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# THE TARIFF COMMISSION

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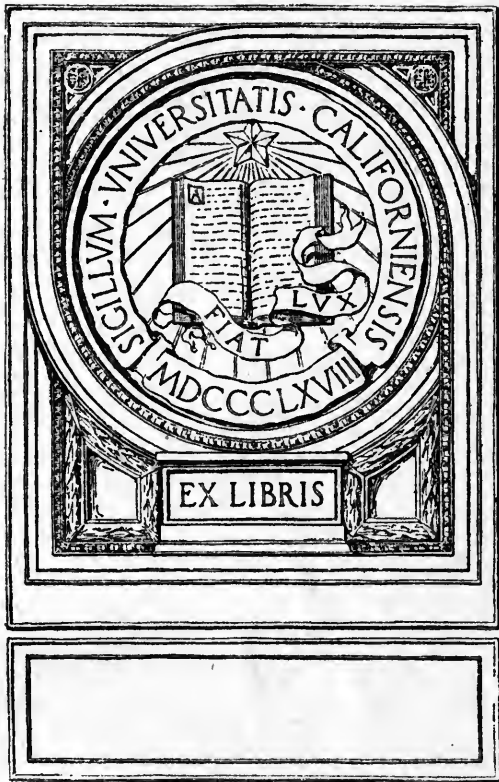
## THE WAR AND BRITISH ECONOMIC POLICY

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- PART 1. BRITISH FINANCE AND INDUSTRY UNDER WAR  
CONDITIONS AND THE BASIS OF FUTURE POLICY.
- PART 2. IRON AND STEEL AND ENGINEERING INDUSTRIES.
- PART 3. TEXTILE INDUSTRIES.
- PART 4. THE ANILINE DYE INDUSTRY.
- PART 5. OTHER INDUSTRIES.
- APPENDIX I. ENEMY PATENTS.
- APPENDIX II. BRITISH DYES LIMITED.
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BRITISH MANUFACTURING RESOURCES  
AND CAPACITY OF EXPANSION

CP.

# THE TARIFF COMMISSION

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## THE WAR AND BRITISH ECONOMIC POLICY

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The object of this Memorandum is to bring together the main facts of the new financial and industrial conditions created by the war and show their bearing upon British economic policy. This review shows that the problems arising out of the war give no cause for anxiety if they are approached without regard to preconceived theories and if it is remembered how much the Empire as a whole can contribute to their solution. In their investigation the Tariff Commission have, as will be seen, had the assistance of a very large number of representatives of the manufacturing, merchanting and banking industries of the country, and the evidence gathered shows the two decisive facts of the situation to be as follows :—

1. A permanent increase of at least £100 millions in the normal national expenditure. To endeavour to obtain this sum from a mere increase on direct taxes would be to place an undue and inequitable burden upon capital and industry ; the new revenue must be obtained by enlarging the productive power of the community. At the same time a basis should be found for the

economic partnership which overseas States of the Empire have long desired and which the facts of the war have proved to be as much in our interests as theirs.

2. The ability of the Empire to provide industrial materials which have become a monopoly of foreign countries. The cutting off by war of German supplies of aniline dyes, has brought great and increasing embarrassment to leading British industries and illustrates a condition of dependence which all agree must now cease.



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# PART 1.—BRITISH FINANCE AND INDUSTRY UNDER WAR CONDITIONS AND THE BASIS OF FUTURE POLICY

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## I.—FINANCE.

It is evident, as the War proceeds and its many complications develop, that questions of finance will, as the Chancellor of the Exchequer has himself anticipated, be a decisive factor in bringing the War to a successful conclusion. But the methods adopted for financing the War will have far-reaching effects upon our financial and economic conditions when peace is re-established. Especially is this the case now that the problem has become so much more intimately and directly one in which the interests not alone of the United Kingdom but of the whole Empire are bound up.

**Finance a  
Decisive  
Factor**

The self-governing States of Canada, Australia, New Zealand, South Africa and Newfoundland, various other parts of the Empire, and the dependency of India have brought to the prosecution of the War every available resource of men, money and material. They have thus proved a unity of interest with ourselves which raises the Empire problem on to an entirely new plane. No solution of the questions which face British statesmanship now while war continues, or afterwards, can possibly neglect this new and guiding factor. Happily it is a factor which greatly adds to the resources available for the immediate struggle and also for the consolidation of our financial and economic position.

**Empire  
Problem**

A consideration of the financial questions immediately to be faced shows the following probabilities :—

1. The Chancellor of the Exchequer stated on November 17th, 1914, that the cost of the War in the first full year would be at least £450 millions. On February 15th 1915, he gave figures\* foreshadowing a higher scale of British expenditure, which will probably be not less than £750 millions in the year ending December 31st, 1915, of which nearly £700 millions will be provided by the United Kingdom. This would make an aggregate British war expenditure up to the end of 1915 of about £900 millions.† The House of Commons has already voted credits of £612 millions in respect of war expenditure up to about the second week of July. On this new basis the expenditure to be met in 1915-16 may be expected to reach about £900 millions as compared with the normal national expenditure just before the War of about £210 millions. These estimates received confirmation in the statement made by the Prime Minister on March 1st, 1915.

2. To meet this greatly increased (more than quadrupled) expenditure, the available revenue for 1915-16 out of current taxes (including about £60 millions for the additions made in the War Budget of November 1914) and other sources is estimated at nearly £260 millions.‡

3. Therefore, if the expectations of the Chancellor of the Exchequer are fulfilled, the estimates of expenditure being not exceeded and of revenue being realised, an additional sum of nearly £650 millions will have to be

\* "For the year ending December 31st next, the aggregate expenditure of the Allies will not be far short of £2,000 millions. The British Empire will be spending considerably more than either of our two great Allies—probably up to £100 to £150 millions more than the higher figure to be spent by the other two great Allies."

Mr. Lloyd George, House of Commons, February 15th, 1915.

† This aggregate is not likely to be materially reduced even if hostilities ceased before the end of the financial year.

‡ This figure is obtained as follows :—

|  | £            |
|--|--------------|
| Revenue in 1914-15, estimated at .. .. .   | 195,750,000  |
| Estimated yield in 1915-16 of New War Taxes (allowing for concessions made in the passage of the War Budget through Parliament) .. | 60,000,000   |
| Estimated Revenue in 1915-16 .. .. .   | 2 5,750,000  |
| Suspension of Old Sinking Fund .. .. .   | 2,750,000    |
|  | £258,500,000 |

Deficit of  
1915-16

War  
Taxation

provided in 1915-16. Even if actual hostilities are concluded before the close of the financial year, the cost of winding up the War is likely to be such that this sum would not be materially reduced.

4. How much of this additional sum will be raised by borrowing and taxation respectively must obviously remain uncertain until the next Budget statement. By way of illustration it may be noted that if the precedent of the South African War were followed about 31 per cent. of the special war expenditure would be raised out of revenue, and this would involve the raising of about £220 millions in 1915-16 by war taxes. Seeing that the new taxes imposed last November are estimated to produce about £60 millions, an additional £160 millions would remain to be raised by further war taxes if the South African standard is to be reached. If, however, owing to the larger figures involved\* only 20 per cent. of the special war expenditure is met by war taxes, the total amount to be so raised in 1915-16 would be reduced to £140<sup>Millions</sup>, or a further £80 millions on the present war taxes.

5. However the question is decided it is difficult to see how, on any calculations, normal budgets can now be less than £300 millions.† They will have to provide not only the sums needed in pre-war days but, in addition, interest and sinking fund for the War Debt, pensions and allowances for

The New  
Budget  
Level

---

\* The total cost of the South African War was estimated by Mr. Ritchie in his 1903 Budget at £211 millions spread over four years.

† The basis of this estimate is as follows :—

1. *War Debt.* By the end of the financial year, 1915-16, the total war expenditure may be expected to reach not less than £1,100 millions. About £1,000 millions would in these circumstances probably be added to the war debt, having regard to price of issue, &c. The interest alone on this sum would amount to £35 millions a year. To this should be added cost of management and sinking fund—not likely to be less than £10 millions, making the additional debt service about £45 millions.

2. *War Pensions and Allowances.* The new scale is estimated authoritatively to represent a permanent annual charge of £15 millions. This is probably a low estimate.

3. *The Army Establishment* is likely to be maintained at a much higher level than before the War. The increase, as compared to the pre-war scale, is not likely to be less than £20 millions for many years.

4. *Miscellaneous liabilities*, and cost of renewal of depleted war stores. Amount uncertain.

disabled soldiers, widows and dependents, liabilities arising from the various financial measures incurred in connection with the War, and the probability that for some years a much larger army establishment than before the War will be maintained.

6. It seems clear that, as in the case of former great wars, the effect of the present War will be to raise our national expenditure to a different plane, and the increase to be provided for is so great that the capacities of our present system of taxation have to be considered from a new standpoint.

7. Before the war direct taxes contributed 56 per cent. of the total tax-revenue as compared with only 36 per cent. about 30 years ago (during the Gladstone regime).<sup>\*</sup> Indeed the amount, in the last Peace Budget, raised from direct taxes was about four times as large as then absolutely, and three times as large per head of the population. If account be also taken of local rates, more than 70 per cent. of the total public expenditure of the country (Imperial and local) was being met from direct taxation, and it is estimated that every direct taxpayer was paying on the average not less than £110 per head per annum in taxes of all kinds, and will in 1915-16 pay over £140 per head.

The present financial situation is largely the result of pre-war conditions. For many years a change has been taking place in the public attitude towards the principles laid down by the economists who supplied the scientific basis for the Free Trade movement. The principles themselves have been so qualified by modern economists that the economic system built upon them has fallen to the ground, and the organised action of the State and the joint action of individuals, through various forms of combina-

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<sup>\*</sup> These percentages are calculated on the assumption that licence duties are *indirect* taxes; if they are regarded as *direct* taxes, the proportions would be correspondingly increased.

tion amongst employers and workpeople and other forms of association, have been in direct conflict with the tenets of the old school. The change has not been confined to this sphere. A Memorandum recently published by the Tariff Commission on "The Abandonment of Cobdenism"\* showed how far even the present Government had departed from former principles of finance and trade policy.

Notwithstanding, however, the importance and significance of this change in the general attitude and in their own practice, the Government have hitherto shown an invincible repugnance to a change of policy which involved the imposition of import duties. The reservation in regard to this sphere of economic policy has had exceedingly important results on the growth of our general expenditure. Over the whole field of State activity the objection to constructive measures has entirely gone, and for many years parties in the State have vied with each other in introducing exceedingly costly measures of social reform. While this movement has been going on, the growth of the resources and the productive power of foreign countries has led to an expansion of their naval and military preparations with which we also have had to keep pace. The joint effect of these two movements, coupled with electoral pressure, has been to increase enormously the standard of expenditure in the United Kingdom, but through the unwillingness of the Government to reorganise the fiscal system and the industrial policy of the United Kingdom, this increase of expenditure has had the result of forcing more and more of the burden upon the direct taxpayer.

New  
Standard of  
Expenditure

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\* Tariff Commission Memorandum (MM 50), "The Abandonment of Cobdenism." London : P. S. King & Son, Ltd. 3d.

The course of our national expenditure during the last 30 years is shown in the following table:—

TABLE 1.—UNITED KINGDOM. IMPERIAL EXPENDITURE (MILLION £).

|             | Con-<br>solidated<br>Fund<br>Services. | Army. | Navy.§ | Miscel-<br>laneous<br>Civil<br>Services. | Customs<br>and<br>Inland<br>Revenue. | Post<br>Office<br>Services. | Total<br>Exchequer<br>Issues. |
|-------------|--|-------|--------|--|--------------------------------------|-----------------------------|-------------------------------|
| 1880-81 ..  | 30.8                                   | 15.2  | 10.5   | 15.8                                     | 2.85                                 | 5.4                         | 80.5                          |
| 1882-83 ..  | 30.7                                   | 19.2  | 10.6   | 17.3                                     | 2.9                                  | 6.1                         | 86.8                          |
| 1887-88 ..  | 28.0                                   | 18.2  | 12.3   | 18.2                                     | 2.7                                  | 8.0                         | 87.4                          |
| 1892-93 ..  | 35.5                                   | 17.5  | 14.3   | 17.8                                     | 2.6                                  | 9.8                         | 97.6                          |
| 1897-98 ..  | 36.3                                   | 19.3  | 20.9   | 21.6                                     | 2.7                                  | 11.6                        | 112.3                         |
| 1902-03* .. | 39.8                                   | 69.4  | 31.2   | 36.2                                     | 3.0                                  | 14.6                        | 194.3                         |
| 1907-08 ..  | 42.6                                   | 27.1  | 31.1   | 30.2                                     | 3.2                                  | 17.5                        | 151.8                         |
| 1912-13 ..  | 38.8†                                  | 28.1  | 44.4   | 51.9                                     | 4.2                                  | 23.0                        | 190.4†                        |
| 1913-14 ..  | 39.0†                                  | 28.3  | 48.8   | 53.9                                     | 4.5                                  | 24.6                        | 199.1†                        |
| 1914-15† .. | 38.3†                                  | 28.9  | 51.6   | 61.1                                     | 4.8                                  | 26.2                        | 210.9†                        |

\* Expenditure inflated owing to the War in South Africa.

† Estimated Expenditure 1914-15, excluding the Special War Credits.

‡ Includes the Establishment Licences, etc., transferred to the Local Authorities from January 1, 1909.

§ The Naval Expenditure is exclusive of expenditure under the Naval Works Acts.

Taken per head of the population the increased expenditure of the past 30 years works out as follows:—

TABLE 2.—UNITED KINGDOM. IMPERIAL EXPENDITURE PER HEAD OF POPULATION. AND RATE OF GROWTH.

|             | Army. | Navy. | Miscel-<br>laneous<br>Civil<br>Services. | Post<br>Office<br>Services. | Total<br>Exchequer<br>Issues. | RATE OF GROWTH, 1880-1<br>=100.       |  |
|-------------|-------|-------|--|-----------------------------|-------------------------------|---------------------------------------|--|
|             |       |       |  |                             |                               | Per Head of<br>Total Popu-<br>lation. | Per Head of<br>Male Population<br>aged 25 years<br>and over. |
|             | £ s.  | £ s.  | £ s.                                     | £ s.                        | £ s.                          |                                       |  |
| 1880-81 ..  | 9     | 6     | 9  | 3                           | 2 6                           | 100                                   | 100  |
| 1882-83 ..  | 11    | 6     | 10                                       | 3                           | 2 9                           | 106                                   | 106  |
| 1887-88 ..  | 10    | 7     | 10                                       | 4                           | 2 8                           | 103                                   | 101  |
| 1892-93 ..  | 9     | 7     | 9  | 5                           | 2 11                          | 110                                   | 107  |
| 1897-98 ..  | 10    | 10    | 11                                       | 6                           | 2 16                          | 121                                   | 114  |
| 1902-03* .. | 1 13  | 15    | 17                                       | 7                           | 4 12                          | 199                                   | 184  |
| 1907-08 ..  | 12    | 14    | 14                                       | 8                           | 3 9                           | 149                                   | 133  |
| 1912-13 ..  | 12    | 19    | 1 3                                      | 10                          | 4 3                           | 179                                   | 155  |
| 1913-14 ..  | 12    | 1 1   | 1 3                                      | 11                          | 4 6                           | 186                                   | 160  |
| 1914-15† .. | 12    | 1 2   | 1 6                                      | 11                          | 4 11                          | 195                                   | 167  |

\* Expenditure inflated owing to the War in South Africa.

† On basis of Estimates for 1914-15, excluding the Special War Credits.

Not only are these figures exceptionally high, but it is true to say that in no other equal period of English history has expenditure mounted at so rapid a pace. Instead of £2 6s. per head, as in 1880-81, the expenditure had before the war reached £4 11s. per head. This represents an increase of 95 per cent. in the expenditure per head of the total population and 67 per cent. in that of the taxpaying population.

There is no ground for the common assumption that this remarkable growth of expenditure is due to our military necessities. It will be seen from the foregoing tables that nearly one-half of the entire increase (even after excluding the postal services) fell under heads other than the Army and Navy.

National  
Wealth and  
Income

According to estimates of various financial authorities, it would seem that national expenditure had increased much more rapidly than either the wealth or the income of the people.

TABLE 3.—UNITED KINGDOM. ESTIMATES OF NATIONAL WEALTH AND INCOME.

|         | National Wealth. |                  | National Income. |                   |
|---------|------------------|------------------|------------------|-------------------|
|         | Amount.          | Authority.       | Amount.          | Authority.        |
|         | Million £.       |                  | Million £.       |                   |
| 1875 .. | 8,548            | Giffen           | 1,200            | Giffen            |
| 1885 .. | 10,037           | "                | 1,350            | "                 |
| 1895 .. | 10,663           | <i>Economist</i> | —                | —                 |
| 1903 .. | —                | —                | 1,710            | Mr. Chiozza Money |
|         |                  |                  | 1,750            | Giffen            |
|         |                  |                  | { 2,000 (about)  | Prof. Bowley      |
| 1905 .. | 13,036           | <i>Economist</i> | —                | —                 |
| 1907 .. | —                | —                | 2,000            | Mr. A. W. Flux    |
| 1908 .. | —                | —                | 1,844            | Mr. Chiozza Money |
| 1909 .. | 13,986           | <i>Economist</i> | —                | —                 |
| 1912 .. | —                | —                | 2,250            | <i>Statist</i>    |
| 1914 .. | 18,000           | Official         | —                | —                 |

In the United Kingdom practically the only source of public revenue, other than taxes, is the postal services. In contrast with Continental countries which possess their State railways, woods and forests, and

Sources of  
Revenue

industrial monopolies, in the United Kingdom taxes were relied on, before the War, to produce not less than five-sixths of the public revenues of the Imperial Exchequer. This may be seen from the following tables :—

TABLE 4.—UNITED KINGDOM. IMPERIAL REVENUE (MILLION £).

|             | Revenue from Taxation.         |         |        | Revenue other than from Taxation.  |        | Total Exchequer Receipts. |
|-------------|--------------------------------|---------|--------|------------------------------------|--------|---------------------------|
|             | Indirect (Customs and Excise). | Direct. | Total. | Post Office and Telegraph Service. | Total. |                           |
| 1880-81 ..  | 44.5                           | 24.5    | 69.0   | 8.3                                | 11.9   | 80.9                      |
| 1882-83 ..  | 46.6                           | 26.5    | 73.1   | 9.0                                | 13.3   | 86.4                      |
| 1887-88 ..  | 45.3                           | 30.4    | 75.7   | 10.6                               | 14.1   | 89.8                      |
| 1892-93 ..  | 49.9                           | 32.1    | 82.0   | 12.9                               | 15.6   | 97.6                      |
| 1897-98 ..  | 55.3                           | 42.7    | 98.0   | 15.2                               | 18.1   | 116.0                     |
| 1902-3* ..  | 72.1                           | 67.6    | 139.7  | 18.4                               | 21.6   | 161.3                     |
| 1907-8 ..   | 68.2                           | 62.1    | 130.3  | 22.3                               | 26.2   | 156.5                     |
| 1912-13 ..  | 73.1†                          | 83.3    | 156.4† | 29.2                               | 34.0   | 190.5†                    |
| 1913-14 ..  | 76.7†                          | 88.0    | 164.7† | 30.8                               | 35.2   | 199.9†                    |
| 1914-15† .. | 76.7†                          | 98.7    | 175.3† | 31.8                               | 35.8   | 211.1†                    |

\* Taxation inflated owing to the War in South Africa.

† Estimated Revenue, excluding War taxes.

‡ Including Establishment Licences, etc., transferred to Local Authorities from January 1, 1909.

TABLE 5.—UNITED KINGDOM. IMPERIAL REVENUE PER HEAD OF POPULATION AND PER HEAD OF MALE POPULATION AGED 25 YEARS AND OVER.

|             | Revenue per Head of Population. |         |                           | Revenue per Head of Male Population aged 25 years and over. |         |                           |
|-------------|---------------------------------|---------|---------------------------|---|---------|---------------------------|
|             | Revenue from Taxation.          |         | Total Exchequer Receipts. | Revenue from Taxation.                                      |         | Total Exchequer Receipts. |
|             | Indirect.                       | Direct. |                           | Indirect.   | Direct. |                           |
|             | £ s.                            | £ s.    | £ s.                      | £ s.  | £ s.    | £ s.                      |
| 1880-81 ..  | 1 6                             | 14      | 2 7                       | 6 1   | 3 7     | 11 0                      |
| 1882-83 ..  | 1 6                             | 15      | 2 9                       | 6 4   | 3 11    | 11 10                     |
| 1887-88 ..  | 1 5                             | 17      | 2 9                       | 5 15  | 3 17    | 11 8                      |
| 1897-98 ..  | 1 8                             | 1 1     | 2 18                      | 6 3   | 4 15    | 12 18                     |
| 1902-03* .. | 1 14                            | 1 12    | 3 17                      | 7 9   | 7 0     | 16 14                     |
| 1907-08 ..  | 1 11                            | 1 8     | 3 11                      | 6 11  | 5 19    | 15 0                      |
| 1912-13 ..  | 1 12                            | 1 16    | 4 3                       | 6 10  | 7 8     | 16 19                     |
| 1913-14 ..  | 1 13                            | 1 18    | 4 7                       | 6 15  | 7 15    | 17 11                     |
| 1914-15† .. | 1 13                            | 2 2     | 4 11                      | 6 13  | 8 11    | 18 6                      |

\* Taxation abnormal owing to the War in South Africa.

† On basis of Estimated Revenue, excluding War taxes.



The foregoing tables show that in the 30 years before the War taxation had been rising as follows :—

1. The total sum from taxes grew from £69 millions in 1880-81 to £175 millions in 1914-15.
2. The proportion obtained by direct taxes rose from 36 per cent. in 1880-81 to 56 per cent. in 1914-15, excluding war taxes.
3. Measured per head of the population, direct taxes had grown from 14s. to £2 2s., or by 200 per cent., while indirect taxes had grown from £1 6s. to £1 13s., or by 27 per cent.
4. Measured similarly per head of the adult male population (*i.e.* the taxpaying section of the community), direct taxes had risen from £3 7s. to £8 11s., or by 155 per cent., as against a rise of from £6 1s. to £6 13s. in the case of indirect taxes, or by 10 per cent.
5. In the same period the aggregate wealth and income of the nation are estimated to have grown by from 80 to 100 per cent. at most.

If allowance is also made for local rates, the changes effected are seen to be even more striking. In the period since 1880-81 this class of taxes has increased from £28½ to over £75 millions a year. This brings the total public taxes and rates up to a total of £97½ millions in 1880-81 and £250 millions in 1914-15. Out of these the amount raised by direct taxes was £53 millions, or 54 per cent., in 1880-81, and £174 millions, or 70 per cent., in 1914-15.

Before the War, then, the situation was that both taxation and expenditure had increased more rapidly than national wealth or income; that direct taxes had reached a level at which it could no longer be held that they were borne entirely by the taxpayer and not shifted on to the working classes; and that the indirect taxes, such as those on tea, sugar and beer, were of a kind which pressed with undue severity upon the poorer members of the community.

Notwithstanding the severity of the burdens already imposed upon them, all classes of the community showed their willingness, on the outbreak of War, to do their utmost to meet the additional expenditure. It was realised that under the conditions which had suddenly developed it was

impossible to undertake a reorganisation of the financial system; the additional revenues needed at once could only be obtained by increases in the rates of existing taxes. The Chancellor of the Exchequer introduced proposals for increasing the revenues from beer, tea, income tax and super-tax, with the following estimated results:—

TABLE 6. TAX INCREASES IN WAR BUDGET OF NOVEMBER, 1914.

| Duty or Tax.  | Original Rate.   | New Rate.          | Estimated Yield. |             |
|---|------------------|--------------------|------------------|-------------|
|   |                  |                    | 1914-15.         | 1915-16.    |
|   | s. d.            | s. d.              | £                | £           |
| Beer, per barrel ..   | 7 9              | 25 0               | 2,050,000        | 17,000,000  |
| Tea, per pound ..   | 5                | 8                  | 950,000          | 3,200,000   |
| Income Tax, per £ ..  | 1 3              | 2 6*               | 11,000,000       | 38,750,000  |
| Super-Tax (on incomes<br>over £3,000) on excess<br>over £2,500 .. per £ | 5<br>to<br>1 4 } | 10<br>to<br>2 8 }* | 1,500,000        | 6,000,000   |
| Total Estimated Yield† .. .. .  | .. .. .          | .. .. .            | 15,500,000†      | 65,000,000† |

\* The increases in Income Tax and Super Tax were made leviable in respect of one-third of the income in the year 1914-15, and in respect of the full year in 1915-16.

† Concessions were subsequently made in respect of the beer, income tax, and super tax increases, which it is estimated will diminish the above totals for 1914-15 and 1915-16 by about £2 millions and £6 millions respectively.

From the foregoing examination of the direct and indirect taxes from which the revenue of the country is at present raised it appears extremely unlikely that the vast further sums required under the new standard of expenditure can be raised by the mere reorganisation of these particular taxes, or increases in the rates at which they are levied. It therefore becomes necessary to examine what changes in the fiscal system can be made which will solve the problem of raising an increased revenue.

## II.—INDUSTRY AND COMMERCE.

Mobilisation at once withdrew from British factories, offices and industries generally about 500,000 men. The subsequent formation of new armies and the expansion of the naval forces and all branches of naval and military administrative services brought about a further diversion of labour, and it is believed that there are now at least two million men in the services of the Crown who have been diverted from the ordinary productive and commercial occupations of the country. This may be estimated to represent about 20 per cent. of those engaged in the above occupations.

Labour  
Depletion

This depletion of labour synchronised with the stoppage of industry which was one immediate consequence of the outbreak of war. Exports and imports were for various obvious reasons severely restricted, thus depriving British manufacturers on the one hand of a considerable part of their best markets overseas, and on the other of necessary materials. There was also a restriction in the home trade due to the diminution of the demand for luxuries and the less important necessaries of life.

Stoppage of  
Industry

Another hampering circumstance was the failure of remittances on the prompt arrival of which British manufacturers and merchants depended for the continuance of their business. This difficulty was, after some weeks, met by a Government system of guarantee for advances by banks on the security of approved trade debts and bills of exchange.

Advances to  
Traders

Moreover, the industrial system, as it existed before the war, was transformed not only by the cessation of the normal export and import trade with both belligerent and neutral countries, but by the commandeering for military requirements of all the railways of the United Kingdom and no less than one-fifth of the mercantile marine.

Railways and  
Mercantile  
Marine

There was a further transport difficulty due to war risks, and the Government met this by an insurance scheme under which the State assumed the war risks in connection with British vessels and British cargoes which had been previously insured against ordinary marine risks. Under

Cargo  
Insurance

the operations of the British Navy\* in clearing the seas for British commerce, the cargo war risk premium, which was five guineas per cent. when the war began, is now only one guinea.

It became clear on the outbreak of war that many goods previously imported from enemy countries could only be supplied from home resources, and efforts, official and unofficial, were made to draw the attention of manufacturers to the opportunities of the new situation.†

#### Patents

The legal difficulty in the way of manufacturing in this country articles patented in an enemy country and protected in the United Kingdom was met by an Act of Parliament (August 28th, 1914) giving to the Board of Trade special powers of transfer, suspension or avoidance of any patent belonging to an enemy. Under this Act 270 applications have been lodged with the Board of Trade for the avoidance or suspension of enemy-owned patents. The wide extent of the ground covered by these applications may be seen from the summary list published in Appendix I (pp. 167 and 168). Out of this large number of applications it appears, however, that up to the end of February, 1915, 27 had been withdrawn and only 74 of the remainder decided, 53 being granted and 21 refused. The patents for which a licence has been granted relate to the following matters:—

|  |   |
|--|---|
| Para-oxyaryl-arsenic acids.  | Connecting tube with ball joint for use in pneumatic conveyors. |
| Nitro-oxyaryl-arsenic acids.   | Joining blocks, &c., in building operations.                    |
| 3 : 3'-diamino-4 : 4'-dioxyarseno benzene.   | Electric igniter for explosion motors.                          |
| Sodium peroxide composition for making cement, &c., watertight.                              | Platen printing-presses.  |
| Halogen-hydrocarbons.  | Apparatus for facilitating payment of change or money.          |
| Artificial teeth (2 patents).  | Timing gear in electric ignition devices.                       |
| Subjecting gases to the action of liquids.   | Pressing plants for textile fabrics.                            |
| Kiln-drying, &c., of malt, &c., and germination of malt, ventilating seeds, &c. (6 patents). | Lattice shutters.   |
| Extraction apparatus (2 applications).   | Props or stemples for mines (2 applications).                   |
| Soldering materials (2 patents).   | Filters for air.  |
| Metallic deposits by electrolysis.   | Files for documents.  |
| Bronze foil.   | Cork sheets for deadening vibrations and sound.                 |
| Brake valves.  | Corsets and suspenders.   |
| Jig conveyors or conveyors of the jiggling type (2 patents).                                 | Leather substitute.   |
| Fulling machines (3 patents).  | Boots.  |
| Machines for stamping and perforating sewing needle blanks (2 applications).                 | Bracelets.  |
| Rotary engines, pumps, &c.   | Bracelet with watch-holder.                                     |
|  | Wind-instruments.   |

\* Calculations which appear to be authoritative (Cuthbert Maughan in the *Quarterly Review* for January) show that the loss of tonnage by capture, seizure or through striking mines, in proportion to the total tonnage on the respective registers since the outbreak of war, has been

|                          |                                 |
|--------------------------|---------------------------------|
| British .. .. .          | 437,000 tons or 2.39 per cent.  |
| German .. .. .           | 985,000 tons or 20.77 per cent. |
| Austro-Hungarian .. .. . | 149,000 tons or 14.75 per cent. |

† See Tariff Commission Memorandum (MM 55), "Trade Aspects of the War with Germany." London: P. S. King & Son, Ltd. 3d.

In the case of a patent for gun-carriages, an enemy-owned patent was suspended; in that of one for machines for making link-mesh the licence granted to a certain grantee was avoided; while two patents for welding metals and for an alumino-thermal process respectively have also been avoided.

The applications which have been definitely refused relate to patents for :—

|   |  |
|---|--|
| Vat dyestuffs (4 patents).                            | Switches for electro-magnetic clutches.                  |
| Colouring matters (6 patents).                        | Tubes for heating, &c. (2 applications for same patent). |
| Purification of sewage.                               | Folding boxes.   |
| Converting printed matter into raised or relief work. | Round chimneys.  |
| Fusing metals electrically.                           | Backings for printing illustrations.                     |
| Electric magnetic clutches.                           | Pipe tongs.  |

Among the products necessary to British industry, the supply of which, **Aniline Dyes** from United Kingdom sources was small and totally insufficient, one of the most important was aniline dyes. Lord Moulton, representing the Government at a conference of dye-users held in December, 1914, stated that for the production of British-manufactured goods, estimated at not less than £200 millions, a continuous supply of these dyes was required in more or less urgent degree. The total trade requirements were valued at over £2 millions, but of this nearly £1 $\frac{3}{4}$  millions represented the imports from Germany, while the British production did not exceed £200,000 a year. The German dye industry was the outcome of the carefully organised State policy of that country which is directed to the employment of all the means necessary to encourage home production. By the time the German tariff was organised on modern lines the German dye industry had become a firmly-established monopoly, and import duties were unnecessary in the absence of effective external competitors. Scientific research in connection with the industry was from the first encouraged and aided by the State and by the development of the improvement trade and of dye-using industries generally a large home market was provided for German dye makers. Moreover, the condition of the English patent laws and the general attitude of the English State towards industry left open for German exploitation the enormous dye-using market of the United Kingdom.

The German Government had not overlooked the menace to British industry which was involved in this monopoly. The direct export of dyes

to Great Britain was stopped by the war, but Germany now made the export to neutral countries (*e.g.*, Switzerland, Italy, Holland and the United States) conditional on a satisfactory undertaking that such exports would not be subsequently re-exported to this country or any part of the Empire. Thus, the Canadian woollen and other industries were also deprived of the supplies of dyes which they had been accustomed to receive from the United States.

The method at first proposed by the Government to meet this difficulty was to increase the output of existing dyeworks through the agency of a new joint stock company with a virtual capital of £4,500,000, of which £3,000,000 was to have been subscribed by British dye users and others interested, and £1,500,000 in the shape of a loan by the State bearing interest at 4 per cent. and repayable in 25 years. This scheme has had to be abandoned owing to difficulties arising from the absence of security for the investment and other reasons, and another scheme has been formulated. Under this second scheme the company would have an initial capital of £2,000,000, of which £1,000,000 would be issued at once. The Government are prepared to advance a sum equal to the amount subscribed as a loan to the company bearing interest at 4 per cent. The Government are also offering to make a grant up to £100,000 for special research to be undertaken by the company. It is objected to both schemes that they would not provide the dyes in time to meet the threatened shortage.\*

#### Sugar

Another important article of domestic and industrial consumption obtained in large quantities from enemy countries was sugar. A new source of supply for this article could not, of course, be easily improvised, and there appeared to be imminent danger of a speculative corner. Acting on the advice of a specially appointed Royal Commission, the Government purchased and pre-empted an enormous quantity of sugar, stated to be 900,000 to 1,000,000 tons, at a cost of about £18 millions. This was subsequently accompanied by a prohibition of the importation of sugar from all

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\* For full details of the dye problem, see Part 4 of this Memorandum—The Aniline Dye Industry.

countries, but under pressure from representatives of the West Indies the prohibition has been relaxed in favour of grocery sugars from that part of the Empire.

The methods adopted by the Government have been criticised, and especially in regard to (1) the prohibition in the first instance of Empire-grown sugar in regard to which there could be no taint of enemy origin; (2) the overbuying on the part of the Government brokers leading to an unnecessary rise of price; (3) the prices at which the sugar is sold to the trade which are stated to be higher than is warranted by the cost to the Government. Obviously, had adequate steps been taken in past years to encourage the production of sugar in the United Kingdom the critical situation due to the war would have been considerably alleviated. Even now home production would receive a largely needed stimulus if assurances were given that the difference or its equivalent between the duties of customs and excise which has existed during the last three years would be continued even though the home production grew to considerable dimensions.

The gigantic war demand for material and equipment enabled many industries to recover almost immediately from the widespread dislocation which followed on the outbreak of war. Not only did the arms and ammunition requirements engage the productive powers of the iron and steel, engineering and shipbuilding industries to the fullest extent with very few exceptions, but the call for Army cloth, blankets, hosiery, boots, &c., made unparalleled demands on the resources of the textile, leather and various other industries. Immense Government orders were given for the equipment of the British troops and the new armies. This was not all, however, for the woollen, hosiery, boot and shoe, and other industries were called upon to fulfil orders for our Allies. New machinery was installed and old diverted, and this great demand will no doubt continue for months.

War  
Demand

There were big Government contracts for ships, guns, projectiles, &c., armoured cars, aeroplanes, transport wagons, rolling stock, galvanised iron huts and shelters, searchlights and electric lighting appliances, personal equipment,

Arms,  
Ammunition  
&c.

and other war material and supplies for the British and Allied Armies. No statistics are available as all details are confidential. Makers in all parts have, however, received orders and the manufacturers of war material have given considerable orders for semi-manufactured iron and steel. Although many industries have been able to adapt their plant to Government needs, others have been prejudicially affected, but enlistment and the mobility of labour as between one industry and another have reduced the problem of unemployment to very small dimensions. In many trades there is an actual shortage of men. There have been some very big contracts in connection with personal equipment for the troops; huge orders, for example, having been placed for razors at Sheffield. Many firms have, of course, benefited not only through the absence of foreign competition, but also through the deflection of private orders which works engaged on war contracts have been unable to undertake. Large orders have been placed in Canada for war material.

A very wide range of industry was also covered by this war demand for cloth, blankets, hosiery, and boots. This is shown by the following statement summarised from the Annual Trade Review of the "Yorkshire Observer" (January 4th, 1915.)

**Khaki, etc.**

Standard khaki was required for the Regulars and all other troops on or destined for early active service, lower grades of khaki for the temporary wear of troops in training or in reserve, light blue cloth for the French, dark blue-greys for the Belgians, and a greenish grey for the Russian soldiers. A list officially supplied to the Huddersfield Chamber of Commerce showed that no fewer than 50 firms in the Huddersfield district had direct orders from the British Government for the supply of khaki and other Army cloth. Khaki was being produced in the Huddersfield district at the rate of at least 250 miles a week, and it was stated that when the contracts now in hand had been completed at least 4,000,000 yards of French blue-grey cloth would have been delivered. Orders offered in December for 3,000,000 yards of cloth for Russian tunics, trousers and overcoats could not be immediately undertaken owing to the heavy pressure.

**Textile  
Machinery**

Manufacturers had to face special difficulties due to recruiting, inadequate machinery, and delay by the Government. Several weeks elapsed before orders for standard khaki were placed by the British Government. It was further discovered that there were not sufficient



carding sets to produce all the woollen yarn required in reasonable time. Worsted manufacturers were consequently invited to submit suitable worsted fabrics and the production of Army cloth was greatly increased. Huddersfield manufacturers had, moreover, to instal new machinery for the new class of trade, and especially milling machines, for which there was an extraordinary demand. Looms were diverted from other uses, and carpet yarn spinners also had to come to the rescue by adapting their machinery to the production of woollen yarns.

That the demand is not likely to wane throughout the war may be gathered from the fact that the average life of the uniform of a soldier on active service does not exceed three months. Taking  $3\frac{1}{4}$  yards of cloth per uniform there will be 13,000,000 yards wanted in a year for each million men in the field, apart from overcoats and minor articles like caps and puttees.

Orders for many millions of blankets have also been given by the British and French Governments, but it was impossible for the moment to furnish anything like the quantity of blankets required for the Russian troops, although the mills have been running day and night. It is estimated that two million blankets were given by householders in response to Lord Kitchener's appeal. Even if Government orders are not repeated on the same huge scale as in the past few months, there should be full employment during the next year and a greatly increased production.

Blankets

By the end of August orders for unprecedentedly large quantities of underclothing, gloves, mufflers, &c., were given out by the Government, and urgent delivery was insisted upon. Soon every machine was at work, new ones were put down, and up to the end of the year the demand had been larger and the output greater than had ever been known before. Orders were placed also for France, Russia and Belgium, whose needs are enormous owing to the stoppage of their own production.

Hosiery

Soon after the commencement of the war the British Government sent large orders for Army boots to Northamptonshire—the centre of the Army boot trade from time immemorial—and soon the Kettering makers were full up. Then the contracts came to Leeds and other centres. Afterwards the Navy wanted boots in larger quantities than ever. Further foreign military authorities came to the English centres of the boot industry with offers of large contracts. In boots and shoes the United States must always be a powerful rival, and at the present moment it is said that many Army leather contracts have gone to the other side of the Atlantic.

Boots, etc.

The Tariff Commission have made the most careful inquiries as to the actual course of events in the commercial world since the war began, and

A Trade  
Inquiry

as to how different trades have been affected. War conditions have disclosed for the first time to many of the firms whom the Commission have consulted the extraordinary degree of dependence on foreign countries to which essential industries have been reduced, both for the supply of necessary materials and for the disposal of their products. Except in very few cases there is an urgent demand coming from business people that the country should now consider, without prejudice, the best way of removing the dangers arising from this dependence upon foreign supplies in time of peace as well as of war, and there is a general desire to see adopted whatever measures may prove necessary, whether they are in harmony or not with the policy hitherto pursued by this country.

The Government apparently share the view of the business community. Mr. Runciman, President of the Board of Trade, speaking on the food question in the House of Commons on February 17th, 1915, said:—"We did not start out with the idea of proving any political economy doctrine. We were faced with grave difficulties which concerned mainly the poorest of our people, and we are not prejudiced in favour of either one doctrine or another if we could find some practical way out of all the troubles by which they are surrounded. The hon. Gentleman has said that we have already discarded some of the laws—as we call them—of political economy. . . . If we had not departed from the old practice of Governments, and had not set on one side some of the doctrines which many of us have held dearly in the past, it is quite certain that in that great time of stress not only would the trade probably have been stopped inwards and outwards, but we should not have received the necessary supplies on which we are now living. . . . On the general question, I would only say that a war of such magnitude as the present brings every man, no matter what his views may be, into close contact with first principles. Those first principles have been tested again and again, privately and publicly, and it may be that when the war is over we may have to modify many of our methods. I say quite frankly that I do not feel so perfectly prejudiced in favour of the practices of the past that I would not depart in case of need in the future from many of the doctrines

and methods to which we have been attached. But I should want to know in every case whether it was going to make things better or to make them worse; and that is the only test by which I hope the House and the country will judge what was said by the Prime Minister last week as to the view of the Government. . . . In all these matters we have not looked into them as doctrinaires. We have dealt with them, if I may use the well-known term, as business men."

Some of the steps taken by the Government excite apprehension in business circles. It is felt that they apply to particular trades and particular problems methods which, from the very nature of the case, it is impossible to adopt without establishing claims for similar treatment by other industries. If, for instance, the methods of State trading and of bounties applied to sugar and aniline dyes respectively were extended to other commodities of hardly less industrial importance, the country would be committed to a policy and a financial burden which would threaten national disaster.

The careful organisation of her policy and industry and commerce for years preceding the outbreak of war unquestionably gave Germany a great initial advantage in carrying out her plans; but the war has also disclosed the remarkable latent powers of the United Kingdom and the other nations of the Empire. It is not too much to say, on the evidence available since the war began, that if during the last ten or twenty years the great communities of the British Empire had been consciously and deliberately working together under the leadership of the United Kingdom in the full spirit of Imperial co-operation such an organisation would have rendered improbable many of the difficulties which have had to be faced since the war began.

**Industrial  
Strength of  
British  
Empire**

### III.—THE NEW SITUATION.

The primary needs of the new situation are :—

(1) While raising the necessary forces to supply our own troops and help those of the Allies with munitions of war and supplies generally.

(2) To feed our people at home with the least possible rise in price of the necessaries of life.

These two objects imply another :

(3) To keep at the maximum the necessary production of the country and the employment of the people.

And lastly :

(4) To raise the money needed to carry on the war.

As affecting all these points there are important factors which lie entirely within the knowledge and discretion of the Government and upon which, in any case discussion is undesirable at present. There are, however, some considerations which may usefully be set forth.

It is obvious from the review given in the preceding sections of the steps which have already been taken under war conditions that in dealing with the present situation there is no room for a pedantic insistence upon pre-conceived theories. The problem now to be solved is both practical and urgent, and it is felt in industrial circles that it should be treated with a perfectly free hand.

Another general consideration is that in view of the new relationship of mutual support which has been established between the United Kingdom and the other States of the Empire, it is imperative that where there is a choice of alternative measures those measures should be selected which will increase the productive power of the Empire as a whole and its solidarity.

The problem of raising the money needed to carry on the war might of course be solved for the moment entirely by borrowings. But by all the canons of British finance it is both undesirable and un-economical to raise by borrowing a larger sum than is absolutely necessary. Every £100 of war expenditure provided out of taxes will save the taxpayer of the near future an annual burden of possibly £6 or £7 on account of interest, sinking fund and debt management. And if the Government come to the conclusion that it is inexpedient to seek to obtain further revenue by adding to the already high level of direct taxation, it is felt in the trading community that careful and unprejudiced consideration should be given to the possibility of raising further immediate revenues by new taxes. Such new taxes might be found either by broadening the basis of the present direct taxes, as was recently suggested by the Prime Minister,\* or by broadening the basis of our indirect taxes, and increasing the number of important articles subject to customs duties.

The inquiry conducted by the Tariff Commission, full particulars of which are given in the subsequent parts of this Memorandum, has covered a wide field, and indicates that the war has made more than ever necessary a frank reconsideration of the whole relations of the State towards commerce, especially in regard to finance and tariffs. In this investigation two points overshadow all others. The first is the increased strain on industry and generally upon the nation involved in the development of our system of direct taxation on present lines; and the second is the absolute necessity for changing the policy of the country so as to provide within the Empire those essential materials the production of which has under our present system been allowed to fall into the hands of countries with which we are at war.

Reference has already been made to the heavy burden of direct taxation at the present time. In the last peace Budget the amount of direct taxes was just short of £100 millions. With the new war taxes an addition of over £40 millions has been made to income tax and super tax. Thus in the coming

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\* At Oldham, Dec. 6th, 1913.

year, 1915-16, a sum not far short of £140 millions will be raised from the direct taxpayers of the country, who are usually estimated to number 1,250,000. The average burden on the direct taxpayer is, therefore, about £110 per annum, exclusive of indirect taxes and local rates. If allowance be made for these exclusions it is estimated that the total contribution in 1915-16 for rates and taxes will average over £140 for each direct taxpayer.

Such heavy burdens are bound to react on industry in two ways. They may be met entirely or partly out of the accumulations which alone provide the capital for progressive industrial development. Unless this capital is available industrial development is restricted or starved, and British industry must fall behind that of competing and more lightly taxed countries. The new direct taxes may also be added to the cost of production, and in that way be shifted on to the consumer by an increase in the price of the article. Attention has been drawn in a previous Memorandum of the Tariff Commission\* to the distinct traces of this shifting.

The burden of direct taxation is accentuated by the other new charges thrown upon industry by legislation and administration and the steadily rising standard of industrial comfort. These charges include the liabilities arising under the various factory enactments, education laws, insurance against unemployment and sickness, and so on.

The experience of all modern progressive nations shows that it is impossible for the leaders of industry and the nation to keep pace with the new demands on the State for the betterment of the industrial classes and the new competitive conditions that have arisen in the modern industrial and commercial world unless the national industries are given the support of the State to safeguard them against unlimited aggression and also to stimulate the development of the productive resources of the community.

In framing British policy we have always to remember the additional strength to be obtained by the co-operative organisation of the greater resources of the whole Empire.

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\* Tariff Commission Memorandum (MM 54), "The Budget and Direct Taxation." London: P. S. King & Son. 3d.

The crisis in respect of aniline dyes is regarded as typical in many ways of British commerce as a whole.\* There is on all hands a fear that as soon as the war is over German makers would destroy any unprotected industry created in the United Kingdom by dumping. Some assurance from the Government is essential, if the money is to be forthcoming from the public for new industries, that after the war the danger of dumping shall be provided against and adequate protection be secured for British industry.

Looking at the problem as a whole and in its more permanent aspects it appears to the great body of those engaged in production that the war has made it increasingly necessary to proceed forthwith to develop the enormous reserve of industrial and agricultural resources of this country, and link up the United Kingdom with the rest of the British Empire in measures of Imperial organisation which shall bring into play the practically illimitable capabilities of the Empire as a whole.

Such a scheme of Imperial organisation means greater homogeneity of conditions, closer co-operation and interdependence, and the more organised use of the resources of one-fourth of the world's surface and its populations. Within the countries that comprise the Empire there is every conceivable product that is required, and no economist would question the proposition that provided this organisation is carried out there must inevitably follow a vast increase in the productive power and the wealth of all the countries which are affected.

Controversy has arisen on the methods of effecting this desired end, and some of the measures which have been tried and failed have been dealt with in the Memorandum by the Tariff Commission on "The Problems of the Imperial Conference."† The results of ten years of controversy and effort have only confirmed generally the view that a change in the fiscal system is necessary. Of course, in the middle of a war it is neither desirable nor possible to consider any of these questions apart from the exigencies of

\* See Part 4 of this Memorandum—"The Aniline Dye Industry."

† Tariff Commission Memorandum (MM 46), "The Problems of the Imperial Conference and the Policy of Preference." London: P. S. King & Son.: 3d.

the present crisis. In the specific problems that arise the Government must act with a free hand and with the sole end in view of increasing the efficiency of the country for war purposes.

The economic activities of the Empire tend, on the whole, to develop on reciprocal lines, and the backwardness of any one part of the Empire is a prejudice to the rest. This has never been more strikingly demonstrated than in the co-operative utilisation of the resources—industrial and agricultural—of the whole Empire in the carrying on of its common objects in the present war.

Both here and in the Dominions it is felt that if the problems of the war are faced in a spirit of practical Imperialism it is impossible to set limits to the degree of mutual help which all parts of the Empire may render to one another. The pure fiscal relief, apart from these other considerations, which would arise would depend upon the rate at which an increase in the productivity of the Empire took place. Resources have to be made available, labour has to be provided and organised, but all experts who have been consulted believe that these problems could be overcome with great rapidity.

The immediate object of Imperial co-operation is the permanent removal of that German menace which it is realised, as never before, is a menace against the whole British Empire. The course of events, as well as the definite declarations of statesmen of the Empire, have however made it clear that the question of defence cannot be dissociated from the question of how to bring the economic resources of the whole Empire to their maximum of efficient development. To meet these new conditions a co-operative relationship must be established between the States of the Empire covering defence, commerce, foreign policy and all matters in which they have a common concern as citizens of the Empire. Whatever measures are now proposed to meet the difficulties that immediately affect the United Kingdom must take account of this new Imperial factor and the new Imperial relationship.

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For a fuller discussion of various phases of the Empire Problem, see the list of Tariff Commission publications on page two of this Memorandum.



