

**C. E. I. 15.**  
Vol. II.

LEAGUE OF NATIONS

ECONOMIC AND FINANCIAL SECTION

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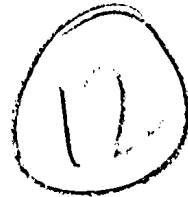
INTERNATIONAL ECONOMIC CONFERENCE

Geneva, May 1927

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DOCUMENTATION

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**MECHANICAL ENGINEERING**

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Volume II

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GENEVA, 1927

Publications of the League of Nations
II. ECONOMIC AND FINANCIAL
1927. II. 6 <sup>II</sup> . ✓

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**MONOGRAPH ON THE ECONOMIC SITUATION  
OF THE BRITISH ENGINEERING INDUSTRY**

**Prepared by the BRITISH ENGINEERS' ASSOCIATION**

*(October 1926)*

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*Communicated by Sir Arthur BALFOUR.*

*The Representative Trade Organisation of British Manufacturing Engineers and Shipbuilders for the Protection and Promotion of British Engineering interests at Home and abroad.*

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# MONOGRAPH ON THE ECONOMIC SITUATION OF THE BRITISH ENGINEERING INDUSTRY

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## I. INTRODUCTION.

This Monograph is modelled on our Report on the Engineering Industry presented to the Government Committee on Industry and Trade in March, 1925, and it may be regarded as a sequel thereto.

The Statistical Appendix is, however, complete in itself. The Tables and Graphs have been brought as nearly up to date as the available statistics permit, and several new ones of considerable importance have been added.

For the proper understanding of this Monograph, it is necessary to be acquainted with the text of the earlier Report, which, for the convenience of the reader, appears as an Appendix hereto.

In spite of the assistance afforded by the Graphs, the Statistical Appendix requires study to apprehend the full meaning and significance of the tabulated figures. It is, therefore, prefaced by a descriptive index, in which the principal features and the general import of the tables and graphs are briefly explained, with the object of economising the time and mental effort of the reader.

This is not a political document, and the facts, so far as they are known to us, are frankly disclosed and commented on in the belief that dissemination of the information given will do more good than harm. In any case, the essential facts concerning British engineering industry could be ascertained independently by any of our competitors who would take the trouble to investigate them.

So far as our own nationals are concerned, nothing but advantage can attend the spreading of exact knowledge in regard to our engineering industry and all that it means to this country and the British Empire.

The Engineering Industry cannot be contemplated in complete isolation from coal, oil fuel, iron and steel, shipbuilding, and finance, and in order to get a mental picture of it in proper perspective it is even necessary to have in vision transportation and the distributive trades. This will explain why some statistics and text are included which, at a first glance, might appear to be unconnected with engineering industry.

In order to prevent possible doubt or misunderstanding, it is thought advisable to state here that, in compiling the Statistical Appendix, every care has been taken to make the corrections necessary to render two or more related quantities strictly comparable, *e.g.*, the price corrections required when comparing the values of exports in 1913 and in post-war years.

## II. A GLANCE AT THE OUTSTANDING FEATURES OF THE ECONOMIC SITUATION OF THE BRITISH ENGINEERING INDUSTRY.

This can be obtained most readily by examination of Table 1, and the figures for the first six months of 1926 contained in Tables 4 and 5.

Careful study of Table 1 will repay even the man in a hurry, because it presents in the condensed form of comparable index numbers the most vital statistics relating to engineering trade and finance, referred to the pre-war basis, and may be regarded as the ultimate presentment of the composite facts given in detail in the other tables and graphs.

It will be seen that, although they have steadily increased between the years 1921 and 1925, the exports of metal, engineering and allied products, in the latter year, did not exceed 85.5% of the exports in 1913, while imports had increased by 25.3%. The figures for the first six months of 1926, given in Tables 4 and 5, show an increase in exports and a decrease in imports, which, if maintained throughout the year, would bring the exports up to 87.2% of the 1913 figure and the imports down to 13.8% in excess of those in that year.