## PART 2.—IRON AND STEEL AND ENGINEERING INDUSTRIES.

*The following is a list of the principal products of the iron and steel and engineering industries made or dealt in by the manufacturers and merchants who have replied to the inquiries of the Tariff Commission:—*

|   |   |  |
|---|---|--|
| <i>Pig iron.</i>                          | <i>Needles and pins, &amp;c.</i>            | <i>Sawing machinery.</i>                           |
| <i>Steel billets, &amp;c.</i>             | <i>Locks.</i>                               | <i>Laundry machinery.</i>                          |
| <i>Malleable alloys.</i>                  | <i>Hardware and hollow-ware.</i>            | <i>Marine auxiliary machinery.</i>                 |
| <i>Rounds, squares, sections, &amp;c.</i> | <i>Cutlery.</i>                             | <i>Milling machinery.</i>                          |
| <i>Bar iron and steel.</i>                | <i>Pumps.</i>                               | <i>Mining machinery.</i>                           |
| <i>Girders, &amp;c.</i>                   | <i>Shipbuilding material.</i>               | <i>Pumping machinery.</i>                          |
| <i>Plates and sheets.</i>                 | <i>Locomotives.</i>                         | <i>Steam navvies.</i>                              |
| <i>Hoops and strips.</i>                  | <i>Steam, gas, and oil engines, &amp;c.</i> | <i>Sugar machinery.</i>                            |
| <i>Castings and forgings.</i>             | <i>Boilers, &amp;c.</i>                     | <i>Textile machinery.</i>                          |
| <i>Rails and railway material.</i>        | <i>Gas, water, and electric fittings.</i>   | <i>Winding machinery.</i>                          |
| <i>Tyres, axles, and springs.</i>         | <i>Electrical machinery.</i>                | <i>Typewriters.</i>                                |
| <i>Wire rods.</i>                         | <i>Electrical goods and apparatus.</i>      | <i>Motor cars, &amp;c.</i>                         |
| <i>Wire and wire manufactures.</i>        | <i>Agricultural machinery.</i>              | <i>Cycles and cycle accessories.</i>               |
| <i>Nails, screws and rivets.</i>          | <i>Cement machinery.</i>                    | <i>Railway carriages, wagons, &amp;c.</i>          |
| <i>Nuts, bolts, &amp;c.</i>               | <i>Dairying machinery.</i>                  | <i>Colliery wagons, &amp;c.</i>                    |
| <i>Tubes and pipes, &amp;c.</i>           | <i>Hydraulic machinery.</i>                 | <i>Portable railway, colliery, &amp;c., plant.</i> |
| <i>Tools and implements.</i>              | <i>Centrifugal machinery.</i>               | <i>Brass, &amp;c., engineering products.</i>       |

### I.—AREA OF TRADE AFFECTED.

#### (A) IRON AND STEEL.

The following statistical statement compiled from the British official returns shows the Anglo-German trade in iron and steel and manufactures thereof in 1913, and indicates the area of industry with which the subjoined statements of British traders are concerned:—

TABLE 7.—TRADE OF THE UNITED KINGDOM WITH GERMANY IN IRON AND STEEL AND MANUFACTURES THEREOF (INCLUDING HARDWARE, CUTLERY, IMPLEMENTS AND TOOLS), 1913.

|  | Imports from<br>Germany. | Exports to<br>Germany. |
|--|--------------------------|------------------------|
|  | £                        | £                      |
| Pig iron .. .. .   | 258,000                  | 440,000                |
| Steel ingots, blooms, billets and slabs .. .. .  | 1,734,000                | Not mentioned          |
| Steel sheet bars and tin plate bars .. .. .  | 1,321,000                | Not mentioned          |
| Iron or steel, wrought in bars, angles, rods and sections .. .. .                          | 528,000                  | 220,000*               |
| Steel girders, beams, joists and pillars .. .. .   | 408,000                  | Not mentioned          |
| Hoops and strips .. .. .   | 330,000                  | 1,500                  |
| Tubes and pipes and fittings, wrought .. .. .  | 463,000                  | 19,000                 |
| Plates and sheets .. .. .  | 711,000                  | 711,000†               |
| Wire .. .. .   | 368,000                  | 64,000                 |
| Wire rods] .. .. .   | 379,000                  | Not classified         |
| Hardware .. .. .   | 992,000                  | 50,000                 |
| Cutlery .. .. .  | 113,000                  | 65,000                 |
| Implements and tools (except machine tools) .. .. .  | 166,000                  | 63,000                 |
| Other iron and steel and manufactures thereof .. .. .                                      | 1,283,000                | 217,000                |
| <b>Total iron and steel and manufactures thereof (including hardware, &amp;c.) .. .. .</b> | <b>9,054,000</b>         | <b>1,853,000</b>       |

\* Steel only.

† Including tinned plates and sheets, £507,000.

The replies received from British traders indicate their full appreciation of the extent of the new home market opened to them by reason of the cessation of German competition. Thus while British exporters have lost, for the time being, a market in Germany for £1,850,000 worth of British iron and steel goods as shown by the foregoing figures, there is a cessation of German imports into the United Kingdom valued at £9,000,000.

The two principal items of British exports to Germany were pig iron (£440,000) and plates and sheets (£711,000). Of the latter item no less than £507,000 was accounted for by tinned plates and sheets. The majority of groups however show a very great excess of imports from Germany over exports to that country. Thus the imports of steel ingots, blooms, &c., and sheet bars and tin plates bars amounted to £3,000,000, while the exports to Germany were insignificant. The same is true of the imports of steel girders, &c. (£408,000), wrought tubes, pipes and fittings (£463,000),

and hoops and strips (£330,000). The imports of wire were £368,000 against exports of £64,000, and the United Kingdom took from Germany nearly £1,000,000 worth of hardware, though we sent her only £50,000 worth.

The total exports of all these items to Austria-Hungary amounted to £130,000 only, while the imports from that country were practically nil.

(B) ENGINEERING.

The following statistical statement relates to Anglo-German trade in engineering products in 1913 :—

TABLE 8.—TRADE OF THE UNITED KINGDOM WITH GERMANY IN MACHINERY, MOTOR CARS AND CYCLES, ELECTRICAL GOODS AND APPARATUS, AND SHIPS, 1913.

Imports from and  
Exports to  
Germany

|   | Imports from<br>Germany. | Exports to<br>Germany. |
|---|--------------------------|------------------------|
|   | £                        | £                      |
| Machinery :   |                          |                        |
| Road locomotives (including steam rollers) .. ..  | 2,000                    | 136,000                |
| Agricultural machinery .. .. .  | 27,000                   | 297,000                |
| Electrical machinery .. .. .  | 721,000                  | 41,000                 |
| Sewing machines and parts .. .. .   | 117,000                  | 91,000†                |
| Textile machinery .. .. .   | 140,000                  | 784,000                |
| Other machinery .. .. .   | 1,377,000                | 538,000                |
| Total machinery .. .. .   | 2,384,000                | 1,887,000              |
| Motor cars and motor cycles :   |                          |                        |
| Complete cars and chassis .. .. .   | 227,000                  | 39,000                 |
| Rubber tyres and tubes for motor cars .. .. .   | 930,000                  | 31,000                 |
| Other parts of motor cars .. .. .   | 199,000                  | 72,000                 |
| Motor cycles and parts .. .. .  | 123,000                  | 9,000*                 |
| Total motor cars, &c. .. .. .   | 1,479,000                | 151,000                |
| Electrical goods and apparatus (other than machinery and<br>uninsulated wire) :               |                          |                        |
| Rubber insulated (not being telegraph and telephone wires<br>and cables) .. .. .              | 262,000                  | Not mentioned          |
| Carbons .. .. .   | 97,000                   | Not mentioned          |
| Electric lamps and parts thereof .. .. .  | 254,000                  | Not mentioned          |
| Other electrical goods and apparatus .. .. .  | 313,000                  | 75,000†                |
| Total electrical goods and apparatus (other than<br>machinery and uninsulated wire) † .. .. . | 926,000                  | 75,000                 |
| Ships and boats, new, with their machinery .. .. .  | Not mentioned            | 456,000                |
| Total machinery, motor cars and cycles, electrical<br>goods and apparatus, and ships .. .. .  | 4,789,000                | 2,569,000              |

\* Parts only.

† Includes figures for items "not mentioned" above.

The foregoing figures indicate the magnitude of the British engineering interests affected by the War. In the four groups shown the value of the total imports from Germany alone amounted to over £4 $\frac{3}{4}$  millions, while British exports in the same groups to Germany reached over £2 $\frac{1}{2}$  millions. Thus, on the assumption that the present productive capacities were fully employed, if all the plant and labour formerly employed in producing the £2 $\frac{1}{2}$  millions of exports to Germany were diverted to the production of goods previously imported, there would still remain a need for plant, labour and machinery capable of producing another £2 $\frac{1}{4}$  millions of engineering products.

The largest single item of machinery imports from Germany was electrical machinery, £721,000, as against exports to Germany of only £41,000. On the other hand, this country sent Germany £784,000 worth of textile machinery taking from her only £140,000. The importations from Germany of motor cars and motor cycles and parts were immensely in excess of the British exports to Germany. The imports of the rubber tyres and tubes, for motor cars, alone amounted to £930,000, as against exports to Germany of £31,000, while the corresponding figures for complete cars and chassis were £227,000 and £39,000 respectively. The same is true of electrical goods and apparatus other than machinery. The imports from Germany of insulated rubber were £262,000, and of electric lamps and parts £254,000, whereas in both these items the exports to Germany were insignificant.

As regards Austria-Hungary our total imports from that country of machinery and electrical goods and apparatus together totalled only about £50,000, as against exports of about £480,000.

## II.—BRITISH MANUFACTURING RESOURCES AND CAPACITY OF EXPANSION.

No branches of British industry are more closely bound up with war activity than the iron and steel and engineering trades. As has been pointed out by the Tariff Commission in an earlier publication,\* the close connection between economic and defensive policy has been accepted at all times in all countries except in England during the Free Trade period. A modern Army is after all a certain group of callings, industries, trades, means of transport, organised for the purposes of war. A modern Navy cannot even be constructed unless the engineering and iron and steel trades, in all their branches, are at the highest point of efficiency. Foreign countries gave no cause for anxiety with regard to their naval programmes until their iron and steel, engineering, and other industries began to make rapid progress.

In illustration reference may be made to the evidence given before the Tariff Commission by one of the largest contractors to the Admiralty. This gentleman spoke of the battleship industry as "really a protected industry as far as the British Admiralty is concerned," and he indicated the wide range of commodities which is affected by this fact. "The principal materials we use," he said, "are iron, steel, brass, copper, tin, zinc and timber. We are also very large users of manufactured articles, auxiliary machinery and fittings of all kinds. Completed articles, such as anchors and cables, pumps, winches, windlasses, steering gear, refrigerating and electric light machinery and lamps, upholstery and other different fittings of a ship, we get from manufacturers in this country. All our timber comes from abroad."

This witness also made the following reference to the weldless steel tube industry: "We are not allowed to buy Belleville boiler tubes abroad for British warships. The solid drawn tube industry as it exists now in this country has been much helped by this protection; if British ship-builders had not been prevented by the Admiralty from going to Germany for these tubes, the industry might not have been so flourishing to-day."

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\* Tariff Commission Memorandum (MM 46), "The Problems of the Imperial Conference and the Policy of Preference." London: P. S. King & Son. Price 3d.

It is now generally recognised that the naval and military organisation of Germany could never have been brought to the point of perfection which has been reached in recent years and evidenced since war began, had it not been for the national recognition in that country of the close connection between economic and defensive policy, and the unceasing care with which the resources of the State have been used to foster these great basic industries.

This intimate relationship between defence and industry has naturally resulted in a great deal of additional work being thrown upon the iron and steel and engineering industries of this country.\* In many cases works and yards, official and private, are working at the highest pressure, and seeing that their relations with the Government remove all difficulties of finance in their case the only restrictions upon their activity would seem to be those arising from the limitations of skilled labour. Mention is made of this scarcity of skilled labour owing to the enlistment of workers in several of the replies received in answer to the enquiries of the Tariff Commission, but it is recognised that this is a difficulty which tends to right itself.

In those branches of the iron and steel and engineering industries not so much affected by war activities there is keen appreciation of the opportunities now offered to capture trade formerly done by German manufacturers and merchants in the British and overseas markets. The statistics already detailed in the earlier part of this memorandum show that the importations into the United Kingdom from Germany in the iron and steel and engineering groups amounted last year to nearly £14,000,000, although British exports to Germany in the same groups were only £4,500,000. There is, besides, the great trade which Germany did with the overseas Dominions and foreign countries outside Europe amounting in these groups to nearly £29,000,000 in 1912.†

There is no evidence in the replies that British manufacturers would have any difficulty in replacing the vast bulk of this German trade on certain conditions. In some cases existing plant is said to be sufficient for the purpose. In the great majority of cases, however, it is stated that it will

\* For fuller account of War Contracts see Part I. pp. 19 and 20

† See Tariff Commission MM 55, "Trade Aspects of the War with Germany," Appendix I.

be necessary to enlarge works and lay down new plant, involving large expenditure of capital, and the replies of leading makers in almost all branches of these industries indicate the main conditions which must first be fulfilled before capital and enterprise can be expected or induced to enter these new fields.

Practically all these manufacturers and merchants refer to the absence of security which will follow the passing away of present war conditions.

Thus a firm of iron and steel brokers and merchants state that they **Iron and Steel** have written to the Board of Trade that if capital is to be expended in the various steel and allied industries for the future benefit of British trade there must be some promise of security. A firm of steel manufacturers say, "We should not dream of spending capital" (to capture German trade) "in the absence of any form of protection." A coal and iron company remark, "It is only natural that works here hesitate before laying out large sums in capital owing to the uncertainty of what is to happen when the war is over."

A firm of forgings manufacturers stated they were negotiating for the **Forgings** expenditure of £20,000 to £40,000 but before closing the matter they desire "some security against free importations of forgings" after the war. Another manufacturer of forgings states that the importations of steel forgings and steel marine shafting from Germany have been so large and the prices so much under cost that the forges in Scotland and the north of England have been unable to go on.

A well-known maker of steel castings referred to negotiations which **Castings** his company had been conducting with several anchor firms who formerly obtained their castings from Germany. These firms were attempting to force on the manufacturer a condition which is interpreted to mean that after the war his company might have to reduce prices to the level of foreign prices even though these leave no margin of profit. The clause reads as follows :—

"If the price chargeable under the sliding scale shall be found at any time to be in excess of the competitive market price quoted from other sources the firm shall then reduce their price *pro rata*, provided that they shall not be expected ever to reduce it below their ascertained net cost."

The tube manufacturers who reply admit that the cessation of the supply of weldless tubes from Germany should benefit British manufacturers ; but seeing that the decisive factors which have enabled Germany to secure this trade in the past, have been low prices and the practice of giving long credit, it is felt to be essential that those who now embark money for the enlargement of British industry should have some safeguard against the renewal of dumping and undercutting.

An important branch of the industry especially affected by the war is the manufacture of iron and steel wire, which according to a leading authority in the trade "has been largely dependent on imported steel in the form of either billets or wire rods." The organisation of the trade in Britain differs materially from that in other countries inasmuch as in other parts of the world the great wire factories are generally a department of a steel works. It is pointed out that in this branch of the trade a considerable amount of land, buildings and machinery is necessary. The first effect of the cessation of German competition has been to fill up existing factories to their manufacturing capacity, but with all the uncertainty as to the future "it will be long before they (the steel makers of Britain) will be prepared to incur large capital expenditure in order to supply the wire trade with steel at the accustomed low level of price." This view is confirmed by another large manufacturer who says the British wire drawers have not the requisite plant to meet the British demands for wire for netting or fencing purposes.

An important firm of nail manufacturers state that the British production of wire nails is totally inadequate to meet the British demand now that German importation has ceased. Nobody however is likely to put down any increased quantity of machinery to meet the new demand, for as soon as the war is over German nails will come in and undercut the British production. Nor is it feasible for the wire rod makers to extend their works without some assurance that their capital will not be thrown away at the end of the war.

The difficulty of users who are not themselves manufacturers of steel goods is shown by the experience of a firm of engineers who offered to buy



and sell 1,000 tons a month of steel rails which they formerly obtained in Germany, but were unable to induce any works to turn out this quantity. They expressed the view that this is due to the fear of German and American competition in the future and state their opinion that "German works being of so much larger capacity than the British have manufactured light steel rails more or less from their bye-products."

As regards hardware which has come so largely from Germany in the past, there is a portion of the trade which British manufacturers are securing without additional plant. There are however many articles which, in the words of a manufacturer, "cannot be made at all without new costly plant." He instances an article retailed at 10s., to make which here would require a plant costing £800. To hold the captured trade in the one case after the war and to induce manufacturers to invest the necessary capital for new plant in the other case some guarantee of security in the future is necessary. Hardware

Another hardware manufacturer emphasises the necessity for some form of Government guarantee that capital laid out in the endeavour to capture enemy trade shall not be lost by the renewal after the war of organised competition and dumping. A maker of pressed hollow-ware and other hardware products states that German articles have been sold in this country at a price about equal to cost here, and adds that "no manufacturer will be foolish enough to invest capital in buildings and plant necessary to produce such articles unless the Government give an assurance that they will not have to meet after the war the competition that has hitherto existed."

A manufacturer of cutlery and silversmiths' wares remarks that Sheffield is not able to compete with Germany and Austria in the manufacture of cheap lines on account of cost of production due to different manufacturing methods. He states that the majority of the Sheffield manufacturers are not wealthy and the whole of their capital is tied up in their businesses so that they are not in a position to discard obsolete methods. The German manufacturer makes large quantities of every pattern and spares no expense in machinery and methods for easy production, whereas the Sheffield trade, owing to its age, enormous number of patterns and consequently smaller Cutlery

requirements of each, has not adopted such ready methods. A firm of makers of electro-plate, &c., say that in order to produce the articles which have hitherto been made in Germany at anything like the German prices it will be necessary to spend a great deal of money on new plant and machinery. Before doing this, however, they would like "some assurance from the Government as to what our position is going to be when the war is over and German industries are again active." Another firm state that at the Board of Trade exhibition of German samples 70 per cent. of the electro-plated goods were those of one German firm, the Wurtemberg Electro Plate Company. Fostered by a highly protected home market this firm has grown to a size which enables it to invest fortunes in dies and tools. It thus has an enormous advantage over the small English manufacturer. In electro-plate wares the competition is mainly in design, and this English makers find most difficult to meet. The trade in England is in the hands of many comparatively small firms. The design is entirely a question of dies and tools and a small firm cannot risk the heavy expenditure required in this direction, with a restricted market and the chance of a new pattern not meeting with public favour or being copied by the foreigner. This firm add that in the absence of German competition at the present time our manufacturers are becoming more enterprising, but "many hesitate to incur expenditure and liability in the way of capital investment in machinery and tools without some guarantee of security from the Government against German competition after the war."

It is pointed out by one firm of cutlery and tool makers that as regards the capturing of German trade one of the chief difficulties will be the labour problem. The present number of hands available in the Sheffield cutlery trade is, they say, quite inadequate to cope with the orders for cutlery with which the town has been inundated.

A firm manufacturing hammers, pincers, pliers, &c., state that "in the absence of security manufacturers are not laying out capital to any great extent to produce pliers and spanners formerly supplied by Germany," while a maker of gas and steam fitters' tools says that "there will be no inducement to lay out further capital for the purpose of increasing the

output of hand tools unless some protection be afforded against the importation of German tools after the war." To take rimers, for example, which were sent here in very large quantities by German manufacturers, this maker states that it would be a speculation as to whether he could make the manufacture pay or not. "I should be willing to try it," he adds, "but for the fact that after the war the Germans will again step in and outsell me."

There are some manufacturers who declare that they are competent to deal with any additional work diverted from Germany and Austria. Thus a firm of mill-wrights, pumpmakers, &c., state that they have quite recently completed a large extension of their works. Other engineers, as for instance a firm who specialise in rotary machines for making Portland cement speak of the temporary protection which war gives and state they are largely increasing their works with a view to doubling their output. They indicate, however, that the German competition now closed was in many cases below English prime cost while the credits given were such that the English could not compete. This firm refer in particular to the character of German competition—their unscrupulous methods of doing business, their systematic bribing of officials, and the offer of guarantees which could not be fulfilled. They add that "It is to be hoped that at the termination of the war some protection against unreasonable German competition will be afforded to British industries."

A very general experience is that of a railway engineering firm, who say "a proposal has been made to us to lay down plant at a cost of at least £100,000 for the manufacture of an article, the supply of which has been cut off by the war, and of which a large output is essential to its profitable production. Of course we hesitate to incur the outlay in view of the probability of having to encounter German competition in the future." This firm hint, however, that the stoppage of supplies of imported steel may prove to be the only difficulty in the locomotive trade. The resources of British locomotive manufacturers are said to be "adequate to meet all demands they can fairly look for" for locomotives and rolling stock, and if English steel makers "could be guarded against unfair competition in the future they would readily increase their plants to meet all possible demands."

Cement Machinery

Railway  
Engineering

A firm making agricultural machinery state that it is not so many years since English manufacturers of agricultural machinery were alone in the markets of the world. As to what will happen after the war they say that no one at the moment can tell, even in those countries at present hostile to Germany, whether buyers will in every case maintain a vigorous boycott of German agricultural machinery. They add that they have very little doubt that manufacturers will be able to cope with the trade if it comes their way.

Another firm of agricultural machinery makers say that the present capacity of British works should be adequate to provide for captured trade, when they have their full complement of men, though it may be necessary to make some outlay in order to cope with the increase. They add that new capital is not so much required to provide extensions as to meet the immense lock-up necessary in the business. In many countries payments are spread over three years and the more trade done the greater the lock-up of capital.

**Machinery** Some big makers of mining machinery and steam, gas and oil engines state that there are very good prospects of capturing much of the German trade in industrial machinery. They add, however, that the present capacity of British works is totally inadequate to provide for and retain the captured trade and that new capital can only be obtained on condition of security of tenure. They suggest therefore in all markets under British control "a preferential tariff of such a character as absolutely to exclude German competition, and thus prevent Germany's industrial recovery."

Another firm of engineers and iron founders say: "We are considering the formation of a new company for the manufacture of patent ball and roller bearings, but we are afraid that our efforts to raise the necessary capital will be hampered by the fear of keen subsidised competition from Germany at the termination of the war." This firm add: "There is an enormous accumulation of uninvested capital in this country, and if protection were guaranteed it would be much easier for firms to obtain the capital required for the extension of their business."

Much the same comment is made by a firm manufacturing pumps and pumping machinery, who remark that it would not be wise for manufacturers to extend their works and plant with a view to capturing German and Austrian trade unless the Government give some assurance that a tariff will be set up against German and Austrian imported goods, while a general engineering firm state that the capitalist must have the assurance that it will be possible to keep industries well and profitably employed.

Some manufacturers of industrial machinery state their belief that the capacity of British cane-sugar machinery works is ample to deal with the plant which has hitherto been made by German and Austrian firms for the cane sugar industry. If, however, extensions were required, capital would be easily attracted provided there were "some assurance that sugar grown within the British Empire would have fair play and not have to compete against sugar produced under the bounty system."

Among the makers of sugar machinery there seems to be a larger proportion of foreign competition than in any other distinctive machinery-using trade. Of 53 advertisers in a leading sugar journal, before the outbreak of the war, no fewer than 22 were those of firms outside the British Empire. Of these 22, 9 were German and Austrian firms, 6 French, 4 United States, 2 Dutch, and 1 a Belgian firm. Since the war the advertisements of the Continental firms, with the exception of the two in Holland, have ceased to appear.

As regards typewriters an important firm of typewriter merchants emphasise the magnitude of the market for typewriters and the various accessories and supplies associated with them.

A firm of general engineering merchants refer to the "bad showing" of British manufacturers, particularly in regard to price, in the electrical branches of engineering, light rails, gas and water tubes, screwed and socketted pipes, &c., and certain lines of tools such as wire cutters and plumbing tools. They remark that "the root reason is free trade which limits production and makes British industry insecure by leaving the home

market open to foreigners without duty." One of the largest firms of electrical engineers testifies to the very extensive range of German goods formerly sold in England, especially of the cheap kinds, and furnishes a list of 50 distinct classes of such goods which could and would be made in this country if unfair competition were eliminated by State action. As regards the motor car industry, the initial outlay for extension is said to be so considerable that the increase of "dead charges" after the war would handicap manufacturers very seriously in competition with Continental firms and new expenditure would not be justified without the safeguard of a tariff.

An interesting sidelight, illustrative of the disturbing effect of the war upon the British engineering industry, generally is obtained from a glance at the advertisement columns of representative English engineering journals. In the case of one of the leading British engineering publications the advertisements of no fewer than 82 firms were discontinued at the outbreak of the war, and these advertisers who have now dropped out included many obviously German in character, such as the Berlin Anhaltische Maschinenbau, the German Niles Tool Works, the M.A.N. Co. (Maschinenfabrik-Augsburg-Nurnberg A.G.), and the Mannesmannrohren Werke.

### III.—STATEMENTS OF BRITISH TRADERS.

The following are the replies received from British traders in the iron and steel and engineering industries respecting British Manufacturing Resources in the various departments of the Iron and Steel and Engineering Trades:—

**FIRM C. 1227 (Coal and Iron).**

Unless the conditions of capital and labour are materially altered either in Germany or in England, I do not think it will be any more possible for English manufacturers to beat the Germans in the open market in the future than it has been in the past. We ought to have import duties of sufficient magnitude to enable English manufacturers to keep their works fully employed.

**FIRM C. 1337 (Steel).**

When the war is over, should the Germans be able to start business again with the great artificial protection they have enjoyed for so long, that is to say, the protection of the Home Market, we do not see how they can fail to take our trade away from us again.

**FIRM C. 9659 (Steel).**

We should not dream of spending capital (to capture German trade) in the absence of any form of protection.

**FIRM C. 6239 (Iron and Steel Merchant).**

Our business has fallen off in the last few years owing to foreign competition. So far as Germany is concerned we have done, comparatively speaking, nothing in the way of manufactured steel. Copenhagen and Elsinore, during the last two years, have been getting almost all their materials from Germany and we have given up expectation of further business with Continental buyers, partly owing to the combination of steel manufacturers in this country and partly owing to the determination of the German makers to cut prices for orders.

**FIRM C 896 (Iron and Steel Merchants).**

The real position in Great Britain is that we are not able to make sufficient steel for the requirements of the country in normal times, and therefore Continental Steel is often welcomed. We have written to the Board of Trade that if capital is to be expended in the various steel and allied industries for the future benefit of British trade there must be some promise of security.

**FIRM C. 1976 (Coal and Iron).**

Prior to the war we were only working our iron and steel works to a very limited extent being pressed into this position by German competition. Now we have an ample supply of orders at better prices. "General charges" in Germany have been reduced to very small proportions owing to Germans having cheaper labour and the enormous works they have put up to supply the whole world. It is only natural that works here hesitate before laying out large sums in capital owing to the uncertainty of what is to happen when the war is over.

**FIRM C. 3116 (Steel Castings, &c.).**

The German steel foundries have exported to this country large quantities of steel castings at prices at which it was impossible for English makers to compete. Immediately on the declaration of war the anchor manufacturers in this country, who have been accustomed to provide themselves with supplies from Germany, found themselves in a difficult position. A number of them approached us, and we are negotiating with one or two firms for contracts, in which event we shall probably arrange for considerable extensions to our premises. Our friends, however, wish to insert in the agreement a clause basing the price chargeable on competitive market prices. The effect of this will be that in the event of the same condition of things prevailing on the cessation of hostilities as was in vogue before, we should be placed in the position that we should have expended our capital in providing plant which might not be of use if our foreign competitors were permitted to resume operations in exactly the same way as hitherto, unless we were prepared to sell the articles at or below the net cost.

**FIRM C. 2210 (Forgings).**

The importations of steel forgings and steel marine shafting from Germany have been so large and the prices so much under cost that the forges in Scotland and the North of England have been unable to go on and have been scrapped. The plant of some firms at the present time is not quite up to date and cannot compete successfully with modern German plant. We have had inquiries for steel shafting, but have been unable to entertain the work, and we think engineers will have difficulty in getting their supplies owing to the limited production in this country. Firms in this country have been unable to compete at the prices quoted by Continental firms. We are considering putting down new plant which will cost from £20,000 to £40,000, but before deciding, we should like some security against free importation of foreign forgings so that we may be enabled to do the business at home which has hitherto been done on the Continent.

In a later letter this firm write:—We are putting down a large extension to our forge plant with a view to making an attempt to retain the work which formerly went to Germany. We are quite alive to the uncertainty of how things will develop after the war, and are certainly very much interested in anything that can be done to give adequate security to manufacturers such as ourselves who are prepared to spend money in putting down additional plant.

**FIRM C. 12275 (Tubes).**

Cessation of supplies from Germany of weldless tubes should benefit the manufacturers in this country of weldless tubes. With regard to our foreign trade, prior to the war German makers were quoting prices considerably less than the normal cost of production here. German competition will be removed probably for some time to come, but we find that American and Canadian manufacturers are quoting very low prices.

**FIRM C. 1418 (Tubes).**

Most of the tube trade which the Germans have had has been taken from the makers in this country, and if the conditions which enabled them to do so are removed a large portion of it will come back again. The two main factors which have helped them to get the business have been the low prices they have been able to quote by their method of distributing reductions of prices through the whole range of materials used, and their practice of giving long credit.

**FIRM C. 3990 (Wire).**

The first effect of the cessation of German competition is likely to fill up existing factories to their maximum capacity, without the assistance of any new markets. The manufacture of wire requires a considerable amount of land, buildings and machinery, and at the present moment, with all the uncertainty of the future, firms may hesitate to embark upon a large capital expenditure. The whole of the wire trade has been largely dependent upon steel imported from abroad in the form either of billets or wire rods. It may be expected that the large steel makers of Britain will, as the result of the new markets thrown open to them, be able to dispose of their comparatively limited production on advantageous terms, and it will be long before they will be prepared to incur huge capital expenditure in order to supply the wire trade with steel at the accustomed low level of price. The interruption in the supplies of foreign steel is causing the wire trade grave anxiety. The majority of the wire manufacturers in Great Britain have grown up as mere wire manufacturers buying their raw material in the cheapest market available. In other parts of the world the great wire factories are generally a department of a steel works and wire is sold where necessary as so many tons of steel without reference to the provision of any intermediate profit. Owing to the magnificent response to the appeal for recruits, manufacturers are on all hands faced with a grave deficiency in labour

**FIRM C. 4463 (Wire).**

Prior to the war, wire cloths were being imported into this country at extremely low prices, but we are now getting back much of the business which was taken from us by German firms. We have received many inquiries and orders from Italy, Denmark, Russia, &c., and we are making special efforts to put ourselves in a position which will enable us to retain our grip on these markets. So far we have been able to obtain all the required raw material from home firms.

**FIRM C. 2192 (Wire).**

We are exceedingly busy at the present moment and cannot possibly undertake all the orders or attend to all the inquiries which are being sent to us every day from nearly all the markets in the world. This is due to the entire stoppage of exportation of German goods similar to those we make. At the present moment it would be impossible for me to extend our business in any direction because there is difficulty in securing capital, labour and raw material. We do not think bankers would be inclined to advance money at the present time. Nor do we think it would be possible to raise money by issuing either debentures or further shares. The labour problem is very serious because already



some of our most skilled workers have gone to the Front, and it is impossible for us to replace them. With regard to raw material, we have been endeavouring to obtain sufficient supplies of phosphor bronze and brass wire for weaving purposes. All the Birmingham brass factories are busily engaged with Government orders, and these take precedence. At the present time we are not getting anything like the necessary supplies.

**FIRM C. 5782 (Wire Nails, &c.).**

The British production of wire nails is totally inadequate to meet the British demand now that German importation has ceased. There is not the machinery here to do this. The total capacity of British wire nail production is not more than ten or eleven thousand tons a year, and the actual production is probably not more than 7,500 tons. The importation is something like 50,000 tons a year, and I am of opinion that much the larger portion of these nails came from Germany, but owing to some of them being shipped from Antwerp they may have been classed as coming from Belgium. The probable amount of British wages paid for converting the wire into nails would be about 30s. per ton, and a further 20s. per ton earned by the wire drawer for converting the wire rods into nail wire. These figures for wages are independent too of the additional British wages upon the machinery and coal and other things used in the making of the nails. Nobody is likely to put down any increased quantity of machinery to meet the demand under existing conditions, for as soon as the war is over German nails will come in and undercut the British production. The greater relative cost of British wire nails over that of other countries is due chiefly to the higher cost of material and labour in this country. In the past the price of German wire nails sold in England has been as much as £2 per ton under the German cost price. The method by which Germany carries on this trade under cost price is easily explained and is common to many branches of trade. Supposing that a German manufacturer is able to produce 100 tons a week. Then having his home market secure against external competition he sells in it say 75 tons at a profit of £3 a ton—while the remaining 25 tons he sells in the United Kingdom at a loss of £2 per ton. The net result would thus be a profit. There is, however, no loss even on the export part of the trade as there is a Government bounty of £2 per ton which covers him on it—while the larger production enables him to carry his "dead charges" over a far greater output with the result of a far more substantial profit than he could have secured on a smaller output. Moreover, it may be assumed from experience that when this undercutting has brought British competitors to a standstill and given German producers control of the British market the price to the British consumer will go up to a figure more directly profitable for the German producer. It is also to be remembered that the nail trade is quite a side issue with the ironmonger. He will often accept a cut price from the builder in the expectation of orders for stoves and locks and bolts and many other things necessary to the completion of a house for occupation.

The cut nail trade is an exclusively British industry, and it is a declining industry because of the competition of the cheaper wire nail. The British production of cut nails is probably 25,000 tons a year, and I should say that this is about half what the existing machinery in this country could manage. There is also German competition to be met in the shoe rivet trade. The sheets used for the making of cut nails are British.

The materials used in the wire nail trade have been supplied very largely from Germany in the shape of rods. Of course the supply of German rods is now cut off and there are not sufficient makers in this country to fill up the deficiency. Hence British wire nail makers have had to fall back upon the United States for their wire rods, and the wire rod makers will tell you, as the wire nail makers also, that it is not feasible to lay down the necessary plant and extend British works without some assurance that their capital will not be thrown away at the end of the war by the renewal of foreign undercutting. The want of skilled labour is another difficulty which British manufacturers have to face in increasing their output. We have been wanting skilled men and cannot get them. German labour is less costly than British labour and German manufacturers are not hampered by the labour conditions which apply in this country.

**FIRM C. 2608 (Wire Netting, &c.).**

The British wire drawers have not the requisite plant to produce sufficient wire to meet the demands of British firms, even for the annealed wire wanted for weaving into netting, let alone the immense quantities of stouter wire required for fencing purposes. Moreover, the principal wire drawing firms here have relied upon Germany and Belgium for raw material in the shape of billets. The spelter used here, too, comes almost entirely from Germany and Belgium. We are thus heavily handicapped in tendering for galvanized wire netting in our overseas markets.

Prior to the war the Germans were quoting galvanized wire netting in the Australian market at prices which no British firm could accept without being involved in a serious loss. A tariff of about 10 per cent. on all German galvanized wire netting entering Australia would enable British manufacturers to secure a larger share of the trade and to give more employment to workmen in this country.

**FIRM C. 2210 (Forgings).**

The importations of steel forgings and steel marine shafting from Germany have been so large and the prices so much under cost that the forges in Scotland and the North of England have been unable to go on and have been scrapped. The plant of some firms at the present time is not quite up to date and cannot compete successfully with modern German plant. We have had inquiries for steel shafting, but have been unable to entertain the work, and we think engineers will have difficulty in getting their supplies owing to the limited production in this country. Firms in this country have been unable to compete at the prices quoted by Continental firms. We are considering putting down new plant which will cost from £20,000 to £40,000, but before deciding, we should like some security against free importation of foreign forgings so that we may be enabled to do the business at home which has hitherto been done on the Continent.

In a later letter this firm write :—We are putting down a large extension to our forge plant with a view to making an attempt to retain the work which formerly went to Germany. We are quite alive to the uncertainty of how things will develop after the war, and are certainly very much interested in anything that can be done to give adequate security to manufacturers such as ourselves who are prepared to spend money in putting down additional plant.

**FIRM C. 12275 (Tubes).**

Cessation of supplies from Germany of weldless tubes should benefit the manufacturers in this country of weldless tubes. With regard to our foreign trade, prior to the war German makers were quoting prices considerably less than the normal cost of production here. German competition will be removed probably for some time to come, but we find that American and Canadian manufacturers are quoting very low prices.

**FIRM C. 1418 (Tubes).**

Most of the tube trade which the Germans have had has been taken from the makers in this country, and if the conditions which enabled them to do so are removed a large portion of it will come back again. The two main factors which have helped them to get the business have been the low prices they have been able to quote by their method of distributing reductions of prices through the whole range of materials used, and their practice of giving long credit.

**FIRM C. 3990 (Wire).**

The first effect of the cessation of German competition is likely to fill up existing factories to their maximum capacity, without the assistance of any new markets. The manufacture of wire requires a considerable amount of land, buildings and machinery, and at the present moment, with all the uncertainty of the future, firms may hesitate to embark upon a large capital expenditure. The whole of the wire trade has been largely dependent upon steel imported from abroad in the form either of billets or wire rods. It may be expected that the large steel makers of Britain will, as the result of the new markets thrown open to them, be able to dispose of their comparatively limited production on advantageous terms, and it will be long before they will be prepared to incur huge capital expenditure in order to supply the wire trade with steel at the accustomed low level of price. The interruption in the supplies of foreign steel is causing the wire trade grave anxiety. The majority of the wire manufacturers in Great Britain have grown up as mere wire manufacturers buying their raw material in the cheapest market available. In other parts of the world the great wire factories are generally a department of a steel works and wire is sold where necessary as so many tons of steel without reference to the provision of any intermediate profit. Owing to the magnificent response to the appeal for recruits, manufacturers are on all hands faced with a grave deficiency in labour.

**FIRM C. 4463 (Wire).**

Prior to the war, wire cloths were being imported into this country at extremely low prices, but we are now getting back much of the business which was taken from us by German firms. We have received many inquiries and orders from Italy, Denmark, Russia, &c., and we are making special efforts to put ourselves in a position which will enable us to retain our grip on these markets. So far we have been able to obtain all the required raw material from home firms.

**FIRM C. 2192 (Wire).**

We are exceedingly busy at the present moment and cannot possibly undertake all the orders or attend to all the inquiries which are being sent to us every day from nearly all the markets in the world. This is due to the entire stoppage of exportation of German goods similar to those we make. At the present moment it would be impossible for me to extend our business in any direction because there is difficulty in securing capital, labour and raw material. We do not think bankers would be inclined to advance money at the present time. Nor do we think it would be possible to raise money by issuing either debentures or further shares. The labour problem is very serious because already

some of our most skilled workers have gone to the Front, and it is impossible for us to replace them. With regard to raw material, we have been endeavouring to obtain sufficient supplies of phosphor bronze and brass wire for weaving purposes. All the Birmingham brass factories are busily engaged with Government orders, and these take precedence. At the present time we are not getting anything like the necessary supplies.

**FIRM C. 5782 (Wire Nails, &c.).**

The British production of wire nails is totally inadequate to meet the British demand now that German importation has ceased. There is not the machinery here to do this. The total capacity of British wire nail production is not more than ten or eleven thousand tons a year, and the actual production is probably not more than 7,500 tons. The importation is something like 50,000 tons a year, and I am of opinion that much the larger portion of these nails came from Germany, but owing to some of them being shipped from Antwerp they may have been classed as coming from Belgium. The probable amount of British wages paid for converting the wire into nails would be about 30s. per ton, and a further 20s. per ton earned by the wire drawer for converting the wire rods into nail wire. These figures for wages are independent too of the additional British wages upon the machinery and coal and other things used in the making of the nails. Nobody is likely to put down any increased quantity of machinery to meet the demand under existing conditions, for as soon as the war is over German nails will come in and undercut the British production. The greater relative cost of British wire nails over that of other countries is due chiefly to the higher cost of material and labour in this country. In the past the price of German wire nails sold in England has been as much as £2 per ton under the German cost price. The method by which Germany carries on this trade under cost price is easily explained and is common to many branches of trade. Supposing that a German manufacturer is able to produce 100 tons a week. Then having his home market secure against external competition he sells in it say 75 tons at a profit of £3 a ton—while the remaining 25 tons he sells in the United Kingdom at a loss of £2 per ton. The net result would thus be a profit. There is, however, no loss even on the export part of the trade as there is a Government bounty of £2 per ton which covers him on it—while the larger production enables him to carry his “dead charges” over a far greater output with the result of a far more substantial profit than he could have secured on a smaller output. Moreover, it may be assumed from experience that when this undercutting has brought British competitors to a standstill and given German producers control of the British market the price to the British consumer will go up to a figure more directly profitable for the German producer. It is also to be remembered that the nail trade is quite a side issue with the ironmonger. He will often accept a cut price from the builder in the expectation of orders for stoves and locks and bolts and many other things necessary to the completion of a house for occupation.

The cut nail trade is an exclusively British industry, and it is a declining industry because of the competition of the cheaper wire nail. The British production of cut nails is probably 25,000 tons a year, and I should say that this is about half what the existing machinery in this country could manage. There is also German competition to be met in the shoe rivet trade. The sheets used for the making of cut nails are British.

The materials used in the wire nail trade have been supplied very largely from Germany in the shape of rods. Of course the supply of German rods is now cut off and there are not sufficient makers in this country to fill up the deficiency. Hence British wire nail makers have had to fall back upon the United States for their wire rods, and the wire rod makers will tell you, as the wire nail makers also, that it is not feasible to lay down the necessary plant and extend British works without some assurance that their capital will not be thrown away at the end of the war by the renewal of foreign undercutting. The want of skilled labour is another difficulty which British manufacturers have to face in increasing their output. We have been wanting skilled men and cannot get them. German labour is less costly than British labour and German manufacturers are not hampered by the labour conditions which apply in this country.

**FIRM C. 2608 (Wire Netting, &c.).**

The British wire drawers have not the requisite plant to produce sufficient wire to meet the demands of British firms, even for the annealed wire wanted for weaving into netting, let alone the immense quantities of stouter wire required for fencing purposes. Moreover, the principal wire drawing firms here have relied upon Germany and Belgium for raw material in the shape of billets. The spelter used here, too, comes almost entirely from Germany and Belgium. We are thus heavily handicapped in tendering for galvanized wire netting in our overseas markets.

Prior to the war the Germans were quoting galvanized wire netting in the Australian market at prices which no British firm could accept without being involved in a serious loss. A tariff of about 10 per cent. on all German galvanized wire netting entering Australia would enable British manufacturers to secure a larger share of the trade and to give more employment to workmen in this country.

design achieve popularity, the foreigner will copy it and flood our home market with similar goods on a cheap scale, whilst we cannot retaliate. Our market is at his mercy whilst his market is, to us, impregnable.

In the absence of German competition at the present time our manufacturers are becoming more enterprising, but many hesitate to incur expenditure and liability in the way of capital investment in machinery and tools without some guarantee of security from the Government against German competition after the war.

**FIRM C. 5582** (Hammers, Pincers, Pliers, &c.).

In the absence of security manufacturers are not laying out capital to any great extent to produce pliers and spanners formerly supplied by Germany. There would be no difficulty in extending works, but manufacturers would not retain the trade after the war without a high tariff. New capital would be found by manufacturers if some security were given. There is difficulty at the present time in obtaining skilled workmen as the trade has been dead for ten years and very few men are left.

**FIRM C. 5964** (Gas and Steam Fitters' Tools).

There will be no inducement to lay out further capital for the purpose of increasing the output of hand tools unless some protection be afforded against the importation of German tools after the war. Take rimers, for example, which are sent here in very large quantities by German manufacturers. To enable me to make these tools an outlay of from £600 to £1,000 on machine tools would be necessary. The rimers would have to be produced at the same low price at which the Germans have been selling them here for years, and it would be a speculation as to whether I could make the manufacture pay or not. I should be willing to try it but for the fact that after the war the Germans will again step in and outsell me.

**FIRM C. 3511** (Gas, Water, and Electricity Fittings).

The resources of the British Empire should enable Great Britain to supply many markets hitherto supplied by Germany and Austria, but, without some combination between the different parts of the Empire and direct or indirect assistance from the British Government, the amount of trade that can be permanently captured will be limited. Many British manufacturers would adapt and reorganise their works to supply goods hitherto supplied by Germany if they had some assurance from the Government by way of security. We are at present laying down a small plant for the production of an article hitherto almost entirely made in Germany. If we have some security for our outlay we shall double or treble that plant as circumstances and opportunity permit.

**FIRM C. 12315** (South American Merchants).

There is German competition in Chile in the following articles :—Enamelled ware, padlocks, shovel bits, razors, cruets, penknives, wove wire and wire of all kinds except mattress, augers, S.M. rivets, lamp burners, hat and coat hooks, corkscrews, sheep shears, spirit stoves, spring tail bolts, screw hooks and eyes, gate hooks and eyes, tyre bolts and nuts, door locks, saddle nails, furniture nails, spring clips, iron butts and wardrobe hinges, till locks, scissors, wing pumps, tack hammers, forced draught stoves, compass and back saws, dog chains and leads, spring balances, jelly strainers, meat safes, charcoal irons, soup strainers, small screw pulleys, hasps and staples, table and dessert knives, painters' scraping knives, stocks and dies, window fasteners, hurricane lanterns, dough wheels, corkscrews, cupboard locks, cheap alloy table spoons and forks, tinned iron table spoons and forks, trowels, saw setters, curry combs, upholsterers' hammers, gas, steam and water tubes, table lamps, hand-rail screws. Austria competes in enamelled ware and potato mashers.

The enamelled ware can all be made in this country. The Germans indeed used mainly British blackplate. There is one firm here which was full up with orders for ten months. The Germans do very cheap lines in padlocks, doorlocks and razors, the latter being marketed at 7s. 6d. per dozen. The cheapest British locks are superior in quality to these German locks but the German locks are taken because they will do.

**FIRM C. 4722** (Rotary Machines for making Portland Cement).

We have had to compete with German firms whose prices in some cases have been below our prime cost, while the terms of payment offered by them have been such that we could not compete. Our German competitors have been most unscrupulous in their methods of doing business, in some cases bribing officials, and often offering guarantees which they could not fulfil. In such cases they have always asked very high prices, holding out inducements of increased output, &c. With the

present war, however, German competition has ceased and we are now enjoying the protection which we have felt all along would benefit trade. We are largely increasing the size of our works with a view to being able to double our output. In the course of time we shall have to face German competition again, but we hope that at the termination of the war some protection against unreasonable competition will be afforded to British industries.

**FIRM C. 1228 (Railway Engineering).**

I am informed that the resources of locomotive manufacturers in Great Britain are adequate to meet all likely demands and that there will be no necessity, even assuming a large increase in trade after the war, to start new works. I can say the same with regard to rolling stock, but the steel works in this country are no doubt unable to satisfy demands at the present time. If English manufacturers could be guarded against unfair competition in the future they would readily increase their plants sufficiently to meet all possible demands. I may mention that a proposal has been made to us to lay down plant at a cost of at least £100,000 for the manufacture of an article the supply of which has been cut off by the war, and of which a large output is essential to its profitable production. Of course we hesitate to incur the outlay in view of the probability of having to encounter German competition in the future.

**FIRM C. 337 (Engineers and Ironfounders).**

Firms who decide to erect new factories should be in a position to feel confident that when the war is over they will be adequately protected. We are considering the formation of a new company for the manufacture of patent ball and roller bearings, but we are afraid that our efforts to raise the necessary capital will be hampered by the fear of keen subsidised competition from Germany at the termination of the war. There is an enormous accumulation of uninvested capital in this country and if protection were guaranteed it would be much easier for firms to obtain capital required for the extension of their business.

**FIRM C. 6859 (Railway Engineers and Contractors).**

Manufacturers in this country would be quite capable of producing a very large proportion of the supplies hitherto made by German and Austrian manufacturers for the various markets of the world, provided they were allowed to compete in these markets on equal terms. Our manufacturers are very much hampered by hostile tariffs and by the policy of trades unions. Moreover, the measure of support accorded to manufacturers by the banks here is inadequate.

**FIRM C. 6251 (Engineers and Millwrights).**

We are competent to deal with any additional work diverted from Germany and Austria. We have quite recently completed a large extension of our works.

**FIRM C. 3281 (Engineers).**

For some time there has been a large shortage of skilled labour, especially in the engineering trade. There has been difficulty, too, in obtaining the capital necessary to carry out much-needed extensions and improvements.

**FIRM C. 12878 (Metallurgical Engineers).**

Brass sheets have been imported from Germany at a price much lower than a Birmingham roller can produce them. This is owing to the fact that there is very little really modern rolling plant in Birmingham.

**FIRM C. 991 (Agricultural Machinery, &c.).**

It seems to us that during the war, owing to the interruption of business all over the world, the question as to the capturing of German trade in agricultural machinery will hardly arise. As regards what will happen after the war, this will mainly turn on the attitude of the buyers in foreign countries, and no one at the moment can tell, even in those countries at present hostile to Germany, whether buyers will in every case maintain a rigorous boycott of German agricultural machinery. It is not so many years ago since English manufacturers of agricultural machinery were alone in the markets of the world. If most of the trade in future comes their way we have very little doubt that they will be able to cope with it.

**FIRM C. 879 (Agricultural Machinery).**

The present capacity of British works should be adequate to provide for captured trade, that is to say, when we have our full complement of men, though it may be necessary to make some

outlay in order to enable us to cope with the increase. In Germany, of course, the competition with the German makers is very strong indeed, and we are slowly but surely being driven out altogether, although we still have a fair hold in German Poland. We have been turned out of Austria altogether, except for a small business which we have done in Galicia. Our biggest market in Europe is Russia, and we do not anticipate any difficulty in capturing German trade with that country. All our agents seem to agree on this point. New capital is not so much required to provide extensions as to meet the immense lock-up which is necessary in our business. In many countries payments are spread over three years and the more trade we do the greater the lock-up of capital.

**FIRM C. 1226** (Engines and Boilers, Agricultural and Sugar Machinery, &c.).

As probably, after the war, many countries will boycott German machinery, there should be a very good prospect of a bigger outlet for British made machinery. Before the war this firm contemplated the extension of their works on a vast scale and they hope to carry this scheme into effect after peace has been established. New capital will be necessary for these proposed extensions, but conditions must become normal before the public will invest money in industrial concerns.

**FIRM C. 3592** (Hydraulic Engineering).

There is to a certain extent a field for British water meters, valves and water fittings generally to replace those formerly supplied by Germany. We have already secured some orders which formerly went to that country. As regards the capacity of British works, so far as we are aware, the works in this country are quite adequate to tackle the trade which might be captured from enemy countries.

**FIRM C. 2442** (Industrial Machinery).

We believe that the capacity of British works which produce cane sugar machinery is ample to deal with the plant which has hitherto been made by German and Austrian firms for the cane sugar industry. If, however, extensions were required, capital would be easily attracted provided there were some assurance that sugar grown within the British Empire would have fair play and not have to compete against sugar produced under the bounty system. Although direct bounties on foreign sugar have been abolished, indirect bounties have been given and so foreign beet sugar has been dumped on the market here below cost price.

**FIRM C. 7104** (Weaving Power Looms).

Although new business may be obtained as a direct result of the war, still, on account of the number of men who have enlisted the out-turn of works such as ours is much crippled. It remains to be seen whether countries, not wishing to have German looms, will still wish to have looms like the German type, or will adopt looms similar to those working in this country which work at a greater speed.

**FIRM C. 4** (Stationary Engines, Mining Machinery, &c.).

There is a very good prospect indeed of capturing much of the German trade, home and export, in industrial machinery, and in this regard we refer more particularly to prime movers. The present capacity of British works is totally inadequate to provide for the captured trade and to retain it. New capital is required for providing extensions and the only condition under which such capital can be obtained is security of tenure. After the war Germany will be a more serious competitor than ever as regards price-cutting. In all markets, therefore, under British control there must be a preferential tariff of such a character as absolutely to exclude German competition and thus prevent Germany's industrial recovery.

**FIRM C. 368** (Engineering, &c., Merchants).

We now have to purchase all engineering supplies from England or America. So far as the machinery branch of engineering goes we are as well served here as on the Continent. But in the electrical branches the terms and prices here are more than we would have to subscribe to were the German market still open to us. The British manufacturers fail to meet requirements in light rails, tubes (gas and water, &c.), and tools, such as wire cutters and plumbing tools. Their prices have for several years made it difficult to purchase here. In light rolling stock and rails the prices asked are at least 30 per cent. higher than those asked by Continental manufacturers and the quality is not to be compared with the supplies we used to receive from the Continent. Another line of business in which the British manufacturers are absolutely beaten is in the production of screwed and socketed pipes and loose flange pipes, both lap welded and solid drawn, their prices in lap welded tubes being double what we were paying on the Continent. America can easily beat this country in both these lines of business.

Our own view of the reasons for our manufacturers' bad showing in these lines is that they allow their plant to become out of date, insufficient reserve being made by large limited companies for this purpose. But the root reason is free trade which limits production and makes British industry insecure by leaving the home market open to foreigners without duty. Had we not had this war Germany would have beaten us by peaceable methods.

**FIRM C. 131 (Electrical Goods).**

A large range of electrical goods have come to this country from Germany, especially of the cheaper kind. These German goods include A.C. drills, small pulley blocks, electric torches and their batteries, electric toys, enamelled ware, small electrical instruments, motor car equipment, &c., telephones, electrically-driven cow-milkers, insulators, insulating materials, welders, frequency meters, burglar alarm systems, loom motors, electric sirens, miners' lamps, ozone generators, bells, electric blasters, electric punkahs, electric heating and cooking apparatus, resistance wires, massage vibrators, rheostats, lamp testing sets (wattmeters), sign flashers, small signs, Rhumkorff coils, electro-medical apparatus, dental apparatus, fairy strip (Pixielyte), small portable tools, sewing machine driving systems, permanent magnets, X-ray bulbs, Geissler tubes, buzzers, projectors, stage arc lamps, metal dimmers for stage work, Christmas-tree illuminations, vacuum cleaners, photometers, carbon brushes, air filters for turbo-generators, asbestos grid resistances, single-phase commutator motors, Edison screw sockets, cheap switches, &c.

**FIRM C. 102 (Motor Cars).**

The motor-car maker will not spend money on additional plant or the erection of new buildings, or incur substantially increased charges for travelling and advertising. He believes that when the war is over the old state of things will recur and that, handicapped by additional "dead charge" such as increased depreciation on buildings, plant, &c., he will again have to face the competition of German goods largely sold at, or just over, cost for the sake of turnover.

**FIRM C. 4373 (Pumps and Marine Auxiliary Machinery).**

Nearly every manufacturer could increase his production very considerably, but there is some doubt as to whether such increase would be sufficient to supply the markets hitherto supplied by Germany and Austria. In some departments of engineering I would say "Yes," in others, certainly, "No."

**FIRM C. 1581 (Pumps and Pumping Machinery).**

It would not be wise for manufacturers to extend their works and plant unless the Government give some assurance that a tariff will be set up against German and Austrian imported goods. Manufacturers might enjoy an increase in business for a year or two, but afterwards we are afraid that low prices, especially with British merchants, would rule before patriotism.

**FIRM C. 12280 (Metal Engraving).**

In our endeavour to secure trade hitherto done by Germany we are taking steps to considerably extend our business. We have difficulty at present in obtaining a supply of fine process brass and the price we are paying is 33 1-3 per cent. more than it could be purchased for in Germany. We have also difficulty in obtaining chemicals. The price in England is 150 to 200 per cent. more than before the war.

**FIRM C. 6193 (Engineers, Boilermakers and Electricians).**

In connection with the extension of businesses, we must not overlook the fact that it will be necessary to find new markets for the great bulk of the goods hitherto exported from this country to Germany, while, on the other hand, goods hitherto imported from Germany, if not purchased from abroad, must now be made here. We must put ourselves in a position to cope with the great extra demand that must necessarily come upon us, but money will not be forthcoming unless the Government gives an assurance that industries will not be subjected to the same competition in the future as has existed in the past. The steel industry has been heavily hit owing to the Germans selling at prices which manufacturers here could not accept without loss. Capitalists must have the assurance that it will be possible to keep industries well and profitably employed.

**FIRM C. 799 (Typewriter Merchants, &c.).**

We feel that there is a very large market both in regard to typewriters themselves (now an enormous industry) and also in inked ribbons and carbon papers and the large lines of papers and other supplies associated with the same, and we should like to see these things manufactured as far as possible in this country.

#### IV.—FINANCIAL ASPECTS.

The main points for consideration which arise from the replies of traders in regard to the financial aspects of the present situation may be stated as follows :—

1. The conditions arising out of the moratorium in the United Kingdom and foreign countries.

2. Credit difficulties. It is the experience of practically all British firms competing with German trade, especially in overseas markets, that their German rivals have been able to offer much more liberal credits to customers, partly on account of the support of German trade banks and partly for other reasons, than could be offered by British firms. The war has of course temporarily suspended German competition, but British firms see no reason why the same conditions should not recur when ordinary trading is resumed.

3. Capital requirements in order to provide the necessary plant resources for dealing with captured German trade.

The first difficulty, namely, the suspension of remittances, was of course felt mainly by merchants engaged in foreign trade, and in the case of South American markets, notably Brazil, has been greatly accentuated by internal financial pressure. Thus, a South American merchant speaks of the large foreign loans contracted by Brazil for railway extension and dock building and the large floating debt incurred, a sequel to which has been a severe restriction in the import business owing to the stoppage of further loan negotiations and the withdrawal of credit from Europe through the war. A firm of tube makers stated they expected that orders from foreign buyers would come more freely when the financial position was easier and exchange better. Another firm of South American merchants spoke of the necessity of banking facilities for merchants who were hung up with their capital already out in South America, and referring to the moratorium which Argentina has established for the entire duration of the war they asked, "What is to become of firms trading with the Argentine at the expiration of our (British) moratorium?"



As regards banking methods it is a very general experience of British traders that, in the words of one firm of engineers, "The terms of payment offered by German firms, with or without the aid of German banks, have been such that we could not compete with them." "Your machines should sell well here," report the agents of a firm of milling engineers, "but we cannot give the credit our German competitors do." These German credits are stated by this firm of engineers to be in some cases for as much as four years. Competitors have been able to get bills bearing interest at 6 per cent., 7 per cent., and even 8 per cent., and they have taken them to their bankers who have discounted them at 1 per cent. or 2 per cent. less, thus providing these competitors with funds to an almost unlimited extent. German bankers too have acted upon the principle of advancing money on orders taken by their clients, and French manufacturers have been greatly helped by means of bills of exchange being sent out with all invoices, and when accepted by the debtor these bills have been discounted by the manufacturer's banker without question and without collateral security. "If we," says this firm, "were to show a Continental bill at three months to our bankers without collateral security of some kind they would treat the matter with ridicule." A firm of merchants who have had twenty years' experience in the principal South American markets say that "in 99 cases out of 100 the Germans have secured a customer, not because the goods are of superior quality or because they are not manufactured in Great Britain but because the German is able to offer better terms. The Germans have built up their enormous trade owing to the banks always backing them up." Another firm of merchants who deal largely in engines and other machinery for the South American market say, "The question of price has not been so important as the question of the long and abnormal credits given to the German exporter by state-aided banks." A firm of Anglo-Brazilian merchants makes a detailed contrast between customary British and German credit terms in that market, entirely to the advantage—from the buyer's point of view—of the German trader. It is not merely the longer period of credit which German traders are enabled to give, but the removal of all speculative elements arising from fluctuations in the rate of exchange while the goods are in transit that has made the German terms so much more acceptable. This

firm quote cases which indicate that their inability to grant terms more comparable with those of their German rivals arises from the action of British manufacturing houses who "require cash against documents in the first instance from the export merchants," while "the banks through whom the documents pass select only drafts for discount which are absolutely gilt-edged, and those only at 90 days sight, and give no facilities whatever to the English export merchant in finance." A similar experience is narrated by a firm of electrical storage battery makers who state that "our foreign competitors moreover grant most liberal terms in respect of credit as against the usual practice of cash against bills of lading adopted by the home firms." It is, they add, the "lack of speculation, if such a term can be used, that retards the advancement of British trade. In the majority of cases the British manufacturer will not risk his capital unless there is a certainty of a good and prompt return." Another firm of South American merchants, while stating that their greatest difficulty in South America has been the much longer credit granted by German houses owing to greater banking facilities, point out that this has been a direct incitement to over-trading by importing firms.

The third difficulty, namely, that of securing adequate capital for extensions and improvements, is also much referred to in the replies of manufacturers and merchants. For instance, a firm of engineers speak of this additional capital as "very much needed," and add: "The general public have been shy in coming forward and the banks have in many instances been too timid to give sufficient accommodation." A firm of stationary engine and mining machinery makers state that new capital is required for providing extensions and the only condition under which such capital can be obtained is security of tenure. A firm of electrical storage battery manufacturers say they are not doing the export trade they might be doing mainly because of "want of enterprise on the part of capital." As mentioned above a South American merchant stated that the only difficulty at the moment "is the question of financing the business, or in other words of banking facilities to merchants who are hung up with their capital already out in South America." A firm of engineers who desire to compete with

Germany in the supply of semi-rotary wing pumps say that a sum of about £10,000 would be required for the plant necessary to produce in large quantities at low cost. They regard themselves as favourably placed for dealing with the trade, but "in view of the calls on our capital in close relation to our present manufactures, we have not felt justified in allocating the amount of money necessary to develop this particular line." The growth of the joint stock banking system at the expense of the private banker is adversely referred to by a firm of British merchants. They point out that "The majority of exporters care only for large transactions while German export trade is to a certain extent, at any rate, made up of a large number of small transactions which keep a large number of small manufacturers busy on the Continent, where the financial conditions are more favourable to the small trader and manufacturer than in this country."

As to the future, a firm of engineers and ironfounders remark, "Firms which decide to put up new factories should be in a position to feel confident that when the war is over they will be adequately protected. German manufacturers will make strenuous efforts to regain the trade which they have lost and will probably in many instances supply goods at cost price or even under, and we think their efforts will be backed up by financial assistance from their Government. In order to assist British manufacturers our Banks might be willing to find the capital necessary for extension provided the Government were willing to guarantee them."

The replies from British firms on this phase of the subject are as follows :—

Replies of Traders

FIRM C. 6888 (South American Merchants).

Brazil has been largely extending its railway systems and building docks. For these schemes large foreign loans have been contracted and a large floating debt has been incurred. This latter was to have been liquidated by a further large foreign loan, negotiations for which were pending when war broke out. There are, therefore, still large amounts owing by the Government locally. A partial remedy has been found in the issue of inconvertible paper, which has had an adverse effect on exchange. This has raised the local price of imported goods and this, combined with decreased spending power, brought about by the sudden stoppage of railway and dock works, due to the withdrawal of further credit from Europe, has limited the import business to absolute necessities. The present is therefore an inopportune moment for endeavouring to supplant the importation of goods formerly imported from Germany.

The German banks give great facilities to German firms and the German Ambassadors back their trade diplomatically. It is a question whether the Germans do not trade on too narrow a margin of finance. We presume banks here are willing to help trade within a safe limit and to advance capital for the setting up of new works after being convinced that the business is practicable and sound.

**FIRM C. 4168 (South American Merchants).**

As regards machinery, the question of price has not been so important as the question of the long and abnormal credits given to the German exporter by state-aided banks. I would not suggest that English firms should try to meet the competition by such credits, but as the German competition, *qua* long credit, has ceased, I consider the only difficulty for English manufacturers and merchants at the moment is the question of financing the business, or in other words, banking facilities to merchants who are hung up with their capital already out in South America. The action of our banks who collect and negotiate bills on South America has been, and continues to be, such that for the moment the powers of firms such as ours to do even their own regular British trade in South America are enormously curtailed and in many cases absolutely stopped. Until this deadlock as to financial facilities to merchants is overcome, either by Government action or by an entire change of attitude on the part of the banks dealing with South America, it is, in our opinion, sheer waste of time to talk about extending British trade and devoting time to replacing German products in those markets by British goods. Argentina has declared a moratorium for the entire duration of the war. What is to become of firms trading with Argentina at the expiration of our moratorium ?

**FIRM C. 12,306 (Anglo-Brazilian Merchants).**

The Germans have secured a large part of the Brazilian market on account of the financial terms they have offered, and German bankers resident in Brazil give great assistance to German houses established there. The German terms are 120 days by accepted draft, accepted only after having examined the goods, and drafts payable at 90 days sight rate exchange at maturity. In many cases longer terms than these are given. In some cases goods are sold at c.i.f. prices at 120 days without charging interest on any further expenses whatsoever. Thus the native merchant knows the exact cost of his goods and is enabled to sell before arrival.

The English terms are generally 90 days accepted draft against delivery of documents through banks in Brazil, the documents only being handed to the merchants after acceptance of draft. Thus the merchant pays for his goods before he can examine them. The terms of the draft too are payable at sight rate of exchange.

English export houses have great difficulty in competing since the English manufacturer requires cash against documents in the first instance from the export merchant, and the banks through which the documents pass select only drafts for discount which are absolutely gilt-edged, and those only at 90 days sight, and give no facilities whatever to the English export merchant in finance.

The British manufacturer must alter his trading methods and the banks must give him the assistance necessary. The banks must also help the export houses in financing their documents.

**FIRM C. 12291 (South American Merchants).**

As regards South America, the greatest difficulty we have had to contend with is the much longer credit granted by German houses, owing to the greater facilities in this direction afforded by their banks. This, however, has been a direct incitement to over-trade and speculation by importing firms.

**FIRM C. 12297 (South American Merchants).**

The writer has had twenty years experience of the principal South American markets and has watched the steady capture of British trade by German competitors. The fault does not lie with the manufacturers, but is due to the English banking system which is totally inadequate, and in 99 cases out of 100 the Germans have been able to secure a customer, not because the goods are of superior quality or because they are not manufactured in Great Britain, but because the German is able to offer better terms.

We supply machine tools and general machinery to Russia and in every case we find that we need have no fear of the Germans as regards price, but they invariably get the best of us in terms. The Germans have built up their enormous trade owing to their banks always backing them up.

**FIRM C. 12298 (Merchants).**

The great weakness of the British export trade is that the majority of exporters care only for large transactions, whilst German export trade is, to a certain extent at any rate, made up of a large number of small transactions, which keep a large number of small manufacturers busy on the Continent. The financial conditions there are more favourable to the small trader and manufacturer than in this country, where joint stock banking has largely eliminated the private banker by whom these classes are financed on the Continent.

**FIRM C. 1418 (Tubes).**

The two main factors which have helped the Germans to get the tube business have been their low prices and their practice of giving long credit.

**FIRM C. 12275 (Tubes).**

We expect that foreign buyers will be ordering more freely when the financial position is easier and exchange better.

**FIRM C. 2192 (Wire).**

There is difficulty in obtaining capital for extension. We do not think bankers would be inclined to advance money at the present time, nor do we think it would be possible to raise money by issuing either debentures or further shares.

**FIRM C. 6284 (Cutlery and Silversmiths' Wares).**

To enable Sheffield to compete with Germany and Austria in the manufacture of cheap lines the only things required are capital and enterprise. The majority of the Sheffield manufacturers are not wealthy and the whole of their capital is tied up in their businesses, so that they are not in a position to discard obsolete methods. At the present time there is an opening for the successful investment of capital in the town. The only way we in Sheffield have been educated to obtain capital has been to earn it and gradually work it into business, a painfully slow and tedious operation. With the exception of a few firms in the heavier trades, none of the cutlery manufacturers have businesses large enough to attract the investor, who naturally prefers companies whose shares are quoted and are marketable. Apart from private investment, I know of no means of obtaining capital, unless the Government be disposed to find capital under some scheme. I could employ with advantage several times the capital I have invested, and the same would apply to many others in the trade if they were prepared to discard obsolete methods.

**FIRM C. 4722 (Rotary Machines for making Portland Cement).**

The terms of payment offered by German firms, with or without the aid of German banks, have been such that we could not compete with them. The Germans have offered long terms of payment to customers, taking debentures on their works redeemable in instalments over a number of years. Thus some firms, instead of raising capital to increase or exploit their business, have obtained machinery on long credit and the earnings have helped to pay, or in some cases have entirely paid, the engineer's bill.

**FIRM C. 6859 (Railway Engineers and Contractors).**

There is a difference in the measure of support accorded to manufacturers by the banks in this country when compared with the great assistance rendered by the banks in Germany. A progressive manufacturer here often finds that he is quite unable to give the long credits that appear to be invariably given by the German manufacturers. The custom of the manufacturers in this country has grown from necessity to require cash against documents on the shipment of goods. The German manufacturer, on the other hand, owing to the great assistance he gets from his bankers, is able to give three, six and even twelve months' credit to the foreign buyer, and thus often secures orders where the British manufacturer fails. We think that the banks in this country ought to give very much larger facilities to our traders and manufacturers.

**FIRM C. 380 (Milling Machinery).**

The principal difficulty we have had to face has been a financial one. Our agents abroad say: "Your machines should sell well here, but we cannot give the credit our German competitors do." We do not see how this difficulty is to be overcome unless bankers here give us the same facilities the Germans have been enjoying for many years. The Germans have completely demoralised trade by offering extraordinary terms of payment, sometimes extending over a period of four years. These competitors have been able to get bills for the amounts due at certain periods bearing interest at 6 per cent., 7 per cent., and even 8 per cent., and they have taken them to their bankers who have discounted the bills at 1 per cent. or 2 per cent. less. Thus our competitors have been provided with funds to an almost unlimited extent. German bankers, too, have acted upon the principle of advancing money on orders taken by their clients, and French manufacturers have been greatly helped by means of bills of exchange being sent out with all invoices, and when accepted by the debtor

these bills have been discounted by the manufacturer's banker without question and without collateral security. If we were to show a Continental bill at three months to our bankers without collateral security of some kind they would treat the matter with ridicule.

As to the combination of traders, with similar interests, to help to finance trade on lines similar to those of the German banks, I may say that there is such a scheme in hand. It is proposed that a certain number of shares should be subscribed by the members in proportion to the capital of the company, and that 2 per cent. should be paid up. The balance would be deferred capital, and it has been found that in China, at any rate, money could be borrowed to the nominal capital of the company, or trust, at a reasonable rate of interest.

But a trust or combination does not strengthen the hands of the smaller man who is not prepared to sink capital into such a trust. Anything done in this direction, I fear, would not be for the general good of the country. The association of big firms having kindred interests would not work because there is so much jealousy and trade rivalry. As far as propaganda in foreign countries goes, at least, it would not work. It is to the interest of the country as a whole to develop a large number of small manufacturers rather than to favour a few who are large manufacturers. If the association of firms of kindred interests could be limited to being security for each other at a joint stock bank having Government support for this purpose if necessary, I think the result would be far-reaching in promoting trade. Suppose, for example, there were fifty firms in this country making dairy machinery. These firms could form a guild banking at one bank. The amount of the liability of each member would have to be fixed, and his share or interest in the guild would be determined by taking his average annual turnover for the last five years. The amount would be adjusted from year to year according to a chartered accountant's balance sheets. Let every member be free to find business where he can. Orders should be reported to an independent accountant nominated by the bank, and this accountant should be required to advise the bank as to the amount of money required to finance these orders. If at the time a member has overdrawn his account so that he has not money enough to draw upon to execute these orders, he should have money advanced to him for which all the members stand joint security. Customers in Russia, China, Spain, Australia and, in fact, in every market taking dairy machinery, should have credit given to them according to the usage of foreign competitive firms, such information being published in a schedule available for all members. Thus every member could seek business abroad and would be able to compete, as far as finance goes, with Germany, America, or any other country.

No trader likes his competitor to know where he is doing his business. He thinks he has inside information which nobody else possesses regarding certain countries. If, however, the chances of trade known to each individual were not divulged but were submitted to a chief accountant as suggested this would not be prejudicial to the individuality and enterprise of any firm. Under the above scheme British dairy engineers would be placed in a position to fight foreign competitors who have received financial assistance from their Government enabling them to give long credit.

#### **FIRM C. 4373 (Pumps and Marine Auxiliary Machinery).**

Capital and enterprise are to be found in plenty if the product itself is equal to that of the German competitor at the same price, and if at this it yields an adequate return.

#### **FIRM C. 12288 (Brass Foundry and Engineering Products).**

Germany has been the main source of supply for semi-rotary wing pumps. To enable us to compete in the manufacture of this article a special plant of automatic and semi-automatic machinery would be necessary, since it is essential that we be in a position to produce in large quantities at a low cost. We have the necessary accommodation for plant, and equipment presents no difficulties as we have the necessary expert knowledge. To bring the venture to a successful issue a sum of approximately £10,000 would be required. We think we are in a first-class position to deal with the manufacture and sale of these semi-rotary pumps, but in view of the calls on our capital in close relation to our present manufactures, we have not felt justified in allocating the amount of money necessary to develop this particular line.

#### **FIRM C. 879 (Agricultural Machinery).**

The German trade has, in the first instance, been largely developed owing to the extra terms given by German firms and also owing to the finely cut prices, but it has been more a question of terms than prices.

New capital is not so much required to provide extensions as to meet the immense lock-up which is necessary in our business. In many countries payments are spread over three years, and the more trade we do the greater the lock-up of capital.

**FIRM C. 1226 (Engines and Boilers, Agricultural and Sugar Machinery, &c.).**

Before the war this firm contemplated the extension of their works on a vast scale, and they hope to carry this scheme into effect after peace has been established. New capital will be necessary for this proposed extension, but conditions must become normal before the public will invest money in industrial concerns.

**FIRM C. 2442 (Industrial Machinery).**

We have found the Germans strong competitors in the foreign trade in cane sugar machinery. They have obtained most of their orders through the facilities which they have been able to give in the way of extended terms. In this they have been supported by their banks in a manner in which the home firms are not supported here. But for these financial considerations purchasers would have preferred British machinery as it is more substantial and of better design and workmanship.

**FIRM C. 8299 (Electric Storage Batteries).**

We are not doing the export trade we might be doing owing mainly to the want of enterprise on the part of capital. Our foreign competitors, moreover, grant most liberal terms in respect of credit as against the usual practice of cash against bills of lading adopted by the home firms. German houses go to almost any length to secure trade and beat off opposition. The preliminary expenses in breaking new ground are very heavy, and capital must be found to cover these disbursements; and it is the lack of speculation, if such a term can be used, that retards the advancement of British trade. In the majority of cases the British manufacturer will not risk his capital unless there is a certainty of a good and prompt return.

**FIRM C. 337 (Engineers and Iron Founders).**

Firms which decide to put up new factories should be in a position to feel confident that when the war is over they will be adequately protected. German manufacturers will make strenuous efforts to regain the trade which they have lost and will probably in many instances supply goods at cost price or even under, and we think their efforts will be backed up by financial assistance from their Government. In order to assist British manufacturers our banks might be willing to find the capital necessary for extension provided the Government were willing to guarantee them.

**FIRM C. 3281 (Engineering).**

For some time there has been the difficulty of securing anything like adequate capital to carry out very much needed extensions and improvements. The general public have been shy in coming forward and the banks have, in many instances, been too timid to give sufficient accommodation.

**FIRM C. 4 (Stationary Engines, Mining Machinery, &c.).**

New capital is required for providing extensions, and the only condition under which such capital can be obtained is security of tenure.

## V.—TRADERS' RECOMMENDATIONS.

In the replies of traders appreciation is shown of the action of the Board of Trade in respect of its publications, since the outbreak of war, and its endeavours by means of conferences and trade exhibitions, to put them in a position to meet the deficiencies created by the cessation of German exports. It is, however, generally felt that there are certain conditions which must be fulfilled before these efforts of the Board of Trade and similar bodies can reap any measure of success.

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Commerce** The position of export traders has been considerably relieved by the action of the Government\* in respect of good trade debts, payment of which was suspended on account of the War; but it is widely felt that the modern conditions of competitive industry call for a reconsideration of the whole relations of the State towards commerce in regard to such matters as treaties, diplomacy, education, transport, financial assistance and especially in regard to tariffs. The War has, it is felt, provided a unique opportunity for this reconsideration, in that German competition is, for the moment, suspended, while owing to the stimulus created by the War demand in

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\* "But let me just for a minute recall to you here the threatening aspect of the financial world in the last week of July. Stock markets were demoralised. The Stock Exchange had closed its doors, bankers were apprehensive of the wholesale withdrawal of deposits, and great accepting houses of the City of London had to face the prospect of being unable to obtain from abroad the remittances they required to meet their daily maturing obligations in respect of bills of exchange. We were confronted at the moment with a double risk—the risk of a shortage of internal, and a general discrediting of international currency. By the end of the first week in August both these dangers had been coped with, the first by the issue of currency notes, the second by providing for the re-acceptance of current bills of exchange. There followed the Moratorium. These measures, sanctioned and approved as they were by Parliament, prevented the destruction of the machinery of commerce; but we proceeded to take the necessary steps to restart its operations. Arrangements were come to with the Bank of England for discounting the postponed bills, and with the Bank of England and the great joint stock banks for discounting new bills. Arrangements were made for meeting pre-Moratorium bills, and schemes have since been devised for dealing both with the Stock Exchange and merchants and manufacturers who had foreign obligations. What has been the result of the measures so taken by his Majesty's Government? I think it is a very satisfactory one. The foreign exchanges are working, in the case of most countries, quite satisfactorily. The gold reserves of the Bank of England, which were 40 millions on July 22, had fallen by August 7 to 27 millions, and now stand at the unprecedented figure of 69½ millions. The gold reserve of the country, after three months of war, amounts to 80 millions, almost exactly twice the amount held at the beginning of the crisis. The Bank Rate, which rose to 10 per cent., has now come down to 5 per cent., a figure not in excess of what it stood at at this time last year. Food prices have been kept at a normal level, and though trade has been curtailed in some directions unemployment has been below rather than above the average."—Mr. Asquith, Guildhall, November 9, 1914.



many of our leading industries, the country has been spared the embarrassments which must have attended any large measure of unemployment.

Among the measures especially referred to by many correspondents is the necessity that British competition with German trade should be supported by some system of liberal bank credits comparable with the German system, providing this can be done without direct encouragement of over-trading. The extracts published in the preceding section indicate how widespread and apparently beneficial has been the operation of this German industrial bank system, and how impossible British merchants, such as those trading with South America, have found it to be to retain their trade much less to secure a share of the growing markets, in the absence of similar banking facilities.

Banking Facilities

Even more emphatic is the demand for this kind of assistance where expenditure is necessary upon new plant. Thus a motor car manufacturer, among other recommendations, urges that Banks should advance, under Government guarantee, overdrafts up to 75 per cent. of the value of buildings, plant, securities, &c. (other than book debts), while a firm of engineers recommends that the same assistance should be given by Government and bankers to industries for producing goods previously obtained from Germany as is given in those countries. Another typical reply is that of a firm of engineers and ironfounders who say: "Firms who intend to put up new factories should be in a position to feel confident that when the War is over they will be adequately protected. German manufacturers will make strenuous efforts to regain the trade which they have lost and will probably in many instances supply goods at cost price or even under, and we think their efforts will be backed up by financial assistance from their Government. In order to assist British manufacturers our Banks might be willing to find the capital necessary for extension provided the Government were willing to guarantee them."

Another direction in which the aid of the Government is sought is in the establishment of more direct and intimate relationship between traders and the diplomatic and consular services. Diplomacy is still too largely

Diplomatic and  
Consular Services

regarded in British official circles as altogether remote from the advancement of the interest of British trade. A firm of railway engineers and contractors state that if here, as in Germany, manufacturers had the assistance of the Diplomatic Corps in obtaining foreign orders they would be encouraged to spend more capital in laying out extensive works. The usefulness of many of the statements of Consuls published by the Board of Trade on openings for British trade in overseas markets is recognised, but they do not as a rule show a sufficiently detailed and exact knowledge of British industrial capacity and the requirements of the markets affected. A leading Anglo-Canadian suggests that the British Trade Commissioners in the Dominions should be instructed to make special and detailed reports on the possibilities of capturing the German and Austrian trade previously done in those markets. To this end it is thought by many experienced British business men that use could be made of the special experience of the business and organising capacity of our Chambers of Commerce, and reference is frequently made to the higher and semi-official status enjoyed by the Chambers of Commerce in Germany.

Some criticism has been evoked by the long-continued practice of the Government to fill Consular positions abroad with foreigners who naturally cannot be expected to act for British traders with the same zeal as an Englishman. In this respect, as also in the number and pertinacity of her Consuls and travellers, Germany is stated to set an example well worthy of emulation, as is also the practice of German traders to strengthen their appeal for orders by the preparation of catalogues specially prepared for each market in respect of the goods specially demanded, and the measures and coinage there current.

Another factor which, in the opinion of correspondents, has conferred inestimable benefits upon German trade has been the long-continued and progressive excellence of the secondary and technical education systems of Germany. Thus Germany would never have attained her embarrassing monopoly in many vital branches of chemical industry had it not been for the excellence of her science schools. The developments in this country in recent years have done much to lessen this German advantage. Much

used to be said in British discussions of the superiority of the educational system which has Charlottenburg for its centre ; but many experienced leaders of education and traders have come to realise in recent years that in place of the German centralised system the educational needs of British industry are far better met by the specialised and localised technical institutions now to be found in successful working in all the leading industrial centres.

The necessity for further protection for British traders in respect of **Trade Marks** trade marks and cognate matters is emphasised. Thus a firm of pump and pumping machinery manufacturers remark that goods have been sent out as British-made when only a very small item in connection with the goods has been actually made in this country. A firm of hydraulic engineers call attention to the following two cases illustrating the misleading effect of the names of certain firms and companies :—

(1) It was discovered on the outbreak of war that work which had been supposed to be done in London for years by a company with a British name had really been carried out in Germany.

(2) A company with a British name is making an article identical with one made in Germany. It was found after investigation that the two articles had the same German source and that probably some of the British shares were held for the German maker.

A firm of motor-car makers suggest that all British goods shall carry an Imperial Trade Mark, and some gas and steam fitters' tool makers state that it is necessary to have some protection against the importation, after the war, of German tools which are not distinctly marked "made in Germany." Iron and steel and engineering firms make no direct reference to the recent War Patent Act, but it is suggested by a textile manufacturer that revocation of enemy patents for the time of the war only is not of the slightest use. It is suggested that these patents should be revoked absolutely and a free hand given to the manufacturer.

The point, however, upon which British traders dwell most insistently **Tariff Systems** in their replies is the dependence of German industrialism for its success upon the tariff which was an integral part of the system upon which

the German Empire was founded, and which has since been gradually moulded to the changing conditions and requirements of her home and overseas trade. It is realised that, excellent as have been the diplomatic, educational and transport systems of Germany, they would have been of small avail had they not been fortified by a fiscal system which made the national and imperial well-being of Germany its first concern.

There are branches of industry which, some manufacturers anticipate, it will be possible to establish in this country without similar tariff support. The boycott of German competitive products will, some anticipate, suffice to secure the British home and Colonial markets against competition. This is the view of one of the largest British manufacturers of industrial machinery, who says: "As probably German machinery will be boycotted after the War, by many countries, there should be a very good prospect for the increased outlet of British-made machinery. Before the War, this firm had in contemplation the extension of their works on a vast scale, and we hope to carry this scheme into effect after peace has been established. New capital will be necessary for these proposed extensions, but times will have to become normal before the public will invest money in industrial concerns."

Similarly, though for somewhat different reasons, other manufacturers indicate their intention to lay down new plant in the expectation of capturing and retaining German trade. Thus a firm of millwrights, pump makers, &c., say that they are competent to deal with any additional work diverted from Germany and Austria, and have quite recently completed a large extension of their works. A firm of metal engravers also wrote: "In our endeavour to secure trade hitherto done by Germany we are taking steps to considerably extend our business."

In the main, however, there is a wide concurrence in the view that in the absence of the security arising from some form of tariff it is impossible to attract capital for the necessary enlargement of British works, seeing the certainty that the end of the war will be followed by a renewal of German competition in all its former efficiency. This is strikingly shown by the

following series of extracts from the replies of representative British traders in the iron and steel and engineering industries :—

**FIRM C. 2217 (Coal and Iron).**

We ought to have import duties of sufficient magnitude to enable English manufacturers to keep their works fully employed.

**FIRM C. 9659 (Steel).**

We should not dream of spending capital to capture German trade unless protected.

**FIRM C. 896 (Iron and Steel Merchants).**

We have written to the Board of Trade that if capital is to be expended in the various steel and allied industries for the future benefit of British trade there must be some promise of security.

**FIRM C. 1976 (Coal and Iron).**

I certainly have always had the view that some duty should be imposed upon foreign products coming into Great Britain in competition with those produced at home.

**FIRM C. 2210 (Forgings).**

We are considering putting down new plant which will cost from £20,000 to £40,000, but before deciding we should like some security against free importation of foreign forgings, so that we may be enabled to do the business at home which has hitherto been done on the Continent.\*

**FIRM C. 2192 (Wire).**

We are exceedingly busy at the present moment and cannot possibly undertake all the orders which we are receiving. This is due to the stoppage of the exportation of German goods similar to those we make. If this alteration in business had taken place gradually, as it would have done had a tariff been scientifically applied, the manufacturer would have been in a better position to cope with the increased demand.

**FIRM C. 5782 (Wire Nails, &c.).**

The wire rod makers will tell you, as the wire nail makers also, that it is not feasible to lay down the necessary plant and extend British works without some assurance that their capital will not be thrown away at the end of the war by the renewal of foreign undercutting.

I see no way of encouraging increased British production as a whole in the nail trade without some form of tariff, without which British manufacturers and capitalists will certainly not go into extended business. I say this although I have always been a Free Trader on general principles. There is nothing else for it that I can see if the British nail industry is to expand so as to handle the trade which Germany has dropped because of the war.

**FIRM C. 6916 (Pins, Needles, &c.).**

Protection by means of a tariff would be the only safeguard to encourage English manufacturers to compete for German and Austrian trade. A tariff would encourage English firms to lay out capital on machinery. They hesitate to do this under existing conditions. In our particular trade we would put down machinery to produce several small articles if we had protection.

**FIRM C. 4449 (Hardware, &c.).**

A considerable number of articles are now being made in this country, without much additional plant, to take the place of the German goods, and a moderate tariff would be sufficient to hold the trade. The home competitor may not meet with so much undercutting of prices from the Germans after the war, owing to the extra taxation that will follow. On the other hand, there are many articles which cannot be made at all without new costly plant, while in the case of others a similar outlay is required to enable the British maker to compete. It seems to us that without some guarantee for the future, the game will be lost. The bulk of the German hardware goods could be made in this country if makers had the proper security. Nothing short of a tariff will give them this security.

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\* See later extract from this firm on page 44.

**FIRM C. 2503 (Hardware).**

There should be some form of Government guarantee that capital laid out in the endeavour to capture the trade of our enemies shall not be lost by the renewal, after the war, of organised competition and dumping. Unless the ordinary working of the laws of supply and demand is accelerated by Government action and continuity of demand reasonably assured no assistance can be expected from British investors.

**FIRM C. 7736 (Tin-plate Products, Pressed Hollow-ware, &c.).**

Articles, which we could manufacture and which have hitherto been bought from Germany, have been sold in this country at a price about equal to cost here and at a considerably lower price than the German manufacturers have sold them in Germany itself. Manufacturers might obtain a satisfactory profit on such articles while the war lasts, but no manufacturer will be foolish enough to invest capital in buildings and plant necessary to produce such articles unless the Government give them an assurance that, after the war, they will not have to meet the competition that has hitherto existed.

**FIRM C. 6597 (Silver, Electro-plate, &c.).**

We have recently visited the Board of Trade Exhibition and have seen the articles in our own line which have hitherto been made in Germany. To enable us to produce these at anything like the German prices we should have to spend a great deal of money in putting down new plant and machinery. Before we do this we should like some assurance from the Government as to what our position is going to be when the war is over and German industries are again active. There should be a duty upon manufactures imported into this country.

**FIRM C. 6083 (Plate and Cutlery).**

When the war ceases, Germany must be prevented from sending her accumulated surplus of manufactures here. Import duties must be imposed to meet the huge bonuses which the Germans will receive and to prevent the importation from Germany into this country of goods which we can manufacture here.

**FIRM C. 4486 (Electro-plate, Cutlery, &c.).**

In the absence of German competition at the present time our manufacturers are becoming more enterprising, but many hesitate to incur expenditure and liability in the way of capital investment in machinery and tools without some guarantee of security from the Government against German competition after the war. The Government should protect British industries from the industrial onslaught which will follow the termination of the war.

**FIRM C. 5582 (Hammers, Pincers, Pliers, &c.).**

In the absence of security manufacturers are not laying out capital to any great extent to produce pliers and spanners formerly supplied by Germany. There would be no difficulty in extending works, but manufacturers would not retain the trade after the war without a high tariff. New capital would be found by manufacturers if some security were given.

**FIRM C. 5964 (Gas and Steam Fitters' Tools).**

There will be no inducement to lay out further capital for the purpose of increasing the output of hand tools unless some protection is afforded against the importation of German tools after the war. Take rimers, for example, which are sent here in very large quantities by German manufacturers. To enable me to make these tools an outlay of from £600 to £1000 on machine tools would be necessary. The rimers would have to be produced at the same low price at which the Germans have been selling them here for years, and it would be a speculation as to whether I could make the manufacture pay or not. I should be willing to try it but for the fact that after the war the Germans will again step in and outsell me. What is wanted is a small tariff upon German tools coming into this country.

**FIRM C. 3511 (Gas, Water, and Electricity Fittings).**

Many British manufacturers would adapt and re-organise their works to supply goods hitherto supplied by Germany if they had some assurance from the Government by way of security. If a Customs duty of 10 per cent. were imposed on German goods, and if the British Dominions and Colonies could be brought into agreement with some such arrangement, an enormous amount of trade would accrue to Great Britain. The system adopted in Germany, in many trades, of allowing manufacturers a rebate or bounty upon manufactured goods exported has been very successful in enabling the Germans to obtain valuable markets in England and in British Colonies and Dependencies. The view taken by the German Government in giving these rebates and bounties is that they get back more than the amount of the subsidies by way of rates and taxes upon the industries established in their own country, and work is found for their people.

**FIRM C. 4722 (Rotary Machines for making Portland Cement).**

It is to be hoped that at the termination of the war some protection will be afforded to British industries against unreasonable German competition. A 5 per cent. or 7 per cent. tariff on German machinery would have enabled me to double my business within the last few years and to have paid wages in proportion.

**FIRM C. 1228 (Railway Engineering).**

If English manufacturers could be guarded against unfair competition in the future, they would readily increase their plants sufficiently to meet all possible demands. In Germany, with a protected market, manufacturers can be sure of a demand enabling them to produce cheaply.

**FIRM C. 337 (Engineers and Ironfounders).**

Firms endeavouring to secure trade hitherto done by Germany should be protected by a duty imposed on foreign-made goods. There is an enormous accumulation of uninvested capital in this country and if protection were guaranteed it would be much easier for firms to obtain capital required for the extension of their business.

**FIRM C. 6859 (Railway Engineers and Contractors).**

The manufacturers of this country are very much hampered in some of the markets of the world by the unfair pressure of hostile tariffs. The bounty system, enabling foreign manufacturers to sell material for export at less than cost price, is of even greater detriment to British manufacturers.

**FIRM C. 6251 (Engineers, Millwrights).**

We make centrifugals which are machines used in sugar factories for drying sugar. For a long time we had a lucrative business in Russia, but of late years imitations of our machines have been produced in Germany and Austria, and to a small extent in Russia itself. Our Russian agent writes to us as follows: "The duties are to be raised here, but it is not known whether this is to be general or directed only against German and Austro-Hungarian goods. If any more duty is put on centrifugals we will be in a mess as it is almost more than they will stand as it is. The English papers should see to this and induce the Government to take measures to prevent further handicapping of British goods"; and again, "Do you know if British manufacturers are taking any measures to protect their interests in the new Russian Customs Tariff scheme? If we are put on a level with Germany & Co. we will not have much chance since the Germans will sell for cost price or under to get back the market." We are interested personally in the question of preferential duties on sugar machinery, but we think the broader question raised—the whole question of preferential treatment as between the Allies—worth attention.

**FIRM C. 1581 (Pumps and Pumping Machinery).**

It would not be wise for manufacturers to extend their works and plant unless the Government give some assurance that a tariff will be set up against German and Austrian imported goods.

**FIRM C. 6193 (Engineers, Boilermakers and Electricians).**

Industries established for producing goods previously obtained from Germany and Austria should receive the same Government and bank assistance as in those countries.

**FIRM C. 4 (Stationary Engines, Mining Machinery, &c.).**

Capital is required for the extension of works in this country and the only condition under which it can be obtained is security of tenure. After the war Germany will be a more serious competitor than ever as regards price-cutting. In all markets therefore under British control there must be a preferential tariff of such a character as absolutely to exclude German competition and thus prevent Germany's industrial recovery.

**FIRM C. 368 (Engineering, &c. Merchants).**

Our own view of the reasons for our manufacturers' bad showing in these lines [electrical engineering supplies, light rails, gas and water tubes, screwed and socketed pipes, &c., wire cutters and plumbing tools, &c.] is that they allow their plant to become out of date, insufficient reserve being made by large limited companies for this purpose. But the root reason is free trade which limits production and makes British industry insecure by leaving the home market open to foreigners without duty.

**FIRM C. 4434 (Domestic Machinery).**

If the Government would only, on the declaration of peace, adopt a fiscal policy that would afford equal chances to British manufacturers, we ought to be able to regain the pre-eminence that we once enjoyed.

**FIRM C. 12291 (South American Merchants).**

It will be difficult to induce British manufacturers to spend money in adapting existing works, or laying down new plant, to produce goods hitherto supplied from Germany and Austria without some security that the imports from these countries will not be admitted free of duty at the conclusion of hostilities.

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## PART 3.—TEXTILE INDUSTRIES.

### I.—AREA OF TRADE AFFECTED.

The following tabular statement, which, like the corresponding statements in this Memorandum relating to the Iron and Steel and Engineering industries, is compiled from British official returns, shows the trade in various branches of textile goods between this country and Germany.

It will be seen that in the aggregate we imported in 1913 about £16,000,000 worth of textiles from Germany. About £14,100,000 worth of these were destined for consumption within the United Kingdom, the other £1,900,000 worth being re-exported to various foreign and British countries. Against these there were exports to Germany of British manufactures amounting to £17,850,000. On the assumption that British manufacturers will be able to replace the £1,900,000 worth of re-exported German goods, the conditions produced by the war show an adverse balance against all branches of the textile industries of nearly £1,900,000. These adverse conditions arise mainly from the situation in the wool trades. In that group the excess of British exports to Germany over imports amounts to over £5,500,000. The difference, however, is more than accounted for by the trade in yarns and tops, in which Germany was Britain's largest market. In 1913 £6,000,000 worth of yarns and tops were exported to that country, but the loss of that trade from the point of view of the labour that it employed is of comparatively much less importance than would be the same value of piece goods. The same is true of the cotton group. Here also £8,000,000 worth of exports include over £5,000,000 worth of yarns, in the manufacture of which a comparatively small amount of labour is employed. In practically all the other departments the figures show that the war has opened large markets at home formerly supplied by Germany which British manufacturers ought now to attempt to enter. The extent of Germany's export trade, other than to the United Kingdom, is shown by the fact that in 1912 Germany sent nearly £21 millions of textiles to countries outside Europe, including over £3,700,000 to British overseas countries.\*

\* See Tariff Commission Memorandum (MM. 55)—“Trade Aspects of the War with Germany.” London: P. S. King & Son. 3d.

TABLE 9. TRADE OF THE UNITED KINGDOM WITH GERMANY IN TEXTILE MANUFACTURES, 1913.

|  | Gross Imports<br>from<br>Germany. | Net Imports<br>from<br>Germany. | Domestic<br>Exports to<br>Germany. |
|--|-----------------------------------|---------------------------------|------------------------------------|
|  | £                                 | £                               | £                                  |
| <b>Cotton :—</b>                             |                                   |                                 |                                    |
| Yarn :—Grey .. .. .                          | 102,000                           | 102,000                         | 5,118,000                          |
| Bleached and dyed .. .. .                    | 235,000                           | 235,000                         | 23,000                             |
| Waste from Worked Cotton .. .. .             | 107,000                           | 106,000                         | 522,000                            |
| Piece Goods .. .. .                          | 1,958,000                         | 1,859,000                       | 1,801,000                          |
| Gloves .. .. .                               | 724,000                           | 619,000                         | not mentioned                      |
| Hosiery .. .. .                              | 1,877,000                         | 1,672,000                       | not mentioned                      |
| Lace .. .. .                                 | 1,115,000                         | 803,000                         | 356,000                            |
| Trimnings .. .. .                            | 651,000                           | 585,000                         | 4,000                              |
| Other Manufactures .. .. .                   | 771,000                           | 650,000                         | 273,000*                           |
| <b>Total Cotton .. .. .</b>                  | <b>7,540,000</b>                  | <b>6,631,000</b>                | <b>8,097,000</b>                   |
| <b>Wool :—</b>                               |                                   |                                 |                                    |
| Woollen and Worsted Yarn .. .. .             | 546,000                           | 533,000                         | 4,798,000                          |
| Tops .. .. .                                 | —                                 | —                               | 1,260,000                          |
| Cloths .. .. .                               | 164,000                           | 136,000                         | } 2,008,000                        |
| Stuffs, Flannels, and Delaines .. .. .       | 1,203,000                         | 1,095,000                       |                                    |
| Hosiery .. .. .                              | 312,000                           | 268,000                         | 23,000                             |
| Other Manufactures .. .. .                   | 368,000                           | 285,000                         | 63,000                             |
| <b>Total Wool .. .. .</b>                    | <b>2,593,000</b>                  | <b>2,317,000</b>                | <b>8,152,000</b>                   |
| <b>Linen :—</b>                              |                                   |                                 |                                    |
| Yarn .. .. .                                 | 85,000                            | 85,000                          | 371,000                            |
| Piece Goods .. .. .                          | 51,000                            | } 320,000                       | { 171,000                          |
| Manufactures other than Piece Goods .. .. .  | 304,000                           |                                 |                                    |
| <b>Total Linen .. .. .</b>                   | <b>440,000</b>                    | <b>405,000</b>                  | <b>642,000</b>                     |
| <b>Silk :—</b>                               |                                   |                                 |                                    |
| Silk, Thrown .. .. .                         | 206,000                           | 206,000                         | 58,000                             |
| Spun Silk Yarn .. .. .                       | 19,000                            | not mentioned                   | 24,000                             |
| Broadstuffs .. .. .                          | 1,758,000                         | 1,665,000                       | 97,000                             |
| Ribbons .. .. .                              | 493,000                           | 456,000                         | not mentioned                      |
| Other Manufactures .. .. .                   | 169,000                           | 102,000                         | 53,000*                            |
| <b>Total Silk .. .. .</b>                    | <b>2,645,000</b>                  | <b>2,429,000</b>                | <b>232,000</b>                     |
| <b>Jute :—</b>                               |                                   |                                 |                                    |
| Yarn .. .. .                                 | 7,000                             | not mentioned                   | 12,000                             |
| Piece Goods .. .. .                          | —                                 | —                               | 19,000                             |
| Manufactures unenumerated .. .. .            | 76,000†                           | 71,000†                         | 3,000                              |
| <b>Total Jute .. .. .</b>                    | <b>83,000</b>                     | <b>71,000</b>                   | <b>34,000</b>                      |
| <b>Apparel :—</b>                            |                                   |                                 |                                    |
| Waterproofed by any process .. .. .          | 1,000                             | } 970,000                       | { 55,000                           |
| Not waterproofed, of Wool :—                 |                                   |                                 |                                    |
| Men's and Boys' Clothing .. .. .             | 12,000                            |                                 |                                    |
| Unenumerated .. .. .                         | 824,000                           |                                 |                                    |
| Not waterproofed, of Other Materials .. .. . | 432,000                           |                                 | 92,000                             |
| <b>Total Apparel .. .. .</b>                 | <b>1,270,000</b>                  | <b>970,000</b>                  | <b>216,000</b>                     |

\* Includes figures for items "not mentioned" above.