Machinery being the peculiar product of engineering industry is, however, the appropriate indicator of its activity. Table 1 shows that, in 1925, the exported tonnage of machinery was 74.9% of the tonnage in 1913. For imports, the corresponding figure was 70.2% as the result of a steady increase from 1922 onward. During the first six months of 1926, the machinery exports were at a rate which, even if maintained during the second half of the year, would only bring the tonnage for the year up to 69.7% of the corresponding figure for 1913, or 5.2% less than in 1925.

Imports of machinery expressed as a percentage of the 1913 figure increased from 51.9% in 1923 to 70.2% in 1925, and, for the first six months of 1926, they were at a rate corresponding to 79.6% for the whole year.

It is satisfactory to record that, in 1925, our exports of electrical machinery were 23.6% more than in 1913. Unfortunately, this is the only class of machinery showing an increase on the pre-war figure.

An unsatisfactory feature of our machinery trade is that the machinery imported has a much higher average value per ton than the machinery exported, though the total quantity and value are very much smaller. On reference to Tables 6 and 7 it will be seen, for example, that in the year 1925, 516,000 tons of machinery were exported and 72,800 tons imported, and that the values per ton were £95.10 and £163.30 respectively.

It will also be seen from the tables that the fall in our export prices has been much greater than that of the prices of machinery imported into this country.

The average value per ton of exports has fallen from £128.52 in 1922, to £93.28 for the first six months of 1926, while in the case of imports the fall has only been from £177.70 to £160.30.

In 1925, our average export price per ton was only 95.2% above the figure for 1913, but imports still showed an increase of 133.0%.



In Table I, under the heading "Analysis of Export Tonnage of Machinery", there are no index figures against the five classes of machinery in the 1921 column. The explanation of this is that a change was made in that year in the method of making up the Board of Trade Returns, which made the figures of machinery exports not strictly comparable with those of earlier or later years.

In Table 1, under "Exports of other Engineering Products," it will be seen that exports of rail locomotives have fluctuated considerably during the last five years, and that, although 1925 showed a substantial increase on the preceding year, the tonnage exported was only 62.2% of the figure for 1913.

Road locomotives, including tractors, have shown a marked increase during the last four years, and the index figure for 1925 was 85.6%.

The gross tonnage of new ships exported in 1925 was 39.2% of the tonnage for 1913; this index figure, though indicating a very serious position, being 5.7% better than the one for 1924.

The index number of the gross tonnage of shipping under construction in the United Kingdom (less construction suspended) at the end of 1925 was 41.7%, as compared with 65.4% at the end of 1924 and 100% at the end of 1913.

It may be noted to the credit of the iron and steel trades that the wholesale price index number for iron and steel, for the year 1925, was only 125.9 as compared with 154.9 for all materials and 159.7 for all commodities, and a cost-of-living index number of 175.5.

Employment in the engineering industry in August, 1925, amounted to 87.3%, and in August, 1926, to 82.4% of the insured workpeople attached to it. It is a significant fact that, in the same months, the percentages of employment in the distributive trades were 94.0% and 92.9% respectively.

On reference to Table 29, it will be seen that, for many years past, there have been serious industrial disputes at comparatively short intervals of time, which have either directly or indirectly affected the engineering and allied industries. Undoubtedly the stoppages, dislocations and increased costs of production due to these disputes are largely responsible for the unsatisfactory state in which these industries find themselves to-day.

The difficulties with which the engineering industry has been beset, not the least injurious of which have been crushing taxation and dear transportation, are inevitably reflected in reduced profits and the depletion of reserves.

The combined financial results, for the last few years, of a number of representative engineering concerns are given in Tables 37 and 38. For the years 1921 to 1924 they are also shown in Table 1, though in lesser detail.

The position would have been worse but for the expansion of the home market, which must be attributed in the main to reconstructive work following on the war; the lavish expenditure of money on utility services; railway electrification; and the great increase in the home demand for motor vehicles of all kinds.

The home consumption of products of engineering industry, in any recent year, will not be known until the results of the last Census of Production are published about the middle of 1927. This Census was taken in 1925 in respect of the year 1924.

On reference to Section V on page 26 of Appendix (A), it will be seen, however, that from certain unofficial figures it would appear that in 1923 and 1924 the proportions of home and export engineering trade were about 73.5% and 26.5% respectively, as compared with 46.65% and 53.35% when the 1907 Census of Production was taken. This shows a large swing over, of considerable economic importance, and the corresponding figures of the last Census will be awaited with great interest.

Some of the engineering trades have derived substantial benefits, either directly or indirectly, from the McKenna Duties first imposed on motor cars and later on commercial vehicles, but with the minor exceptions of certain gauges, instruments, and magnetos, none of their products have yet received any protection under the Safeguarding of Industries Act.

To some extent engineering industry has benefited by the Trade Facilities Acts and the Export Credits Scheme, though, under the former the advantage has been mostly obtained indirectly through the financing of undertakings requiring machinery and plant.

### III. THE STATISTICAL APPENDIX (B).

Except for the above summary of key figures and outstanding points, the tables and graphs will be left to speak for themselves. Pains have been taken to make them easily and quickly comprehensive, and it would serve no useful purpose to attempt to cover the same ground verbally in this text.

This Monograph cannot be understood without some study of at least the Descriptive Index to the Statistical Appendix on pages 33 to 38, and the Graphs.

### IV. THE CAUSES OF THE PRESENT STATE OF THE ENGINEERING INDUSTRY.

These were so fully stated and explained in our Report to the Government Committee on Industry and Trade, that they need not be recapitulated here, and the reader is referred to Sections IX, X, XI, XII, and XIII of that Report, a reprint of which appears as Appendix (A).

The same causes operate to-day and it is only necessary here to make the following amendment to Section X "Foreign Competition." Since the Report was written, foreign competition, as a whole, has become slightly less severe owing to the following causes:

The termination of the acute phase of inflation with all its uneconomic price derangements in certain manufacturing countries;

The gradual restoration of prices based on gold values even though expressed in inflated currencies having no gold basis;

The reduction of our own selling prices in the face of great difficulties.

The competitive prices cited in Paragraph 75 of the above-mentioned Section X are, of course, out of date.

Foreign and British Dominion tariffs were not included in the above-mentioned causes, though reference was made to unfair foreign competition in our unprotected home market. The reason for omitting tariffs was that they generally applied equally to our competitors, and in any case they were beyond our control. In their wider and international aspects, they are referred to below under the heading "Some International Considerations in regard to Engineering Industry".

Although the engineering industry has had to contend with many other difficulties and disadvantages, there can be no doubt that its recovery has been greatly retarded by industrial strife, the sense of insecurity thereby engendered, and the consequent unattractiveness of industrial investments. It is true that much of the strife has been outside the engineering industry itself, but nowadays industries are so interdependent that the evil effects of an industrial dispute are not restricted to the actual seat of the trouble.

The trade statistics show that the coal stoppage occurred at a time when there were definite signs of improvement in our engineering export trade. Not only were the exports of machinery increasing, but more enquiries were flowing in and more orders were being booked. Had it not been for the momentum of this upward movement, the effects of the coal stoppage on the engineering trades must have been far more serious than has as yet become apparent. It is a remarkable fact that the exports of machinery for the past five months of the coal stoppage amounted to nearly 90% of the tonnage for the corresponding period of 1925.

The never-ending succession of industrial disputes, the prolonged depression in the iron and steel and shipbuilding industries, and, in a lesser degree, in the engineering industry, and the inequitable disparity in the rates of wages economically payable to the skilled workers engaged in them, as compared with the wages paid even to unskilled workers in other less exacting vocations, have combined to create widespread dissatisfaction with the present and grave anxiety for the future. This anxiety has been felt not only by industrialists, but, through the press, has extended to the general public.