† Described as jute manufactures (other than cordage, cables, ropes, and twine, but including piece goods, sacks, and bags).

|   | Gross Imports<br>from<br>Germany. | Net Imports<br>from<br>Germany. | Domestic<br>Exports to<br>Germany. |
|---|-----------------------------------|---------------------------------|------------------------------------|
|   | £                                 | £                               | £                                  |
| Haberdashery, Millinery, Embroidery, and<br>Needlework :—*                        |                                   |                                 |                                    |
| Embroidery and Needlework :—  |                                   |                                 |                                    |
| Made by Hand .. .. .  | 601,000                           | } 554,000                       | 48,000                             |
| Made by Machinery .. .. .   | 601,000 ..                        |                                 |                                    |
| Flowers, Artificial .. .. .   | 312,000                           | 281,000                         | not mentioned                      |
| Hats and Bonnets, Trimmed and Untrimmed,<br>other than Straw :—                   |                                   |                                 |                                    |
| Felt .. .. .  | 275,000                           | } (265,000) {                   | 142,000                            |
| Other Sorts .. .. .   | 14,000                            |                                 |                                    |
| Total Hats and Bonnets, other than<br>Straw .. .. .                               | 289,000                           | (265,000)                       | 161,000                            |
| Cordage, Cables, Ropes and Twine, &c., of Hemp,<br>Coir, or like material .. .. . | 131,000                           | 131,000                         | 101,000                            |
| Bags and sacks, empty, for packing Merchandise                                    | Not mentioned                     | , but see note to               | 116,000                            |
| Oilcloth .. .. .  | 49,000                            | 48,000                          | 48,000                             |
| Hemp Yarn .. .. .   | 23,000                            | not mentioned                   | not mentioned                      |
| Total, Textile Trades .. .. .   | 16,000,000                        | 14,100,000                      | 17,850,000                         |

\* The import figures are for "Embroidery and Needlework." The export figures are for "Haberdashery, Millinery, Embroidery, and Needlework."

## II.—BRITISH MANUFACTURING RESOURCES AND CAPACITY OF EXPANSION.

The influence of army orders on the prosperity of various branches of the textile industry has been described in Part 1 of this Memorandum, and the following summary deals with the views of traders and manufacturers on the possibilities of capturing trade which under peace conditions was done by Germany and Austria. It is compiled from the opinions of a large number of leading textile traders who have answered the inquiries of the Tariff Commission. The textile industries as a whole are, of course, more than any other, menaced by the aniline dye difficulty, but as this is separately dealt with in Part 4 it is not included in the following

paragraphs. Apart from this difficulty, the possibility of capturing a good deal of enemy trade is admitted. Again and again, however, traders declare that the fear of renewed competition and deliberate dumping after the war is advanced as a bar to the extension of business and the laying down of new plant. Especially is this the case in respect of various lower class and medium goods which have constituted so large a part of the German export trade to this and other countries. In many cases, too, the manufacture of these "sightly" goods at low prices has only been rendered possible, it is stated, by the labour conditions in Germany and the tariff protection which enables her manufacturers to undertake large scale production. In a few cases British manufacturers doubt whether it is worth their while to turn to the production of these new branches. In others it is recognised that the undertaking involves the erection of special and occasionally expensive machinery, and manufacturers do not see their way to face the new departure under existing fiscal conditions. In the silk industry in particular, special looms would be required in many cases. Special trades, too, are affected by special conditions. Thus, while cheap cotton is helping the cotton trade, the linen trade is nearly stranded, owing to the scarcity of flax and yarn. In the woollen and worsted industry much trade has been lost, in the views of certain manufacturers, through the failure of British manufacturers to go in for the Continental method of mule yarn spinning, while the loss of the German market for staple yarns must be set off against any captured trade. The summary of traders' opinions in which the leading trades are taken in turn is as follows:—

#### COTTONS.

**Yarns** One spinner and manufacturer states that there is quite sufficient producing power both in the yarn and manufacturing departments of the cotton trade to capture the German trade. The war, he says, merely intensified the cloud which was hanging over the trade, and many of the new companies floated in 1912 and 1913 had not yet got to work. A helpful factor, too, is the low price of cotton. A cotton importer states, however, that while with the cessation of German imports certain Lancashire spinners have

been making cheap articles which they were formerly unable to produce profitably, the retention of this business after the war will necessitate the erection of new mills in order to cope with the normal business. He adds that there is not as a rule difficulty in raising money for the erection of cotton mills in this country provided business is profitable. A like opinion is expressed by another spinning firm, who state that orders have come in from countries lately supplied by Germany for low-class yarns of a kind not made extensively here. This firm say that a tariff will be necessary to prevent the Germans, who are "masters in the production of the cheap and nasty," recovering the trade and in order to ensure capital "remaining remunerative."

One spinner states that it is quite possible for British manufacturers **Piece Goods** to deal a severe blow to certain sections of the German export trade, more especially in Italian cloths and zenellas (largely used for making umbrellas, parasols and kindred goods). A "coloured cotton goods" firm say, however, that they "would not spend one penny extra for extensions under free trade" to capture German trade in corset and other cloths, as "the English cloth buyer would buy from his bitterest enemy if he could save sixpence a week."

Some calico print makers state that the present capacity of British **Prints** works is more than adequate to provide for captured trade, but after the war "Germany will undoubtedly resume business in the most vigorous manner," and in a trade like printed goods where a good deal depends upon originality of design the Germans are "certain to get back a good deal of the trade." The Germans, too, are helped to reduce costs by the quantity of their output, and this firm is therefore of opinion that British printers will be lucky if they are able to retain a part of the captured trade. A similar view is taken by a firm making calicoes and printed cotton linings who state that there is some disinclination on the part of manufacturers to put down machinery to produce stuff to compete with that which Germans have produced because they cannot produce as cheaply as the Germans in normal times and they fear that the Germans will again "obtain the hold they have had for so long."

Muslins

A firm of muslin makers state that they do not feel German competition in muslins proper, but in buckram, in sparterie and marly finish. They state that the finishing power here is quite inadequate, and only one finisher at Paisley has succeeded in coming near the German finish.

Absorbent  
Cotton Wool

Another firm state that their speciality which has suffered most from German and Austrian competition is absorbent cotton wool. "Many institutions in this country have sent orders abroad in times past to save as small an amount as  $\frac{1}{8}$ d. per lb." say this firm, and the Germans and Austrians have so reduced their prices that "during the last few years the lowest qualities of cotton wool have been manufactured by us at a net loss." This firm say that they are extending their plant as rapidly as possible to deal with the business coming in, but there has been no inducement to extend on a very large scale in view of the probability of renewed competition after the war. Every necessity for the manufacture of this speciality can be obtained in abundance, and this firm add "If we were sure of some small measure of protection we could by this time next year be employing double the number of workpeople."

#### WOOLLENS.

Yarns

A worsted spinner states that Germany, France and Belgium have for many years almost monopolised a trade which differs from the ordinary English worsted trade because the yarn is spun on mules instead of spinning frames. These mule-spun yarns are only made to a very slight extent in Great Britain, and there is at present no adequate capacity for British competition with the German trade. He adds that to equip new mills with suitable machinery would require a deal of capital, and it would be doubtful whether those engaged in the worsted spinning industry, which is now exceedingly busy, would care to turn their attention to a new branch of production. Other firms, too, emphasise that this is the one branch for which we are not properly equipped. In the home trade there is said by one firm to be a good prospect of capturing trade in Berlin wool for retail sale for hand-knitting, and for manufacturing the dry-spun yarn. "There is

nothing like sufficient machinery, but machinery is already being put down to cater for this trade, and new capital will be forthcoming because the conditions are favourable.”

As regards the worsted yarns which are the staple trade of Yorkshire, the worsted spinner first quoted above points out that while it will probably be possible to capture some of the German trade, especially in Far Eastern markets, the captured trade will probably not more than compensate for the possible loss of the great German market. The seriousness of this loss was indicated by a firm of worsted yarn spinners and manufacturers who pointed out that while owing to Army orders Yorkshire would not suffer as much as Lancashire through the war, the firms that have been spinning for export were in a bad position, as they could not all turn on to khaki. This manufacturer added, however, that the demand for women's dress goods ought to give full employment to manufacturers whose looms will not weave army goods, as, except for the dye, there is no difficulty in supplying the trade with the goods which would under other circumstances have been made in Germany and Austria. The British manufacturer, in his opinion, does not require either assistance or inducement to supply all classes of textile goods, for home and export hitherto bought from the German manufacturer. New machinery can be put up if necessary, and the firms that have been selling their yarns so far to the German manufacturers will either have to buy looms and begin manufacturing piece goods or find customers in the increased demands for home manufactures. The greater difficulty he suggested would probably be one of labour, which might be relieved by the temporary bringing in of cotton operatives from Lancashire. In contradistinction to the above opinion, a firm of alpaca and mohair spinners and manufacturers give it as their opinion that the productive resources of this country are not at present able to supply markets hitherto supplied by Germany and Austria; while another woollen manufacturer states that the prospect of capturing and retaining the German trade (for home and export) in woollen goods except the better class goods and yarns is small, although the crippling of German finance may help by making a renewal of the German long credit system impossible. There

Piece Goods

are, say this firm, many cloths of the lower types which they are unable to imitate, and this trade must, it seems, go back after the war. Even if the capacity of mills were not sufficient, automatic provision would be made for increased output if the trade could be retained. Another firm of spinners and manufacturers remark that no great development of the worsted piece goods trade is possible on account of the great scarcity of labour which has been brought about by emigration, legislative checks, the transfer of operatives to more attractive employment, and the restrictive action of trade unions. This firm remark that "only a comparatively small portion of the German and Austrian trade in our branch of industry is worth capturing—the bulk of it being in cheap common fabrics which we should not attempt to make, because there would be no profit in them." They add that no prudent business man will risk his capital in new plant and works without a guarantee of protection from the Government, as "sooner or later German and Austrian manufacturers will again enter into competition and their prices and methods of business will quickly rob us of any temporary advantage we may have gained while their factories were closed." "We are already," they say, "supplying the home markets with goods hitherto obtained from our enemies, but we cannot hope to compete successfully under normal conditions." Some makers of woollen and worsted yarns and piece goods stated that upwards of a dozen English firms who had ceased doing business with them during the last decade were now most anxious for them to give them orders, and "they will eagerly pay the 1½d. or 2d. per yard or more by which the foreigner could beat us owing to us being called upon to pay rates and taxes amounting to 12½ to 15 per cent. which the foreigner was let off scot-free." A manufacturer of woollens and tweeds suggests that the best way to capture German trade would be to get a large preference from our Colonies and at the same time try to come to some arrangement with the allied countries. With such a guarantee for a lengthy period manufacturers would find money to extend their premises.

Some tweed and flannel manufacturers point out that they do not find any competition in high-class textiles from Germany, though there is considerable competition in the lower classes of woollen goods. Another firm



say: "We do not think that British capital could be got to embark on the extension of plant, &c., unless some guarantee were given that unfair competition would be guarded against for a period after the war." Another firm remark, however, that while the Germans appear unable to compete with Huddersfield in fine fancy worsteds, they are distributors as well as consumers of these goods. It has been the boast of German and Austrian merchants that they dealt in nothing but English goods and "after the war these merchants will not dare to make the same profession." Huddersfield merchants have thus, say this firm, not only to consider the question of finding a substitute for the very large and increasing amount of fine trade done with Germany and Austria, but they have also to consider the prospect of preserving the trade hitherto done through Germany and Austria, and in this connection merchants should give some assistance. This firm add that the capture of German trade, so far as Huddersfield is concerned, would not be accomplished by imitating German cloths to any great extent, but by substituting Huddersfield for German cloths. The capacity of the works can be quickly increased and made equal to all demands.

Attention is also drawn to this point of distribution by another tweed and yarn firm who point out, too, that the German trade has always been on a lower level of prices than the English. With very few exceptions they say the British works can be made effective to provide for additional business, and capital will be forthcoming to do all that is wanted in the way of manufacturing "provided the Government give reasonable protection and assurance that they will not permit dumping." Another tweed and worsted firm are of opinion that so far as the woollen industry is concerned faced cloths, piece dyed for the costume trade, constitute the principal class of goods left entirely to the Germans at present. The Germans have the carding machinery required for the yarns, while their ability in finishing and dyeing the delicate shades is superior.

A mohair, alpaca and worsted coating manufacturer also mentions this German superiority in finishing and dyeing and especially in giving consistency to a cloth that would, under Bradford conditions, be

Mohairs and  
Alpacas

too flimsy altogether. This firm say that owing to their much larger market the Germans can provide large ranges of beautifully dyed shades, and distributing houses and makers-up can be far better supplied according to their wants by the Germans than by ourselves. This manufacturer adds that unless during the war taste or demand changes he does not see how we can capture and retain trade, as manufacturers cannot get all the combinations that go to make up the things required to place the cloth on the market, and he says that "manufacturers putting down the necessary machinery for the utilisation of wools that have hitherto gone to Germany will waste their money unless after the war something is done to give them security." He states further that the competing cloths seem to be made from yarns spun from shorter stapled wool than is used in Bradford, with the result that the German or Frenchman can give a softer handling cloth for the money, but this applies more particularly to cloths and yarns intended for the medium and better class costumes for ladies' wear. An important firm of clothing and piece-goods manufacturers say that the Germans have been steadily eating their way into the worsted trade by producing at a medium price a "sightly" well-blended article. "They have copied our most expensive and best designs in medium qualities, and they have been able to do this by using very expensive machinery, and they have been able to employ very expensive machinery by working behind a tariff wall." English manufacturers, say this firm, are not in a position to produce such neat high-class designs in low and medium class worsteds as the Germans and Austrians, since their machinery is not suitable. After the war the trade in medium class worsteds, "now forced on Bradford, will inevitably go back to Germany, unless mills with new machinery be built in the Bradford district," and "of course no one will build mills and put in machinery unless he be sure of some sort of protection after the war." In woollens, too, "the forte of the Austrian and German manufacturers is the low-class stuff, and here, again, it is a question of expensive machinery."

Clothing

This firm point out that in the matter of ready-made clothing the Austrians have taken a very large share of the South African trade on account of the tasteful cloths employed, but more particularly owing to the

excellence, or rather, neatness of the workmanship. As regards South America (where a German taste in clothing has been developed owing to the large German population) "we have only to copy the German style in a very general way to be able to get the German share of the low and medium class trade." In this branch, too, "the capacity of British works to capture and retain German trade is not quite adequate," and "if our manufacturers could be assured of continued trade after the war they would, no doubt, willingly sink the necessary capital in buildings and machinery." This desire for security is also expressed by a firm of fancy woollen manufacturers, who state that "before capital can be found to commence new industries it will be necessary for the Government to give ample protection for at least ten years."

**Fancy  
Woollens**

The productive resources of Great Britain are equal to demands in the shawl trade according to one manufacturer, but under present conditions it is impossible to keep the trade which in the past "has been driven into German and other Continental hands by the action of the British Government and the employees of this country;" and it is very largely the fault of the latter, he states, that so much trade has gone abroad.

**Shawls**

A firm of felt manufacturers think that the present capacity is adequate and works could easily be extended to meet an increased demand. They too, however, point out that British manufacturers generally have hesitated to spend money freely on extensions because of the risk of being cut out later by competition from foreign firms who with a much larger market have been able to manufacture more cheaply with the added certainty of being able to carry on their home trade at a profit.

**Felts**

### HOSIERY.

As regards hosiery, a prominent manufacturer states that enormous quantities of hosiery goods, and especially the lower qualities similar to those made in the Leicester district, have been imported from Germany and Austria. These goods could all be made here, but owing to cheaper labour

**Hosiery**

and Government assistance, the Germans have been able to beat us in price. This manufacturer is of opinion that the Government should protect manufacturers and their workpeople to some extent against the unfair competition and longer hours of Continental and yellow races.

#### CARPETS.

In the carpet trade, too, the outstanding feature has been the cheap grade of carpet imported from Germany and Austria. One manufacturer points out that as the Kidderminster manufacturers decided to run their plant continuously on half time, thus entailing accumulation of large stocks and consumption of considerable capital, the Government should take steps to prevent German and Austrian stocks being disposed of in the British markets at any rate for a certain number of years.

#### LINENS.

The linen trade is in a specially difficult position owing, in the words of a prominent manufacturer, "on the one hand to the absolute scarcity of raw material, both flax and yarns, and on the other to the large and most unusual demand for heavy linens for war purposes." These conditions are said to have forced up prices to such high levels as to make them prohibitive for all classes of goods used for ordinary trade and domestic purposes, and owing to the flax scarcity many mills may soon be standing still. This manufacturer says that as under these conditions there is no reason to anticipate any great increase of trade arising from the war there is no reason to expect a great shortage of productive power. In any case, if it could be profitably employed, capital would be forthcoming. The position is accentuated, as another firm point out, by the competition of "abnormally cheap cotton." A linen yarn manufacturer says that if there is security for capital it will certainly be provided if required. It is pointed out by other manufacturers that owing to the longer hours and lower pay and the fact that one man can manage a larger number of looms the Germans are able to undersell us in many instances, and one says: "I very much fear that if the

war were over and the wave of patriotism had passed away, the linen buyers throughout the country would fall back on the old system of buying what is cheapest."

The machinery employed is fit to cope with every class of plain goods, **Damasks** says this manufacturer, but in the case of some of the fancy damasks and towellings a small additional capital outlay might be necessary. It is the opinion of this manufacturer that the situation in the linen trade is that "it requires too much capital for the return which it yields. This brings about undue competition and cutting of prices, which is detrimental to the manufacturer and of very little benefit to the purchasing public." Another damask manufacturer states that spinning has been largely ousted from this country by Belgium, France and Austria, so that we are now dependent upon these countries for yarn. "Given a plentiful supply of yarn at a reasonable rate there is idle machinery that could be set working, and when there is not too much hand labour we could quite well compete, but cheaper Continental wages make competition in the matter of hand labour difficult." This manufacturer adds that "it would not be easy to raise money to put into linen damask weaving without some measure of protection from foreign importation"—which, however, he says, raises the question of protecting the spinner and by raising the price of yarn adversely affecting the weaver. Another damask trader says that the prospect of capturing German trade is not very bright, and "it appears to me that it is only by the cost of production in Germany being substantially raised, or by the cost in this country being materially reduced (which can hardly be looked for), as well as by manufacturers here being contented with the narrowest possible margin of profit, that we can hope to permanently retain any of the German trade which the war may enable us to capture."

#### HEMP.

Manufacturers of hemp yarns, hemp rope, &c., lay stress on the **Hemp** necessity of tariff security if capital is to be invested to increase the machinery now at work in this country.

## JUTE.

**Jute** As regards jute, a prominent manufacturer states that the prospects of capturing German trade are not very bright, nor is there very much trade to capture, Germany's exports having been mainly spasmodic in order to relieve pressure on her home market. As the German market is as likely to be highly protected after the war as it was before it, there is, says this manufacturer, no reason to anticipate that Great Britain will obtain even such a share of the German trade as she had before the high protective tariff was adopted.

## SILKS.

**Silks** Silk manufacturers point out, too, that the German lower wages and longer hours, together with the great assistance obtained from the Government and in other ways, make it impossible for them to compete. One firm of dress silk manufacturers say that "no one would put down, say, £100,000 to be spent in mills, machinery, patterns, designing and stocks, with the certainty that as soon as the war is over buyers will again go to the cheapest market." The prosperity of the cotton trade, too, has led to labour scarcity in the silk trade in the last few years.

**Velvets** A prominent expert states that there is every reason to believe that a considerable proportion of silk goods and velvets hitherto made in Germany could be produced in this country both for the home trade and export. Certain German goods, however, are of such a low quality that British manufacturers do not consider it worth while attempting to produce them, special looms at present unobtainable in this country being required in many cases. This point is emphasised by a firm who say: "We do not think it would pay loom makers to make or manufacturers to work the looms for the low quality velvets with the certainty that directly the war was over the Germans would flood the market again and undersell them."

A manufacturer of glove and textile fabrics and fancy hosiery states **Gloves** that there is no prospect of capturing the German trade in silk gloves and glove fabrics, and no new capital will be found unless an import duty be imposed of from 50 to 60 per cent. In the absence of a tariff, he says, the Germans will flood our markets after the war.

It is pointed out that there is every prospect of capturing a large portion **Ribbons** of the German trade in silk ribbons, but the Coventry looms are unsuitable, and again manufacturers are apprehensive as to what will happen after the war. Similar opinions are expressed by silk label and embroidery manufacturers.

#### ARTIFICIAL FLOWERS.

A manufacturer of artificial flowers states that the capture of German **Artificial Flowers** trade is practicable in nearly all the kinds manufactured by Germany, but it is inexpedient at the present juncture to expend a large amount in up-to-date extra machinery unless a guarantee be given of a substantial tariff being imposed to preclude dumping. Here, again, cheap German labour and freights "form an absolute bar to fair competition." This manufacturer says: "With an adequate tariff we can both capture and retain the bulk of this trade, and be enabled thereby to pay higher wages and employ a largely increased number of hands."

#### LINOLEUM.

A linoleum manufacturer states that in his opinion the combined **Linoleum** resources of British makers are quite equal to capturing and holding the bulk of Germany's trade so long as the question of low prices, which has been a great factor, is eliminated.

### III.—STATEMENTS OF BRITISH TRADERS.

The following are the replies received from British Traders in the textile industries respecting British manufacturing resources:—

#### COTTONS.

##### FIRM C. 1627 (Cotton Yarns).

Many inquiries and orders for cotton yarn are coming forward from countries that were lately supplied from Germany. The yarns inquired for were not made extensively here. They were made principally from Indian cotton waste and shoddy. All spinners here making such yarns are engaged for some considerable time. To increase this class of trade, *i.e.*, low class yarns, fresh capital and more spindles would have to be found, and as the Germans are masters in the production of the cheap and nasty they would probably recover the trade after the war. If new capital were introduced into the trade, in my opinion a protective tariff would be necessary to ensure such capital remaining remunerative. And then it is doubtful whether the spindles would not be used for making better class yarns and the shoddy sorts consequently neglected. The Germans were exporting some high class yarns to Holland, but we have now captured the trade, and it is almost certain that after the war we shall retain it without a protective tariff.

##### FIRM C. 3437 (Cotton Yarns).

It is quite possible for British manufacturers to deal a severe blow to certain sections of the German export trade, more especially in Italian cloths and zenellas, which are largely used for making umbrellas, parasols, and kindred goods. Our experience is limited to the districts of Elberfeld and Barmen, but these particular districts catered chiefly for embroideries, &c., used very largely in the Parisian dressmaking trade.

##### FIRM C. 451 (Cotton Yarns and Manufactures).

I think there is quite sufficient producing power, both in the yarn and manufacturing departments of the cotton trade, to gradually capture the German trade. During 1912 and 1913 a large number of new companies were floated by speculators in Lancashire. They were not wanted, and many of them have not yet got to work, but the buildings are up and will have to be worked eventually by some one at some price. I believe that the war has merely intensified the cloud now hanging over the trade. Raw cotton is lower than it has been for many years, and yet the merchants will not buy cloth because they all hold such large stocks (the products, for the most part, of the new mills) in the foreign markets.

##### FIRM C. 848 (Calico Prints).

It is probable that we shall be able to pick up a certain amount of German trade during the war, and special attention is being given to this, but it does not seem likely that the trade will be very large, owing to the restricted buying power of the various neutral foreign countries. The present capacity of British works is more than adequate to provide for the captured trade. After the war Germany will undoubtedly resume business in the most vigorous manner; and in a trade like printed goods, where a good deal depends upon originality of design, the Germans are certain to get back a good deal of their trade because their designs will naturally be of a different type to those produced in France and Great Britain. A good deal of the export trade in prints is a question of low price. The Germans, having a tariff and so securing the bulk of their home trade, are helped materially to reduce costs through the quantity of their output and to sell more cheaply abroad. We think, therefore, that whilst British printers will profit to some extent by the temporary stoppage of the industry in Germany, they will not be able to capture the whole of the German trade, and they will be lucky if they are able to retain a part of such captured trade.



**FIRM C. 3049** (Calicoes—Printed Cotton Linings, &c.).

We are particularly interested in cheap grade calicoes (used not for personal purposes, but in the course of manufacturing certain articles), and printed cotton goods principally for bag and trunk linings. In neither of these have we met with any competition from Germany or other countries. We have made endeavours to produce one special cotton finished material, but so far without result, because the Lancashire man will not put down special machinery, on the ground that when the war is over the trade will go back to Germany and the machinery have to be scrapped. We have also been exercising a deal of energy in connection with a cloth dyed and finished in various ways for the production of certain milliners' requisites, and have met with a certain amount of success in obtaining orders. It is believed that the Germans will find it extremely difficult to recapture this market. There is some disinclination on the part of manufacturers to put down machinery to produce stuff to compete with that which the Germans have produced, because they cannot produce so cheaply as the Germans in normal times, and they apparently hold the view that the Germans will again obtain the hold on the market which they have had for so long.

**FIRM C. 3083** (Coloured Cotton Goods).

I would not spend one penny extra for extensions under free trade to capture German trade, *i.e.*, in corset cloths, &c. The English cloth buyer would buy from his bitterest enemy if he could save sixpence a week.

**FIRM C. 1716** (Cotton Importer).

I am informed that owing to the cessation of imports of cheap German cotton goods certain Lancashire cotton spinning firms have been making these cheap articles which they formerly were unable to produce profitably. If it were possible to retain this business profitably there would be need, no doubt, for the erection of fresh mills in order to cope with the normal business in other classes of goods which is at the moment dislocated. There is not, as a rule, any difficulty in raising money for the erection of cotton mills in this country, provided business at the time being is profitable.

**FIRM C. 2249** (Muslins).

We do not feel German competition in muslins proper. It is the French and Swiss who oppose us in tarlatan and mercerised muslins and also in silks, which compete with fine muslins. We experience German competition in the manufacture of buckram in various cloths, and in sparterie and marly finish. The buckram and sparterie are finished at Paisley, the marly at Nottingham by Glasgow muslin houses. The finishing power is quite inadequate, and finishers will not increase their power, as their experience is that German buckram is preferred, and we only get the excess when fashion absorbs the German production. Buckram is a special finish, and only one finisher at Paisley has succeeded in coming near the German finish.

**FIRM C. 2913** (Cotton Mills—Absorbent Cotton Wool).

Our speciality which has suffered mostly from German and Austrian competition is absorbent cotton wool. Many institutions in this country have sent orders abroad in times past for this article, in many cases to save as small an amount as  $\frac{1}{2}$ d. per pound, and no matter how much we have reduced our price, the reduction has been followed always by a price decrease on the part of the German and Austrian manufacturers. This has gone on to such an extent that during the last few years the lowest qualities of cotton wool have been manufactured by us at a net loss. At present we are receiving plenty of business and are as rapidly as possible extending our plant; but there has not been much inducement, so far, to extend on a very large scale, in view of the probability of German and Austrian competition being renewed after the war. If we were sure of some small measure of protection we could by this time next year be employing double the number of workpeople. As regards resources, everything necessary for the manufacture of our speciality can be obtained in abundance. As regards quality, price for price, we can easily beat our foreign competitors.

## WOOLLENS.

**FIRM C. 2022** (Yarns).

There is a very good prospect of capturing a considerable portion of the German trade, both for Home and Export—in the Home trade more especially the class of yarn called Berlin wool for retail sale for hand-knitting and for manufacturing the dry-spun yarn (also made in France and Belgium). There is nothing like sufficient suitable machinery in this country to provide for this

trade, but machinery is already being put down to cater for it. New capital will be forthcoming because the conditions are very favourable. There will be a prejudice against German goods long enough after the war to allow our home firms to get in, and once in they will hold the trade. In former times English manufacturers would not adopt the Continental method of spinning, and lost the trade for which it proved more suitable. Now they recognise its advantages and are quite ready to start competing. As regards the export trade, the largest openings are in our own Colonies, America, Russia, China, and Japan. In all these countries German competition has been very severe, but in nearly all of them we ought to have a sentimental preference.

**FIRM C. 1198 (Worsted Yarns).**

Germany, France and Belgium have for many years almost monopolised a trade which differs from the ordinary English worsted trade because the yarn is spun on mules instead of spinning frames. Mule-spun yarns are only made to a very slight extent in Great Britain, and there is at present no adequate capacity for British competition with the German trade. These yarns are used for some piece goods in the Yorkshire and other markets. To equip new mills with suitable machinery to produce these yarns would require a great deal of capital, and it would be doubtful whether those engaged in the worsted spinning industry, which is now exceedingly busy, would care to turn their attention to a new branch of production. In endeavouring to capture the German trade we should also be fighting against our French and Belgian allies. I think more mule-spun yarn is produced in France and Belgium than in Germany.

With regard to the worsted yarns, which are the staple trade of Yorkshire and are produced largely in Leicester and other parts of the kingdom, we shall probably be able to capture some portion of this trade which has also been carried on by Germany, in the markets of the Far East especially. But the machinery for producing worsted yarns may only find new markets to replace the old ones that have been lost in consequence of the war. Germany has been an important market for English worsted yarns, and I am not sure that the captured trade in various parts of the world will more than compensate for the trade we shall probably lose with Germany itself.

**FIRM C. 2049 (Worsted Yarns and Manufactures).**

Yorkshire will not suffer on account of the war as much as Lancashire in the textile trades, as the army orders for clothing will make up in a great degree for the loss of exports. The firms, however, that have been spinning yarns for export are in a very bad position as they cannot all turn on to khaki. All the Yorkshire firms that can spin khaki yarns and have looms suitable for weaving this cloth are very busy and likely to be so for months. The demand for women's dress goods ought to give full employment to manufacturers whose looms will not weave army goods, as there is no difficulty (except the dye) in supplying the trade with the goods which would, under other circumstances, have been made in Germany and Austria.

The British manufacturer does not require either assistance or inducement to supply all classes of textile goods for home and export, which have been bought from the German manufacturer.

With the present demand for army and navy clothing, both for our own and our Allies' troops, it is quite likely that the present number of looms will not be sufficient for the increased demand. But this difficulty can soon be overcome by the addition of new machinery, and the firms that have been selling their yarns so far to the German manufacturers will either have to buy looms and begin manufacturing piece goods or find customers in the increased demand from home manufacturers.

The greater difficulty, I am afraid, will be one of labour, and this scarcity of labour will especially be felt by the woollen and worsted manufacturers of Yorkshire. Some relief may be got by bringing the cotton operatives of Lancashire into the Yorkshire trade, but this probably would be only temporary.

**FIRM C. 1573 (Yarns and Manufactures).**

No great development of the worsted piece goods trade is possible on account of the great scarcity of labour. This scarcity is caused by: (1) Emigration. (2) Legislative checks on the employment of women and children. (3) The transfer of operatives to more attractive, if not better paid, employment. (4) The restrictive action of trade unions.

Only a comparatively small portion of the German and Austrian trade in our branch of industry is worth capturing, the bulk of it being in cheap, common fabrics which we should not attempt to make because there would be no profit in them. No prudent business man will risk his capital in new plant and works, &c., without a guarantee of protection from the Government. Sooner or later German and Austrian manufacturers will again enter into competition, and their prices and

methods of business will quickly rob us of any temporary advantage we may have gained while their factories were closed. We are already supplying the home market with goods hitherto obtained from our enemies, but we cannot hope to compete successfully under normal conditions.

The departments of the worsted trade most affected by emigration are the spinning and weaving departments. The emigrants are nearly all young men, young women and children who have first become skilled workers or who are potential skilled workers. The drain has been going on for many years. I believe emigration to these countries is a sound policy and I do not complain of it, but together with other factors it is checking the development of this industry.

**FIRM C. 215 (Tweeds and Yarns).**

There is no doubt that the German manufacturers have been obliged to give up their works, firstly on account of the difficulty in conducting business and secondly because of the shortage of labour. But we see difficulties before us, because when the war is over we shall not want to trade with Germany to any extent, and the Germans have without doubt been the distributors of woollen goods for the Continent of Europe. After the war Germany will come into the market with productions at extremely low prices, with a view of regaining her position, and it will be a very hard time for those who are endeavouring to capture German trade. German goods will not have the market in this country that they have had hitherto and there will therefore be a better opening here for well manufactured woollen goods, but it will be at a higher price than the Germans have been taking. The German trade has always been on a lower level of prices than the English.

As regards the capacity of British works to provide for the captured trade and to retain it, with very few additions the present machinery can be made effective to provide for the additional business.

Capital will be forthcoming to do all that is wanted in the way of manufacturing, provided the Government give reasonable protection and assurance that they will not permit dumping in our market.

**FIRM C. 56 (Woollen and Worsted Yarns and Cloths).**

Previous to the war, these works were working short time, and there was imported daily into Leeds warehouses cloth sufficient to run three mills as large as ours at from 1½d. to 2¼d. per yard less price than we could make it, and for this small margin our workers were walking the streets. Upwards of a dozen English firms, who had thrown us off during the last decade, are now most anxious for us to re-open business and they will eagerly pay the 1½d. or 2d. per yard or more by which the foreigner could beat us owing to us being called upon to pay rates and taxes amounting to 12½% to 15% which the foreigner was let off scot-free. Now that free imports are stopped, whereas we were working 4½ days per week up to August 1st, we are now running day and night and Saturday afternoons. Dozens of dismissed workers are again at work, and we could do with dozens of others.

**FIRM C. 1666 (Alpacca and Mohair Yarns and Manufactures).**

The productive resources of this country are not at present able to supply markets hitherto supplied by Germany and Austria.

**FIRM C. 2155 (Woollens and Tweeds).**

The best way to capture German trade would be to get a larger preference from our Colonies and at the same time to try to come to some arrangement with the allied countries. But the present works would not be large enough to cope with the trade hitherto done by Germany. Manufacturers would find money to extend their premises if they were guaranteed a good preference with the above-mentioned countries for a lengthy period.

**FIRM C. 1728 (Tweeds, Worsteds, &c.).**

So far as the woollen industry is concerned I should think that probably faced cloths, piece dyed for the costume trade, might be the principal class of goods that is left entirely to the Germans at present. They have the carding machinery required for the yarns used, while their ability in finishing and dyeing the delicate shades is superior. There are also costumes of the covert coat type the small yarns for which they made more perfectly.

**FIRM C. 2578 (Tweeds and Flannels).**

We do not find any competition in high-class textiles from Germany. We have no doubt that in the lower classes of woollen goods there is considerable competition with German stuffs. We do

not think that British capital could be got to embark on the extension of plant, buildings, &c., unless some guarantee were given that unfair competition would be guarded against for a period after the war.

**FIRM C. 1664** (Mohairs, Alpacas and Worsted Coatings).

Every cloth I dissect seems to be made from yarns spun from shorter-stapled wool than is used in Bradford, with the result that the German or Frenchman can give a softer handling cloth for the money than we can. These remarks apply more particularly to cloths and yarns intended for the medium and better class costumes for ladies' wear in which an enormous trade has been done. The inability to get such goods at present is helping this branch of the trade here enormously, as buyers must have something and consequently buy in this market. As regards cloth requiring carded yarns, woollen spun, the West Riding woollen spinners are quite capable of competing with foreign yarns up to a certain count, but above that fineness the Belgians have the trade practically to themselves. Here, again, I make out that the Belgians use shorter and finer wools for these carded sorts, and their machinery is of a different class to the Huddersfield types.

In finishing and dyeing, the foreigner seems to excel in many ways, especially in giving consistency to a cloth that would, under Bradford conditions, be too flimsy altogether. Owing to their much larger market the Germans can provide large ranges of beautifully dyed shades, and distributing houses and makers-up can be far better supplied according to their wants by the Germans than by ourselves. Our markets being more restricted, it is folly for a manufacturer to put in to stock on chance any but a very few of the, for the moment, most popular shades, and even this is dangerous. The result is that of late years very large orders have gone abroad. Unless, therefore, during the war, the taste of buyers or the demand changes, I do not see how we can capture and retain trade, as manufacturers cannot get all the combinations that go to make up the things required to place the cloth on the market. Manufacturers putting down the necessary machinery for the utilisation of wools that have hitherto gone to Germany will waste their money unless after the war something is done to give them security.

**FIRM C. 1491** (Woollens).

The prospect of capturing and retaining the German trade (for home and export) in woollen goods, except the better class goods and yarns, is small. The most telling factor in favour of the British trader is, perhaps, the crippling of Germany's finances, which will undoubtedly make the German long-credit system hitherto practised impossible. On the other hand there are many cloths of the lower types which we are unable to imitate, and this trade, it seems, must go back to Germany after the war. The capacity of mills in this country is sufficient for any of the trade we may capture, but if not individuals will automatically make provision for an increased output of anything which they see can be retained. The one branch for which we are not properly equipped is the mule spinning of worsted yarns, and this trade could, we think, be captured if we had the necessary machinery.

**FIRM C. 2248** (Woollens and Worsteds).

The Germans do not appear to be able to compete with the Huddersfield district in the making of fine fancy worsteds any more than they can compete with Paris in fashions for ladies' wear. But they are able to dispose of an ever-increasing quantity of these cloths made in Huddersfield to countries other than France, besides absorbing more for home use.

The chief difficulty in trading with the Germans and Austrians in the future will be that, whereas, prior to the war, it was the boast of foreign merchants that they dealt in nothing but English goods, after the war these merchants will not dare to make the same profession. Huddersfield manufacturers have thus not only to consider the question of finding a substitute for the very large and increasing amount of fine trade hitherto done with Germany and Austria, but they have also to consider the prospect of preserving the trade hitherto done through Germans and Austrians, and in this latter connection merchants should give some assistance.

Of course Russia will be more open to us, and here the Germans did a big trade.

France does a good trade with Huddersfield, but not so large as Germany or Austria. Many of the cloths she supplies to South America come from Huddersfield. But she produces largely the cloths of second degree in her own mills, although her tailors boast of keeping Huddersfield cloths. The fine trade of Huddersfield is so exclusive that comparatively short lengths of each style go for actual wear to any country. Travellers take patterns to all countries, and so each style gets spread about. The difficulties of the Huddersfield fine manufacturers will thus be largely increased should Germany and Austria not share in the distribution.

There are two distinct branches of the industry in Huddersfield—the fine trade, already mentioned, and what is known as the Colne Valley trade. The customers of the last-named trade are in Great Britain and her Colonies. The cloths are handsome, usually heavy, and very cheap. Attempts to imitate these cloths are crude and usually result in flooding the market with rotten cloths instead of sound ones. Blacks and blues are of good value in all countries, but all nations look to Great Britain for the best ones and for articles of taste in mixtures and fancies, and, so far, no other nation has employed the talent necessary for the production of these goods. Huddersfield is acknowledged to take the lead in men's wear.

The capture of German trade would not, so far as Huddersfield is concerned, be accomplished by imitating German cloths to any great extent, but by substituting Huddersfield cloths for German cloths. These may be found to answer the purposes now served by German-made cloths, and so be got into use during the war and kept in use after it. The capacity of the works can be quickly increased and made equal to all demands. When a firm becomes permanently busy it is usual to work two shifts until new works can be erected. To increase in any other way would be folly, as expenditure on new machinery would be immediately involved.

**FIRM C. 2449** (Ready-made Clothing, Woollen and Worsted Merchants).

A very large proportion of the German worsted yarns are imported from Bradford, a third of whose output is devoted to supplying German needs in normal times. There is no difficulty in obtaining yarns, but the Germans have been steadily eating their way into the worsted trade by producing at a medium price a slightly, well-blended article. They have copied our most expensive and best designs in medium qualities. They have been able to do this by using very expensive machinery, and they have been able to employ very expensive machinery by working behind a tariff wall, having a thoroughly protected home market and the whole of the British Colonies to go at in addition. The biggest markets for medium class worsteds produced in Germany are Canada (for summer goods), Africa and Australia. In the African clothing trade in recent years about one-half of the medium class worsted suits have been made up of German worsteds. At the present time English manufacturers are not in a position to produce such neat high-class designs in low and medium class worsteds as the Germans and, especially, the Austrians—since the machinery is not adapted to it. After the war the trade in medium class worsteds (which is now being forced on to Bradford because there is no other centre outside the war zone) will inevitably go back to Germany unless mills with new machinery be built in the Bradford district. Of course no one will build mills and put in machinery unless he be sure of some sort of protection after the war.

In regard to woollens, the forte of the Austrian and German manufacturers is the low class stuff from 1s. up to 2s. for 54-inch woollens. Here again it is entirely, or almost entirely, a question of expensive machinery.

With regard to ready-made clothing, the Austrians have taken a very large share of the South African trade partly on account of the tasteful cloths employed (which, however, are open for purchase by the British manufacturer), but more particularly owing to the excellence or, rather, neatness of the workmanship.

The Germans have a big market for clothing in South America which they hold because such a large proportion of the population there is German, and a German taste in clothing has been developed. The German goods are dearer than the English, and for this market, generally speaking, are no better made. We have only to copy the German styles in a very general way to be able to get the German share of the trade. This only applies to the low and medium class trade, and duty-free-entry ports. There is very little clothing of any other sort.

What trade there is in other sorts is held by the Americans on account of the very high-class workmanship demanded in the better class ready-mades.

In the Egyptian market Austrian goods have an almost exclusive sale. The reason is that a great many of the shops and bazaars are financed almost entirely from Buda Pest. In this case the native does not care so much about style, and if the shapes and sizes were copied in similar cloths and a good heavy duty were clapped on the Austrian article, the whole of this market—worth about three millions per annum—could be handed over to England.

The capacity of British works to provide for the captured trade and to retain it after the war is not quite adequate, and in order to supply our own and the Continental demands for war material increased facilities are necessary even now. If our manufacturers could be assured of continued trade after the war they would, no doubt, willingly sink the necessary capital in buildings and machinery. My own firm, for instance, know the Egyptian requirements well, and if we could see a certainty of that trade coming our way we would unhesitatingly put up further buildings and put down machinery and send out travellers to be the first in the field.

**FIRM C. 54** (Ready-made Clothing).

We have not felt the effect of German competition. The only garments we have had of German make are the low-priced alpacas and thin summer jackets. This is a small trade, but we think it desirable to take precautions against it. As alpaca jackets are difficult to make and the Germans produce them at very low prices, it is reasonable to assume that it would not be difficult for them to compete keenly with us in the higher priced goods.

**FIRM C. 1994** (Fancy Woollens).

At present the maximum output of the woollen trade seems unable to keep pace with the demand for cloth for military purposes. Before capital can be found to commence new industries it will be necessary for the Government to give ample protection for at least ten years. It is a long time before new businesses can produce as cheaply as those which have the benefit of years of experience and organisation.

**FIRM C. 2635** (Shawls).

So far as our trade is concerned the productive resources of Great Britain are quite equal to the demand, but under present conditions it is impossible to keep the trade. The shawl trade has been driven into German and other Continental hands by the action of the British Government and the employees of this country, and it is very largely the fault of the latter that so much trade has gone abroad.

**FIRM C. 1663** (Felts).

We think the prospect of capturing the German trade in felts very favourable. Heretofore there has been considerable exportation of German felts both to this country and to our Colonies. The present capacity of British works is adequate to meet the demand, and works could easily be extended to meet increased demand. The question as to whether British manufacturers feel justified in increasing their capital outlay on plant and buildings until there is a closer tariff arrangement between the Mother Country and the Colonies, with some exclusion of foreign-made goods, is difficult to decide. British manufacturers generally have hesitated to spend money freely on these extensions because of the risk they run of being cut out by foreign competition, while they have not had freedom of access to the home markets of their foreign competitors. The foreign firms have had a much larger market and have therefore been able to manufacture more cheaply, with the added certainty of being able to carry on their home trade at a profit.

## HOSIERY.

**FIRM C. 57** (Hosiery).

Enormous quantities of hosiery goods (especially the lower qualities) similar to those made in Leicester and the surrounding districts have been imported from Germany and Austria. These goods could all be made here. The only difference has been a matter of price. Manufacturers have had cheaper labour in Germany, and with a certain amount of Government assistance have been able to beat us in price. However you may stir up patriotic feeling, there can be no permanent reliance placed upon that alone, whereas if the Government in power were to protect manufacturers and their workpeople to some extent against the unfair competition and longer hours of Continental and yellow races, the object we have in view would be attained.

**FIRM C. 2664** (Hosiery and Underwear).

A continuance of "sentimental preference" for a limited time is anticipated, but this will eventually lose its force. It is therefore necessary to be protected so as to command the market.

**FIRM C. 2890** (Hosiery).

Inquiries have been made for a line of goods which the Germans used to make, but the price is too low to induce this firm to produce those articles.

**FIRM C. 3353** (Hosiery).

The Nottingham hosiery trade has greatly improved during the war, and naturally, as the cheaper German goods are no longer procurable.

## CARPETS.

## FIRM C. 1753 (Carpets).

Many of the carpets imported from Germany and Austria have been of the cheapest grades and have been sold at prices considerably below the cheapest qualities of English manufacture. English manufacturers can make these grades, provided they can be persuaded to put aside their inherent distaste of manufacturing what is cheap and nasty, and then a considerable increase in turnover can be obtained. Speaking of my own plant, provided we get the opportunity, I can increase my turnover by nearly 40 per cent. without laying down additional machinery, but as I presume this additional turnover would consist chiefly of the cheapest grades, machinery would be employed in making a production of less monetary value. I do not think the manufacture of the cheap articles would affect my regular turnover in any way.

During the present crisis the manufacturers of Kidderminster have decided to continue running their plant on half-time. This entails an accumulation of a large quantity of stock and the consumption of considerable capital. Before the commencement of the war German and Austrian manufacturers held large stocks of carpets and rugs, and upon its termination the Government should take some steps to prevent these stocks being disposed of in British markets, at any rate for a certain number of years.

## FIRM C. 387 (Axminster Carpets).

In carpets the only thing is to have an assurance from retail traders that they will not buy German make, as their labour has enabled German manufacturers hitherto to copy our designs and sell at a lower cost.

## FIRM C. 92 (Carpets).

German competition in the Argentine has been mainly in seamless chenille qualities. We are inclined to think that in this line the German productions have been more attractive to the Argentine consumers than the British, in respect of colouring, finish, and price.

## LINENS.

## FIRM C. 2431 (Linen Yarns).

Germany of course exports linen goods to France, Belgium and Russia, as we do, and I think that sentiment will gain a portion of this trade at any rate for a time. It is impossible to estimate how our trade with other countries will be affected after the war, which will be of course an important factor in our capacity to capture and retain German trade. If there is security for capital I am certain that it will be provided for extensions, if required.

## FIRM C. 1583 (Linen Manufactures).

Owing to the longer hours and lower pay, and also to the fact that, as I understand, one man can manage a larger number of looms, the Germans are able to undersell us in many instances, and I very much fear that if the war were over and the wave of patriotism had passed away, the linen buyers throughout the country would fall back on the old system of buying what is cheapest. In the linen trade the machinery employed is, I believe, fit to cope with every class of plain goods, but in the case of some of the fancy damasks and towellings a small additional capital outlay might be necessary.

I think I might safely sum up the situation in the linen trade by saying, in a general sense, that it requires too much capital for the return which it yields. This brings about undue competition and "cutting" of prices, which is detrimental to the manufacturer and of very little benefit to the purchasing public.