One result of this has been to attract a great deal of attention to the United States of America, where industrial and commercial prosperity abound, where both wages and profits are high, and where industrial disputes are comparatively rare. Several missions of enquiry have visited the United States, and one appointed and sent out by the Government is now conducting its investigations. The object of all this enquiry is to discover the so-called "secret of high wages," and the causes of a prosperity in marked contrast to our own condition and which almost affronts the general condition of Europe.

These enquiries, with their press accompaniments, are all to the good, as a certain amount of sensationalism is necessary to make an impression on the public mind, which is apt to revolt against cold economics and bald statements of unpalatable facts. The causes of high wages and general prosperity in the United States are, however, no secret from the leaders in industry, commerce and banking in this country, who are also well aware of certain fundamental differences between the two countries which

must be taken into account when instituting comparisons or considering the possibility of adopting American practices, and reproducing American economic phenomena in this country.

The history—even the recent history—of their achievements may be left to speak for the genius and practical abilities of British engineers. It would have been unnecessary to mention their qualities here, but for our national vice of self-criticism and depreciation, which is apt to mislead the foreigner and influence his mind to our disadvantage.

In the realms of research and invention, a great deal of valuable work has been done during recent years, and this is well known to scientists and engineers abroad who keep in touch with current scientific and technical literature. That the amount of research work carried on in this country might be greatly increased with advantage is, however, now becoming recognised, and there is little doubt that the necessary financial support will be forthcoming in the near future.

A great service to the engineering and allied industries has been rendered by the excellent work—largely voluntary—of the British Engineering Standards Association in the face of many difficulties, not the least of which have been financial ones from which it might and should have been spared. Much remains to be done, but there are signs of a growing recognition of the practical value of standardisation, and increased financial support may be expected to follow. National simplification, instead of preceding, has lagged far behind standardisation, and it presents great unexploited possibilities of economy by the elimination of waste.

A serious weakness of the British engineering industry lies in its defective organisation for the purposes of the representation, promotion and defence of its interests at home and abroad, and for participation in international negotiations which promise to be of considerable importance in the future. These defects are largely due to that extreme individualism which is a national characteristic and makes effective combination and concerted action difficult of attainment. At the present time there is too much sectionalism without co-ordination.

Wholesale regimentation is neither possible nor desirable, but the conditions in the changed industrial and commercial world of to-day will soon enforce a serious attempt to bring the organisation of the engineering industry into closer accord with the principles governing the constitution of representative and deliberative bodies possessing authority and the power to act.

## V. SOME REFLECTIONS ON THE USE OF OIL FUEL AS AFFECTING THE ENGINEERING INDUSTRY AND THE NATION.

On reference to Tables 24 and 25 it will be seen that, in 1925, we imported fuel oils to the value of £34,529,000, and that for the first eight months of 1926 the imports had so increased as to correspond to a value of £41,000,000 for the whole year.

Particulars of the sources of the supplies are as yet available only up to the end of 1924, but in Table 25 it will be seen that the proportion coming from British sources is only from 4.5% to 5.5% of the total quantities imported.

The dangers are obvious of such a dependence on foreign supplies of what, strangely enough, has become an essential source of heat energy to this great coal-mining country, the stoppage of which would quickly sterilise huge capital investments in motor ships, motor vehicles, aviation, and power plants.

The progress of the marine oil engine is shown by the fact that, at the end of September 1926, there were under construction in the world 271 marine oil engines with an aggregate of 781,870 shaft horse-power, as compared with 254 steam engines and turbines of 764,026 shaft horse-power.

Of the oil engines, 53 with a total of 275,530 horse-power, and 135 steam engines and turbines with a total of 392,661 horse-power, were under construction in Great Britain and Ireland.

In 1925, 133,500 motor cars and 40,199 commercial vehicles were produced in this country.

The oil engine and the petrol engine have revolutionised engineering in several respects; the novel and exacting nature of their technical and workshop requirements having brought about a great advance in engineering practice, while their special characteristics have made many new applications of power possible and innumerable substitutions of old plant profitable, thus creating extensive new markets for important products of engineering industry.

## VI. SOME INTERNATIONAL CONSIDERATIONS IN REGARD TO THE ENGINEERING INDUSTRY.

It is an inevitable deduction from the manufacturing and trading experience of the past few years that the total productive capacity of the manufacturing countries, with all their works and factories working full time on an economic load factor, is considerably in excess of the power of the world markets to purchase the whole of their products at present prices. The disparity between potential production and actual consumption is so great that it is causing grave anxiety to leaders of industry in the principal manufacturing countries, more especially in Europe, because, unless the problem of increasing the markets for their products at profitable prices can be solved, a large amount of machinery and plant will have to be thrown out of action and written off. In other words, large capital values will be destroyed, and large numbers of people thrown out of employment. These remarks apply, unfortunately, with special force to engineering and allied industry.

On the one hand, the engineering requirements of the world are enormous and are ever growing, and, on the other hand, the engineering productive capacity of the world is underloaded and stands in great economic need of a big increase in the volume of orders. The difficulty standing in the way of the satisfaction of the respective require-

ments of the consumer and the producer is the inadequacy of the consumer's purchasing power.

The only ways to meet this difficulty are to cheapen the products of engineering industry, to improve the salesmanship, and to make the terms of payment easier for the purchaser. The only alternative is to hope and wait for an increase in world purchasing power. It might prove to be a very long wait and, in any case, it would be sheer fatalism. Nevertheless, the international leaders of engineering industry should watch and promote all developments calculated to encourage the growth of purchasing power in the markets or the potential markets for their products. Great though the difficulties of the situation may be, one cannot but believe that the combined intelligence of the great engineering nations will surmount them.

Engineering being the basic industry supporting the entire material structure of modern civilisation, the engineering production of the world cannot stop. Engineering cannot remain in a static state but must ever change and progress, and the engineering needs of the world must grow both in variety and volume (see Appendix A, Section II). The question of the future, therefore, is not "if" but "how" they are to be fulfilled.

Is the satisfaction of the engineering needs of the world to be left to the accidents of unplanned developments influenced mainly by narrow selfish considerations and international rivalry, or will it be possible for the principal engineering countries to arrive at some mutually satisfactory arrangements reconcilable with the interests of the consumers ?

One obstacle in the way of any arrangement based solely on economic considerations is that, in these days, the resources of an engineering industry are essential to national defence. No nation would be content to rely entirely on external sources of supply for its munitions of war, and, regardless of purely economic considerations, it will make an effort to become independent to the greatest possible extent. Furthermore, the possession of mechanical munitions of war, even though purchased abroad, necessitates the training of personnel to use, maintain and repair them. This in itself tends to engender the engineering spirit.

Another serious obstacle in the way of any such arrangement has been created by the almost universal policy of erecting tariff barriers between the different countries, the restrictive effects of which on international trade are, in some cases, aggravated by prohibitions, special licences and extremely troublesome Customs procedure.

A third obstacle lies in the inherent attractiveness of engineering, the products and achievements of which are in daily evidence in most countries. The fact that products of engineering industry are imported into a country for industrial, commercial, domestic and luxury purposes necessarily results in the growth of trained personnel to erect, maintain, repair and operate them. From this to home manufacture is often but a short step, and there is a strong inclination to take it even in the face of unfavourable economic conditions.

The above-mentioned military, fiscal and psychological facts and considerations all tend towards the wide territorial distribution of engineering industrial activities, and the prevention of their centralisation in a very few specially favoured countries.