## FIRM C. 2301 (Linen Manufactures).

Nothing can in our opinion be done at the present time towards capturing German linen trade owing to the scarcity of flax. The main source of supply, that from the Baltic Ports of Russia, has been cut off since the war began, and since Ghent was taken a similar condition of affairs exists in Belgium. At present linen yarns have advanced about 50 per cent. and the supply is limited, and the sale of linen goods is consequently suffering severely. A high basis of cost in linens accompanied, as is the case at present, by abnormally cheap cotton, simply means that very few linen goods can be sold.

**Firm C. 1625 (Linen Manufactures).**

Owing to the want of raw material little can be done in capturing German trade in linen manufactures.

**FIRM C. 1649 (Linen and Cotton Damasks).**

There is little prospect of capturing German trade in linen damasks at present owing to the great scarcity and excessive cost of flax, as so little can be got from Russia, which is our chief source of supply. There is the further fact that spinning has been largely ousted from this country by Belgium, France, and Austria, so that we are now very dependent upon those countries for yarn. As Germany has taken or will probably take all the flax and yarn she can get from both France and Belgium our prospects of procuring fresh supplies are slight, and it is becoming a question how long we shall be able to keep our factories working.

Given a plentiful supply of yarn at a reasonable rate there is idle machinery that could be set working, and when there is not too much hand labour on the article to be made we could quite well compete, but the cheaper Continental wages make competition in the matter of hand labour difficult.

It would not be easy to raise money to put into linen damask weaving without some measure of protection from foreign importation. This, however, raises the question of protecting the spinner and, by raising the price of yarn, adversely affecting the weaver.

**FIRM C. 876 (Linen and Jute Yarns and Tissues).**

From such knowledge as I possess of the linen trade (apart from damasks, which are dealt with by the enclosure following), I should say that neither from Austria nor from Germany can much trade be captured. Neither Germany nor Austria can export linens just now, nor can Belgium, which in goods other than damasks has been for many years a more fierce competitor, both in London and New York, than either of the other two countries. Were conditions otherwise normal, the present time might seem most opportune for this country to acquire much of the business which usually finds its way to the Continent. The situation, however, is far from normal. On the one hand there is absolute scarcity of raw material, both flax and yarns, while on the other there is a large and most unusual demand for heavy linens for war purposes. These conditions have forced up prices to such high levels as to make them prohibitive for all classes of goods used for ordinary trade and domestic purposes. Consequently there is no demand from ordinary channels, either at home or abroad, and therefore the element of price already operates against the capture of German foreign trade as well as of the trade hitherto done at our expense in home markets. As long as the war lasts there is no prospect of getting supplies of flax from Russia, or of yarns from Belgium, and therefore, within six months, a great many mills and factories may be standing for want of supplies.

I think we shall probably reach, soon after the war, the same international competitive position as we occupied before; and the man who can sell cheapest will get the preference, irrespective of nationality. Prejudice of course may favour the Scotch or Irish manufacturer to begin with, but sooner or later, unless we in this country can manufacture German goods cheaper than Germans, we shall not keep the trade. On the whole, then, I think that we can capture nothing just now. After the war is over, if we can secure raw material more quickly than the Continent, and if, as is likely, we suffer less economically from the war, we may get a start of a few laps after trade begins to be normal again.

As there is thus no reason to anticipate any great increase of trade arising from the war, there is no reason to expect a great shortage of productive power. In any case, if it could be profitably employed, sufficient capital would be forthcoming.

**FIRM C. 876 E. (Damasks).**

The prospect of capturing German trade is not in my opinion very bright. We have already secured orders which are as a rule placed with German manufacturers, but it is simply because these manufacturers are not in a position to supply the goods. When peace comes, I have no doubt that any prejudice in the home trade against German goods will quickly pass away, and that the ability of the German manufacturer to produce sightly goods at a considerably lower cost than we can will very quickly get back his trade. The upward movement in cost of manufacturing has been much greater, I suspect, in this country than in Germany. In that country hours are longer and wages are much lower than here, and so long as these conditions obtain, the German manufacturer will be able to beat us both in the home and the export trade. Several of my business friends inform me that the German factories are not large, but that they are practically run, "office, warehouse, and all," by the manufacturer and his family. He is said to live as a rule in a house adjoining his works and to live in a very moderate manner. He will, no doubt, besides making a living, save a little money, but manufacturers in this country want to live a little better than moderately and to save rather more than a little money. Of recent years the Germans have practically captured the



business in linen huck towels. This season we have secured some orders for these goods, but only because it was impossible to place them in Germany, and the buyers had to pay us considerably higher prices than they would have had to pay to the German makers. These towels are mostly used in America.

As to the present capacity of British works to provide for any trade that may be captured, I do not think there would be much difficulty about that. Even in fairly good times there is always a certain proportion of machinery not in full work. By employing all available machinery and working probably at a little higher pressure, a very considerable amount of extra trade could be provided for. As to retaining it after the war, that of course is almost wholly a question of price. If the Germans can supply goods of equal quality and style at lower prices, no antagonistic sentiment will be able to hold out long against them. It appears to me that it is only by the cost of production in Germany being substantially raised or by the cost in this country being materially reduced (which can hardly be looked for), as well as by manufacturers here being contented with the narrowest possible margin of profit, that we can hope to permanently retain any of the German trade which the war may enable us to capture. I do not think there would be any difficulty in getting sufficient capital, provided the prospects of doing a satisfactorily profitable trade were good.

#### HEMP.

**FIRM C. 2329** (Hemp Yarns for Twine, Hemp Sacking, &c.).

There is at present no material export of hemp yarns and sacking from Germany and Austria that we know of, but there is a large export of finished hemp twines. The present capacity of British works is quite equal to providing for a largely increased amount of trade at the present time, but the same causes which have led to hemp twines being dumped from Germany and Austria are likely to operate as before after the war. It is estimated that at least 20 per cent. of the twine used in this country is imported from Germany, Austria and Belgium; and if our country had control of its own consumption large extensions of machinery and works with consequent additional capital would undoubtedly be required. We doubt, however, if any manufacturers would put in new plant unless an import duty of, say, not exceeding 10 per cent. were put upon foreign yarns and twines. The necessity of this arises from the fact that in these foreign countries the manufacturers, in order to secure British orders, are prepared to sacrifice usual standing charges which average about 10 per cent. The surplus production is taken over by cartels and combines which undertake the selling of it in this and other countries.

**FIRM C. 2643** (Hemp Rope and Twines, &c., and Jute Goods).

The great difficulty of our trade just now is in obtaining raw material. At present it is impossible to obtain supplies of Russian hemp, and the Italian Government have prohibited the export of Italian hemp. There is no difficulty in the supply of British machinery for our trade. In our opinion there is not sufficient machinery at work in this country (even if working night and day) to produce the normal demand of rope and twine if the German and Austrian firms can be kept out of our home and colonial markets. Sufficient capital would, we think, be forthcoming if the manufacturers of rope and twine in this country could be assured of an equitable working arrangement in the future, but they are not likely to invest more money with the prospect of recent and future taxation if Continental firms are allowed a free market here.

#### JUTE.

**FIRM C. 876** (Linen and Jute Yarns and Tissues).

The prospects of capturing German jute trade are not very bright, nor do I think that there is very much trade to capture. The jute industry in Germany has been highly protected, and there is no reason to anticipate that after the war duties will be relaxed so as to enable Great Britain to obtain even such a share of the German home trade as she had before the German high protective tariff was adopted. So far as I know, Germany has no steady organised export trade. Her exports have been mainly spasmodic in order to relieve pressure on her protected home markets. It must not be forgotten that India is this country's greatest and almost sole competitor in the large jute cloth markets of North and South America, Australia, &c. Other countries—Germany, Austria, Italy or Russia—if they enter these markets or the British home market at all, do so only from time to time, in order to relieve home pressure as indicated above. I think, therefore, there are no fresh worlds to conquer.

As there is no reason to anticipate any great increase of trade arising from the war, there is no reason to expect a great shortage of productive power. In any case, if it could be profitably employed, sufficient capital would be forthcoming.

## SILKS.

**FIRM C. 5522 (Dress Silks, &c.).**

When war broke out we did some extra business for a short time, but later, when routes were opened from Zurich and Como, goods came forward from these centres and Lyons, and the demand for our goods ceased. London houses are heavily stocked with goods ordered last spring and, since no one is doing more than half his usual business, a great part of these orders will not be sold this season.

We have never attempted to compete with German and Austrian manufacturers. The low wages they pay for longer hours of work, and the great assistance they get from their Government, in low carriage, in advances from banks and in various other ways, make it impossible for us to compete. If under changed conditions we could compete, no one would put down, say, £100,000 to be spent in mills, machinery, pattern designing and stocks, with the certainty that, as soon as the war is over, buyers will again go to the cheapest market for their goods.

For the last three or four years we have been trying to increase our business. We have plenty of capital, but all efforts to obtain any fresh hands were fruitless until the last few months, owing to the prosperity of the cotton trade.

**FIRM C. 1168 (Silks).**

There is every reason to believe that a considerable proportion of silk goods and velvets hitherto made in Germany could be produced in this country both for home trade and export. Certain German goods are of such a low quality that British manufacturers do not consider it worth while attempting to produce them.

British manufacturers are already producing many silk fabrics, both plain, figured, and velvets, and are preparing to capture other sections of the German trade. Some of these sections will require a considerable amount of preparation, as special looms, at the present time unobtainable in this country, are required.

The probable inability of manufacturers to retain captured trade after the war is preventing many from launching out to the extent of putting up new buildings and laying down fresh plant and machinery, particularly to make the medium and lower qualities, as it is felt that, in the present state of uncertainty as to what will happen when the war is over, serious risk of loss may, and probably will, be incurred.

It is generally felt that, in order to induce capitalists to assist, some sort of guarantee that German and Austrian goods will not be allowed to come into the country free of a tax is required.

**FIRM C. 1782 (Silks and Velvets).**

We do not see our way to make the lowest priced velvets for collar velvets which the Germans made, and none of our loom makers has made the looms for them. We have a German loom on which we make richer qualities successfully, and we asked an English silk loom maker to copy this loom, but he declined to do so and would not undertake to make it work. If we could procure the machinery we could make plenty of the medium-priced goods, but a good deal of capital would be required. We do not think it would pay loom makers to make, or manufacturers to work, the looms for the low quality velvets with the certainty that directly the war was over the Germans would flood the market again and undersell them.

**FIRM C. 2177 (Glove and Textile Fabrics and Fancy Hosiery).**

There is no prospect of capturing the German trade in silk gloves and glove fabrics, and no new capital will be found, unless we have an import duty of 50 to 60 per cent. Eighty per cent. of the fabric gloves sold in this country have been imported from Germany. In the absence of a tariff the Germans will flood our markets with gloves and glove fabrics after the war. We should say the stock of German gloves in this country will last six to nine months. The capacity of British works is sufficient to provide for about one-half of the trade hitherto done by Germany. We have about 60 machines, and nearly all have been standing idle; but we are now getting busy with cotton glove fabrics, all of which Germany has hitherto made.

**FIRM C. 1010 (Silk Ribbons, &c.).**

There is every prospect of capturing a large portion of the German trade, but the greatest difficulty lies in the unsuitability of the machinery at our disposal. New capital would certainly be needed to enable us to get the required machinery in any quantity. We have obtained orders, for instance, for 500 gross yards that have previously been supplied by Germany. The difficulty

which immediately presents itself is the production of quantities quickly and economically, and we find our Coventry looms are unsuitable. Before building new looms we are considering the probability of business when the war is over, and whether we should get a return for the money involved.

**FIRM C. 2496** (Silk Labels, &c.).

In the past the German manufacturers have sold a good many of their lines at very close figures, while in Germany they have been able to get a much higher figure, being protected by a tariff. If we knew the conditions under which German manufacturers will offer their goods in this country in the future it would enable us to decide as to the advisability of putting down additional plant. We do not feel inclined to spend five or six thousand pounds in extensions if the Germans are again to have the same free use of our market.

**FIRM C. 1913** (Silk Embroidery, Bead Work, &c.).

I have gathered at various meetings convened by manufacturers that manufacturers must have a guarantee that they will be protected against German importation before they will invest more money in existing or new works.

### CORSETS.

**FIRM C. 8398** (Corsets).

So far as we know, the amount of corset trade done in this country by Germany before the war was not large, and we think the capacity of the British corset manufacturers is quite adequate for any captured trade. We quite believe that ample capital is available for any extensions which may be necessary.

### ARTIFICIAL FLOWERS.

**FIRM C. 130** (Artificial Flowers).

The capture of German trade in artificial flowers is practicable in nearly all the kinds manufactured by Germany. The present capacity of British work is, however, inadequate to retain trade after the war. There exists a fair amount of capital among the manufacturers to provide extensions, but it is inexpedient at the present juncture to expend a large amount in up-to-date extra machinery and equipping an additional factory unless a guarantee be given of a substantial tariff being imposed of about 40 per cent., which would effectually preclude the dumping of goods in this trade. The conditions of labour in Germany in the villages where these goods are made, together with the cheap freight of the German State railways, form an absolute bar to fair competition. With an adequate tariff we can both capture and retain the bulk of this trade, enabling us to pay higher wages and to employ a largely increased number of hands.

### LINOLEUM.

**FIRM C. 2146** (Linoleum).

We do business with Canada and Australia, and can give no opinion about trade with foreign countries (outside Germany). We should say the combined resources of the British makers are quite equal to capturing and holding the bulk of Germany's trade, so long as the question of low prices (which we believe has been a great factor in their securing trade) is eliminated.

## IV.—FINANCIAL ASPECTS.

**Credit Facilities**

Textile traders are as emphatic as the iron, steel and engineering firms in their references to the long credits which have resulted from the facilities accorded to traders by the German banks, though the dangers of overtrading when such a system is abused are recognised. A firm of tweed and yarn makers say that “the Germans have given large credits and better terms” presumably because “the banks in Germany have given large credits to their customers and have supported business houses with great liberality.” A worsted spinner and manufacturer states that financially the German manufacturer is in a position “to assist the purchaser to a much larger extent than we ourselves can by extended credit—larger discounts, taking orders for smaller quantities at a time and giving facilities and inducements for sampling at low rates.” A calico printer suggests that this state of things has been characterised by unsoundness, which generally speaking appears to have “brought German business into a very bad way.” Another woollen and worsted firm say “it is understood that German banks take greater risks than English banks and are often astride of book debts.” A woollen manufacturer thinks that “the most telling factor in favour of the British trader and one which may enable him to compete successfully against many German-made cloths is, perhaps, the crippling of Germany’s finances, which will undoubtedly make the long credit system hitherto practised by the Germans impossible.”

**Capital Requirements**

In the opinion of a worsted yarn manufacturer new capital will be forthcoming because the conditions are very favourable. A worsted spinner and manufacturer says that the capital for extensions will be found without any difficulty if the labour difficulty can be surmounted. Another woollen and worsted firm say that “outside capital for extensions is not likely to be required as local banks make very liberal advances to manufacturers who show capacity coupled with industry.” A silk expert suggests, however, that “some sort of guarantee that German and Austrian goods will not be

allowed to come into the country free of a tax ” would undoubtedly “ induce capitalists to assist British manufacturers much more readily than they are at present doing.”

A prominent linen manufacturer says : “ I think I might safely sum up the situation in the linen trade by saying, in a general sense, that it requires too much capital for the return which it yields. This brings about undue competition and ‘ cutting ’ of prices, which is detrimental to the manufacturer and of very little benefit to the purchasing public.” The flax fibre is an expensive commodity, says this manufacturer, whose growth and treatment are largely dependent on weather and climatic conditions. Skilled and carefully trained workers are required, while the machinery used is also expensive, and “ were it possible for an arrangement of minimum prices to be settled it would be undoubtedly a most valuable and profit-returning trade.”

A prominent lace manufacturer points to the hindrance to investment of the Trades Disputes Act, and says that the taxing of capital out of existence, such as has been attempted in the last few years, is a most dangerous experiment if trade and manufactures are to prosper.

A cotton spinner and manufacturer says that a check is required to the wild speculation which prevails in raw cotton. The year’s crop, he states, is sold four or five times over “ mostly to parties who know nothing about the trade and have no interest in it.” This manufacturer suggests that by placing a substantial stamp duty upon all contracts for futures the Government would not only check this gambling in futures but would derive a considerable revenue which the bonâ fide user of the raw material would willingly pay, because it would ensure for him more regular markets, not governed by speculative manipulation.” Cotton  
Futures

A well-known manufacturer says that as regards the jute trade both Merchanting in Calcutta and Dundee the product of the mills is usually sold “ on change ” to merchants who have their connections and travellers abroad. These are the people who would have to do the capturing of trade. “ They are.”

he adds, "likewise the people who, in normal times, pit the prices of Dundee against the prices of Calcutta, and it may be of Hamburg, in the neutral markets of the world."

On this phase of the subject the replies from manufacturers are as follows:—

#### COTTONS.

##### FIRM C. 451 (Cotton Yarns and Manufactures).

A check is required to the wild speculation which prevails in raw cotton. The year's crop is sold four or five times over mostly to parties who know nothing about the trade and have no interest in it. This gambling in futures must be profitable, but those who engage in it merely reduce the legitimate profits of the planter and the spinner. By placing a substantial stamp duty upon all contracts for futures the Government would not only check gambling, but would derive a considerable revenue which the bonâ fide user of the raw material would willingly pay, because it would ensure for him more regular markets, not governed by speculative manipulation.

##### FIRM C. 848 (Calico Prints).

The Germans have been in the habit of granting their customers excessively long credit and special facilities and advantages by way of concessions. They have been enabled to do this only through the peculiar commercial methods adopted in Germany, namely, special facilities granted by the banks which, as far as we can follow, are very unsound and would appear, generally speaking, to have brought German business into a very bad way.

#### WOOLLENS.

##### FIRM C. 2022 (Yarns).

New capital will be forthcoming because the conditions are very favourable. In the case of Russia and the East the German methods of financing their customers by means of longer credit than our manufacturers would give may reasonably be expected to be considerably modified after the war.

##### FIRM C. 1198 (Worsted Yarns).

The conditions that will exist at the conclusion of the war with regard to labour in Germany, and the financial conditions which may or may not enable German banks to give the enormous facilities which in the past they have provided for industrial undertakings, make it impossible for me at present to form an opinion as to what can be done to satisfy the British capitalist to embark upon the enterprise of laying down plant and machinery with the object of capturing trade hitherto done by Germany.

##### FIRM C. 2929 (Worsted Yarns and Manufactures).

Financially the German manufacturer is in a position to assist the purchaser to a much larger extent than we ourselves can by extended credit, larger discounts, taking orders for smaller quantities at a time, and giving facilities and inducements for sampling at low rates.

##### FIRM C. 2049 (Worsted Yarns and Manufactures).

The capital for extensions will be found without any difficulty if the labour difficulty can be surmounted.

##### FIRM C. 215 (Tweeds and Yarns).

The German trade has always been on a lower level of prices than the English trade, and the Germans have given longer credits and better terms. This, I suppose, arises from the fact that the banks in Germany have given large credits to their customers and have supported business houses with great liberality.

**FIRM C. 1491 (Woollens).**

The prospect of capturing and retaining the German trade in woollen goods is small. The most telling factor in favour of the British trader, and one which may enable him to compete successfully against many German-made cloths is, perhaps, the crippling of Germany's finances, which will undoubtedly make the long credit system hitherto practised by the Germans impossible.

**FIRM C. 2248 (Woollens and Worsteds).**

It is believed that the Germans obtain information as to the exact standing of their foreign customers and give longer terms of credit than are given by English firms. It is understood that German banks take greater risks than English banks, and are often astride of book debts.

Outside capital for extensions is not likely to be required, as local banks make very liberal advances to manufacturers who show capacity coupled with industry. In provincial towns the affairs of nearly all firms are fairly well known to all local bank managers.

**HOSIERY.****FIRM C. 2664 (Hosiery and Underwear).**

When the war is over Germany will quote at or near cost prices in order to regain lost trade, and this, together with the great financial assistance given by German banks, will act as a check upon our extensions of machinery and plant here.

**FIRM C. 4305 (Hosiery Agents).**

It is not thought that the credits given by German manufacturers to Canadian customers have had much effect in securing orders. The price of German goods has been an important factor in securing orders to German manufacturers.

**FIRM C. 57 (Hosiery).**

There has been a considerable increase in wages in Germany during the last ten years owing to the trades union movement getting stronger in that country. As an off-set against this, however, manufacturers are taxed much more heavily in this country than they were, through the medium of the Insurance Act and other social reforms.

**LINENS, JUTE, &c.****FIRM C. 1583 (Linen Manufacturers).**

I think I might safely sum up the situation in the linen trade by saying, in a general sense, that it requires too much capital for the return which it yields. This brings about undue competition and "cutting" of prices, which is detrimental to the manufacturer and of very little benefit to the purchasing public. The flax fibre itself is an expensive commodity, depending largely upon the weather of the season in which it is grown. All the machinery employed in the treatment of it is of a very expensive and technical description. The flaxen yarns can only be woven under certain conditions of humidity by skilled and carefully trained workers, and by the time the linen has passed through the process of bleaching, examination, lapping, &c., and is ready for shipment, it results in the production of a very costly article of which an equivalent in price is not always obtained. Were it possible for an arrangement of minimum prices to be settled it would be, undoubtedly, a most valuable and profit-returning trade.

**FIRM C. 876 (Linen and Jute Yarns and Tissues).**

As regards the jute trade, I think I ought to point out that, both in Calcutta and in Dundee, manufacturers, as a rule, do not themselves have direct dealings with foreign countries. The product of the mills is usually sold "on change" to merchants who have their connections and travellers abroad. These, then, are the people who would have to do the capturing. They are likewise the people who, in normal times, pit the prices of Dundee against the prices of Calcutta, and, it may be, of Hamburg, in the neutral markets of the world.

## SILKS.

FIRM C. 5522 (Dress Silks, &c.).

The great assistance which German and Austrian manufacturers obtain through advances from their banks, and in various other ways, makes it impossible for us to compete with them. After the war buyers will again go to the cheapest market for their goods, and this country with its enormously increased taxation will be beaten by Japan, United States, Italy, and Switzerland.

FIRM C. 1168 (Silks).

It is generally felt that some sort of guarantee that German and Austrian goods will not be allowed to come into the country free of a tax is required. Such a guarantee, providing its terms were ample, would undoubtedly induce capitalists to assist British manufacturers much more readily than they are at present doing.

## LACE.

FIRM C. 871 (Lace).

One of the greatest hindrances to the investment of new capital in industrial enterprise is the Trades Disputes Act. So long as trades unions as such are exempt from the common law, people will be loth to risk new capital in industrial concerns. The taxing of capital out of existence, such as has been attempted in the last few years, is a most dangerous experiment if trade and manufactures are to prosper.

## V.—TRADERS' RECOMMENDATIONS.

The recommendations of textile traders follow in many respects very closely those made by iron and steel and engineering firms. As has already been seen, the great assistance to German trade which has resulted from liberal banking facilities is recognised, and there appears to be a substantial feeling that some similar assistance by British bankers to British traders would be extremely valuable, provided that it could be given without direct incitement to over-trading.

Attention is drawn to the advantage derived by German traders from cheap freight rates, and a worsted spinner and manufacturer says: "Buyers are only willing to place orders with us so long as our goods are equal to, or lower than, the German goods as regards price. Should the conditions which obtained before the war ever prevail again this will be impossible in the majority of cases owing to the advantage which the German manufacturers enjoy in freight subsidies, among other things."

A lace manufacturer states that "one of the greatest hindrances to the investment of new capital in industrial enterprise is the Trades Disputes Act." So long, he says, as trades unions as such are exempt from the common law, people will be loth to risk new capital in industrial concerns. Labour

Banking  
Facilities

Freights

Trades  
Disputes  
Act



difficulties are also referred to by a woollen shawl manufacturer, who says "the shawl trade has been driven into Germany and other Continental countries by the action of the British Government and the employees of this country, and it is very largely the fault of the latter that so much trade has gone abroad." He adds: "The first question that wants settling is the labour difficulty of the country, for if the whole of the Continental trade were captured, it would only be a signal for all industries in this country to be brought to a standstill through industrial disputes."

The lace manufacturer just quoted points out also the advisability of establishing the metric system in this country; and as regards patents, he suggests that revocation of enemy patents for the time of the war only is not of the slightest use, and that these patents should be revoked absolutely and a free hand given to the manufacturer. The shawl manufacturer above referred to also says that "the Government is to be blamed for allowing Continental imports into this country to be re-exported as British manufactures after labels and identification marks have been changed."

Metric System

Patents, &amp;c

A manufacturer of floorcloth and linoleum is of opinion that a Ministry of Commerce should be formed consisting of the best business heads of the nation. "Each trade ought to be gone into thoroughly, and every assistance and encouragement given to manufacturers by subsidies or a tariff, so that when the war is over there should be no possibility whatever of trade drifting back to Germany or Austria." This manufacturer thinks that "the present Commercial Intelligence Department of the Board of Trade is but a very poor step in this direction." "I consider," he says, "that agents, manufacturers and merchants should be brought in touch with each other by that Department; but I find agents are debarred from attending the exhibitions, although, generally speaking, the agent is the most important man of the three." Another textile manufacturer thinks that the work of this Department should be subdivided into sections comprising a general field of British industry, such as (1) textiles, (2) iron and steel, &c., and Advisory Committees should be appointed throughout the country to co-operate with the Department. If the Chambers of Commerce were

Ministry of Commerce

The Commercial Intelligence Department

Chambers of Commerce

linked up with the Commercial Intelligence Department, manufacturers could become Associate Members of the Chambers of Commerce and receive through them the latest available information from London.

**Attention to Markets** Considerable stress is laid by several traders on the necessity for close attention to markets. Thus a large woollen and worsted firm, referring to the low and medium class trade with South America, say : " The Germans have a big market for clothing in South America which they hold because such a large proportion of the population there is German and a German taste in clothing has been developed. The German goods are dearer than the English, and for this market, generally speaking, are no better made. This should be the easiest market for the English to take and keep. We have only to copy the German styles in a very general way to be able to get the German share of the trade." A firm of hosiery agents point out that " German manufacturers have been in the habit of taking their samples through Canada."

**Merchanting** The difference between German and British methods is emphasised by a firm of calico printers, who say that whereas the Germans go more or less directly to the consumers the British printers deal through merchants. There is no likelihood, however, this firm remark, " so far as we can see of the German method of trading in this respect being adopted by British firms, as it would mean the entire dislocation of the present trading methods which have been built up over a long period of time, and would further involve an enormous increase of capital to enable the British printers to do this direct trade."

**Agents** A large textile firm say that a point of great importance is the provision of " really capable, reliable and suitable agents." It is, they say, most difficult to get a good foreign agent, and they suggest that " something might be done whereby agencies would be arranged for different industries, say shirts, linens and woollens, whereby one agent would represent three different houses and the expenses would be divided." A floorecloth manufacturer,

who is a member of the South Wales Commercial Travellers' Association, says : " We realise as travellers the need of language classes for our members. In the business with which I am connected we have the greatest difficulty in getting hold of really competent representatives," and he adds, "to be a successful salesman technical and artistic qualities are requisite, which our schools unfortunately leave untouched."

One carpet firm suggest that retail traders should engage not to buy German carpets.

**Retail Traders**

As has been fully described in the section on " Manufacturing Resources and Capacity of Expansion," a considerable amount of new, and in many cases special, machinery will be required if manufacturers are to endeavour to capture trade in certain branches of the German textile industry, and it is pointed out that this will of course necessitate in many instances the expenditure of considerable capital outlay. As was the case with the iron and steel and engineering industries there are a few firms who suggest that the extra capital needed will be forthcoming without difficulty.

**New Machinery**

In the large majority of instances, however, anxiety as to the position after the war constitutes an absolute bar to the outlay of fresh capital. So strong indeed is this feeling of insecurity that, as with the iron and steel and engineering industries, so with the textile industries, the dominant feature of the replies received by the Tariff Commission is the almost unanimous agreement that the desired capital will in general be withheld unless the Government give an undertaking that a tariff will be imposed on enemy goods at the end of the war. The strength of this general desire for tariff security is shown by the following series of extracts from the replies of textile traders :—

**Tariff Recommendations**

#### COTTONS.

##### FIRM C. 1627 (Cotton Yarns).

To increase the trade in low class yarns fresh capital and more spindles would have to be found, and as the Germans are masters in the production of the cheap and nasty they would probably recover the trade after the war. If new capital were introduced into the trade, a protective tariff would be necessary to ensure it remaining remunerative.

**FIRM C. 3437** (Cotton Yarns).

We wish you every success in bringing to a satisfactory conclusion the efforts that are being made to capture a great part of the export trade of Germany and Austria. Please note that you are not to consider that we have departed from our absolute faith in free trade principles, as we are still as opposed as ever to any adoption of protective tariffs.

**FIRM C. 24** (Cotton Manufacturer).

Will the British Empire after the war adopt free trade within the Empire? Germany's success in trade and in Empire has been due to this more than to any other cause.

**FIRM C. 3083** (Coloured Cotton Goods).

The prospect of capturing German trade for home and export in corset cloths and others coming under my styles is nil under free trade. I would not spend one penny extra for extensions, under free trade, to capture German trade.

**FIRM C. 1716** (Cotton Importer).

I am informed that owing to the cessation of imports of cheap German cotton goods certain Lancashire cotton spinning firms have been making cheap articles which they formerly were unable to produce profitably. Whether they will be able to retain this business when the war is over is a matter upon which I cannot express an opinion, nor can I suggest any other means than a tariff by which any assistance could be given in this direction.

**FIRM C. 2249** (Muslins).

We experience German competition in the manufacture of buckram in various cloths and in sparterie and marly finish. The buckram and sparterie are finished at Paisley, the marly at Nottingham by Glasgow muslin houses. The finishing power is quite inadequate and finishers will not increase their power, as their experience is that German buckram is preferred, and we only get the excess when fashion absorbs the German production. The capitalist will not invest without a protective tariff or a guarantee by the Government for money expended in developing this branch. Buckram is a special finish and only one finisher at Paisley has succeeded in coming near the German finish. A duty of 15 per cent. on buckrams and 25 per cent. on fine muslins and silks would be required.

**FIRM C. 2913** (Cotton Mills—Absorbent Cotton Wool).

Our speciality which has suffered mostly from German and Austrian competition is Absorbent Cotton Wool. Many institutions in this country have sent orders abroad in times past for this article, in many cases to save as small an amount as  $\frac{1}{8}$ d. per pound, and we have noticed that, no matter how much we have reduced our price, the reduction has been followed always by a decrease in price on the part of the German and Austrian manufacturers. During the last few years the lowest qualities of cotton wool have indeed been manufactured by us at a net loss. At the present time we are receiving plenty of business and are as rapidly as possible extending our plant; but there has not been much inducement, so far, to extend on a very large scale in view of the probability of renewed competition after the war. If we were sure of some small measure of protection we could by this time next year be employing double the number of workpeople.

## WOOLLENS.

**FIRM C. 56** (Woollen and Worsted Yarns and Cloths).

The foreigner, for the use of our market, should pay our income tax 6 per cent., our municipal tax  $7\frac{1}{2}$  per cent., and our local tax  $1\frac{1}{2}$  per cent., total 15 per cent.; then we fight him on level terms. Since war was declared we have had visits daily from our Leeds clothing houses and from Bradford, Manchester and London asking us to make foreign cloths. A tariff judiciously handled would find work for every man, woman and child in the Kingdom.

**FIRM C. 1573** (Yarns and Manufactures).

Only a comparatively small portion of the German and Austrian trade in our branch of industry is worth capturing, the bulk of it being in cheap, common fabrics which we should not attempt to make because there would be no profit in them. No prudent business man will risk his capital in new plant and works, &c., without a guarantee of protection from the Government. Sooner or later

German and Austrian manufacturers will again enter into competition, and their prices and methods of business will quickly rob us of any temporary advantage we may have gained while their factories were closed. We are already supplying the home market with goods hitherto obtained from our enemies, but we cannot hope to compete successfully under normal conditions.

A change in our fiscal system would tend to check emigration, but I am not convinced that such a result would be good for the Empire as a whole.

**FIRM C. 215 (Tweeds and Yarns).**

Capital will be forthcoming to do all that is wanted in the way of manufacturing, provided the Government give reasonable protection and assurance that they will not permit goods to be dumped in our market as they have been. In fact, the Government will be obliged to go back very much to the basis of the Tariff Commission if they want to re-establish business on profitable lines.

**FIRM C. 2155 (Woollens and Tweeds).**

The best way to capture German trade would be to get a larger preference from our Colonies and at the same time to try to come to some arrangement with the allied countries. Manufacturers would find money to extend their premises if they could have a guarantee of a good preference with the above-mentioned countries for a lengthy period.

**FIRM C. 2578 (Tweeds and Flannels).**

We do not think that British capital could be got to embark on the extension of plant, buildings, &c., unless some guarantee were given that unfair competition would be guarded against for a period after the cessation of the war.

**FIRM C. 1664 (Mohairs, Alpacas and Worsted Coatings).**

Manufacturers putting down the necessary machinery for the utilisation of wools that have hitherto gone to Germany will waste their money unless after the war something is done to give them security, and this by way, I suppose, of protection of some sort.

**FIRM C. 2449 (Ready-made Clothing, Woollen and Worsted Merchants).**

The Germans have copied our most expensive and best designs in medium qualities. They have been able to do this by using very expensive machinery, and they have been able to employ very expensive machinery by working behind a tariff wall, having a thoroughly protected home market and the whole of the British Colonies to go at in addition. After the war the trade in medium class worsteds (which is now being forced on to Bradford because there is no other centre) will inevitably go back to Germany unless mills with new machinery be built in the Bradford district. Of course no one will build mills and put in machinery unless he be sure of some sort of protection after the war. A "Zollverein" of the British Empire would meet the case, but this should be arranged before the war is over so that the machinery and buildings may be ready. In the Egyptian market Austrian goods have an almost exclusive sale. The reason is that a great many of the shops and bazaars are financed almost entirely from Buda Pesth and are really Austrian shops under native names and with native managers. In this case the native does not care so much about style, and if the shapes were copied in similar cloths and a good heavy duty were clapped on the Austrian article the whole of this market—worth about three millions per annum—could be handed over to England.

**FIRM C. 2635 (Woollen Shawls).**

A tariff for revenue purposes would assist the industries of this country, provided our Colonies follow the example of Canada by giving a preference to Great Britain.

**FIRM C. 1663 (Felts).**

British manufacturers generally have hesitated to spend money freely on extensions because of the risk they run of being cut out by foreign competition, while they have not had freedom of access to the home markets of their foreign competitors. The foreign firms have had a much larger market and have therefore been able to manufacture more cheaply with the added certainty of being able to carry on their home trade at a profit.

## HOSIERY.

## FIRM C. 57. (Hosiery).

Of course we shall receive orders as long as the German manufacturer is unable to send his goods to us, but at the end of the war many feel that unless a tariff of at least 15 per cent. to 25 per cent. is placed on German cotton hosiery it will not be wise to lay down a large plant. Enormous quantities of hosiery goods (especially the lower qualities) similar to those made in Leicester and the surrounding districts have been imported from Germany and Austria. These goods could all be made here. The only difference has been a matter of price. Manufacturers have had cheaper labour in Germany, and with a certain amount of Government assistance have been able to beat us in price.

A tariff of 20 per cent. to 25 per cent. would secure the whole of this trade for this country and would cause work to be found for many thousands of operatives in a healthy trade at good rates of wages. It has been supported by several local manufacturers, and others who are not Tariff Reformers, that a tariff might be introduced, for revenue purposes only, under the name of "Commercial Treaty," such a tariff to be directed against Austria and Germany alone. If a manufacturer will adapt himself to local requirements the preference we are getting in the Colonies is sufficient to build up an enormous trade. However you may stir up patriotic feeling, there can be no permanent reliance placed upon that alone, whereas if the Government in power were to protect manufacturers and their workpeople to some extent against the unfair competition and longer hours of Continental and yellow races, the object in view would be attained.

## FIRM C. 2664 (Hosiery and Underwear).

A continuance of sentimental preference for a limited time is anticipated, but this will eventually lose its force. It is therefore necessary to be protected so as to be able to command the market. A small protective duty of even 5 per cent. would encourage and justify expenditure on additional plant and so strengthen our position, and a  $7\frac{1}{2}$  per cent. duty on lowest grade yarns known as shoddy would enable Huddersfield to compete successfully. The preferential tariff given by our Colonies will under present conditions be of greatly improved value.

## FIRM C. 4305 (Hosiery Agents).

Preference has turned orders to British goods, but hardly so much as was hoped.

## CARPETS.

## FIRM C. 1753 (Carpets).

During the present crisis the manufacturers of Kidderminster have decided to continue running their plant on half-time. This entails an accumulation of a large quantity of stock and the consumption of considerable capital. Before the commencement of the war German and Austrian manufacturers held large stocks of carpets and rugs, and upon its termination the Government should take some steps to prevent these stocks being disposed of in British markets, at any rate for a certain number of years, since the action of our manufacturers has so far prevented any serious distress or call for relief.

## FIRM C. 92 (Carpets).

The preferential tariffs in the Dominions are of substantial assistance.

## LINENS, &amp;c.

## FIRM C. 2431 (Linen Yarns).

A 10 per cent. duty on German linen yarns and manufactures would, in my opinion, largely lessen our imports of these articles from Germany. If there is security for capital I am certain that it will be provided for extensions if required.

## FIRM C. 1583 (Linen Manufactures).

Owing to the longer hours and lower pay, and also to the fact that as I understand one man can manage a larger number of looms, the Germans are able to undersell us in many instances, and I very much fear that if the war were over and the wave of patriotism had passed away, the linen buyers throughout the country would fall back on the old system of buying what is cheapest.

To the question whether this could not be met by Tariff Reform I reply that I believe it could, but that against that we should be faced by a further extension of bureaucracy, the tendency to which in this country has been growing rapidly. At the present time we have to apply for permits for the shipment of linen goods to certain parts of the world, and our experience has not tended to make us desire such a system extended.

**FIRM C. 1649** (Linen and Cotton Damasks).

It would not be easy to raise money to put into linen damask weaving unless some measure of protection from foreign importation were given, which then raises the question of protecting the spinner and, by raising the price of yarn, adversely affecting the weaver.

**FIRM C. 2392** (Fancy Linens).

The preference in the various Dominions is a great benefit and it would help still further if it could be increased or if we had free trade within the Empire.

**FIRM C. 2329** (Hemp Yarns for Twine, Hemp Sacking, &c.).

The present capacity of British works is quite equal to providing for a largely increased amount of trade at the present time, but the same causes which have led to hemp twines being dumped from Germany and Austria are likely to operate as before after the conclusion of the war. It is estimated at least 20 per cent. of the twine used in this country is imported from Germany, Austria and Belgium, and if our country had control of its own consumption large extensions of machinery and works with consequent additional capital would undoubtedly be required. We doubt, however, if any manufacturers would put in new plant unless an import duty of, say, not exceeding 10 per cent. were put upon foreign yarns and twines. The necessity for this arises from the fact that in these foreign countries the manufacturers, in order to secure British orders, are prepared to sacrifice usual standing charges which average about 10 per cent. The surplus production is taken over by cartels and combines which undertake the selling of it in this and other countries.

**FIRM C. 2643** (Hemp Rope and Twines, &c., and Jute Goods).

Sufficient capital would, we think, be forthcoming if the manufacturers of rope and twine in this country could be assured of an equitable working arrangement in the future. But manufacturers are not likely to invest more money with the prospect of recent taxation and the increasing taxation of the future, if Continental firms are allowed a free market here.

With reference to tariff policy we may say that it is no use wasting time with political propaganda. If the matter is going to be tackled on a business basis and a definite proposition put before the people of this country for consideration we think it will be seen quite clearly that manufacturers here cannot continue to pay heavy taxation (heavy because they are manufacturers in this country) and allow manufacturers out of the country to have all the opportunity of trading and escape the taxation.

### SILKS.

**FIRM C. 1657** (Silk Throwsters).

To induce capital and enterprise to adapt existing works or set up new works for the production of goods hitherto supplied by our enemies, the only efficient and effectual condition is straightforward tariffs.

**FIRM C. 5522** (Dress Silks, &c.).

A tax on foreign goods would perhaps help the silk trade, but I cannot advocate it.

**FIRM C. 1168** (Silks).

The probable inability of manufacturers to retain captured trade after the war is preventing many from launching out to the extent of putting up new buildings and laying down fresh plant and machinery, particularly to make the medium and lower qualities, as it is felt that, in the present state of uncertainty as to what will happen when the war is over, serious risk of loss may, and probably will, be incurred. It is generally felt that some sort of guarantee that German and Austrian goods will not be allowed to come into the country free of a tax is required. Such a guarantee, providing its terms were ample, would undoubtedly induce capitalists to assist British manufacturers much more readily than they are at present doing.

**FIRM C. 1782 (Silks and Velvets).**

In order to induce loom makers to make, and manufacturers to work, looms for low quality velvets, there should be some guarantee that no German velvet looms or German low priced velvets will be admitted to this country without paying a very substantial duty.

**FIRM C. 2177 (Glove and Textile Fabrics and Fancy Hosiery).**

There is no prospect of capturing the German trade in silk gloves and glove fabrics unless we have an import duty of 50 to 60 per cent. Eighty per cent. of the fabric gloves sold in this country have been imported from Germany. In the absence of a tariff the Germans will flood our markets with gloves and glove fabrics as soon as the war is over. We should say the stock of German gloves in this country will last 6 to 9 months. The capacity of British works is sufficient to provide for about one-half of the trade hitherto done by Germany.

**FIRM C. 1010 (Silk Ribbons, &c.).**

There is every prospect of capturing a large portion of the German trade, but the greatest difficulty lies in the unsuitability of the machinery at our disposal. New capital would certainly be required to enable us to get the required machinery in any quantity, and a tariff would be the most satisfactory way of fostering the business.

**FIRM C. 2496 (Silk Labels, &c.).**

A tariff should be put on German manufactures in order that we may be able to get a reasonable profit on our goods. In the past the Germans have sold a good many of their lines at very close figures, while in Germany they have been able to get a much higher figure, being protected by a tariff on the goods of competing countries. If we knew the conditions under which German manufacturers will offer their goods in this country in the future it would enable us to decide as to the advisability of putting down additional plant. We do not feel inclined to spend five or six thousand pounds in extensions if the Germans are to have the same free use of our market as formerly.

**FIRM C. 1913 (Silk Embroidery, Bead Work, &c.).**

I have gathered at various meetings convened by manufacturers that manufacturers must have a guarantee that they will be protected against German importation before they will invest more money in existing or new works.

## LACE.

**FIRM C. 871 (Lace).**

A full measure of Tariff Reform is necessary. We must enable our farmers to convert pasture land into arable on which wheat and other valuable crops may be grown, and our manufacturers to produce goods hitherto dumped into this country. We should also have a system of Imperial Preference for the mutual benefit of the Mother Country and the Overseas Dominions.

**FIRM C. 3353 (Lace).**

I believe that the lace trade in Nottingham has considerably improved since the war commenced. The Nottingham hosiery trade has also greatly improved during the last two months, naturally, as the cheaper German goods are no longer procurable.

I should say that as Germany can no longer deliver her surplus stocks at trade catching prices in our Colonies, British trade will undoubtedly benefit. The question is, will this check to German trade be removed at the end of the war, here in England and in our Colonies, or will it become permanent? This war should convince Free Traders how suicidal their policy is.

## ARTIFICIAL FLOWERS.

**FIRM C. 130 (Artificial Flowers).**

It is inexpedient at the present juncture to expend a large amount in up-to-date extra machinery and equipping an additional factory unless a guarantee be given of a substantial tariff being imposed on imported artificial flowers of about 40 per cent., which would effectually preclude the dumping of goods in this trade. The conditions of labour in Germany, in the villages where these goods are made, together with the cheap freight of the German State railways, form an absolute bar to fair competition. With an adequate tariff we can both capture and retain the bulk of this trade, enabling us to pay higher wages and to employ a largely increased number of hands.



## PART 4. THE ANILINE DYE INDUSTRY.

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### I.—AREA OF TRADE AFFECTED.

The United Kingdom imported in 1913 £1,890,000 worth of coal-tar dyes and dyestuffs, of which £1,730,000 worth came from Germany. These German imports were made up as follows :—

|  | £          |
|--|------------|
| Alizarine and anthracene dyestuffs .. .. | 271,000    |
| Aniline and naphthalene dyestuffs .. ..  | 1,382,000  |
| Synthetic indigo .. ..                   | 77,000     |
| Other coal-tar dyestuffs .. ..           | 500        |
|  | <hr/>      |
|  | £1,731,000 |
|  | <hr/>      |

The remaining £160,000 of imports was made up almost entirely of aniline and naphthalene dyestuffs from Switzerland, Belgium and Holland, practically all, however, from Switzerland (£146,000).

The United Kingdom exported coal-tar dyestuffs to the value of £177,000, of which £20,000 went to Germany.

Aniline dyes constitute an indispensable material in the many various branches of the textile, leather, paper and other trades, and it is estimated that the annual British output of goods in which they are an essential or important material is £200,000,000, requiring over £2,000,000 worth of dyes. Of these dyes only about £200,000 worth has hitherto been of British home production.

### II.—BRITISH MANUFACTURING RESOURCES AND CAPACITY OF EXPANSION.

The following is a summary of the opinions expressed by a large number of firms, interested in aniline dyes as users or manufacturers, on the position of the British industry and its resources. So great was the dependence on

German supplies that the present capacity of British dyeworks is totally inadequate to fill the gap, which it is now recognised can only be done by the creation of an enormous new industry requiring great capital expenditure. It will be seen from this summary and the extracts printed later that the fear of renewed German competition after the war constitutes an apparently insuperable hindrance to the raising of this capital.

#### (A) OPINIONS OF DYE MANUFACTURERS.

One important manufacturer of coal-tar dyes says that the colour difficulty cannot be overcome in a day, a month, or a year. Writing soon after the outbreak of war this manufacturer said: "We have doubled our production and are still increasing, but fear this new machinery might have to be scrapped after the war." This manufacturer says that there are no German trade secrets in regard to the production of aniline dyes, and the only difficulties in the way are the patents held by the German firms. He adds that had the Patents Act of 1907 been strictly carried out these German patents would have been worked in this country and the dye industry more firmly established here, but the section relating to compulsory working has become practically a dead letter. A manufacturing chemist states that the capital required is so great and the technical skill so difficult to obtain that "manufacturers have great hesitation in venturing upon departures with the probability that after the war the Germans would continue to command these manufactures." As regards alizarine, this chemist suggests that "it may be difficult to obtain the capital necessary for the extension of the manufacture of alizarine in this country without an assurance of protection for at least some years in some form." This fear of post-war dumping with consequent waste of capital expended is also referred to by another chemist as the opinion of people who would otherwise be willing to help. A prominent dyestuff expert, referring to the possibility of Switzerland doubling her former contribution to our supplies, mentions that owing to the lack of certain raw materials and intermediate products of German origin, Swiss firms are "barely able to supply one-tenth of the amount sent prior to the war," though they are "holding out hopes to their

customers here of being able to resume supplies at the pre-war rate by March or April." Referring to the original Government scheme and its bearing on British resources, this expert expresses the opinion that "with a capital of £4,500,000 fully subscribed it should be possible within five to ten years to produce in England about 50 per cent. of the former German supplies," while "within three years from now possibly 20 per cent. may be reached." This estimate is, however, stated by this gentleman to err "if anything, on the optimistic side."

#### (B) OPINIONS OF TEXTILE AND OTHER TRADERS.

##### COTTONS.

A manufacturer of plain and fancy coloured cottons says "our greatest difficulty is to obtain supplies of colour which have hitherto come mainly from Germany; as far as we can see we shall be stopped for colour later on." A leading cotton authority writes: "With regard to the manufacture of aniline dye a guarantee by the Government of protection until such time as initial expenditure was paid for would help." A cotton velvet and velveteen firm says: "Where we lose our velvet trade is in the dyeing." This manufacturer states that "the Germans are more clever than ourselves in chemicals." He suggests that capital would be well spent in opening up a chemical laboratory where experiments in the produce of dyes required would be supervised by capable experts.

##### WOOLLENS.

A worsted spinning and manufacturing firm say that "the great difficulty the textile manufacturers of the West Riding will have to face is the aniline dye one." He adds: "I am told that the plants of firms in England would have to be extended very materially, and that unless there was some security against German competition when the war is over no one would run the risk of putting down the necessary capital." This firm enclosed the opinion of an important authority that "the whole textile trade of Bradford" would be "brought to a standstill in a few weeks" unless further supplies of dyewares were obtained. This conclusion was apparently based

on the assumption that the normal demand for dyes would continue. The gigantic war demand for particular classes of goods in regard to which the dye difficulty has been overcome has postponed the difficulties arising from a normal demand for a large variety of colours.