Another important factor in the new situation is the enormous recent development of water power in France, Italy, Switzerland, and the Scandinavian countries, whereby the establishment of manufacturing industries has been made possible in localities where the price of coal would have been prohibitive. Manufacturing industries on any considerable scale cannot flourish in a state of complete dependence on foreign engineering resources. Therefore, engineering trades grow up with them.

If the older and greater engineering countries still possess natural and acquired economic advantages qualifying them to continue to be the chief seats of the industry, it is not unreasonable to expect that these advantages should be expressed in their competitive power. In other words, they should be able to deliver f.o.b. to the purchaser of their products more for his money than less favourably situated producers, and here it may be remarked that this advantage may be conveyed to the purchaser in three different forms, viz., a lower price for a given article; a better article for the same price; or a better article for a higher price, economically justified by the degree of superiority received. A purchase of the last-mentioned character is very often the most economical investment, but there are many purchasers who are too poor to indulge in the luxury of true economy.

If this great and old established engineering country—the United Kingdom—became unable to offer any of these advantages, it would forfeit its claim to be regarded as one of the chief natural seats of engineering and allied industry, at least for the purposes of imperial and international trade, and, in view of its initial advantages, such a loss of position could only be attributed to inefficiency, though perhaps not wholly within the industry itself.

It must be remembered, however, that the above argument is based on the manufacturer's f.o.b. prices, beyond which his control rarely extends, and it is now necessary to take into account the effects of tariff barriers, whereby a highly efficient manufacturer may be kept out of a market and prevented from conveying to a potential customer any of the above-named advantages proceeding from his efficiency.

All tariffs, of course, have the effect of either increasing the price of imported goods to the consumer or reducing the profits of the exporting producer. In either case the producer suffers, because, if the total cost of the goods to the consumer be increased, his purchasing power will buy less of them, and the flow of orders to the manufacturer will be reduced accordingly. The effects of a protective tariff, more especially if designed to safeguard and promote the growth of an infant industry under unfavourable economic conditions, only differ in degree from those of any other tariff and more nearly approach prohibition. The consumer pays more for his goods, but that is the internal business of the country concerned.

In some highly responsible and well-informed quarters the opinion is strongly held, and it is spreading, that these tariff barriers not only restrict international trade, but also in many cases force it out of its natural channels to the detriment of economy, and that they are seriously retarding the recovery of Europe. It has recently been suggested by an influential group of international bankers, shipowners and industrialists that, in Europe at least, all these barriers should be swept away. Such a drastic change in fiscal policy might be justified by the results,

and ultimately have the effect of increasing the total annual wealth production of Europe. It is, however, no use disguising the fact that there are enormous difficulties in the way of accomplishing it. Some of the special difficulties that would be encountered in the case of engineering and allied industry have been described above, viz., considerations of national defence; the natural fear and disinclination to be too dependent on foreign supplies of such necessary things as many of the products of engineering industry; and the strong desire created by modern education and environment to engage in so interesting and attractive a profession or industry as engineering.

In a word, the greatest difficulty in the way of the proposed scheme is the fact that man does not live by bread alone, and that, as in the case of the individual, other than purely economic considerations enter into the scheme of life of a nation.

It helps to bring these things into true perspective, if one remembers that some of the so-called economic laws that have been enunciated, and have held the field from time to time, have been proved by post-war experience to be either fallacious or subject to remarkable exceptions. For example, what pure economist could have conceived the possibility of marine Diesel engines of great size and weight being built commercially in an inland country like Switzerland, which, moreover, has none of the raw materials of engineering industry within her own borders?

Another great obstacle to the wholesale removal of tariff barriers is that, to a great extent, the State revenues now derived from them would have to be replaced by the proceeds of new taxation, and it is more than probable that in many, if not all, of the countries concerned the proposals to impose such new taxation would raise political questions of a kind and magnitude that overthrow Governments. It may be doubted whether the politicians in power would run the risk of defeat in pursuit of an ideal such as pan-European free trade, the economic arguments concerning which are beyond the understanding of the multitude. Nevertheless, it might be possible, and the attempt should be made, to bring about some reduction of certain tariffs and their adjustment on a better economic basis. The removal of some of the existing unnecessarily troublesome and restrictive Customs regulations and procedure should be even easier of accomplishment.

In the face of all these difficulties and portentous changes, to what are the older established engineering countries to look for the revival and future development of their engineering and allied industries?

The United States of America can well look after itself. With its vast natural resources and enormous home market, the only aspect in which it need be considered here is as a powerful competitor with Europe in the markets of the world.

One thing should be quite clear in the light of post-war experience, and that is that nothing is to be gained by any kind of international commercial warfare waged between the greater engineering countries, with the object of killing the competition of one or other of them in the expectation of thus making it easier for the survivors to prosper. In these days it is scarcely necessary to expound how this would have the effect of further decreasing world purchasing power and reducing the consumption of manufactured articles including, of course, the products of engineering industry.



In this connection reference should be made to Table 34 and Fig. 25 in the Statistical Appendix.

Jungle law will not help us to solve our difficulties and give to the world the benefits of the civilising services which engineering science and industry have the power to render. Whatever speculations may be indulged in about the distant future, the fact to be faced now is that there is no way of substantially increasing the world consumption of the products of engineering industry without cheapening them. Improved salesmanship and increased credit facilities would help, but alone they could not increase the volume of engineering trade to the extent required to place it in a sound economic position.

Cost of production is always in some inverse proportion to the volume of output, and consumption is usually in some inverse proportion to price, but price does not always vary in direct proportion to cost of production, because it depends on the charges and profits added before the goods reach the consumer. Some traders prefer a large profit on a small turnover, to a smaller percentage of profit on a bigger turnover, thereby standing between the manufacturer and the volume of trade to which his cost of production fairly entitles him. Nevertheless, it is generally true that reduced cost of production increases consumption and that increased consumption reduces cost of production. But one of them must precede the other, and for the reasons stated above it is clear that, in the case of engineering industry, reduced cost of production must come first.

That alone, however, would not suffice, and the manufacturer might be robbed of the fruits of his increased efficiency, unless he were able to ensure that a corresponding reduction would be made in the price at which his products would be offered to the consumer.

Assuming that the conditions affecting cost of production, which are beyond the control of the manufacturer, remain constant, he can reduce his cost only by increasing his efficiency; in other words, by increasing the ratio of the values produced and sold to the values consumed in the processes of production and distribution.

It is not necessary to restate here the principles and elements of efficiency as applying to engineering industry. But it may be useful to draw attention to the enormous wastage of values that results from unintelligently conceived and ill-regulated competition, either national or international. In its extreme form it is known as "cut-throat" competition, which almost invariably engenders undesirable business practices and lowers the whole standard of business morality. In the long run, this kind of mutually destructive competition makes the world poorer and is, therefore, anything but a means of increasing the prosperity of European engineering industries.

Fair competition and friendly rivalry are, of course, necessary to progress and are beneficial in every way, but no business man of any experience will confuse them with the kind of competition referred to above.

All the above considerations lead one to the conclusion that, although the protection and development of its own engineering industry must be primarily the affair of each of the countries concerned, the interests of all of them might be well served,

in the present situation, by international conferences between duly accredited representatives of their respective engineering trade organisations.

It will be gathered from this Monograph that there are several important questions that might be discussed with advantage, and whether or not it would be possible to arrive at understandings or agreements between any of the countries concerned would emerge from the discussions.

By order of the Council,

D. A. BREMNER,

*Director.*

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APPENDIX A

REPRINT OF A REPORT ON THE PRESENT CONDITION  
AND FUTURE PROSPECTS OF THE ENGINEERING INDUSTRY

*Presented to the Government Committee on Industry and Trade  
in March 1925.*

I. SOME CONSIDERATIONS GOVERNING THE SCOPE AND SUBJECT MATTER OF  
THIS REPORT.

*Scope.*

1. The Engineering Industry cannot be examined and properly considered in complete isolation from iron and steel, non-ferrous metals and shipbuilding.