The seriousness of the scarcity is emphasised by many other firms. Thus a woollen and worsted manufacturer writes: "We are in sore need of colours which we have had from Germany, and the fine trade of the Huddersfield district must suffer if something is not done quickly." The bar which absence of security constitutes to extensions of the British industry is also repeatedly dwelt upon. Thus a woollen spinner and manufacturer expresses the opinion that no prudent business man will risk his capital on new plant and works without a guarantee of protection, for "sooner or later German and Austrian manufacturers will again enter into competition, and their prices and methods of business will quickly rob us of any temporary advantage we may have gained." A firm of alpaca and mohair spinners and manufacturers suggest that no one would invest capital "without he were sure of some protection after the termination of the war." This firm add that the Germans have specialised the aniline dye industry to such an extent "that it will take years and years for us to compete with them." A tweed and costume cloth firm say that there would probably be no difficulty in obtaining capital on a large scale to establish the aniline and alizarine dye industry in this country were it not for the fact that "when the war is over long-established and wealthy German manufacturers will come to this country and cut prices in order to regain command of the trade." They put it plainly that "to ask firms to invest money in plant without an assurance from the Government that they will be protected from undue competition at the termination of the war is not a commercial proposition."

As will be seen later, it is pointed out by several firms that the heavy Excise duty on alcohol severely hampered the development of the British dye industry until recent years, and even now it is felt that some further Government aid in this respect is needed.\* The great desire for reform in

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\* Mr. Runciman announced (February 22nd, 1915) that the new company would be enabled to use alcohol free of duty, and that other manufacturers would be given equal facilities.

the matter of patents is also emphasised.\* It is, however, this absence of security which is held to be the root difficulty; and a firm of woollen and worsted merchants, who say the chemical research part of the dye industry is already provided for in our various technical universities, state bluntly that "no one is going to be fool enough to put down expensive works if immediately after the war the enemy are to be allowed to bowl in their manufactured dyestuff."

#### HOSIERY.

Hosiery firms also point out the acuteness of the dye question. One firm state their opinion that there would not be any lack of capital or enterprise "if we had the necessary knowledge," and "it is to our chemists that we must look for this, and to a more widespread and efficient chemical education for the production of suitable workmen."

#### CARPETS.

A carpet firm state their opinion that the British colours are not as strong or as fast as the German make. British colour manufacturers, they say, have in most cases been able to match the German colours given, but one colour, previously bought from the Bayer Company of Germany, they could not get matched in England at all. This firm say they have had to pay double and in some cases three times the price for colours corresponding to those bought previously in Germany, partly because the textile industry has to go to the English manufacturer for these dyes, but also because "a large proportion of the raw material appears to have come from Germany," and it is suggested that until some other source of supply of the base is found prices are likely to rise. Another carpet manufacturer says that "unless the Government takes immediate steps in the matter and gives encouragement in a substantial way, with a guarantee for a certain number of years," he much fears that whatever efforts may be made by individual manufacturers will only end in failure. Even for a beginning, he states, a very large capital would be required, and even then there would be some difficulty in obtaining a specially-trained staff for the working.

\* "The Act which was passed last autumn as an emergency measure does provide that the operators of German patents in this country shall have a chance of conducting them on licence. It is our intention not to cripple the companies when the war is over, but to give them every opportunity of making the most of the German patents."—*Mr. Runciman, February 22nd, 1915.*

### LINENS.

A linen firm state that if the aniline dye industry is to be established here it will be necessary to have groups of firms each making a certain class of dyes, because the bye-products from a firm manufacturing, say, alizarine colours form the raw materials for another firm making direct colours, and so on. This firm are of opinion that English firms would require a guarantee of support or a tariff for a period after the war, and "failing this it would be useless to expect anyone to sink capital now with the certainty of being 'cut out' later."

### SILKS.

A firm of silk spinners and manufactures say that their only serious difficulty has been that of obtaining dyestuffs, and they, too, point out that "when the German manufacturer is again able to sell his goods in this market, unless protected by some import duty, or alternatively and possibly better by some guarantee of support by colour users, the British maker will find that the strong German combines who have already been years in the business and consequently have reduced their costs to a minimum will be able to beat him." Another silk trader states that he has gathered at various meetings convened by manufacturers that there must be "a guarantee that they will be protected against German importation before they will invest money in existing or new works."

### LEATHER.

A leather firm say that the supply of aniline dyes, "one of the most important chemicals used in our industry," is entirely cut off. They lay stress on the thoroughness with which Germany took the aniline dye industry in hand, and add "the same thing might have been done in this country if the Government had subsidised the manufacturers and had helped to develop the industry as the Germans did."

### PAPER AND STATIONERY.

Several paper and stationery firms refer to the difficult position in which these industries are placed through the scarcity of dyes, and a stationery

firm say "the colour question is so much a national one, since nearly every business requires colours somewhere or other, that we think it should be taken up by the Government." One paper firm say: "We cannot take over the aniline dye trade because we cannot find anyone with sufficient enterprise to put up the necessary capital," and they add "only after years of practice would a man be able to turn out a certain colour and he would only be able to turn out the one colour."

### III.—STATEMENTS OF BRITISH TRADERS.

The following are the replies received from British Traders in the dye manufacturing and dye using industries respecting British manufacturing resources and needs:—

#### (A) OPINIONS OF DYE MANUFACTURERS.

##### FIRM C. 599 (Coal-tar Dyes).

We import from Germany two-thirds of the colours used in the dyeing and printing trades and the difficulty cannot be overcome in a day, a month, or a year. We have doubled our production and are still increasing, but fear this new machinery might have to be scrapped after the war. The advantage secured through the war is not sufficient to secure the production of such a variety of colours as to make us independent of German imports. There are no German trade secrets regarding the production of aniline dyes. The only difficulties in the way are the patents held by German firms. Alcohol is quite a secondary consideration. We can get any amount of pure alcohol under certain restrictions at a reasonable price.

##### FIRM C. 827 (Manufacturing Chemists).

The capital required is so great and the technical skill so difficult to obtain that manufacturers have great hesitation in venturing upon departures with the probability that after the war the Germans would continue to command these manufactures. The alizarine manufacture is a secret trade and outsiders have difficulty in obtaining the necessary skill and design of apparatus with which to carry it on. To meet with success it would be necessary to start with most up-to-date plant and appliances and the best technical skill and knowledge of the present process of manufacture. It may be difficult to obtain the capital necessary for the extension of the manufacture of alizarine in this country without an assurance of protection for at least some years in some form.

##### FIRM C. 4434 (Chemicals).

A director of a firm of old-established paint manufacturers told me that while he and others would be willing to go to the expense of putting down aniline dye plant they are deterred by the knowledge that after the war Germany would be able to dump her surplus from a protected market, and that the large capital expenditure made would in the end be lost.

##### FIRM C. 12228 (Dyestuff Expert).

There are no dye-producing factories outside Germany which in size approach the four or five largest German works. Outside Germany there are four factories in Switzerland, one (very small) in France, one (still smaller) in the United States, and three or four in England. Assuming the total value of coal-tar dyestuffs used yearly in this country to be £2,000,000, the share of British firms in the production may be taken at something under £200,000. The value of Swiss supplies is about £150,000 according to the Board of Trade Returns, but other estimates place the imports from Switzerland at about £300,000. France does not send us more than £3,000 worth, and America

sends nothing. Some of the dyes made by the Swiss firms are identical with those produced in Germany, or sufficiently nearly so to serve as substitutes, and it is possible that in the course of a year or two Switzerland may be able to send us double the former quantities. I have learnt, however, that not only have the Swiss firms been unable up to the present to increase their exports to Great Britain, but, owing to the lack of certain raw materials and intermediate products of German origin, they are barely able to supply one-tenth of the amount sent prior to the war. They are holding out hopes to their customers here of being able to resume supplies at the pre-war rate by March or April next. The output of the new company would of course depend upon the efficient use of the capital, upon the organisation, and also upon the purchase of sufficient quantities of raw material at reasonable prices. I think that with a capital of £4,500,000 fully subscribed it should be possible within five to ten years to produce in England about 50 per cent. of the former German supplies. Within three years from now possibly 20 per cent. of the German supplies may be reached. My estimate errs if anything on the optimistic side.

## (B) OPINIONS OF TEXTILE AND OTHER TRADERS.

### COTTONS.

#### FIRM C. 2772 (Plain and Fancy Coloured Cottons).

We are dyers as well as manufacturers, and our greatest difficulty is to obtain supplies of colour which have hitherto come mainly from Germany. As far as we can see we shall be stopped for colour later on. A British firm from which we obtain some part of our supply has advanced prices from 50 to 100 per cent. They seem dependent on Germany for raw material.

#### FIRM C. 2253 (Zephyr Muslins and Shirtings).

The only trouble we are having at the present time is in regard to dyestuffs, and it would certainly be a great advantage to the trade if these could be more largely manufactured in this country.

#### FIRM C. 24 (Cotton Manufactures).

With regard to the manufacture of aniline dye a guarantee by the Government of protection until such time as initial expenditure was paid for would help.

#### FIRM C. 2686 (Cotton Velvets and Velveteens).

Where we lose our velvet trade is in the dyeing. The Germans are more clever than ourselves in chemicals. I would suggest that capital would be well spent in opening up a chemical laboratory where experiments in the produce of dyes required could be supervised by capable experts. There was a German works in Ancoats which only employed rough labour; for the final process goods were sent to Germany.

### WOOLLENS.

#### FIRM C. 2049 (Worsted Yarns and Manufactures).

The great difficulty the textile manufacturers of the West Riding will have to face is the aniline dye one. I am told that the plants of firms in England would have to be extended very materially and that unless there was some security against German competition when the war is over no one would run the risk of putting down the necessary capital.

Eighty per cent. of our dyewares came from Germany. Certain stocks are now coming to an end. After the exhaustion of stock we shall have to dye with the best dyewares we can procure from the limited capacity of English makers, in addition to going back to the older methods of dyeing, using such materials as logwood, fustic, &c. English makers of dyewares manufacture a very limited range of colours. At the best they do not make anything like the variety of dyewares produced in Germany, particularly in the better and faster dyes, and at full time they could not supply us with sufficient dyes, of the type they are now producing, to fill our requirements. It has been deemed advisable to secure available supplies at any price in order to keep going, and prices for dyeing and finishing have therefore had to be advanced.



**FIRM C. 607 (Woollens and Worsteds).**

The restrictions in this country on the use of methylated spirits and absolute alcohol, compared with all the advantages that the German manufacturer enjoys, prevent the British manufacturer from competing with Germany in the manufacture of products in which alcohol is used. The Germans manufacturer can obtain any quantity of alcohol at a very low figure, whereas the English manufacturer must deposit a sum of money before he can take his alcohol out of bond, and when this has been done the alcohol costs many times the price of alcohol in Germany.

**FIRM C. 2929 (Worsted Yarns and Manufactures).**

We are experiencing the greatest difficulty in getting pieces, slubbing and yarns dyed. Dyers have increased their prices considerably and in many cases refuse to undertake the dyeing of certain shades. The work, when received, is frequently very badly done, and in some cases the dyers, taking advantage of the present abnormal conditions, insist on very bad matches being accepted. The dyeing industry is mainly in the hands of a few large corporations which practically control a monopoly. The outside firms are so small in the aggregate as to be practically negligible in dictating the policy of dyers during the present crisis.

**FIRM C. 1573 (Woollen Yarns and Manufactures).**

No prudent business man will risk his capital in new plant and works, &c., for the aniline dye industry, without a guarantee of protection from the Government. This applies to every class of trade and industry which may be taken up under present conditions. Sooner or later German and Austrian manufacturers will again enter into competition, and their prices and methods of business will quickly rob us of any temporary advantage we may have gained while their factories were closed.

**FIRM C. 215 (Tweeds and Yarns).**

Germany was fixed upon as the site of the aniline dye works because of the difficulty of getting duty-free spirits here with which to work. The Chambers of Commerce have never been able to do anything very satisfactory because of the huge capital possessed by the aniline dye manufacturers in Germany with whom, of course, it would be necessary to compete when trade is in its normal state. The plant is very expensive.

**FIRM C. 1666 (Alpaca and Mohair Yarns and Manufactures).**

Our trade at present is suffering very much from being unable to get chemicals and dyewares, and the prices are almost prohibitive where the goods can be got at all. Our manufacturers of dyewares have been ruined through German competition, and the capital invested in Germany is so enormous that it makes it impossible for our manufacturers to compete successfully. No one would invest capital in this industry without he were sure of some protection after the termination of the war. The Germans have specialised the aniline dye industry to such an extent that it will take years and years for us to compete with them.

**FIRM C. 4127 (Tweeds and Costume Cloths).**

We do not think there would be any difficulty in obtaining capital on a large scale to establish the aniline and alizarine dye industry in this country, if it were not for the fact that, when the war is over, long-established and wealthy German manufacturers will come to this country and cut prices in order to regain command of the trade. To ask firms to invest money in plant without an assurance from the Government that they will be protected from undue competition at the termination of the war is not a commercial proposition.

**FIRM C. 2578 (Tweeds and Flannels).**

The Germans have received every encouragement from the large firms and combines in this country who have thought fit to employ German and Austrian chemists. These chemists, in my opinion, are no better qualified than the British-trained chemists. The German, however, will work for much less money than the Englishman with the same qualifications. You can get a Ph.D. to work for £5 a month, but you cannot get a qualified Englishman to work for the same figure.

The heavy excise duty on alcohol prevented, until recent years, the use here of duty-free alcohol for industry, whereas German firms were allowed this privilege by their Government.

**FIRM C. 1664** (Mohairs, Alpacas and Worsted Coatings).

Manufacturers putting down the necessary machinery for the utilisation of wools that have hitherto gone to Germany will waste their money unless after the war something is done to give them security. The same reasoning applies here as in the question of dyewares.

**FIRM C. 2248** (Woollens and Worsteds).

We are in sore need of colours which we have had from Germany, and the fine trade of the Huddersfield district must suffer if something is not done quickly. The cost of aniline dye works and machinery in Germany has in many instances been entirely written off, so that any businesses starting here now under private ownership could not compete after the war is over.

**FIRM C. 2449** (Ready-made Clothing, Woollen and Worsted Merchants).

The aniline dye difficulty can only be overcome by encouraging capitalists to establish the industry in this country. The chemical research part of the industry is already provided for in our various technical universities. The putting down of the expensive machinery is a mere matter of protected capital. No one is going to be fool enough to put down expensive works if immediately after the war the enemy are to be allowed to bowl in their manufactured dye stuff.

**FIRM C. 4212** (Manufacturers, Merchants, &c.).

We have endeavoured to encourage the manufacture of dye-stuffs in Great Britain, especially aniline dyes of which 90 per cent. at least have hitherto been made in Germany. This trade can only be successfully carried on with substantial Government support, now and after the war, since the immense working capital and reserve invested in the business in Germany will enable the German firms to undercut British manufacturers whenever they can again get supplies through.

**HOSIERY.****FIRM C. 4294** (Plain and Fancy Hosiery Dyers and Finishers).

We are at the present moment very short of colours and are trying to get some through from Switzerland as we understand the English makers are very short of raw materials, which came from Germany, instead of being made in England.

**FIRM C. 1198** (Hosiery).

My firm are dependent upon aniline dyes, which for many years they have procured from Germany. I do not think there would be lack of capital or enterprise if we had the necessary knowledge, and it is to our chemists that we must look for this and to a more widespread and efficient chemical education for the production of suitable workmen.

**FIRM C. 57** (Hosiery).

The question of dyeing materials is a very acute one, as most of the chemicals for this trade have been manufactured in Germany.

**CARPETS.****FIRM C. 387** (Carpets).

We are able to obtain most of the aniline colours, which we have previously bought from Germany, in this country, and the colour manufacturers here have in most cases been able to match the German colours which we gave them to match, in shade, but we do not think the colours are as strong or as fast as the German make. One colour, however, that we bought from the Bayer Company of Germany, viz., their alizarine sapphirole BL, we cannot get matched in England at all. It is a colour that is most useful in carpets in giving soft touches of blues and for tinting with other shades, and we understand that there are trade secrets as to the manufacture of this colour which our English manufacturers do not know. We are having to pay double and in some cases

three times the price to our English manufacturers for colours corresponding to those we bought from Germany. This is partly because the textile industry has to go to the English manufacturer for these dyes, but also because a large proportion of the raw material used in their manufacture appears to have come from Germany. Until some other source of supply of the base is found the price of these aniline dyes seems likely to rise. During the war it would seem impossible to import supplies as the only countries besides Germany which supply the dyes are France and Switzerland. The Germans have informed the Swiss manufacturers that they will only supply colours or raw materials used in making the colours on condition that they are not exported from Switzerland.

#### FIRM C. 222 (Carpets).

The question of aniline dyes requires to be dealt with with the greatest promptitude. The great bulk of aniline dyes are made in Germany and the stock in this country is very limited. The want of them is already severely felt, in fact some of the dyes are scarcely procurable, even at famine prices. 85 per cent. of the aniline dyes used came from Germany. Unless the Government takes immediate steps in the matter and gives encouragement in a substantial way, with a guarantee for a certain number of years, I much fear that whatever efforts may be made by individual manufacturers will only end in failure. Even for a beginning of the trade in this country a very large capital would be required; and even then there would be some difficulty in obtaining a specially trained staff for the working. In this respect some help might be obtainable from such a country as Switzerland. There is not sufficient technical skill in this country to enable makers of aniline dyes to face anything like the demand that has, for so many years, existed for German productions.

#### FIRM C. 1753 (Carpets).

With regard to the question of aniline dyes, unless an attempt is made by British chemists to provide some counterpart for the German dyestuffs, the textile trades will be unable to find work for their employees.

### LACE.

#### FIRM C. 871 (Lace).

You cannot expect British manufacturers to lay down expensive aniline dye machinery on a mere speculation which may be knocked on the head by the red tape of a permanent official (owing to the administration of the new Act relating to enemy patents). The taxing of capital out of existence in the last few years is a most dangerous experiment if trade and manufactures are to prosper.

### LINENS.

#### FIRM C. 340 (Linen Yarn Bleachers, Finishers and Dyers).

We do not think that the productive resources of this country are at present sufficient to supply markets with chemicals and dyes hitherto supplied by Germany and Austria. English firms have been "cut out" and consolation money has been paid to them to keep their plants idle, while their requirements have been supplied by German firms at a low price.

The Germans have specialised in chemicals which are used in quantity. The firms work in groups and individual firms are appointed to make certain things only, and supply all the others at a special price. Open markets they have to themselves.

If the aniline dye industry is to be established here it will be necessary to have groups of firms, each making a certain class of dyes, since the bye-products from a firm manufacturing, say, alizarine colours form the raw materials for another firm making direct colours, and so on. English firms would require a guarantee of support or a tariff for a period after the war. Failing this it would be useless to expect anyone to sink capital now, with the certainty of being "cut out" later.

### SILKS.

#### FIRM C. 1657 (Silk Throwsters).

For some years Germany has been doing the bulk of our dyeing for us, and also supplying this country with dyestuffs—so, for the moment, we are locked up.

**FIRM C. 1478 (Silk Yarns and Manufactures).**

The only serious difficulty we have experienced has been that of obtaining dyestuffs. If extended largely the British dyestuff and colour factories would, so long as Germany is cut off, find an ample and profitable market for their productions, but when the German manufacturer is again able to sell his goods in this market, unless protected by some import duty, or alternatively and possibly better by some guarantee of support by colour users, the British maker will find that the strong German combines who have already been years in the business, and consequently have reduced their costs to a minimum, will be able to beat him.

**FIRM C. 5522 (Dress Silks, &c.).**

The question of getting silk dyed is now a very urgent one, as we ourselves, and I think many others, have for years past had it done chiefly in Crefeld and Lyons. We are trying English dyers, but the work is inferior. It seems likely that the supply of aniline dyes will soon run out.

**FIRM C. 1913 (Silk Embroidery, Bead Work, &c.)**

I have gathered at various meetings convened by manufacturers that there must be a guarantee that they will be protected against German importation before they will invest more money in existing or new works. This applies particularly to those interested in the making of aniline dyes.

**LEATHER.****FIRM C. 6034 (Tanners—Makers of Glacé Kids, &c.).**

The supply of aniline dyes—one of the most important chemicals used in our industry—is entirely cut off. The aniline dye industry was not properly developed in this country through lack of capital and help. Germany took the matter in hand, put money into it, employed the necessary chemists in research work, and so captured nearly the whole of the world's trade in these dyes. The same thing might have been done in this country if the Government had subsidised the manufacturers and had helped to develop the industry as the Germans did.

**PAPER AND STATIONERY.****FIRM C. 3585 (Paper).**

We are not experiencing a shortage of many substances used in our trade, but we can name a few. . . . I need not refer to aniline and other synthetic dyes as everyone knows about them.

**FIRM C. 107 (Paper).**

Paper mills are experiencing serious difficulty in obtaining aniline colours.

**FIRM C. 59 (Pencils, &c.).**

The aniline dye question affects us considerably, apart from the matter of the particular aniline for copying ink pencils (methyl violet) which we have hitherto obtained from Germany. Nearly every manufacturer of colour here is dependent upon German manufacturers for some of the basic colours. There is difficulty in obtaining a particular red used in making our red pencils. We shall be able to get blues more easily later on, as they are obtainable in France, and to a certain extent in this country. The colour question is so much a national one since nearly every business requires colours somewhere or other, that we think it should be taken up by the Government. That appears to be the only solution.

**FIRM C. 4503 (Paper).**

The aniline dye industry has been entirely lost to England, but ought to be encouraged. Aniline dyes are used very largely by all paper makers and also in the textile trades. They have been imported exclusively from the Continent and we have not heard of any English firm of colour manufacturers who are able to make them.

**FIRM C. 3501** (Pencils and Stationery).

One difficulty in regard to pencils is the supply of aniline dyes for copying pencils. An English maker offered us a supply at 2s. 6d. per lb. as against 1s. 3d., which was the German price.

**FIRM C. 257** (Paper).

We cannot take over the aniline dye trade because we cannot find anyone with sufficient enterprise to put up the necessary capital. Only after years of practice would a man be able to turn out a certain colour, and he would only be able to turn out the one colour.

**HARDWARE.****FIRM C. 4449** (Hardware and Woodware).

An immediate impetus would be given to British enterprise if a measure of protection were assured.

**IV.—TRADERS' RECOMMENDATIONS.**

Several firms emphasise the extent to which British makers of aniline **Patents** dyes are hampered by patent restrictions.\* One prominent coal-tar colour manufacturer states that more than 20 years ago he called attention to the "folly of granting foreigners British monopolies in the form of patents without getting any *quid pro quo*." The foreign patentee ought to have been compelled to carry out his patent in this country. Had this been done, says this manufacturer, all the colours of which there is a shortage now would have been made here. Patents would long since have lapsed, and a proper staff would have been trained. As regards the Patent Act of 1907, he adds that "the section relating to compulsory working has become practically a dead letter." Had the Act been strictly carried out the German patents would have been worked in this country and the dye industry more firmly established. Other firms express the opinion that the Board of Trade emergency provisions for giving licences to British manufacturers are not far-reaching enough. The time limit of six months after the end of the war is too short in the opinion of a woollen and worsted firm, who add that since the intermediate products of aniline dyes as well as a great number of dyestuffs are patented by German firms in England the British manufacturer should be given more scope if he is to be induced to make these things. A lace manufacturer expresses the opinion that "through red tape and delays" even the new Act is being nullified. He adds that if strong and drastic

\* See note on p. 113.

steps are taken in connection with the Patent Act much may be done, but "revoking patents for the time of the war only is not the slightest bit of use." In his opinion, "enemy patents must be absolutely revoked and a free hand given to the manufacturer."

**Embargo on  
Raw  
Material  
Exports**

One firm suggest that there should be an embargo on all the raw materials which come from the gasworks in this country and are sent to Germany for the manufacture of dyes. This would not only interfere largely with the dye industry in Germany, but it would probably cause the Germans to begin to manufacture in this country.

**Technical  
Skill**

A carpet firm state that there is not sufficient technical skill in this country to enable makers of aniline dyes to face anything like the demand that has existed for German productions. Some help might be obtained in this direction from Switzerland, and as a last resource after the war "some good German chemist might be induced to come here." This firm also say that makers of dyewares in this country should copy some of the methods employed by their German competitors. They should, for example, advertise their wares by books of instructions and shades translated into the languages of the buying countries.

**Advertising**

**Division of  
Manufacture**

A linen firm state that if the aniline dye industry is to be established here it will be necessary to have groups of firms each firm making a certain class of dyes, since the bye-products from a firm manufacturing, say, alizarine colours form the raw materials for another firm making direct colours, and so on.

**Capital  
Require-  
ments**

The greatest stress is laid on the fact that very large capital indeed would be required to enable manufacturers of aniline dyes to meet "anything like the demand which has existed for German dyes." As a textile manufacturer points out, "the capital of the German dyestuff firms in some cases runs into millions of pounds sterling." These firms have spent enormous sums of money in expensive plant and machinery and "unless an enormous sum of money is subscribed it will be impossible to compete with German manufacturers after the war is over." It is pointed out that one large German firm has regularly paid at least 30 per cent. in dividends owing

to the fact that it has turned over its capital of millions several times in the year and has therefore worked at a very small percentage of profit, and the general opinion of traders is summed up in the words of a firm of hosiery dyers and finishers, who say that the plant and capital required "could not be obtained without a large amount of help from the Government in the shape of tariff and monetary help." A worsted firm say that it is suggested that protection for a number of years is the straightest way out of the difficulty, but "as this Government would be afraid to take that course," they say that a bounty system might be adopted in such a way that if a million pounds fund was necessary the trade should find half and the Government half, the distribution being in the hands of a body representing the Board of Trade, the manufacturers and the dyeing trade. This scheme, which approximates to the Government's present proposal, is, however, characterised by this firm as "a roundabout and complicated solution."

**Government  
Assistance**

A well-known dyestuff expert referring to the original proposal of the Government, in connection with their first scheme, that consumers should bind themselves to take all supplies for five years from the British company independently of any lower prices or better qualities which may be offered elsewhere, states that "the opinion of consumers is that not by this means will the success of the new undertaking be assured." He adds that he hardly anticipated that the £3,000,000 which was being asked for would be obtained "without some additional guarantees for the permanent success of the company in the face of renewed competition after the war." This suggestion of consumers giving an undertaking is mentioned also by a prominent colour manufacturer, who says that there are only three way of establishing a new aniline dye industry in this country:—(1) the consumers should combine and give a five to six years' contract to the manufacturers of colours, (2) the Government should subsidise the manufacturers, or (3) the most practical way is that the Government should place a duty on the import of aniline dyes. This last suggestion is the one which is most prominent of all in the replies of traders on this matter. As has already been seen in the sections relating to the position and resources of the British dyestuff industry there is a wide concurrence in the view that tariff assistance is imperative if the necessary capital is to be

**Contracts  
with  
Consumers**

**Tariff  
Recommend-  
ations**

obtained. Several firms refer to the necessity for further assistance in the direction of free alcohol,\* and as has been seen much importance is attached to the benefits which would accrue from patent law reform.† The need for tariff security against renewed German competition and dumping when peace comes appears, however, to dominate all other considerations. This will be clear from the following series of extracts from the replies of the leading dye manufacturers and dye users who have answered the enquiries of the Tariff Commission :—

(A) TARIFF RECOMMENDATIONS OF DYE MANUFACTURERS.

**FIRM C. 599** (Coal-tar Dyes).

The most practical proposal is that the Government should put an import duty on aniline dyes.

**FIRM C. 827** (Manufacturing Chemists).

To encourage the permanent establishment of the alizarine and aniline industries in this country, and to ensure British manufacturers being protected, at least for some years until thoroughly established, a duty would have to be imposed upon such articles imported into this country from Germany.

**FIRM C. 4434** (Chemicals).

Is it not possible that the Government might be disposed to give more sympathetic consideration to a protective tariff which would enable the large and remunerative aniline dye trade to be captured by England ?

(B) TARIFF RECOMMENDATIONS OF OTHER TRADERS.

COTTONS.

**FIRM C. 24** (Cotton Manufactures).

With respect to the manufacture of aniline dye a guarantee by the Government of protection until such a time as the initial expenditure was paid for would help.

WOOLLENS.

**FIRM C. 2049** (Worsted Yarns and Manufactures).

It is suggested that protection for a number of years is the straightest way out of the aniline dye difficulty. But as this Government would be afraid to take that course it is suggested that a bounty system might be adopted, in such a way that if a million pounds fund was necessary, the trade should find half and the Government half, the distribution being in the hands of a body representing the Board of Trade, the manufacturers and the dyeing trade. This is of course a roundabout and complicated solution.

**FIRM C. 2929** (Worsted Yarns and Manufactures).

As regards the production of aniline dyes, the initial outlay for plant would be very great, but the difficulty would be met by public or private enterprise if a reasonable return over a given period of years after the cessation of hostilities were guaranteed by the Government. In our opinion this could only be done by imposing a tariff on foreign competitive products.

\* See note on p. 112.

† See note on p. 113.



**FIRM C. 1573 (Woollen Yarns and Manufactures).**

As to the aniline dye industry no prudent business man will risk his capital in new plant and works, &c., without a guarantee of protection from our Government in the shape of a tariff. This applies to every class of trade and industry which may be taken up under present conditions.

**FIRM C. 215 (Tweeds and Yarns).**

Perkins and Humboldt fixed upon Germany as the site of their aniline dye works, because of the difficulty of getting duty-free spirits here with which to work. The Government are now considering a scheme for establishing an aniline dye industry in this country on a large scale. The amount of capital required is large but, although the Government proposes to give some financial assistance, capitalists are afraid of the German competition which will follow as soon as the war is over. As the Government is not willing to give protection to a new industry it is doubtful whether the capital will be forthcoming.

**FIRM C. 1666 (Alpaca and Mohair Yarns and Manufactures).**

Of course the only way to develop the aniline dye trade is by levying heavy duties against all imported dyewares. Although I am, speaking generally, a free trader, it is in my opinion quite wrong that our industries should be held up as at present, through our not being able to produce dyewares for carrying on our trade. The Government should at once give an assurance of protecting the chemical industry by putting a duty on imports after the war.

**FIRM C. 4127 (Tweeds and Costume Cloths).**

To ask firms to invest money in aniline or alizarine dye plant without an assurance from the Government that they will be protected from undue competition at the termination of the war, is not a commercial proposition. Firms must have an assurance of a sufficient measure of protection.

**FIRM C. 2248 (Woollens and Worsteds).**

We know a firm who would want some Government help (protection, if you like), in case they extend their colour works.

**FIRM C. 2449 (Ready-made Clothing—Woollen and Worsted Merchants).**

The aniline dye difficulty can only be overcome by encouraging capitalists to establish the industry in this country. The putting down of the expensive machinery is a mere matter of protected capital. No one is going to be fool enough to put down expensive works if immediately after the war the enemy are to be allowed to bowl in their manufactured dyestuff.

**FIRM C. 1994 (Fancy Woollens).**

Aniline dyewares could be made in this country if the Government would give a protection of, say, 20 per cent. for ten years and 10 per cent. for the next ten years.

**HOSIERY.****FIRM C. 57 (Hosiery).**

It is the general opinion of this trade that the aniline dye industry could only be established if the Government were willing to protect it by a tariff. We are given to understand that the plant is so very expensive—a matter of millions of pounds—that unless some guarantee from the Government in the nature of a tariff or otherwise is given, no one will attempt to set it up in this country.

**FIRM C. 4294 (Plain and Fancy Hosiery Dyers and Finishers).**

A tariff should have been put on all aniline colours imported. The plant required to make these colours cannot be set up without a large amount of tariff and monetary help from the Government.

## SILKS.

## FIRM C. 1478 (Silk Yarns and Manufactures).

When the German manufacturer is again able to sell his goods in this market, unless protected by some import duty, or alternatively and possibly better by some guarantee of support by colour users, the British maker of dyes and colours will find that the German combines will be able to beat him.

## FIRM C. 1913 (Silk Embroidery, Bead Work, &amp;c.).

I have gathered at various meetings convened by manufacturers that manufacturers must have a guarantee that they will be protected against German importation before they will invest more money in existing or new works. This applies particularly to those interested in the making of aniline dyes. Perhaps the Government will now see to what a position our one-sided Free Trade and the Factory Acts have brought many industries in this country.

## LINEN.

## FIRM C. 340 (Linen Yarn Bleachers, Finishers and Dyers).

English firms intending to set up the aniline dye industry here would require a guarantee of support or a tariff for a period after the war. Failing this, it would be useless to expect anyone to sink capital now with the certainty of being "cut out" later.

## MERCHANTS.

## FIRM C. 4212 (Manufacturers, Merchants, &amp;c.).

We are strongly of opinion that the making of dyes can only be successfully carried on with substantial Government support, now and after the war, since the immense working capital and reserve invested in the business in Germany will enable the German firms to undercut British manufacturers whenever they can again get supplies through. This would point to the necessity of a tariff or duty upon all dyestuffs entering this country, but we fear that that in itself would be a mistake as it would only increase the cost to the user on this side and would benefit the manufacturers here very little. Instead of a tariff on imported dyes there should be an embargo on all the raw materials which come from the gas works in this country and are sent to Germany for the manufacture of dyes. This would not only interfere largely with the dye industry in Germany but would probably cause the Germans to begin to manufacture in this country.

## LEATHER.

## FIRM C. 4436 (Chrome Tanners, &amp;c.).

When there is a tariff against them the German manufacturers manufacture their aniline dyes in the protected country. The Badische Aniline und Sodafabrik, who are the largest producers in the world, told me a few years ago that they had the option of land here in England to erect works if Tariff Reform came in, but of course, seeing it has not, they dropped out altogether.

## NOTES ON THE GOVERNMENT PROPOSALS.\*

[NOTE.—All the footnotes refer to the Debate in the House of Commons on February 22nd, 1915.]

1. British industries use annually dyes to the value of nearly £2¼ millions. Of this total about £1¾ millions came from Germany, about £150,000 from Switzerland, and only about £200,000 was of British home production.

2. Aniline dyes are essential to a great variety of British industries, such as many branches of the textile trades—woollens, cottons, silks, lace, carpets. Dyes are also necessary in the production of linoleum, leather, wallpapers and other coloured papers, paints, ink, lithograph printing, hats. Lord Moulton estimated the annual value of such goods to be £200 millions, employing approximately 1,500,000 persons.

3. The war has of course cut off the main source of supply, namely, that from Germany; the stocks in hand at the beginning of the war were insufficient for the needs of more than a few months; the available supplies from either British or neutral sources are insignificant in amount.† There is, however, reason to believe that the potentialities of British production are sufficient to meet the needs of British industry if proper steps are now taken.

4. The war demand in the textile industries has relaxed the immediate stringency, inasmuch as many factories, whose normal productions required a considerable variety of dyes, are now making khaki and other textile requisites for war in regard to which the dye difficulty has been overcome.

5. To meet the situation the Government first proposed to subsidise the establishment of a British dye industry by the creation of a new joint-stock company to increase the output of existing dye works. The company was to have a working capital of £4½ millions, of which £3 millions was to have been subscribed by the public (principally the dye-users), and £1½ millions by the Government in the shape of a loan bearing interest at 4 per cent., repayable in 25 years. This scheme did not prove acceptable to the public chiefly because of the absence of security for the investor against German competition after the war.

6. A second Government scheme has now been propounded. The details of this scheme, as explained by the President of the Board of Trade (Mr. Runciman) on 8th February, are as follows:—

The original scheme for the development of the dye-making industry in this Country on a large scale, which was framed by a representative committee of users of dye in consultation with the Board of Trade, has now been modified, as it appeared that, owing to difficulties arising in connection with some details of the proposal, it was improbable that the amount of capital contemplated would be raised.

\* The scheme of the new company (British Dyes, Limited) is given in full on p. 169

† "They (i.e., dye-stocks) are so low that we should be rapidly approaching the danger-point if some steps were not taken for reorganising our dye supply."—Mr. Runciman (President of the Board of Trade)

The new scheme, which has the approval of the enlarged committee of users, provides for an original share capital of £2,000,000, of which, in the first instance, £1,000,000 would be issued. The amount of capital to be subscribed at the outset is thus smaller than in the earlier scheme, but power is taken to extend the operations of the company as occasion may justify. The Government is prepared to advance £1 for every £1 of share capital raised, up to a maximum of £1,000,000; should it subsequently be found necessary, the Government will further contribute £1 (up to a maximum sum of £500,000) for every £4 further share capital subscribed. The effect of this arrangement will be that, if full advantage be taken of the Government offer, the company will ultimately have a share capital of £3,000,000 and a loan capital of £1,500,000 as in the original scheme. In the meantime, however, the new financial arrangements will, it is believed, be more manageable, and make subscription by those interested much easier.

The Government advance will bear interest at the rate of four per cent. and be repayable within 25 years. But whereas under the original scheme, the interest on the advance and the requisite sinking fund for repayment were to be cumulative, though payable only out of net profits, under the new arrangement the payment of interest will be non-cumulative for the first five years, and there will be no compulsory sinking fund. On the other hand, the interest on the ordinary shares will be limited to six per cent. per annum so long as any part of the Government's advance is outstanding.

Further, with a view to the promotion of research, the Government have undertaken to make a grant to the company during a period of 10 years of a sum not exceeding in the aggregate £100,000 to be devoted exclusively to experimental and laboratory work. The company will be required to show, to the satisfaction of the Treasury, that the amounts granted from time to time have been expended solely for the prescribed purposes. This is a new feature of the scheme.\*

The agreement proposed to be made between consumers of dyes and the company has been modified in some respects and will, it is believed, be more acceptable to consumers than that originally proposed.†

An option has already been obtained for the acquisition by the company, when formed, of important dye-making works,‡ and negotiations for other options of the kind are in progress, and there is reason to believe that satisfactory arrangements can be made with important producers in Switzerland. The new Company will be able immediately on its formation to take advantage of these arrangements, should the directors think it expedient to do so and to take such other steps as may be thought expedient to develop the supply of dyes both by the enlargement of the plants of the undertakings acquired and in any other ways.

The scheme, like the original scheme, provides for the nomination by the Government so long as any part of the Government advance is outstanding, of two directors who will have the ordinary powers of directors and also certain special powers to prevent undue

\* "I think £100,000 for ten years for research is absolutely inadequate, and it is not worth beginning with that sum." Again, "Mr. Pearce gave practical instances of the enormous lump sums paid for and the colossal perseverance devoted to some of these investigations which have been carried on in Germany. I believe that in connection with the manufacture of ammonia from the air the investigations lasted for over ten years, and cost, I am informed from a reliable authority, a sum of half a million pounds."—*Sir A. Mond.*

† "I understand it is not proposed by the Provisional Committee to make the signing of the five years' agreement an essential condition of subscribing capital to the new undertaking. So long as the amount of dyes supplied by the new company is insufficient to meet all demands, priority of supply will naturally be given to consumers who had come under the agreement."—*Mr. Runciman.*

‡ "This compulsory element in the scheme, forcing subscribers to buy their colours of the company in future is absolutely impracticable and impossible of enforcement."—*Mr. T. C. Taylor (of J. T. and T. Taylor, Ltd., Batley).*

See also Clause 2 of the Agreement on next page.

§ "The option which we have on Read, Holliday's enables us to take that firm, if the option is exercised, at a price which shows that the average annual profits during the last six years represent about six per cent. on what we propose to pay them."—*Mr. Runciman.*

preference or encroachment on the business of undertakings not concerned with the making of dyes and colours, but there is not, nor has there ever been, any intention to utilise these powers so as to hamper the business management of the company in such matters as the working up of bye-products or the giving of priority in supply to shareholders in the company.

I share in the belief of the committee that the new scheme, and the subsidiary arrangements which I have mentioned, will provide both for the immediate and effective utilisation of existing sources of supply and for their expansion with as much rapidity as is compatible with sound development.

**7. Mr. Runciman's answer refers to an agreement between consumers of dyes and the Company. This agreement is as follows :—**

Memorandum of Agreement made this            day of            191    Between  
British Dyes Limited whose registered office is at  
in the            of            (hereinafter called " the Company ") of the one part  
and  
of  
in the            of            (hereinafter called " the Customer ") of the other part.

Whereas the Company has been incorporated since the commencement of the present war for the purpose among other things of producing manufacturing and selling dyes colours and other chemical substances (hereinafter collectively referred to as Dyes) which previously to the war were exclusively or principally manufactured in Germany and sold by Germans and German companies and firms. And whereas under the provisions of the Contracts of which particulars are set out in the Schedule hereto the Customer is or may be bound after the war to take delivery of the goods specified in the third column of the said Schedule. And whereas the Company has supplied and/or agreed to supply the Customer with certain of the dyes required by the Customer for the purposes of the Customer's business but it was stipulated by the Company and accepted by the Customer as one of the terms and conditions upon which such supply would be made that this Agreement between the parties hereto should be executed.

Now it is hereby agreed and declared by and between the Company and the Customer as follows that is to say :—

1. The consideration for this Agreement is the supply by the Company to the Customer of certain of the Dyes required by the Customer and the mutual accommodation of the parties hereto by the sale and purchase of such Dyes during the continuance of the present war.

2. The Customer undertakes with the Company that as from the conclusion of the present war and for a period of five years thereafter or until five years have elapsed from the last delivery to the Customer pursuant to the terms of the Contracts set out in the Schedule hereto or until five years have elapsed from the determination of the said Contracts whichever shall be the longest period the Customer (A) will purchase from the Company all Dyes which may be required by the Customer for the purposes of the Customer's business or such amounts and quantities thereof respectively as the Company may from time to time be able and willing to supply to the Customer of good quality and suitable for the purposes of the Customer's business and at reasonable prices within a reasonable time after the same shall be ordered having regard to the obligation and requirements of the Customer and (B) will not purchase from any Company firm or person (other than the Company) any Dyes which may be so required as aforesaid excepting only such amounts and quantities thereof respectively as the Company may from time to time be unable and/or unwilling so to supply to the Customer. Provided always that the fulfilment by the Customer of his legal obligations under the Contracts set out in the Schedule hereto shall not be deemed a breach of this Clause.

3. The prices to be charged by the Company and paid by the Customer to the Company for the Dyes during the period referred to in the preceding clause hereof shall be reasonable prices from time to time fixed by the Directors of the Company. Provided that if the Customer shall consider such prices unreasonable he shall in writing notify the fact to the Company within seven days after being informed of the said prices indicating in such notice the prices he is willing to pay and in the event of the Company being unwilling to accept the prices named by the Customer he shall be at liberty to call upon the Company to submit the question of whether the Directors' prices are reasonable or not to the decision of a Referee appointed by the President for the time being of the Association of Chambers of Commerce of the United Kingdom. The Referee shall decide whether the prices charged by the Directors are reasonable and in so deciding he shall have regard to all the circumstances including the fair current prices at which dyes are being sold by other suppliers and if he shall come to the conclusion that they are not reasonable he shall prescribe what prices shall be charged and in that event the prices fixed by the Referee shall be the prices to be charged by the Company to the Customer.

4. Strikes breakdowns war fire flood and all similar occurrences which might curtail or render impossible either the manufacture or the consumption of the Dyes shall be regarded as *force majeure* and as mutually releasing either party from its obligations in respect to the time stipulated for delivery of any Dyes bought or sold in pursuance of this Agreement during the period of derangement.

5. The expression the Company and the expression the Customer shall respectively include their respective successors in business where the context so admits.

In Witness, &c.

**THE SCHEDULE ABOVE REFERRED TO.**

| Date of Contract. | With whom Contract made. | Description of goods and quantity thereof remaining undelivered under the Contract. | Period over which undelivered goods are to be delivered. |
|-------------------|--------------------------|---|--|
|                   |                          |   |  |

8. This second scheme is put forward as being financially more attractive to the subscriber than the first scheme. Another claimed advantage is that it provides a Government grant for research work. On the scheme as a whole (including the agreement) the following are among the questions to be decided :

(a) What dyes will the Company manufacture? The preamble to the agreement seems to limit its production to dyes " which previously to the war were exclusively or principally manufactured in Germany and sold by Germans and German companies and firms." Who will decide what dyes the Company may and shall make? Is the Company to manufacture dyes for which there are competitive sources of supply? And is the Company especially to be debarred from making dyes which other English Companies outside the scheme are willing to supply?

(b) On the first clause of the Agreement, what prospect is there of satisfying the "consideration" that the dyes required by the customer will be provided by the Company during the war, and what is to happen if the Company fails in this respect? \* The only provision mentioned in the scheme for supplying any deficiency is the projected arrangement with certain Swiss dye-makers. What guarantee has the dye user that, even with the aid of Swiss makers, he will be able to obtain the dyes he needs, suitable in quantity and quality, during the war? And would the failure of the Company in this respect constitute a breach of the agreement, and entitle the customer to go outside the Company for his dyes?

(c) On the second clause, what are the dyes "suitable for the purposes of the customer's business"? Who is to decide that suitability—the user or the Company? Is there an obligation on the Company to provide any dye that the user requires, whether its production is likely to be profitable or not to the Company? In the event of the Company offering a substitute, is the customer bound to accept it even though he regards it as unsuitable, having regard to the conditions in his works?

(d) On Clause 3 (apart from the general question of the expediency of State interference with the delicate economic processes by which prices are regulated), what are "reasonable prices"? † Is it essential that these prices shall be profitable to the Company? In that case, is the customer to be precluded from purchasing cheaper dyes offered to him by British concerns outside the scheme, by Swiss concerns who had been given a privileged position in the British market during the

\* "It is not claimed for any company which could be established to-day that within the next two or three years it could possibly supply users of dyes with all, or half, or even one-fourth of the kinds of colour that most dye-houses in the country use."—*Mr. T. C. Taylor*.

† "'Reasonable price' would be understood in a reasonable sense. . . . My right hon. Friend could not possibly have meant to suggest for a moment that, if a competitor came along and offered to sell at a dumping price, a price that he could not keep up, that would be regarded as a reasonable price. Suppose the referee were told, 'Here is a consumer, a subscriber of the company, who has hitherto bought from the company; he is offered goods by a rival concern at a lower price, which they have notoriously maintained for a long period.' If there were evidence that although that price had been maintained even for six months, it was a dumping price, I think the referee might very reasonably decide that it was not a reasonable price. That is if his evidence were decisive. But I do not take upon myself the position of the referee. I am simply putting it to the Committee that the matter would be settled in a common-sense fashion. Although the right hon. Gentleman (Mr. Chamberlain) might reasonably criticise the brief form of phrase used by my right hon. Friend, I do not see that he can criticise the wording of the agreement:—

'The referee shall decide . . . and in so deciding he shall have regard to all the circumstances, including the fair current prices at which dyes are being sold by other suppliers.' I think that is a sound basis for a business arrangement. Certainly, thousands of business arrangements that are far looser are made every day."—*Mr. J. M. Robertson (Parliamentary Secretary to the Board of Trade)*.

"The task of fixing what is a reasonable price for every little dye-house throughout the country, for every little bit of dye that is bought, is not one to give much joy to the man who has to do it."—*Mr. T. C. Taylor*.

war, and by other foreign dye-makers? What is to be the position of the customer if his rival being outside the Government scheme is able to take advantage of these cheaper dyes? Will it be possible for the Government to escape the necessity for protecting the industry to whose maintenance it is pledged if after the war foreign and especially German competition threatens its existence? And in the absence of such protection, will not British dye users come under irresistible temptation to break away from the scheme?

9. The points for immediate consideration are :—

(a) Whether this revised scheme will secure the necessary support of the interests concerned.

(b) Whether the dyes would be forthcoming in time to meet the approaching exhaustion of all available supplies.\*

(c) What are the potentialities of the existing British chemical and allied trades at the present time.†

(d) Whether the present Government scheme is likely to make the most of those potentialities, and if not whether other means can be devised for achieving the object in view.

10. The evidence received by the Tariff Commission from the leading firms of makers and users of dyes in the United Kingdom goes to show that the potentialities of the country are sufficient to relieve any feelings of apprehension if the resources of British industry are properly organised and an adequate guarantee as to the future is given. There are held to be almost illimitable possibilities of adapting and expanding existing chemical industries for the production of aniline dyes; indeed, the problem is regarded as in a sense comparable with that which has been so successfully overcome under the pressure of war demand in obtaining enormous supplies of war material from industries established for other classes of production.

11. The general trend of the evidence received is that no guarantee would be considered adequate which did not include protection for the new industry.

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\* See note \* on previous page.

† “ We have in the country now certain great dye works, and a certain number of smaller firms, and I am also advised that we have great chemical firms which could produce dyes and so help us out of the difficulty, and that if you organise for this purpose both the dye potentialities and the chemical potentialities you could solve the question. I do not know what difficulties there may be in the way of such complete organisation. There was a Liberal organ the other day, I think it was the ‘Daily Chronicle,’ which, in a leading article, suggested that there were difficulties of the nature of international agreements which would stand in the way of any complete organisation of that kind. All that I want to say on that is that when it is the safety and employment of our English people that is at stake I should not let international considerations stand in my way, and I think I would make people understand that. If that were done I am advised that the potentialities of the case would be equal to the difficulties we have to deal with.”—*Mr. W. A. S. Hewins.*



## PART 5.—OTHER INDUSTRIES.

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### I.—BRITISH MANUFACTURING RESOURCES AND CAPACITY OF EXPANSION.

#### LEATHER.

Activity in the leather trade since the outbreak of war has been very great. Tanners and curriers have been working up to their full capacity to meet the requirements of boot, saddlery and harness makers, and at some centres the supply of labour has been short. The Government have issued a report on the recent inquiries relating to the supplies of hides and the capacity of British tanneries, and it is said that no difficulty will be experienced in obtaining all the leather required.

War Activity  
in the  
Leather  
Trade

There is no item of Army personal equipment of more importance than boots. Manufacturers have had to cope not only with the demands of our own Government but also with the big orders placed by our Allies. It is said that the French Government are making every effort to increase the production of military footwear in their own country and that this is confirmed by the endeavours being made to obtain suitable leather in the British market. But it is not thought that this will cause any falling off in the contracts with British firms; and the future needs of our own Armies and our Navy alone will keep the majority of our manufacturers fully employed for some months hence.

Ordinary trade in the leather industry shows little expansion, and it is probable that there will be no noticeable improvement until manufacturers are in a position to study the requirements of their regular customers. As one firm says, "The demand for stout chrome leather for Army boots is the outstanding feature of the trade, and we are busy turning out heavy substance side leather much to the neglect of the box and willow calf trade."

State of  
Ordinary  
Trade in  
the Leather  
Industry

Opportunities for increased trade

It is generally recognised, however, that in most branches of the industry there are opportunities for capturing the trade formerly done by German manufacturers in the British and overseas markets. In this connection it may be noted that the net imports of leather into the United Kingdom from Germany amounted, in 1913, to £1,800,000 (British exports to Germany on the other hand amounted to about half a million sterling). The German trade with foreign countries outside Europe amounted to £1,300,000 in 1912, and the trade with British possessions was valued at about £150,000.

Capacity of British Works

While an opportunity for a considerable expansion of trade presents itself to British manufacturers, even after making allowance for a shrinkage in the home market, it is stated that the capacity of British works at the present time is not adequate to meet new demands, and manufacturers hesitate to enlarge factories and lay down plant owing to the uncertainty of the conditions upon the conclusion of the war. To quote one firm: "The productive resources of this country are not sufficient to supply markets hitherto supplied by Germany with upper leather for boots (particularly chrome tanned upper leather), neither are the resources sufficient to supply the normal requirements of the home market." This is believed by another firm to be due to the excessive conservatism of the leather dressers here. It is said that at one time a considerable amount of curried leather was made in this country. When, however, this particular style of dressed leather went out of use and other kinds were introduced, in the first instance notably by the Americans, our leather dressers made no effort to produce these new kinds; they waited until their manufacture was perfected and then the difficulties of competition were greatly increased. Another firm, however, assert that, although the capacity of British works is not at present adequate to provide for the trade hitherto done by Germany, the whole of the demand for leather from the boot manufacturers of this country could be met by the makers of leather here if the Government would protect them from the importation of dumped lines either by an import duty or in some other way. It is pointed out that prior to the war a very large quantity of the chrome tanned leather used in this country was imported from Germany and the U.S.A. If leather makers had some safeguard a great

deal of capital could and would be put into the trade. New capital would undoubtedly be required to develop the industry. The same firm state that foreign competitors have an advantage over the British manufacturer since they can send their accumulated stocks to this country and can run their works at full speed. Where firms can keep their works running regularly with a full output the cost of production is very much lower.

An upper leather importer asserts that the manufacture of patent leather is very difficult and that much experience and a great deal of capital are necessary, so that he sees no reasonable chance of the manufacture of this leather being successfully conducted in this country. On the other hand, a manufacturer of enamelled and patent leather thinks that, although the Germans have had the bulk of the patent leather trade here for years past, British manufacturers could meet demand in a comparatively short time if they had some security against unrestrained imports from Germany. As regards glacé kid, it is the opinion of one firm that there is little disposition on the part of manufacturers to extend works for the manufacture of this leather. It is said that there is some difficulty in obtaining a regular supply of pelts at reasonable prices. The great bulk of the imports of glacé kid comes from the U.S.A. As regards the manufacture of willow and box calf the outlook is more hopeful. But it should be remembered that for the past few years the Germans have sought to monopolise the sale of this leather in this and other countries. The supply and quality of pelts also influences the profitable character of the trade, and it is stated that Germany has in the past sought to control the raw skin prices. However, it is made clear that box calf can be made in this country as well and as cheaply as in Germany; but manufacturers are unwilling materially to increase the capacity of their works if, as one firm state, "England is to remain the free tip for the accumulated stocks of foreign makers of box calf."

**Patent  
Leather**

**Glacé Kid**

**Willow and  
Box Calf**

It is thought that we ought not to have much difficulty in obtaining tanning materials. But one firm point out that a certain amount of chemicals, such as lactic acid and bichromate of potash, was imported from Germany prior to the war and supplies of these chemicals from that source are now

**Supplies of  
Tanning  
Materials**

cut off. The same firm, referring to aniline dyes, describe them as some of the most important chemicals used in their trade. The great bulk of the supply of these dyes is now entirely cut off.

#### PLATE, JEWELLERY, CLOCKS AND WATCHES.

Plate,  
Jewellery,  
&c.

The maximum value of the German and Austrian trade in these goods which it might be possible to divert to British manufacturers is estimated at about £6,000,000. This is divided in the proportion of about a million sterling for the home market and about five millions sterling for Colonial and neutral markets. As far as can be gathered from the British official trade returns our total domestic exports of products of the plate, jewellery, &c., trades only amounted to about £1,500,000 in 1913.

It is generally thought that there is a fair prospect of capturing trade hitherto done by Germany and Austria. One firm speak of "a great awakening of enterprise" among our manufacturers and attribute this mainly to "the protection which is at present afforded by the absence of German competition." But where, in order to meet new demands, it is necessary to extend premises and to introduce special plant, manufacturers are of opinion that they ought to have some guarantee of security for their investment and some assurance that their trade will be safeguarded against foreign competition in the future.

Some firms are of opinion that the process of expansion would be slow and difficult. For example, one manufacturer says "expansion in the clock industry must necessarily be very slow because a clock factory needs to be under highly technical management. We have to train our hands for every process and we are greatly hampered by the want of skilled labour. The lack of skilled labour is due primarily to the smallness of the industry." Another firm, referring to clock movements, are of opinion that it would take from 12 to 18 months to get a factory in working order for their manufacture. It is said that the manufacture of cheap watches here similar to those made in Germany would mean the creation of an entirely new industry. The manufacture of "the cheap type of German watch

is quite a different problem both of mechanics and finance to the manufacturer of the general type of English lever watch." As regards electro-plate it is said the competition has been mainly in design and that this is the competition English makers have found most difficulty in meeting. One firm say that "the design in electro-plate making is entirely a question of dies and tools," and reference is made to a German firm, employing 7,000 hands, which invests "fortunes in dies and tools." It is pointed out that "in England the trade is in the hands of very many comparatively small firms which cannot risk heavy expenditure in this direction with a restricted market and the chance of a new pattern not meeting with public favour." A firm of silversmiths and cutlers state that manufacturers have not been able to compete with Germany in the manufacture of cheap lines owing to the different methods employed. "The German manufacturer prefers to make large quantities of every pattern, and to this end spares no expense in machinery and methods for easy production. The Sheffield trade, with its enormous number of patterns, and consequently smaller requirements of each, has not adopted such ready methods."

In some cases British manufacturers have been dependent upon Germany for supplies of materials and unfinished parts. One firm say that manufacturers of jewellery have obtained a quantity of such things as ready-made chain and stampings from Germany. A firm of manufacturing jewellers interested in the making of rings and brooches refer to the difficulty in obtaining rolled gold material. They also anticipate difficulty in obtaining both real stones of the cheaper class and imitation stones. It is said that real stones have hitherto been obtained mainly from Germany and imitation stones have been largely made in Bohemia. Another firm referring to cheap stone jewellery say that it has been made in Germany "because the stones have been found and polished on the spot." It is also stated that the china and glass used in mounting electro-plate have been obtained largely from Germany and Austria, "and considerable difficulty is being experienced in replacing such goods by English wares since the cost of English china and glass is about double that of German or Austrian manufacture."

Dependence  
upon  
Germany

## BRUSHES.

The aggregate value of the German and Austrian export trade in brooms and brushes which might be secured by British manufacturers has been estimated at about £500,000. This figure comprises about £200,000 worth of trade for the home market and about £300,000 worth for overseas markets.

It is the opinion of a maker of nearly all classes of brushes that, although the Government have been issuing large orders, manufacturers could, in most cases and within a comparatively short time, put themselves in a position to deal satisfactorily with additional trade hitherto carried on by Germany and Austria. It is stated, however, that Germany has monopolised the artists' and quill brush trade, and it is thought that there would be some difficulty in taking it over. Again, as regards cheap hair brushes it is asserted that the resources of manufacturers are not at present sufficient to cope with the trade hitherto done by Germany. One firm say that the brushes imported from Germany have been usually of a much more common make than those manufactured here and they do not think that British manufacturers generally are anxious to cultivate this class of business.

In dealing with the possibilities of expansion firms refer to a temporary difficulty arising out of diminished supplies of bristles, and it is said that Government contracts have rendered this question of supplies more acute. A manufacturer states that supplies of bristles for hair brushes have come mainly from Russia and Germany. Bristles for tooth brushes have been obtained from France and Belgium, and bristles for cloth brushes from China. It is stated that for many years Leipzig has been the distributing centre for the trade in practically all kinds of European bristles, and it is thought that some time must elapse before the trade can be transplanted elsewhere. In connection with the question of supplies of bristles the following figures may be interesting. In 1913, out of a total importation of £799,000 worth of bristles, £298,000 worth were imported from Russia, £298,000 from China and £106,000 from Germany.

Manufacturers also speak of a scarcity of skilled labour. One firm refer to it as a temporary difficulty resulting from employees having enlisted in the Army. Another firm, however, say that skilled labour in this country is very largely controlled by the unions and that these unions will not allow more than a certain number of apprentices to be trained.

Labour  
Scarcity

If the difficulties mentioned above are removed manufacturers believe that they will be able to cope with additional business, but they urge that those who extend their works in the endeavour to capture German and Austrian trade should have some guarantee against loss through the dumping of foreign goods in the home market after the war.

#### PAPER AND STATIONERY.

The value of the trade in paper and cardboard which might be diverted to British manufacturers has been estimated at about  $5\frac{3}{4}$  millions sterling. This figure is divided in the proportion of rather over  $1\frac{1}{4}$  million as to home trade and about  $4\frac{1}{2}$  millions as to neutral and Colonial markets. It will be seen that there is room for great expansion in the paper trade. One firm state that they are in a position to supply a certain amount of paper to those markets which have been supplied hitherto by Germany, and they are eager to get into touch with buyers. Having regard to the state of the paper trade at the present time this firm welcome the opportunities placed before them. On the other hand, other firms think that there is little inducement to lay out the capital necessary for extension, seeing that after the war they will probably have to face reckless foreign competition in the home market. Manufacturers, however, indicate the branches of the trade which it might be profitable to take up or to extend, provided they have some security for the capital invested and are able to obtain supplies of materials at reasonable prices. One firm refer to the importations of printing paper from Germany and they are of opinion that this paper could be made here quite well. The amount of the German trade which might be replaced in Colonial and neutral markets, too, is considerable in this class of paper. Another firm refer to special coloured papers of which no very large quantity

Paper

has been used and the manufacture of which English paper makers have not hitherto deemed it worth while to take up with their relatively small market as compared with that of Germany. A well-known firm state that unprepared paper for making tracing paper was formerly purchased from English mills, but the Germans captured the trade by matching English samples and underquoting English prices. It is thought, however, that there will be no difficulty in obtaining supplies from English mills now that German supplies are cut off. Manufacturers are also devoting attention to the better classes of photographic papers. These papers have not been made hitherto in this country but have come chiefly from Germany and France.

**Scarcity of  
Materials**

In discussing the possibilities of expansion in the paper trade manufacturers point out that at the present time difficulties arise through the lack of necessary materials which have hitherto been obtained from Germany. Nearly all firms refer to the serious difficulty in obtaining aniline dyes. Some firms say that supplies of chemicals, such as sulphate of alumina, powdered bisulphate of soda, sulphate of barium and anhydrous sulphite of alumina, which they formerly obtained from Germany, can only be obtained in this country at a much greater cost. A prominent paper maker states that certain classes of glue and gelatine are hard to obtain, Germany having had almost a monopoly in these items. Card makers have been dependent largely on Germany for supplies of farina. Zinc plates which are extensively used by paper makers for glazing have been largely imported from Germany. One firm state that they have been unable to discover any English manufacturer who can make them. Another firm, however, say that thin nickel-faced steel plates are being tried as substitutes. These are more expensive but are said to be more durable and do rather better work. It is also stated that paper makers have been dependent upon Germany for paper machine wires and that the price of these wires is now very much higher than formerly owing to the scarcity.

**Stationery  
and  
Stationers'  
Sundries**

There are valuable openings in several markets for the sale of stationery. The value of the German and Austrian trade in the United Kingdom market has been estimated at about  $\frac{1}{4}$  million sterling, and the value of the trade



in Colonial and neutral markets at about 2 millions sterling. A firm of stationery and fancy box makers state that they could easily produce some of the articles hitherto supplied by German manufacturers, but that there is not much inducement to put further capital into the business for this purpose if the home market is to be flooded with foreign goods after the war. It is further stated that the Trade Boards Act has made competition with foreign firms more difficult than before. A firm engaged in the manufacture of hand-made papers are taking steps to increase their trade in various markets. The firm complain of the sale of goods as "hand-made" when they are really machine made, rather than of foreign competition in the "real thing."

A well-known firm of pencil makers have been spending a good deal of money in order to increase their output, but in common with other firms they refer to the absence of security for extension and to the increase in the cost of practically all raw materials. This firm are of opinion that the present output of British pencil makers does not amount to 25 per cent. of the trade done by foreign firms here. Another prominent firm state that the three largest pencil makers in Germany have an output greater than the entire output of this country, and they are of opinion that English makers have not been doing more than about 20 per cent. of the English pencil trade. Reference is made to the keen competition from the U.S.A. It appears that Germany has excelled in pencil making machinery and it is said that Nuremburg has made pencil machinery for the whole world. It is thought, however, that there ought to be no difficulty in making these machines here. One manufacturer has received offers from English firms to supply them, and another firm have erected a machine shop of their own.

Lead Pencils

The aniline dye question affects pencil makers considerably. One firm have hitherto obtained methyl violet for copying pencils from Germany and they have purchased their raw colours for crayons and pastels from a British firm who have relied on Germany for some of their basic colours. The same firm refer to a difficulty in obtaining a particular "red" at the present time. "Blues," it is thought, will be more easily obtained later on.

Scarcity of  
Materials

It is the opinion of one firm that coloured leads, crayons and copying inks will be procurable from the U.S.A. eventually.

Pencil makers do not anticipate much difficulty in obtaining supplies of either plumbago or wood. Indeed, one maker asserts that supplies of wood are much better owing to the war. It is pointed out that most of the wood used at the present time comes from the U.S.A. German wood has only been used for very cheap and common qualities of pencils for such markets as India and China. There appears to be some difficulty, however, in obtaining the right kind of wood for making T squares, set squares and drawing boards. It is said that pear wood is largely used for T squares, and Austrian pear wood is apparently the best, though Canadian birch is mentioned as a satisfactory substitute.

From the evidence of pencil makers it appears that there is lack of supplies of gold and silver bronze and gold leaf which have hitherto been largely obtained from Germany. It is stated that a variety of metal fittings for pencils have also been obtained from Germany, but it is thought that some of these fittings could be easily made in Birmingham or Sheffield. It is further suggested that nickel fittings might be obtained from the U.S.A.

One firm refer to the trade hitherto done by Germany in carbon papers, stencil papers, inks, and typewriter ribbons. As regards the latter it is said that the town of Chemnitz, in Saxony, has had a monopoly in the manufacture of the fabric known as jaconet from which the ribbons are made.

#### OTHER INDUSTRIES.

The views of those engaged in various other industries as to the capacity of British works to cope with additional trade are summarised below.

A firm of manufacturing and analytical chemists state that there is little doubt that many of the fine chemicals hitherto largely made by Germany could be manufactured here if the Government would give some assistance to manufacturers. Another firm engaged chiefly in making chemicals used in medicines state that the manufacture of chemicals in which Germany

has hitherto had a monopoly would necessitate the laying down of new plant and the adoption of new processes, but there is little inducement to British firms to take up the manufacture without any "guarantee of permanence." An analytical chemist referring to Germany's trade in pharmaceutical products expresses the opinion that "all the synthetic products could be made in England and should be able to compete favourably with German products." But he goes on to say that he knows of no British works at present capable of undertaking the production of synthetic products on a large scale. "In Germany there are only a few such concerns, but they have enormous capital, trained and skilled labour and a sympathetic Government." "It is not a question of a works already in existence adding on the manufacture of synthetic drugs or perfumes," but of establishing works for the sole purpose of making these synthetic drugs and perfumes. These preparations are associated in Germany with the production of coal tar dyes.

A large firm engaged in lead smelting and the manufacture of pig, sheet **Lead** and pipe lead, white lead, red lead, litharge, &c., state that to deal with the trade hitherto done by Germany may involve additions to or adaptation of existing plant and increased capital expenditure. Such expenditure would be more willingly incurred if manufacturers were afforded some assistance by a tariff against German goods when they again enter the market. A representative of a large lead works making white lead, red lead, &c., says, the firm are anxious to improve existing plant and to introduce the latest and most modern kinds of machinery with the object of increasing their output. But they cannot do this without some assurance from the Government as to the future: In the past they have been compelled to curtail greatly their output in many directions owing to German competition, and they are of opinion that after the war they will again have to meet an influx of German goods at very low prices. Another firm are quite prepared to put down plant in order to capture part of the trade which the Germans have hitherto had in this country in white lead, red lead, &c., but they want some security for the capital invested.

A manufacturer of varnish expresses the opinion that, in order to **Varnish** supply markets hitherto supplied by Germany, manufacturers will find

it necessary in the majority of cases to extend works and to increase plant. The German varnish industry began to develop about half a century ago, and, it is said, is now one of very large proportions.

Glass  
Bottles

A maker of glass bottles is of opinion that, unless buyers will enter into a contract extending over a long period of time, there is little inducement for him to spend money on new plant. People will "buy in the cheapest market" and the trade will revert to Germany upon the conclusion of the war. It may be noted that the net imports into the United Kingdom of bottles from Germany in 1913 amounted to £400,000 (900,000 gross).

China and  
Earthenware

A firm engaged in the manufacture of china and earthenware say that there are not many lines of German manufacture that they are in a position to produce. German manufacturers have competed with them for some time in making china tea services. This firm would not undertake the production of special lines hitherto made in Germany unless they were satisfied as to their position after the war.

Bricks, &c.

A firm making chemical stoneware refer to a plant used for the manufacture of nitric acid. They can make the "vessels" for this plant satisfactorily, but they cannot make the "worms" to last nearly so long as the German worms do. The superiority of the German worms is said to be due to the kind of clay used. There appears to be some difficulty in making certain parts of the stoneware exhausters used in chemical works. The firm say that owing to the special adaptability of their clay the Germans can treat these parts in the lathe without turning up the edge of the tool. It is also said that there is something in the German clay which gives a beautifully finished appearance to the stoneware. A firm making silica bricks, fire bricks, ground canister and other refractory materials state that owing to the scarcity of labour their output is greatly curtailed, and they are not at present in a position to cope with increased trade. They are, however, doing "all that is possible to get more labour" in order to take advantage of the present "exceptionally favourable opportunity" for the extension of their trade.

A firm engaged in the slate trade say that neither Germany nor Austria **States** has exported many ordinary slates. But a quantity of asbestos roofing slates have been "made in Austria and shipped to this country and our Colonies." These slates, it is stated, are "now being manufactured on the Austrian patent in this country," and therefore the firm do not think they are likely to be "largely benefited by a shortage from Austria."

There is room for considerable expansion in the cement trade with **Cement** overseas markets. The maximum value of the German and Austrian (mainly German) trade which might be diverted to British firms is estimated at about one and a half millions sterling. A representative of one firm is of opinion that cement makers here will be fully able to cope with additional trade and to set up new works where desirable. Whatever situation arises will be turned to the best advantage.

A firm of button manufacturers and horn merchants are extending **Buttons** their business in order to cope with Government work and to provide for a larger output of middle class buttons such as have been imported in great quantities from Austria and Germany. But they ask what return may be expected if, when the war is over, foreign manufacturers are allowed to send their goods into the home market free of duty and at the lowest possible price in order to recapture the trade.

A firm of pianoforte manufacturers express the opinion that English **Pianos** makers could have well supplied all the instruments which Germany has hitherto sent to this country and to our Colonies. In 1912, Germany exported pianos and parts (including actions, keyboards, &c.), to the value of about £600,000 to the United Kingdom, while the German exports to the principal Colonial markets amounted to over £500,000.

A firm interested in the manufacture of tin toys state that since the **Toys** outbreak of war they have been very much more active in this branch of their business. They point out, however, that there is no inducement to spend money on further plant with the object of working up the trade if, after the war, German toy-makers are allowed to flood this market with their goods. According to the returns of the Census of Production for 1907

the aggregate value of the output of firms engaged in this country in the toys and games trades amounted to £265,000. On the other hand the United States Consul at Nuremburg in his report for 1911 estimated the value of the entire German output at over £5,000,000 per annum. In the course of his report he says: "Nuremburg has for many years maintained its place as the centre of the toy trade of the world. Its toy factories employ about 12,000 workers, half of whom are women and girls. . . ." The following extract from the report of our own Consul at Nuremburg for 1911 may also be of interest. He says: "The latest rise in wages in the tin toy industry makes the manufacturing of certain articles belonging to the so-called 1s. line exceedingly difficult. These are the articles of which the dozen is sold at 3s. and 6s. wholesale—to be retailed in the United Kingdom at 6d. and 1s. each. The prices of these articles had already been cut fine and left the manufacturers hardly a profit. Even this will, perhaps, entirely disappear owing to the increase of cost in the production, so that articles will have to be removed from the sample collections. It is a hard blow to the manufacturers, who have up to now generally made such 3s. stapleware, all the more as the tools and machinery necessary for making these articles become almost worthless."

il  
refining A firm engaged in refining vegetable fats and oils refer to the large quantities of coconut oil, refined and crude, imported from Germany. This firm have doubled the machinery in one of their mills and have another mill, a fourth, in process of erection. When it is completed they will be in a position to handle a very large proportion of the trade hitherto done by Germany. It may be interesting to note that in 1913 our total net imports of refined coconut oil amounted to 535,000 cwts. and net imports from Germany amounted to 211,000 cwts. The total net imports of unrefined coconut oil amounted to about 560,000 cwts. and net imports from Germany amounted to 390,000 cwts. At the same time our total net imports of copra from which coconut oil is expressed amounted to about 14,000 tons, and we exported 59,000 cwts. of coconut oil refined in the United Kingdom and 62,000 cwts. of unrefined coconut oil the product of British industry. It is said that the greater part of the imports of coconut oil from Germany have not

been on ordinary commercial lines. Reference is made to a concern owning copra mills in Germany and having a coconut oil refinery and a margarine factory in England, and it is stated that this concern has imported "fully two-thirds of the coconut oil from Germany."

A firm of manufacturing confectioners and chocolate manufacturers have been working on several lines of chocolates hitherto imported from Germany, and have already put on the market two or three lines which are meeting with success. Their prices for these goods are "several pence per lb. cheaper than the prices the Germans were getting." It is said that "the Germans and Austrians could get any prices they liked, simply because the goods were Continental." The firm think the public are now more inclined to regard favourably the products of home manufacturers, but they point out that this may cause German manufacturers to "cut prices mercilessly" when the war is over.

**Con-  
fectionery**

## II.—STATEMENTS OF BRITISH TRADERS.

The following are the replies received from British Traders in the industries previously summarised respecting British manufacturing resources :—

### LEATHER.

#### FIRM C. 390 (Leather).

I do not think manufacturers in this country will spend enormous sums of money in laying down plants to capture the trade in question if, when the war is over, our Government permit the Germans to dump everything into this country without any duty or charge on the goods.

#### FIRM C. 6835 (Leather).

The productive resources of this country are not sufficient to supply markets, hitherto supplied by Germany and Austria, with upper leather for boots (particularly chrome tanned upper leather), neither are they sufficient to supply the requirements of the home market in normal times. Unless the dumping of leather in this country from Germany and Austria be prohibited, or a substantial import duty be imposed, there is no likelihood of any great increase in the productive capacity of British works and no new tanneries will be started.

#### FIRM C. 4528 (Enamelled and Patent Leather).

Germany has had the bulk of the patent leather trade for shoe purposes for years past here. The business requires expensive plant, and British manufacturers have not entered into the trade seriously on account of the lack of security against dumping. If this difficulty were met satisfactorily I think that in a comparatively short time manufacturers here could meet the demand. The raw materials, chemicals and skilled labour required could all be procured.

#### FIRM C. 6034 (Tanners, Glacé Kids, &c.).

There is no doubt that the Home and, to a large extent, the Export trade, especially with our Colonies, could be done in nearly all classes of leather by this country. At the present moment, however, the capacity of British works is not adequate to provide for the trade hitherto done by Germany. But this is simply a question of enlarging and developing businesses. We ought to have little difficulty in obtaining tanning materials, as many of them are imported from our Colonies. But, on the other hand, a certain amount of chemicals, such as lactic acid, bichromate of potash, &c., was imported from Germany prior to the war, and supplies of these chemicals from that source are now cut off. The supply of aniline dyes—one of the most important chemicals used in our industry—is entirely cut off.

The whole of the demand for leather from the boot manufacturers of this country, and many others, could be met by the makers of leather in this country if the Government would protect them from the importation of dumped lines either by tax or some other way. As our foreign competitors can tip their accumulated stocks into this country and can obtain spot cash for cheap parcels of goods, they can run their works at full speed. Where firms can keep their works running regularly with a full output the cost of production is very much lower. If leather makers here had some safeguard a lot of capital could and would be put into the leather trade. New capital would undoubtedly be required to develop the industry. The manufacturers here have had to provide leather for Army boots in enormous quantities, and before war broke out there was hardly any of this leather in the country. Prior to the war most of the chrome leather used in this country was imported from U.S.A., Germany and France. All this leather could have been made here. The buying of raw material such as skins is no more difficult for us in England than for others; in fact, it is rather better for us as most of the world's supply of skins is sold on the open auction markets.

#### FIRM C. 48 (Boots and Shoes).

An upper leather importer, who imports patent leather, glacé kids, and calf skins as willow calf and box calf from Germany, states that the manufacture of patent leather is very technical, very difficult, somewhat capricious and requires a very large experience and large capital, so that there is no reasonable chance of its manufacture being successfully conducted in England. As regards glacé kids, there are two or three manufacturers on a small scale in this country and he visited one



of the largest and wished to make an arrangement with the firm to take all its output. He had only a lukewarm reception, however, and was told that the business was very uncertain as to profit and there was little disposition to extend the works. I think the main difficulty the firm has to contend with is the regular supply of pelts at a reasonable price. This I believe to be a real difficulty for manufacturers doing only a moderate output. The large manufacturers of glacé kids, who have done the trade for years, have made arrangements with regard to the collection and distribution of pelts, which makes it difficult for outsiders to get a share of the pelts at proper prices. As regards the manufacture of willow and box calf the outlook is more hopeful, but it is held that it would be very difficult to compete with the Germans. The question of the supply and quality of pelts also influences the profitable character of the trade.

I think the leather dressers in this country have been excessively conservative and have shown no energy or aggressiveness in meeting the active competition of other countries. At one time a considerable amount of curried leather was made in this country, but when this particular style of dressed leather went out of use and other kinds were introduced, notably in the first instance by the Americans, our leather dressers made no effort, whilst these new leathers were being introduced in an imperfect condition, to produce them; they waited till their manufacture was perfected and then of course the difficulties of competition were greatly increased. Contrast this with the action of the British shoe manufacturers. Some years ago when the trade had got into a lethargic condition and they were confronted with what has been called the "American Invasion" and American goods at once found more favour with the public than British goods, the shoe manufacturers rose to the occasion, put their factories in order and have since held their own against American manufacturers.

It may be that the character of their trade, that of tanning and currying, which has been in existence for so long a period, has caused the upper leather producers of this country to be indisposed to resort to new methods. They have certainly shown no initiative or energy to supply the needs of the shoe manufacturers here. This is illustrated by my own company, for roughly speaking nine-tenths of the upper leather we use comes from abroad. It is very difficult for me to suggest what practical steps can be taken to replace foreign leather by leather made in this country, but I think a freer application of brains and industry is needed.

#### PLATE, JEWELLERY, CLOCKS AND WATCHES.

##### FIRM C. 3520 (Agents for Clocks, &c.).

We are particularly interested in the question of supplies of clocks and clock movements which have been imported in large quantities from Germany for very many years and which cannot at the present time be replaced in England. Perhaps there would not be much difficulty in obtaining sufficient capital to start a factory for the manufacture of clock movements, but it would probably take twelve to eighteen months to get such a factory in working order. By that time perhaps the war would be over and we should have to face German competition, more keen than ever, in British and Colonial markets. Unless we had some promise of security in the shape of a tariff on these particular goods, we should not find anyone who would invest capital. There is very little doubt that without protection the factory would not be able to pay its way against the severe German competition which would undoubtedly ensue. So far we have had no tangible results from the Board of Trade exhibition of clocks and clock movements, inasmuch as no manufacturer has come forward to say that he is willing or able to manufacture the class of goods displayed.

##### FIRM C. 5951 (Jewellery).

There are certain difficulties in the way of capturing the German trade, both in rings and brooches. We shall have to contend with the difficulty of obtaining both real and imitation gems. The real stones, such as amethysts, topazes, garnets, &c., of the cheaper class come mainly from Germany. Imitation stones are practically all made in Bohemia, enormous quantities being imported into this country at prices at which we have never attempted to compete. There is also the question of obtaining the rolled gold material, which is also a speciality of the Germans, who supply the bulk of the trade. The German prices are very much below those of manufacturers in this and other countries. Until we are able to obtain regular supplies of stones we shall always be handicapped, but apart from this we see no reason why a good share of the German trade should not only be taken but held.

## FIRM C. 3557 (Jewellery).

The prospect of capturing German trade in the goods we make is very good, provided that, if we spend our capital in extension of works, &c., the Germans will not be allowed to overrun this country after the war. The capacity of British works could easily be increased, since such large and extensive buildings are not required as in other manufactures.

## FIRM C. 4486 (Jewellery).

In some branches of the jewellery trade German competition does not exist, and in others the competition is severe. In some branches, too, the German manufacturer has been largely drawn on for material and unfinished parts.

## SILVER PLATE.

There is no competition in the silver plate trade. This is due to the protection afforded to the British manufacturer by the hall-marking regulations. These regulations, although not designed as a protective measure, act as such by branding the British article "British" and the foreign article "Foreign." Prior to 1904, when the hall-mark for foreign goods consisted of a single letter "F" added to the existing British mark, there was a small but growing trade in cheap German and other foreign goods. In 1904 a more distinctive mark for foreign goods was introduced.

## WATCHES.

The English watch industry is not affected by German competition. The manufacture of good watches in Germany is confined to one town only—Glashutte—and is so small as to be negligible. Many very cheap metal watches have been imported from Germany costing between 1s. 5d. and 3s. each, but, as no similar goods are made here, these compete with the Swiss, French and American makes only. There would be no insuperable difficulty in making this type of watch here, but it would not be desirable to do so as it would undermine the traditional high reputation which the English watch holds in all markets of the world. There is undoubtedly a wide demand for the very cheap watch, but to manufacture it here would mean the creation of an entirely new industry. To make the cheap type of German watch is quite a different problem, both of mechanics and finance, to the manufacturer of the average type of English lever watch.

## CLOCKS.

This branch of industry has suffered greatly from German competition. At our clock factory we have made much progress in design and construction, and we have frequently found our patterns have been copied exactly by German manufacturers, and in some cases the German copy has been sold as an English clock. Competition in this case amounted to considerable undercutting in price, made possible by the absence of the quality and finish which distinguished the English clock. Given a protected home market, the clock industry would be capable of great expansion, since the foreign maker could be met on an equal footing. Many of the imported German and Austrian clocks are rubbish, and in order to make similar articles here it would be necessary to establish manufacturing conditions similar to those existing abroad; but we do not think it would be in the British interests to do that. There is, however, a good deal of the better class trade which could and should be handled in England.

Expansion in the clock industry must necessarily be very slow, because a clock factory needs to be under highly technical management. We have to train our hands for every process, and we are greatly hampered by the want of skilled labour. The lack of skilled labour is due primarily to the smallness of the industry, which in turn is due to the free and unhampered importation of foreign clocks of mediocre quality which have attracted the public by their cheapness and have prevented the superior merits of the English article from becoming widely known.

## ELECTRO-PLATE AND CUTLERY.

German competition in this trade has come mainly from one firm, but their success was already attracting the attention of other German houses, who were beginning to invade this market early last summer. In electro-plate the competition is mainly one of design, and this is the competition

English makers find most difficulty in meeting. In England the trade is in the hands of very many comparatively small firms. The Wurtemberg Company, on the other hand, employs 7,000 hands and has sixty distributing houses in various parts of the world. Fostered by a highly-protected home market this firm has grown to a size which enables it to invest fortunes in dies and tools. This gives it an enormous advantage over the small English manufacturer. The design in electro-plate making is entirely a question of dies and tools. They are very expensive, and a small firm cannot risk heavy expenditure in this direction with a restricted market and the chance of a new pattern not meeting with public favour. There is also the possibility that, should a new design achieve popularity, the foreigner can copy it and flood our home market with similar goods on a cheap scale. The china and glass used in mounting electro-plate have been almost entirely of German or Austrian make, and considerable difficulty is being experienced in replacing such goods by English makes. The cost of English china and glass is about double that of the German or Austrian.

#### JEWELLERY.

The manufacturer of gold jewellery has looked to Germany for a quantity of his material. Ready-made chain and stampings have been imported from Germany, not because they could not be made as well or as cheaply here, but because the English maker has hesitated to instal expensive plant, preferring to purchase his parts ready-made according to his current requirements. Since the beginning of the war, however, many of these things have been made in Birmingham, from which it is obvious that the imposition of a tariff on such goods would have the desired effect of keeping this work at home always. Birmingham can make cheap silver and fancy jewellery as well and as economically as the Germans, and there is no reason why these goods should ever be imported. The cheap stone jewellery is made in Germany because the stones are found and polished on the spot. It would be difficult to capture this portion of the trade. We have reason to hope that such goods as fancy metal boxes, candlesticks, trays, flower vases, &c., which we formerly obtained from Germany, will be now produced here quite satisfactorily.

#### OPTICAL GOODS.

There are many lines of optical goods made in Germany which are difficult to manufacture here. But the German productions can be easily replaced by those of American or French make.

Speaking generally, there is a great awakening of enterprise among our manufacturers. This is largely the direct result of the protection which is at present afforded by the absence of German competition. Many, however, are being held back by the fear of what will happen after the war. Manufacturers hesitate to incur expenditure and liability in the way of capital investment in machinery and tools without some security. They look to the Government for protection from the industrial onslaught which will follow the termination of the war, and some assurance from the Government on this point would be of immense service.

#### FIRM C. 5806 (Gold and Silver Leaf).

Owing to the regular user of English gold leaf being slack, we are at present doing work which formerly went to Germany.

A good opportunity to capture trade hitherto done by Germany presents itself; but manufacturers will not extend their plant because they feel that after the war things will go on as before. A big industry would grow up here if there were a substantial tariff on gold leaf imported from Germany.

#### FIRM C. 6043 (Jewellery).

British works are not large enough at the present time to provide for and to retain the trade hitherto done by Germany.

#### BRUSHES.

#### FIRM C. 6973 (Brushes).

As far as cheap hair brushes are concerned the productive resources of this country are not at present sufficient to cope with trade hitherto done by Germany; and while British manufacturers are able to keep their works going on better-class goods they have little inclination to cater for a trade that does not pay so well. The skilled labour in this country is controlled by the Union to

a very large extent. These will not allow more than a certain number of apprentices to be trained, and it is naturally to the advantage of the British manufacturer to use the available labour on the most profitable work.

The most important point for all those connected with the brush-making industry to consider is how to produce bristle within the Empire. At the present time we get bristle from China, Russia, Siberia, Germany, France, and India. We do not see why a country with such a climate as, say, Scotland should be unsuitable for the raising of hogs. Perhaps the forest land in Scotland could be used for this purpose. China bristles are generally black and are used only for cloth brushes. Supplies of bristles for hair brushes have come mainly from Siberia, Russia and Germany. Bristles for tooth brushes have come from France and Belgium.

#### FIRM C. 6910 (Brushes and Baskets).

We have felt the competition of brushes and baskets from Germany and other countries now at war, but not to any great extent. Brushes imported from Germany are usually of a much commoner make than we manufacture, and I do not think that English manufacturers generally are anxious to cultivate this class of trade. Probably when the German people are more proficient they will attempt to make the better class of brushes as made in England. They will then, no doubt, be able to undercut the home industry. As regards German baskets, a very large number have been imported into England, generally of the fancy kind and design. I do not think it would be possible for English manufacturers to place anything on the market at a price to compete with these, owing to wages being so much higher here. This also applies to the French basket industry. The French brush makers turn out good class work which compares favourably with the home-made article. The French brushes sell more cheaply than English brushes, no doubt through the difference in the cost of labour. Brushes are made in France on a different principle from that generally practised here, and machinery is largely used. The Japanese will be serious competitors in the toilet brush trade of the future. Large quantities of brushes have been sent to this country at very low prices, thus benefiting the factor and the retailer greatly to the detriment of the British workman.

#### FIRM C. 795 (Brushes).

We manufacture all classes of brushes except tooth brushes, artists' and quill brushes. The Germans have monopolised the artists' and quill brush trade, and we do not think the one or two makers of these brushes in this country are in a position to cope with the large increase of business with which they are now called upon to deal. There should be little difficulty, however, in meeting new demands in the tooth brush trade. As regards all other kinds of brushes, we think that, under ordinary peace conditions, the existing British brush manufacturers could very easily (and in a comparatively short space of time) put themselves in a position to satisfactorily deal with additional trade. At the present time, however, there are temporary difficulties, such as a diminished supply of bristles, &c., and scarcity of labour, which make the handling of additional business very hard.

Leipzig is the distributing centre for practically all kinds of European bristles, and some time must elapse before the trade can be transplanted to Russia. The London stock has been practically cleared and, unless supplies come from Russia, European bristles after a short time can be no longer used. European bristles, of course, only form a part of the supply of raw materials. A large quantity of bristle comes from China. China bristles are black, but European bristles are white and light in colour and form almost entirely the material for painting and toilet brushes. Thus, if these white bristles cannot be obtained, painting, toilet and certain other sorts of brushes cannot be manufactured, unless the public will use brushes made with black bristles. It is doubtful, however, whether the supply of China bristles will be equal to the demand. At the present time the Government are issuing orders for a very large number of brushes, and they require quick delivery. These contracts are making the question of bristle supplies very acute.

We are very seriously handicapped in coping with increased business, since there is great difficulty in replacing men who enlist for the Army and in training new men. An extension of plant is useless if labour is not obtainable. If a large number of men go from any one department, it frequently happens (unless their places can be filled) that other departments are seriously interfered with, and if it went on to any extent other workers (women) would be thrown out of employment.

In addition to these temporary difficulties manufacturers will probably have to meet the competition of German and Austrian goods "dumped" on the English and Colonial markets after the war. The results will be disastrous, especially to those manufacturers who have locked up all available capital in extending their works.

If the difficulties referred to above are removed manufacturers will be able (except the makers of artists' and quill brushes referred to) to easily cope with additional business. British manufacturers can compete with the Germans under fair conditions, but, if the Germans are allowed to make big profits behind a tariff wall and to "dump" their surplus products here at cut prices, it will take very little time for them to regain their lost trade. The Government should give some guarantee against loss to those manufacturers who have put down additional plant in the endeavour to capture trade hitherto done by Germany. We are making a big extension to our works.

### PAPER AND STATIONERY.

#### FIRM C. 107 (Paper).

There are a good many special coloured papers of which no very large quantity has been used. English mills have not thought it worth while to take up the manufacture of these owing to their relatively small market as compared with Germany's. Photographic papers—the better classes of which have not been made in this country, but have come chiefly from Germany and France—cannot now be obtained, and several of the English paper-makers are therefore diverting their attention to this manufacture.

There is not much inducement for English manufacturers to make these papers, as, unless we have a tariff, they are almost certain to lose the trade again in a few years' time, when German industries again get into full swing.

As regards materials and accessories, paper mills are experiencing serious difficulty in obtaining aniline colours. Paper-makers also want zinc glazing plates, but there are substitutes for these (thin nickel-faced steel plates) which are now being tried and can be obtained in this country. They are more costly but are said to last longer and to do better work. Sulphate of barium, or blancfixe, and anhydrous sulphite of alumina are difficult to obtain. The price at which they can be obtained in this country is higher than that charged for supplies we were having from Germany. Glue and gelatine are difficult to obtain. Germany has almost had a monopoly in these items. Farina or potato starch, too, has come chiefly from Germany. It is an important material for card-makers, as it possesses certain properties not to be found in wheat, rice or starch.

#### FIRM C. 4503 (Paper).

The materials which come mainly from abroad, manufactured in Germany, and particularly required in paper manufactures are sulphate of alumina, powdered bi-sulphate of soda, aniline dyes, and zinc plates for plate-glazing. The firms which make sulphate of alumina in this country are unable to meet the demand of British paper-makers and are only able to supply at an enhanced cost over the German make. We have not yet found an English maker to supply either the powdered bi-sulphate of soda or the zinc plates. Aniline dyes are used very largely by all paper-makers, and the aniline dye industry which has been entirely lost to England ought to be encouraged. The zinc plates industry should also be taken up in this country to meet the very large demands of the paper trade.

#### FIRM C. 3501 (Pencils and Stationery).

Formerly entire supplies of unprepared paper for making tracing paper came from English mills, but Germany captured the best part of the trade by under-quoting English prices and matching English samples. There is no difficulty, however, in obtaining English supplies now that the German supplies are cut off.

English makers have not been doing more than about 20 per cent. of the English pencil trade. One difficulty in regard to pencils at the present time is the supply of aniline dyes for copying pencils. An English maker offered us a supply at 2s. 6d. per lb. as against 1s. 3d., which was the German price. Supplies of gold and silver bronze have hitherto come from Germany, and it seems nobody in England now makes this material. Prepared plumbago used to come from Germany years ago, but more recently supplies have come from Mexico. There is no difficulty in getting the necessary material here. Pencil making machinery has come from Nuremburg in the past, but we have now had offers from British manufacturers to supply it.

There is a difficulty in obtaining the right kind of wood for the manufacture of T squares, set squares, and drawing boards. Pear wood is largely used for T squares, and the Austrian pear wood is apparently the best. Canadian birch seems to be a successful alternative.

**FIRM C. 3585 (Paper).**

In our particular branch of trade we are more damaged by the sale of goods as "hand-made" which are really machine-made than by the competition of the real thing from foreign countries. We do not think the importation of German and Austrian hand-made paper has been of any importance. We are taking steps to push our goods in the Colonies and the U.S.A.

We are not experiencing a shortage of many substances used in our trade, but we can name a few. Alum and sulphate of alumina appear scarce and dear, zinc glazing plates seem almost unprocurable, and ultramarine, largely used in paper-making, seems rather short in supply. I need not refer to aniline and other synthetic dyes, as everyone knows about them.

**FIRM C. 1898 (Paper).**

The Germans have hitherto captured the bulk of the paper machine wire business, and their price was about 8½d. per square foot. The price to-day is 50 per cent. higher in consequence of the scarcity. Paper machine wire is one of the lines we could produce in this country if reasonable protection were given, without which the requisite capital will not be invested. The printing paper, which has been largely imported from Germany, could also be done here quite well. Yet the paper hitherto imported from Germany is now coming in increased quantities from Scandinavia, and the Swedish stocks have flooded our market.

**FIRM C. 12303 (Stationery and Fancy Boxes).**

We could without difficulty produce some of the foreign articles recently exhibited by the Board of Trade, but at the close of the war we should lose the trade, partly because of the Trade Board wage rates and partly because the market would be flooded with German goods now held up and awaiting export. These goods would undoubtedly be sold as cheaply as possible to provide German traders with fresh capital. If the Government decline to protect the manufacturer we cannot see that there is much inducement to traders to put their capital into their business when the business secured is only of a temporary nature.

**FIRM C. 6428 (Paper).**

We are in a position to supply a certain quantity of paper to those markets which have hitherto been supplied by Germany and Austria. In fact, seeing what a shocking state the paper trade is in, we should be only too glad to supply these markets.

**FIRM C. 7831 (Pencils).**

Germany has excelled in pencil-making machinery, and prices have been so cut as to make it too risky for a small company to make extensions.

We have hitherto obtained a variety of metal fittings for pencils from Germany. These fittings should be easily made in Birmingham or Sheffield. Nickel fittings may be obtained from the U.S.A. Copying ink, coloured leads and crayons will be procurable eventually from the U.S.A. Supplies of wood are much better owing to the war, and splendid graphite can be obtained from the U.S.A.

**FIRM C. 6440 (Paper).**

The following articles used by ourselves came partly or wholly from Germany and Austria :— Soluble brown for staining pulp (we believe wholly from Germany), dyes of various colours, sulphate of alumina, machine wires, woollen and cotton felts, and electric lamps.

**FIRM C. 59 (Pencils, &c.).**

The machine manufacturers of Nuremberg make pencil machines for the whole world. We have erected a machine shop of our own and we think good machine-making firms should have no difficulty in copying existing pencil machines, but we are doubtful as to whether improvements can be made from time to time and new designs instituted.

The aniline dye question affects us considerably, apart from the matter of the particular aniline for copying ink pencils (methyl violet) which we have hitherto obtained from Germany. Of late years we have been purchasing our raw colours for crayons and pastels from a British firm which has relied on Germany for some of its basic colours. Nearly every manufacturer of colour here is dependent upon German manufacturers for some of the basic colours. There is difficulty in obtaining a particular red used in making our red pencils. We shall be able to get blues more easily later on, as they are obtainable in France and to a certain extent in this country.

There is no alternative source of supply for the gold and silver bronze and pure gold leaf which we have hitherto obtained from Germany. Some of the bigger pencil protectors, too, cannot be obtained at the present moment.

Practically all the wood used at the present moment for pencils comes from the Southern States of America, and it is chiefly for the very common and cheap qualities of pencils for such markets as India, China, &c., that German wood has been used.

The large increase in the cost of practically all raw materials makes the present time a very difficult one, and the question of financing enlargements of British trade under the present circumstances appears to us to be impossible without a tariff at the end of the war. We have been spending a good deal of money in order to increase our output, but we are of opinion that the present output of British pencil firms is not 25 per cent. of what comes into this country from abroad.

**FIRM C. 6495 (Stylographic Pens, Druggists' Sundries, &c.).**

The trade in stylographic pens is not to any great extent held by Germany. So far as we know what little of this trade they do hold is for the cheapest class of goods which we do not touch. We believe, however, that Birmingham manufacturers who specialise in these cheap goods are able to compete pretty closely with Germany on the question of price. The better class stylographic pens are almost entirely made in this country or America. But the trade in many other classes of small articles, made in vulcanite or ebonite, has been almost monopolised by Germany. The articles referred to include mouthpieces for briar pipes, medical and surgical sundries, and electrical fittings. The trade generally are making great efforts to turn out the necessary goods, but the principal difficulty is the question of moulds for the various designs. To lay down these means a considerable outlay of capital which few firms are disposed to undertake unless they have some security. Under the most favourable conditions British manufacturers can never produce these articles quite as cheaply as Germany has done. Consequently when the war is over and Germany re-enters the market she will inevitably re-capture the trade, and the money laid out in this country for moulds will be wasted.

**FIRM C. 799 (Typewriters and Accessories).**

In addition to typewriters of which there are quite a number of machines made in Germany, and which compete not only in their own but in this and other countries with the American product, there are other lines in this trade, some of which are almost exclusively made in Germany. Not only are the completely inked typewriter ribbons now largely made in Germany, but also carbon papers, and stencil papers and inks, as well as other requirements. The basic fabric of the ribbons themselves, known as jaconet, we understand, is entirely manufactured in Chemnitz, where an absolute monopoly is held. Why, we do not know, unless it arises from the unwillingness of British manufacturers to take pains to meet the requirements of the markets. We should think that the annual requirement could not be less than 100,000,000 yards.

We feel that there is a very large market both in regard to typewriters themselves (now an enormous industry) and also in inked ribbons and carbon papers, and the large lines of papers and other supplies associated with the same, and we should like to see these things manufactured as far as possible in this country.

### OTHER INDUSTRIES.

**FIRM C. 3470 (Chemical Products).**

There is little doubt that many of the fine chemicals, of which the Germans have hitherto held a monopoly, could be manufactured in this country. We should have no objection to putting down plant for the purpose, provided that our Government would (1) provide capital at a low rate of interest, (2) allow the use of alcohol free of duty, (3) guarantee the setting-up of a sufficiently protective tariff after the war is over.

**FIRM C. 4511 (Chemical Products).**

In our branch of manufacture, chemistry goods fall into two classes, those which we have been manufacturing in spite of German competition, and those of which, owing to patent laws or local advantages, the Germans have had a monopoly. We are doing our utmost to supply all requirements of goods of the first class, but with the other class the matter is different. In most cases the manufacture requires new plant, new processes and additional capital, and there is little inducement to find these without some guarantee of permanence. After the war the competition will be fiercer than ever, and how many buyers will consider help given them during the war against 1 per cent. cheaper prices for goods from abroad ?

**FIRM C. 12323** (Chemical Products).

As regards capturing the German trade in pharmaceutical products, all the synthetic products could be made in England and should be able to compete favourably with German products. Where we have the crude products in this country, it is only a question of capital and skilled labour at a wage not higher than that obtained in Germany. There are no British works that I know of at present capable of undertaking the production of synthetic products on a large scale, and in Germany there are only a few such concerns, but they have enormous capital, trained and skilled labour and a sympathetic Government. It is not a question of works already in existence adding on the manufacture of synthetic drugs or synthetic perfumes, but of establishing works for the sole purpose of making these synthetic drugs and perfumes. These preparations are associated in Germany with the production of coal-tar dyes.

**FIRM C. 7930** (Chemicals).

All our ammonia is manufactured in this country and the capacity of the works is quite sufficient, not only to cope with present trade but also to meet a very large extension of trade, and if necessary a new plant would be put down to meet any further increased requirements. Any further capital that would be necessary for increasing the plant is available at the present time, and we should not ask any outside help in this matter.

**FIRM C. 4359** (Lead).

To deal with the business hitherto supplied by Germany may possibly involve additions to or adaptation of existing plant and increased capital expenditure. Such expenditure would doubtless be more willingly incurred if there was security of tenure in the assistance of a protective tariff when Germany again enters the field.

**FIRM C. 12314** (Lead).

We are anxious to improve our plant, to renovate old plant which has been forced to stand idle, and to put up still more of the latest and most modern kinds of machinery; but without some definite assurance from the Government as to the future we cannot approach either our shareholders or the public for more capital for the necessary extensions. We are eager and willing to do our utmost to supply both our own country and the Colonies, provided we are protected from the dumping of German goods. In the past we have been compelled to largely curtail our output in many directions owing to German dumping, and we think that, when the war is over and conditions on the Continent have reached their normal level, we shall again have to meet an influx of German goods at prices at which we could possibly compete, but at which we could show no return to our shareholders. After the war many able-bodied men will return to this country seeking employment, and we could have our plant ready and could employ quite three times as many people as we do now if we had some assurance of protection.

**FIRM C. 2007** (Lead).

We are quite prepared to put down plant in order to capture part of the trade which the Germans have hitherto had in this country in white lead, red lead, sheet lead and lead pipe. But in order to warrant our doing so it is most desirable that we should have some assurance from the Government that, upon conclusion of the war, German lead manufactures will not be allowed to be dumped in the British market duty free.

**FIRM C. 331** (Paraffin and Mineral Oil).

As our existing markets are sufficient to absorb the whole of the products which the capacity of our works will enable us to manufacture, the movement in the direction of capturing German commerce does not affect us.

**FIRM C. 679** (Varnish, &c.).

In the great majority of cases manufacturers will be able to supply markets hitherto supplied by Germany and Austria by increasing works, plant and staff. But no one will take such a step without security of tenure in some such shape as a scientific reciprocal tariff. In our particular manufacturing business Germany and Austria do not figure as serious competitors, but America does, and there are German firms trading as British but manufacturing in Holland and America.



**FIRM C. 5342 (Margarine).**

In connection with the margarine industry it is our opinion that all the coconut refined oil, the palm-kernel refined oil, the groundnut oil and the cotton-seed oil could easily be made in this country.

**FIRM C. 6377 (Glass and Bottles).**

I would never think of putting down more plant until the Government can guarantee security by setting up a tariff. Many people have been asking me to make bottles for them, but they will not enter into a contract for, say, 5 to 7 years. People who take up the work without a contract will find themselves out of pocket when the war is over, as the trade will then go back to Germany. A firm asked me to put down plant to the value of £8,000 at least, but they would not enter into a contract extending over a few years, and they informed me that they would buy in the cheapest market upon conclusion of the war.

**FIRM C. 6490 (China and Earthenware).**

German manufacturers have competed with us for some time in china tea services. We should not consider for one moment the question of expending capital in order to produce other special lines "made in Germany," until we were satisfied that after the conclusion of the war we should be protected against their competition by some wise tariff measure.

**FIRM C. 6443 (Refractory Materials).**

Owing to the loss of such a large number of our men who have gone to the War our output of refractory materials is sadly curtailed and we are not just at present in a position to take advantage of the markets which are opening through the failure of Germany and Austria to supply the steel trade with goods in our line. We are doing all that is possible to get more labour so that we may take some advantage of the present exceptionally favourable opportunity for the extension of our Continental and overseas trade.

**FIRM C. 7098 (Stoneware, Pottery, Fireclay Goods, &c.).**

There is a process for the manufacture of nitric acid called the Valentiner Plant. We make the vessels necessary for this plant satisfactorily, but owing to the nature of the clay we cannot manufacture the worms to stand as well as the German worms. Ours last perhaps a month, but those made by the Germans last years. For a similar reason we cannot manufacture the whole of the stoneware exhaustor used in a good many chemical works. Owing to the special adaptability of their clay the Germans are enabled, after lining the shaft with stoneware and putting the propeller into position, to put it in a lathe, whereas all other clays we know of turn up the edge of the tool. There is something in the German clay which gives a beautifully finished look to the stoneware.

**FIRM C. 2460 (Slates).**

In so far as the slate trade is concerned there are no foreign markets that we are likely to capture, since Germany and Austria do not export many slates. A large quantity of asbestos roofing slates, made in Austria, have been shipped to this country and our Colonies. They are now being manufactured here on the Austrian patent and considerable shipments are being made to Australia. Therefore we do not think we shall be largely benefited by the shortage from Austria.

**FIRM C. 6088 (Cement).**

I have no doubt that cement makers here will be fully able to cope with additional trade and to set up new works where desirable. We shall turn whatever situation arises to the best advantage.

**FIRM C. 3000 (Granite Works).**

We supplied the Blackpool Corporation some years ago with hulking blocks for the sea wall. These are rough granite blocks, and thousands of tons have been used at various times. We were,

however, eventually knocked out, certainly not on account of quality, by blocks of basalt brought from the Rhine. We feel sure that equal quality could have been obtained in this country at equal price.

**FIRM C. 2886 (Buttons, &c.).**

We are spending thousands of pounds in extending our business in order to cope with Government work and to provide for a larger output of middle class buttons such as have been imported in great quantities from Germany and Austria. What return may we expect when the war is over if these foreign goods are to come in free, and at the lowest possible price in order to recapture the trade? It is a great hardship that we, and our employes through us, should have to contribute towards local and national expenditure whilst the foreigner goes practically free.

**FIRM C. 4403 (Pianos).**

We have lost a lot of our trade through German competition. At one time we could easily do our thousand pianos a year. This had dwindled down to five hundred, but during the past year or two things have improved. We certainly think that English firms could well supply all the instruments Germany used to send to this country and to our Colonies.

**FIRM C. 743 (Metal Polish, Enamel, Tin Toys, &c.).**

One of the branches of our business is the manufacture of tin toys, and since the outbreak of war this department has been very much busier. It would, however, be a suicidal policy to lay out money in machinery and buildings with the object of capturing trade if, after the war, German toy-makers are to be allowed to dump their goods in this market at prices that would hardly buy the material with which they were made.

**FIRM C. 4575 (Refined Vegetable Fats and Oils).**

Large quantities of coconut oil, refined and crude, are imported from Germany and France. The greater part of the imports from Germany are not on ordinary commercial lines. A group of companies connected with and controlled by one of the large multiple-shop concerns owns copra mills in Germany, a coconut oil refinery on the Thames and a margarine factory near London. This concern imported, we estimate, fully two-thirds of the coconut oil from Germany, and, we are informed, they are now erecting a large copra mill on the Thames. Two other copra mills in this country which were shut down at the time of the outbreak of hostilities are now in full operation.

Since the outbreak of war we have doubled the machinery in one of our mills and have another mill, a fourth, in process of erection, and when it is completed we shall be in a position to handle a very large proportion of the trade hitherto done by Germany. The competition from France is a "dumping" trade, Marseilles on occasions making heavy "cuts" in market prices which are not warranted by the price of the copra.

Although we are doing all in our power to capture the German trade in coconut oil we see at present no certainty that the trade will not eventually resume its former state.

**FIRM C. 6333 (Confectioners, &c.).**

We have been working on several lines of chocolates since the outbreak of war, hitherto imported from Germany and Austria, and we have already put on the market two or three lines of this character which are meeting with success. We think we shall be able to retain this trade after the war is over, although it is difficult to make any positive forecast. Our prices for these goods are several pence per lb. less than the prices the Germans were getting before the war. It is a remarkable fact that the Germans and Austrians could get any price they liked simply because the goods were Continental. Our own public are now more inclined to favourably regard the products of home manufacturers, but this may cause German manufacturers to cut prices mercilessly when the war is over. In such an event we should probably be at a disadvantage and we should require protection of some kind to enable us to retain our market.

### III.—TRADERS' RECOMMENDATIONS.

The recommendations of traders in these miscellaneous industries reiterate to a great extent those made by the large number of iron and steel and engineering and textile firms whose opinions have been dealt with in the preceding parts of this Memorandum.

The desirability of more adequate banking facilities is mentioned by a pencil and stationery firm, who remark that "a very real difficulty in capturing German trade is the want of capital." English bankers, they say, seem to require a security something like double the amount of the advance, and on such terms it is very difficult to do business. A pianoforte firm are of opinion that greater facilities for the discounting of bills are desirable. "We understand," they say, "that in Germany the banks actually advance on a manufacturer's stock." A firm of manufacturing and analytical chemists say that they would have no objection to putting down plant for the purpose of manufacturing many of the fine chemicals of which "the Germans have hitherto held a monopoly," if the Government would provide capital at a low rate of interest, allow the use of duty-free alcohol, and guarantee the setting up of a protective tariff after the war. Another pencil and stationery firm say, too, that the question of financing enlargements to British trade under present circumstances appears to them to be impossible without a tariff at the end of the war.

**Finance  
Aspects**

The question of freights is referred to as a serious one. The piano firm quoted above state that freight rates have most seriously hampered their trade. "A German piano," they say, "could be sent from the south of Germany and could be delivered in York or Manchester for less than we could send to these parts;" and "as for shipping to Australia there was a vast difference, and even the preferential tariff did not help us." This firm state that they used to send goods destined for the north of Africa

**Freights**

viâ Hamburg as they went considerably cheaper that way, and they conclude by saying that "if English shippers were subsidised as German shippers are we should be enabled to compete more effectually." A chemical manufacturer, too, complains that the shipping companies in this country insist upon very much higher freight rates to the Continent than were formerly in force, and he points out in the case of anhydrous ammonia that as the packages containing it weigh as a rule four times as much as their contents the freight "is a serious item." Some South American merchants say that it is not possible to pay the freight and packing charges incurred in the case of arsenic if the Board of Trade regulations on the subject are complied with. The shipment of calcium carbide by British steamers is also, they state, made impossible by the Board of Trade regulations.

**Attention to Markets**

A firm of lead manufacturers call attention to the necessity for studying local conditions if German trade in foreign markets is to be captured. As regards the language question a firm of paper manufacturers remark: "We must have young men who can correspond in several languages, but we cannot obtain suitable Englishmen."

**Trade Marks, &c.**

A brush manufacturer complains that foreign-made brushes imported into this country are not stamped with any identification mark of the country of origin, the packing case only being marked. He suggests that the Government should insist that all brushes made abroad should be stamped plainly and conspicuously with such words as "made in Germany" or "not made in Great Britain." Another manufacturer draws attention to a metal polish which was at one time totally manufactured in Germany. Just before the war broke out, he states, the polish was sent over here in barrels and the tins as well ready except for stamping the already printed lids out of the sheets, so that 75 per cent. of the manufacture of the polish was already done in Germany. This manufacturer points out that although the trade is still going on in this country under the German trademark the profits will all have to go to the German shareholders, "which means that the

public are still being deceived." A varnish manufacturer, speaking of American competition, says that there are German firms trading as British but manufacturing in Holland and America.

Paper manufacturers in particular dwell upon the difficulties with which industries have been confronted owing to the scarcity of essential materials and the enhancement of prices. As has been pointed out already in previous sections, apart from the aniline dye difficulty there has been a shortage in several other substances. One firm, for example, suggest that the zinc plates industry should be taken up in this country to meet the very large demands of the paper trade. The great scope which exists for the establishment or extension of British industries to supply materials for other industries is also illustrated by the remarks of a firm trading in typewriters and their accessories, who state that not only are the completely inked typewriter ribbons now largely made in Germany, but also carbon papers and stencil papers and inks as well as other requirements. The basic fabric of the ribbons themselves, known as jaconet, is said to be entirely manufactured in Chemnitz, where an absolute monopoly is held. "Why, we do not know," they add, "unless it arises from the unwillingness of British manufacturers to take pains to meet the requirements of the markets." These requirements, in the opinion of this firm, could not be less than 100,000,000 yards. Materials.

As was, however, manifest from the opinions expressed above with reference to financial aspects, the provision of capital for extensions with a view of capturing German trade is considered to be largely dependent on some guarantee of security from unrestricted foreign competition after the war. As was the case with the large majority of the iron and steel and engineering and the dye and textile firms, so here, too, it is generally felt that the necessary capital will not be forthcoming in the absence of safeguards against post-war dumping. Indeed, in the great majority of cases the setting up of a protective tariff is regarded as a *sine qua non*, as will be Tariff  
Recom-  
mendations

seen from the following series of extracts from the replies of traders in these various miscellaneous industries :—

### LEATHER.

#### FIRM C. 4528 (Enamelled and Patent Leather).

Germany has had the bulk of the patent leather trade for shoe purposes for years past here. The business requires expensive plant, and British manufacturers have not entered into the trade seriously on account of the lack of security against dumping. If this difficulty were met satisfactorily I think that in a comparatively short time manufacturers here could meet the demand.

#### FIRM C. 3670 (Boots and Shoes).

Germany has been a more powerful competitor in the leather trade than in the shoe trade of England, but what seriously affects one trade in our country affects every other trade. Commercial supremacy rather than territory is Germany's ambition, and we might have nipped that in the bud by giving full force to Mr. Chamberlain's proposals.

#### FIRM C. 6034 (Tanners, Glacé Kids, &c.).

The whole of the demand for leather from the boot manufacturers of this country, and many others, could be met by the makers of leather in this country if the Government would protect them from the importation of dumped lines either by tax or some other way. A duty of 5 to 7½ per cent. on German leather coming into this country, say, for 15 years, would do a great deal. If leather makers here had some safeguard a lot of capital could and would be put into the leather trade.

#### FIRM C. 6835 (Leather).

Unless the dumping of leather in this country from Germany and Austria be prohibited, or a substantial import duty be imposed, there is no likelihood of any great increase in the productive capacity of British works and no new tanneries will be started.

#### FIRM C. 390 (Leather).

I do not think manufacturers in this country will spend enormous sums of money in laying down plants to capture the trade in question if, when the war is over, our Government permit the Germans to dump everything into this country without any duty or charge on the goods.

### PLATE, JEWELLERY, CLOCKS AND WATCHES.

#### FIRM C. 6043 (Jewellery).

The prospect of capturing German trade would be very good indeed if we could get a little protection. In order to encourage the investment of new capital to provide for the extension of works we must have an import duty of at least 25 per cent. against all countries and an import duty of 50 per cent. upon German goods. If we get this we can supply all requirements.

#### FIRM C. 3557 (Jewellery).

If British manufacturers are to sink capital to provide extensions and machinery they should have some guarantee, such as a moderate tariff, of protection for their industry.

#### FIRM C. 6332 (Jewellery and Chains).

We are laying ourselves out to compete for the trade hitherto done by Germany in this country in our class of goods. This means to us the investment of a considerable sum of money, and in our opinion British manufacturers ought to have some guarantee that their trade will be fostered and not allowed in future to be destroyed by the actions of German competitors. The Australian and

Canadian Governments are doing their duty in this matter in favour of English manufacturers, and in consequence we are able to export our goods to these countries with success. It only rests with our Government to do likewise.

**FIRM C. 4486 (Jewellery).**

#### CLOCKS.

Given a protected home market the clock industry would be capable of great expansion, since the foreign maker could be met on an equal footing. Many of the imported German and Austrian clocks are rubbish, and in order to make similar articles here it would be necessary to establish conditions similar to those existing abroad; but we do not think it would be in the British interests to do that. There is, however, a good deal of the better class trade which could and should be handled in England. The lack of skilled labour in the clock industry is due primarily to the smallness of the industry, which in turn is due to the free and unhampered importation of foreign clocks of mediocre quality which have attracted the public by their cheapness and have prevented the superior merits of the English article from becoming widely known.

#### ELECTRO-PLATE AND CUTLERY.

In electro-plate the competition is mainly one of design, and this is the competition English makers find most difficulty in meeting. In England the trade is in the hands of very many comparatively small firms. The Wurttemberg Company, on the other hand, employs 7,000 hands and has sixty distributing houses in various parts of the world. Fostered by a highly protected home market this firm has grown to a size which enables it to invest fortunes in dies and tools. This gives it an enormous advantage over the small English manufacturer.

#### JEWELLERY.

The manufacturer of gold jewellery has looked to Germany for a quantity of his material. Ready-made chain and stampings have been imported from Germany, not because they could not be made as well or as cheaply here, but because the English maker has hesitated to instal expensive plant, preferring to purchase his parts ready-made according to his current requirements. Since the beginning of the war, however, many of these things have been made in Birmingham, from which it is obvious that the imposition of a tariff on such goods would have the desired effect of keeping this work at home always. Birmingham can make cheap silver and fancy jewellery as well and as economically as the Germans, and there is no reason why these goods should ever be imported.

Speaking generally, there is a great awakening of enterprise among our manufacturers. This is largely the direct result of the protection which is at present afforded by the absence of German competition. Many, however, are being held back by the fear of what will happen after the war. Manufacturers look to the Government for protection from the industrial onslaught which will follow the termination of the war, and some assurance from the Government on this point would be of immense service.

**FIRM C. 3520 (Agents for Clocks, &c.).**

Perhaps there would not be much difficulty in obtaining sufficient capital to start a factory for the manufacture of clock movements, but it would probably take twelve to eighteen months to get such a factory in working order. By that time, perhaps, the war would be over and we should have to face German competition more keen than ever in British and Colonial markets. Unless we had some promise of security in the shape of a tariff on these particular goods we should not find anyone who would invest capital. There is very little doubt that without protection the factory would not be able to pay its way against the severe German competition which would undoubtedly ensue.

**FIRM C. 5806 (Gold and Silver Leaf).**

A good opportunity to capture trade hitherto done by Germany presents itself; but manufacturers will not extend their plant because they feel that after the war things will go on as before. A big industry would grow up here if there were a substantial tariff on gold leaf imported from Germany.

## BRUSHES.

## FIRM C. 795 (Brushes).

British manufacturers can compete with the Germans under fair conditions, but if the Germans are allowed to make big profits behind a tariff wall and to "dump" their surplus products here at cut prices it will take very little time for them to regain their lost trade. The Government should give some guarantee against loss to those manufacturers who have put down additional plant in the endeavour to capture trade hitherto done by Germany. In the case of the brush trade a duty of not less than 10 per cent. should be imposed.

## PAPER AND STATIONERY.

## FIRM C. 4503 (Paper).

If the Government do not intend to put a tariff on goods coming from Germany and Austria after the war, it will not be of much use for capitalists to invest their money in industries in this country or in their development or extension.

## FIRM C. 1898 (Paper).

The Germans have hitherto captured the bulk of the paper machine wire business. If a 10 per cent. duty had been placed upon paper machine wires there can be no doubt they would have been made over here. We are quite able to produce this line with reasonable protection for the capital required.

## FIRM C. 107 (Paper).

To give English manufacturers some encouragement and to enable them to compete with Germany when her industries are revived, the Government should introduce substantial protective duties. It would be better still were such a scheme combined with some system of imperial preference.

## FIRM C. 12303 (Stationery and Fancy Boxes).

Unless the Government is fully prepared to place an import duty on all manufactured goods, as far as this trade is concerned, our benefit can only be a temporary one.

## FIRM C. 3501 (Pencils and Stationery).

The following import duties are suggested :—

|  |                |
|--|----------------|
| On lead pencils in cedar .. .. .   | 1s. per gross. |
| On water colours, oil colours, drawing boards made of wood,<br>and boxes fitted with material for painting .. .. | 25 per cent.   |
| On prepared artists' canvas and tracing paper .. ..  | 15 per cent.   |

## FIRM C. 59 (Pencils, &amp;c.).

The question of financing enlargements of British trade under the present circumstances appears to us to be impossible without a tariff at the end of the war.

## OTHER INDUSTRIES.

## FIRM C. 679 (Chemicals, Paints, Varnishes, &amp;c.).

In the great majority of cases manufacturers will be able to supply markets hitherto supplied by Germany and Austria by increasing works, plant and staff. But no one will take such a step without security of tenure, in some such shape as a scientific reciprocal tariff. In our particular manufacturing business Germany and Austria do not figure as serious competitors. We are, however, representatives here of German white lead manufacturers, and a duty on white lead would undoubtedly mean a loss to us. But a duty of, say, 20s. per ton on white lead would certainly result in increased manufacture of the article here without affecting the consumer in the slightest degree.

The colour manufacturing trade would receive an astonishing stimulus from a reasonable duty.



**FIRM C. 3470 (Chemical Products).**

There is little doubt that many of the fine chemicals, of which the Germans have hitherto held a monopoly, could be manufactured in this country. We should have no objection to putting down plant for the purpose, provided that our Government would allow the use of alcohol free of duty and would guarantee the imposition of a sufficiently protective tariff after the war is over.

**FIRM C. 12314 (Lead).**

We are eager and willing to do our utmost to supply both our own country and the Colonies provided we are protected from the dumping of German goods. In the past we have been compelled to largely curtail our output in many directions owing to German dumping and we think that, when the war is over and conditions on the Continent have reached their normal level, we shall again have to meet an influx of German goods at prices at which we could possibly compete, but at which we could show no return to our shareholders. If we had some assurance of protection we could have our plant ready, so that, after the war, we could employ three times as many people as we do now.

**FIRM C. 4359 (Lead).**

Manufacturers would doubtless more willingly view increased expenditure if they had security of tenure in the assurance of a protective tariff when Germany again enters the field.

**FIRM C. 2007 (Lead).**

It is most desirable that we should have some assurance from the Government that, upon conclusion of the war, German lead manufactures will not be allowed to be dumped in the British market duty free. A substantial import duty should be imposed, otherwise capital now invested in plant, &c., will be rendered worthless.

**FIRM C. 6377 (Glass and Bottles).**

I would never think of putting down more plant until the Government can guarantee security by setting up a tariff.

**FIRM C. 6490 (China and Earthenware).**

German manufacturers have competed with us for some time in china tea services. We should not consider for one moment the question of expending capital in order to produce other special lines "made in Germany" until we were satisfied that after the conclusion of the war we should be protected against their competition by some wise tariff measure.

**FIRM C. 2460 (Slates).**

A tariff on asbestos roofing slates from Germany and Austria might be of considerable assistance.

**FIRM C. 743 (Metal Polish, Enamel, Tin Toys, &c.).**

One of the branches of our business is the manufacture of tin toys, and since the outbreak of war this department has been very much busier.

The large buyers of toys in this country are, however, mostly German and Austrian firms, and I have it on very reliable authority that there is a syndicate at present formed in readiness when peace is proclaimed immediately to go over to Germany and buy for ready cash all the toys they can possibly lay their hands on so that the toys will be swamped into this country before the Government have any time to do anything in the matter.

It would be a suicidal policy for the English manufacturer to lay out money in machinery and buildings with the object of capturing trade if, after the war, German toy-makers are to be allowed to dump their goods in this market at prices that would hardly buy the material with which they were made.

**FIRM C. 2886 (Buttons, &c.).**

We had been doing, until war broke out, a good trade in fine quality buttons with all the countries affected by the war. As the buttons were very expensive, the duties, being specific, were comparatively light. When, however, we attempted to supply middle class or cheap goods the duty we had to pay spoilt our profits. Germany and Austria in particular have copied all our rich goods and have made them in common qualities at cut prices. Novelties in our trade are after

six months, novelties no longer. It seems pretty hard that we should be the inventors of nice goods and should pay duties on them going into foreign countries, and that then the foreigners should beat us in our home market with cheap imitations, free of duty, of our own productions. One of the curses of this country, and the cause of great waste, has been the "11½d." policy in the sale of cheap foreign goods as opposed to the shilling policy for an article worth buying and taking care of. It all takes root in uncontrolled imports. No one in this country is better off for it, and the workman is losing in wages so long as it continues.

**FIRM C. 6325 (Malt Vinegar, &c.).**

Acetic acid imported from Germany is diluted, coloured and sold in this country in very large quantities as a substitute for malt vinegar. The brewing of malt vinegar is exclusively a British industry. Malt vinegar is not, and never has been, imported. For pickling, household use, the making of sauces, &c., malt vinegar is superior in every way and able to replace entirely the use of acetic acid which is used very largely on account of the lower cost. If the British malt vinegar brewers could receive protection in the form of an import duty on acetic acid there would be a very large increase in the demand for malt vinegar.

**FIRM C. 6333 (Confectionery and Chocolate).**

Our own public are now more inclined to favourably regard the products of home manufacturers, but this may cause German manufacturers to cut prices mercilessly when the war is over. In such an event we should probably be at a disadvantage and we should require protection of some kind to enable us to retain our market.

**FIRM C. 333 (Flour Milling).**

There appears to be a general desire that the manufacture of goods hitherto supplied by Germany should be undertaken by British firms. The manufacture of many of the goods will involve a great deal of expenditure on buildings and the laying down of plant, but one sees nothing about any protection for the people investing their money in these different industries. These industries may be started, but when the war comes to an end German manufacturers, with a protected home market, will be able to make a very good price there and will be able to dump many of their goods at cost price in this country. Nobody is going to spend money on extensions unless assured of a continuance of business at fair remunerative prices after the war.

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## APPENDIX I.

## ENEMY PATENTS.

The area of industry affected by the 270 applications which have so far (*i.e.*, to the end of Feb., 1915) been made to avoid or suspend enemy patents or licences will be gathered from the following lists compiled from the descriptions published in the "Illustrated Official Journal (Patents) or Trade Marks Journal" :—

## CHEMICAL, METALLURGICAL, &amp;c. :—

Para-oxyaryl-arsinic acids.  
 Para-amido-phenyl-arsenic acid.  
 Nitro-oxyaryl-arsinic acids.  
 Arseno preparation.  
 Substituted aromatic arsines.  
 3 : 3'-diamino-4 : 4'-dioxyarseno benzene.  
 Derivatives of diamino-dioxy-arseno-benzene.  
 Sodium peroxide composition.  
 Halogen-hydrocarbons.  
 Carbazole.  
 Indophenolic compounds.  
 Derivatives of carbazole and dyestuffs formed therefrom.  
 Sulphide colours from carbazole derivatives.  
 Sulphide dyestuffs from carbazole.  
 New indophenolic compounds and dyestuffs therefrom.  
 Bisulphite compounds of carbazole dyestuffs.  
 New azo-dyestuffs.  
 Vat dyestuffs.  
 Dyestuffs.  
 Colouring matters.  
 Tanning.  
 New compounds by the action of formaldehyde or organic bodies.  
 Hydrogen gas producing apparatus.  
 Subjecting gases to the action of liquids.  
 Illuminating gas.  
 Formates of chromium, aluminium, and iron.

Hydrosulphites.  
 Making cement, mortar, and concrete watertight.  
 Discharging agents.  
 Purification of sewage.  
 Three-floor kiln for drying malt.  
 Drums for germination of malt.  
 Steeping and kiln-drying malt, &c., and drying seeds, &c.  
 Converting printed matter into raised or relief work.  
 Extraction apparatus.  
 Extractive matter from hops.  
 Artificial teeth.  
 White enamels.  
 Cloudening agents for white enamels, glass, and the like.  
 Imitation stained glass.  
 Reducing-agents.  
 Liquid soldering composition.  
 Material applicable for soldering, &c.  
 Metallic deposits by electrolysis.  
 Metallic coating on metallic articles.  
 Fusing metals electrically.  
 Welding metals.  
 Alumino-thermal process.  
 Bronze foil.  
 Removing metal-coated objects from the bath.  
 Cleaning filter cloths.

## MECHANICAL :—

Brake valves.  
 Vacuum brake cylinders.  
 Pistons of vacuum brake cylinders.  
 Cut-off valves.  
 Valve apparatus for rock drills.  
 Rock drills.  
 Refacing valves and valve-seats.  
 Hydraulic jiggling machines.  
 Jig conveyors.  
 Conveyors for coal, &c.  
 Tipping-devices for railway trucks, &c.  
 Machines for stamping and perforating sewing needle blanks.  
 Sewing machines.  
 Sewing machines for boots.  
 Embroidery machines.  
 Jacquard card-punching machines.  
 Jacquard embroidering machines and mechanisms for.  
 Motion-transmitting mechanisms for embroidering machines.  
 Ratchet wheels.  
 Eccentric drives.  
 Labelling machines.

Engine pistons.  
 Crank-pins.  
 Calendering machines.  
 Fulling machines.  
 Kneading machines.  
 Speed indicators.  
 Knife-rollers for hide-treating machines.  
 Rotary engines, pumps, &c.  
 Balancing devices for centrifugal pumps.  
 Compressed gas motors.  
 Connecting tube with ball joint for use in pneumatic conveyors.  
 Platen printing presses and machines.  
 Potato-planting machines.  
 Sawing machines.  
 Machines for making link-mesh.  
 Feeler mechanism for sheet-feeding machines.  
 Disintegrators.  
 Inclined hoists.  
 Inclined lift for feeding shaft furnaces.  
 Indicating fares and extras in "taximeters."  
 Apparatus for facilitating payment of change or money.  
 Calculating machines.

## MECHANICAL (continued):—

Apparatus for stamps, dies, &c.  
 Apparatus for flashes of light.  
 Railway signalling.  
 Water discharge for steam-heating systems.  
 Separating mechanical admixtures from liquids.  
 Drying and cooling granular materials.  
 Ventilating grain, seeds, &c.  
 Drum for treatment of granular materials with liquids or gases.  
 Endless elevator.  
 Feeler mechanism for sheet-feeding machines.  
 Joining blocks, &c., in building operations.  
 Toy or apparatus for the construction of model structures.  
 Furnaces and furnace hoists.  
 Charging device and apparatus for furnaces.  
 Electric igniter for explosion motors.  
 High-tension electrometers.  
 Electro-magnetic clutches.

## MISCELLANEOUS:—

Filters for air.  
 "Fuellner" paper-stuff filters.  
 Fire glazing bottle-necks.  
 Receptacles for molten glass.  
 Tanks for glass articles.  
 Articles of glass.  
 Round chimneys.  
 Props or stemples for mines.  
 Packing material.  
 Letter file.  
 Files for documents.  
 Backings for printing illustrations.  
 Store bins.  
 Cork sheets for deadening vibrations and sound.

Clutches.  
 Switches for electro-magnetic clutches.  
 Incandescence gas lamps.  
 Inverted incandescence gas, &c., lamps.  
 Lighthouse lamps for aerial navigation.  
 Timing gear in electric ignition devices.  
 Withdrawing glass from glass furnaces.  
 Shaping glass articles.  
 Pressing plants for textile fabrics.  
 Dismountable framework.  
 Elastic bearings for vertical shafts.  
 Crow-bars.  
 Tubes for heating, &c.  
 Wire springs.  
 Flat wire springs.  
 Packing rings for stuffing-boxes.  
 Folding boxes.  
 Gun carriages.

Corsets and suspenders.  
 Elastic bandages.  
 Leather substitute.  
 Chrome leather.  
 Boots.  
 Pulling-over of boots, &c.  
 Bracelets.  
 Bracelets with watch-holders.  
 Wind-instruments.  
 Pipe tongs.  
 Hypodermic needles.  
 Photographic shutters.  
 Lattice shutters.  
 Hair-curling and waving

## APPENDIX II.

## BRITISH DYES, LIMITED.

The Prospectus of the above Company was published in *The Times* and certain provincial journals on Saturday, March 6th, 1915. The following is the full statement of the scheme as made in that prospectus.

## SCHEME.

## OPERATIONS.

The Directors will, in the first place, consider the question of purchasing the business of Read Holliday and Sons, Limited, for which an option has been obtained, and they will continue negotiations already begun to acquire other dye-producing concerns. Negotiations have been initiated with the object of securing a supply of dyes from Switzerland, but the terms of such supply are still under discussion.

The existing plants of companies whose undertakings this Company may purchase or financially assist will be largely extended, and as progress is made and it is seen to be advantageous, the erection of entirely new works can be undertaken.

Considerable extensions are in progress in the works of Read Holliday and Sons, Limited, with a view to largely increasing their output, and as part of the terms of the option the Government have undertaken to advance £200,000 for this and other purposes, and in the event of the option being exercised the responsibility for the provision of the £200,000 will be assumed by this Company.

## ALCOHOL AND PATENTS.

The Directors have satisfied themselves that the regulations of the Board of Customs and Excise will enable the Company to obtain permission to use alcohol for its industrial purposes, free from duty, by arranging that the denaturing of such alcohol shall be carried out under conditions which will not hamper its use for such purposes; and that the new Act of 1914 and the rules thereunder will enable the Company to obtain on reasonable terms a licence from the Board of Trade for the duration of the patents empowering it to manufacture commodities covered by any patents held by alien enemies so as to enable the community to enjoy the full use of the patented invention.

## TECHNICAL COMMITTEES.

The Articles of Association of the Company contain powers for the appointment of committees, including a committee of persons conversant with the science and practice of dye manufacture, to advise the Directors.

## RESEARCH.

In view of the opinions which have been expressed as to the important assistance which the German dye industry has derived from the elaborate organisation which it has established for scientific research, and with the object of encouraging and assisting similar action here, H.M. Government has undertaken to make a grant to this Company for the purpose of experimental and laboratory work up to an amount not exceeding in the aggregate £100,000, to be expended at the discretion of the Directors within a period of ten years.

## STAFF.

It is intended in carrying out agreements for taking over existing dye-producing concerns to retain as far as it may be expedient their respective chemists and staffs.

## PRIORITY OF SUPPLY.

It must be clearly understood that those dyes which the Company can provide will, so long as the supply of such dyes is insufficient to meet the requirements of all classes of consumers, be primarily appropriated for supplying the wants of users who are shareholders and have entered into agreements to take the Company's dyes.

With a view to protecting the Company, the Directors propose that consumers or users of the Company's products who desire to have the benefit of the above-mentioned priority of supply shall be invited to enter into agreements with the Company whereby they will be bound for a period of five years after peace is established, or five years after the expiry of existing contracts and of all deliveries thereunder, whichever is the longer period, to take their supplies from the Company in all cases where the Company is able to supply the same, provided the products are of good quality and suitable for the purposes of the customers' business and the prices are reasonable, while in the event of the Company and the consumer being unable to agree what are reasonable prices, that question shall be referred to the decision of a referee, who shall have regard to all the circumstances, including the fair current prices at which dyes are being sold by other suppliers. The form of agreement is printed on the back of the prospectus, and prints of the agreement for signature will be sent out with the letters of allotment.

The preliminary expenses payable by the Company are estimated at £10,000.

The following material contracts have been made:—

1.—An Agreement made the 4th day of December, 1914, between Read Holliday and Sons, Limited (hereinafter referred to as "the Company"), whose registered office is at St. Andrew's Road, Turnbridge, Huddersfield, Yorkshire, of the first part, Lionel Brook Holliday, of The Oaklands, Kirkburton, Huddersfield, Yorkshire, of the second part, Joseph Turner, of Azo House, Birkby, Huddersfield, Yorkshire, of the third part, and Sir Hubert Llewellyn Smith, K.C.B., of Oakfield Lodge, Ashtead, Surrey (hereinafter referred to as "the Purchaser"), of the fourth part. Whereby in consideration of the Purchaser having agreed to advance to Read Holliday and Sons, Limited, £200,000 at 4 per cent. interest on the terms that the same should rank for repayment after the

paid-up Share Capital of that Company and the interest be payable only out of profits remaining after payment of a 10 per cent. dividend on the Ordinary Shares the Purchaser acquired options:

either

(a) To purchase the whole of the Company's undertaking, business, and assets as on a date to be specified for the sum of £248,265 and interest at 4 per cent. per annum from the specified date, together with a sum equal to the profits of the Company up to the specified date, and if that date be earlier than the 30th June, 1915, an additional sum at the rate of £6,000 per month for each month or part thereof from the specified date to the 30th June, 1915, and the Purchaser is also obliged to pay and discharge all the debts and liabilities of the Company, including its Debentures, amounting to £59,500, which, in the event of the Company going into voluntary liquidation, he is to repay at a premium of 5 per cent. No goodwill appeared in the balance-sheet of Read Holliday and Sons, Limited, dated 30th June, 1914. The price to be paid under the option after deducting reserves set out in such balance-sheet leaves the goodwill payable by this Company approximately at £74,158. A valuation by professional valuers of lands, buildings, and machinery, made in 1900, showed a considerable excess over their book values, and if this were taken into account it would largely reduce the above figure. The amount of goodwill above mentioned does not include the £6,000 per month referred to in this paragraph and in paragraph (b) below,

or, in the alternative,

(b) To purchase from the said Lionel Brook Holliday 2,451 of the 7,034 issued Ordinary Shares of the Company of £10 each (£9 paid) at the price of £22 10s. per share, plus 2,451/7,034ths of the actual profits of the Company up to a date to be specified, and if that date is earlier than the 30th June, 1915, an additional sum, at the rate of 2,451/7,034ths of £6,000 per month for each month or part thereof from the specified date to the 30th June, 1915, and the Purchaser is also bound to purchase on similar terms any other Ordinary Shares of the Company which may be offered to the Purchaser on like terms within three months of the completion of the sale of the said 2,451 Ordinary Shares, and is obliged on the Company going into voluntary liquidation to repay the Company's Debentures at a premium of 5 per cent.

In the event of either of the above-mentioned options being exercised, there is to be paid to the said Lionel Brook Holliday and Joseph Turner the sum of £10,000 each in cash, in consideration of which each of them agree, should they be called upon to do so, to accept employment in the management of the business of the Company for a term of five years at the salary in the agreement mentioned.

2.—A letter dated 5th March, 1915, addressed by Sir Hubert Llewellyn Smith, K.C.B., to British Dyes, Limited, whereby he has undertaken to hold Contract No. 1 for the benefit of British Dyes, Limited, on that Company undertaking all his obligations thereunder.

The Articles of Association contain the following provisions:—

Until otherwise determined by the Company in General Meeting, the Directors' remuneration shall be at the rate of £5,000 per annum, which shall be divided among them as they shall agree and in default of agreement equally.

In addition there shall be at the disposal of the Board a further annual sum of £5,000, out of which the Board may provide additional remuneration to those Directors who at the request of the Board perform special services or go or reside abroad for any purposes of the Company, or who in addition to their ordinary duties as a Director devote additional time to the furtherance of the Company's interests.

The Board may establish Committees, including a Committee of persons conversant with the science and practice of dye manufacture, to advise the Board and local boards or agencies for managing any of the affairs of the Company either in the United Kingdom or elsewhere, and may appoint such persons, whether Directors of the Company or not, to be members of such Committees as they shall decide, and may delegate to such Committees any of the powers, authorities, and discretions vested in the Board with power to sub-delegate, and any such appointment or delegation may be made upon such terms and subject to such conditions as the Board may think fit, and the Board may remove any person appointed and may annul or vary any such delegation.

The Board may from time to time fix the remuneration of the members of such committees.

A Managing Director or Manager shall receive such remuneration (whether by way of salary, commission, or participation in profits, or partly in one way and partly in another) as the Board may determine.

The qualification of a director other than a Government director shall be the holding alone and not jointly with any other person of shares or stock of the Company of the nominal amount of £1,000.

The Articles of Association provide that the directors shall not be less than six nor more than twelve in number, and that the Board shall have power to appoint additional directors up to the maximum number of twelve; they also contain special provisions restricting the transfer of shares so as to preserve British control.

This issue has been sanctioned by the Treasury.

The minimum subscription on which the directors may proceed to allotment is fixed by the Articles of Association at seven shares.

Applications are invited from users of dyes and colours and from others willing to assist in providing a supply thereof.

Applications must be made on the form below or that accompanying the prospectus, and lodged, together with the amount payable on application, with the Company's bankers.

In default of payment of any instalment at its due date the amount or amounts previously paid will be liable to forfeiture and the allotment to be cancelled. Interest at the rate of 5 per cent. per annum will be charged on overdue instalments.

If no allotment is made the deposit will be returned without deduction, and if a partial allotment is made the surplus will be applied towards the payment due on allotment.

Copies of the above-mentioned contracts and of the Memorandum and Articles of Association can be inspected by intending applicants at the office of the Solicitors of the Company on any day during business hours prior to the closing of the lists.

A copy of the Memorandum of Association is printed in the fold and is part of the prospectus.

Prospectuses and forms of application can be obtained from the Bankers and at the offices of the Company.

London, 5th March, 1915.

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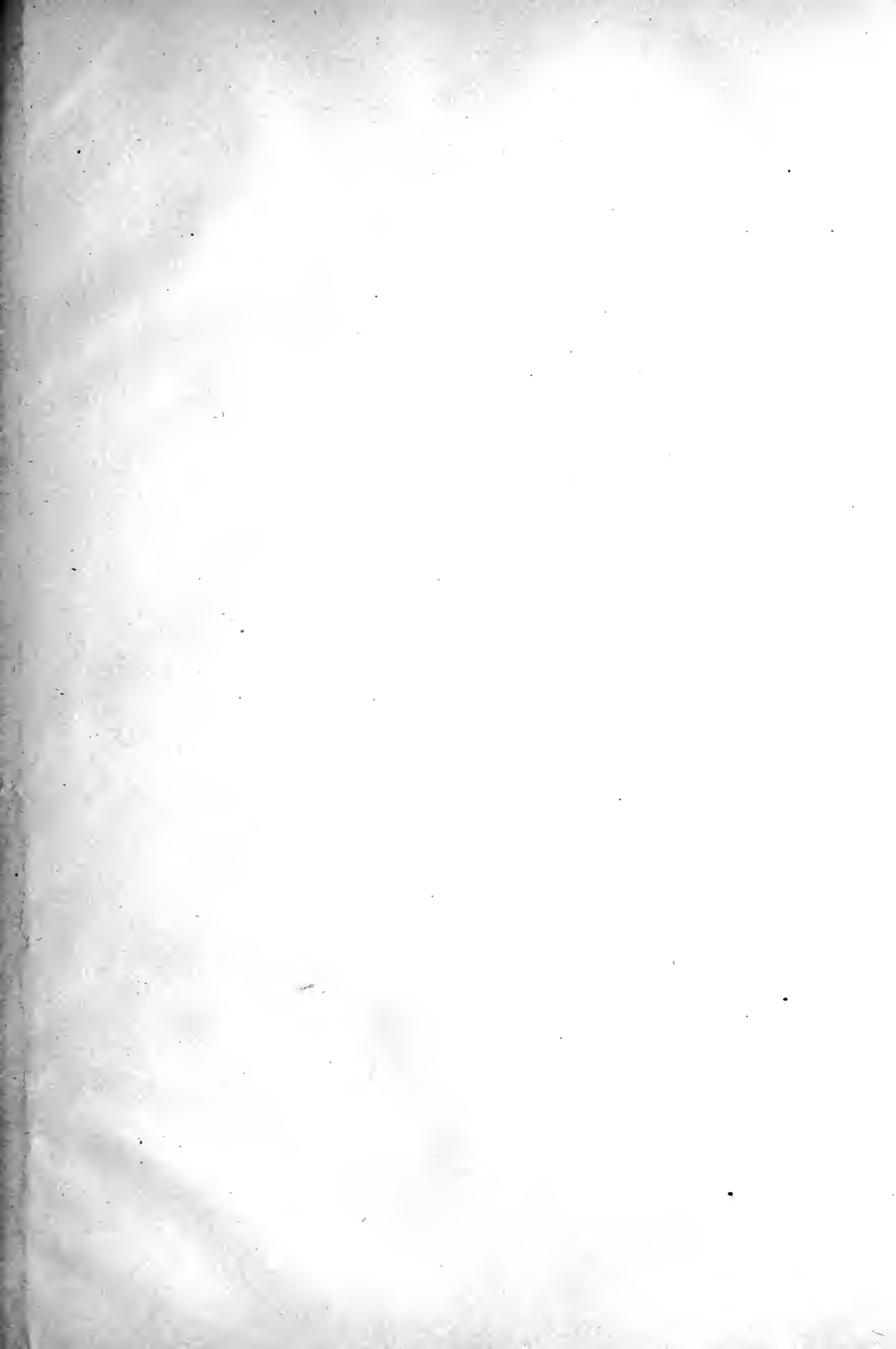
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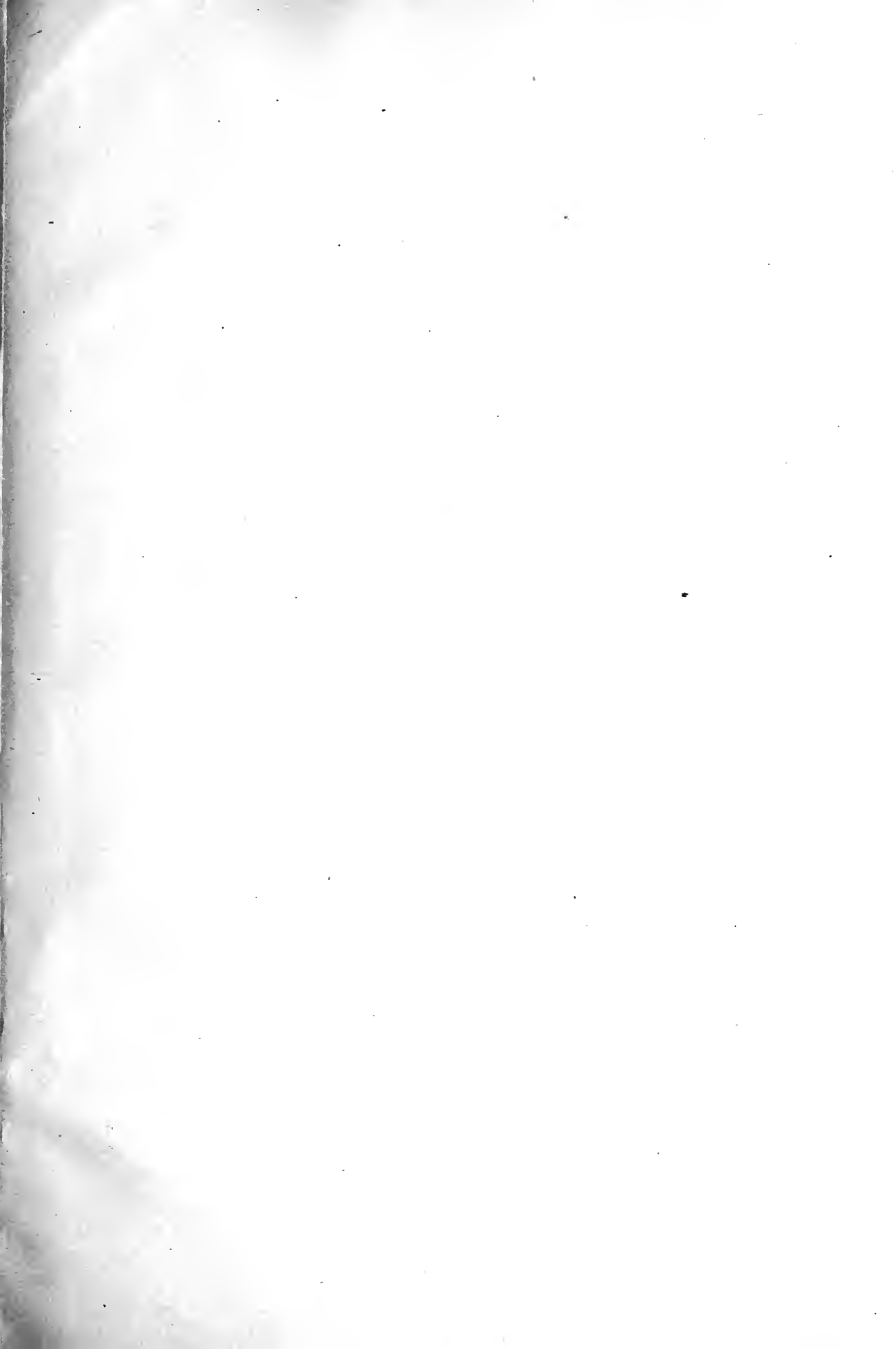
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