2. For the purposes of this Report the term "Engineering Industry" is, therefore, used in a wide sense, though special attention is given to the manufacture and export of "Machinery", as being a special product of the purely engineering trades.

3. This Association, being the general trade association of the Engineering Industry, must survey the whole field. This may be an advantage, in view of the fact that our evidence will be considered by the Committee in conjunction with that presented by various sectional trade organisations, and be thereby brought into proper perspective.

4. Except in a general way, when commenting on the economic position and prospects of the engineering industry, we shall not touch on wages, hours, or conditions of working, which fall within the special province of the Engineering and Allied Employers' National Federation.

*Statistics and their Limitations.*

5. The statistical section of this Report contains a number of tables and graphs of exports and imports, showing the figures for certain pre-war and post-war years. Where necessary, the post-war figures of value are corrected to the pre-war basis, so that they may be compared with the corresponding pre-war figures. If their limitations are recognised, these statistics are of considerable practical value. In fact, without them, one could not form a mental picture of the present state of the industry and its economic significance. It is necessarily a relative thing, and one must have some basis of comparison — a datum line from which to measure progress or retrogression.

6. Hitherto, it has been the general practice to compare post-war figures with the corresponding figures for 1913, or the average figures for the years 1911/1913, and we have used one or other of these, according to circumstances, as the basis of comparison.

7. For obvious reasons, it is expedient to compare the present state of industry and trade with that immediately preceding the upheaval of the war. It is, however, misleading to regard the immediately pre-war conditions and results as representing normality, and to attribute any special virtue to their use as a basis of reference, on the ground that they constituted a normal state of things, which we should endeavour and might reasonably hope to restore. There is no such thing as normality in the industrial and commercial life of a country, which is essentially dynamic, and, strictly speaking, even the conditions of yesterday cannot be re-established. If it were possible to restore our engineering industry to the state it was in just before the war, that state, from the point of view of the national economy, would now be relatively far less satisfactory than then, because of our increased population, our enormously increased financial burdens, and the higher standard of living.

8. Since the war, great changes have taken place in the nature, volume and geographical incidence of the world's demands for the products of the engineering and allied industries, and in almost every fact entering into costs of production and distribution. Important changes have also been made in the kind and the design of products; in the instruments and processes of production; in wages and working conditions; in capital and other financial conditions, and in the burden of taxation.

9. For all these reasons it is impossible mathematically to equate pre-war and post-war positions.

10. After consultation with the Statistical Department of the Board of Trade, it was decided not to attempt to show how engineering export trade has been distributed at different periods between this country and its competitors. The required information could be obtained only from the import statistics of the various importing countries. It was agreed that the difficulties in the way of compiling such statistics are so great that, at the best, only a few typical examples could be given. We were given to understand that the Board of Trade would endeavour to do this.

11. In preparing such a Report as this, it is easy to be misled into the laborious achievement of futility by attempting to compare the incomparable, or to make meticulous calculations from inadequate and inaccurate data. For example, it would be useless to attempt any detailed comparison of German and English costs of production in the engineering trade. This will be appreciated by those who have tried to obtain truly comparable costs of production of similar articles from different makers, even in this country alone. Moreover, the calculations involve so many variables that, in these times of rapid change, figures calculated to-day might be valueless to-morrow.

12. If our engineering exports are some tens of per cent below the pre-war figure and our imports of engineering products are above the pre-war figure, the situation before us and the measures necessary to deal with it are not affected practically by our ability to state the percentages in question to several places of decimals or even to unity. Furthermore, it is of no practical importance to know in exactly what proportions foreign trade has been taken from us by our several competitors. In any case, we should know that the only possible remedies would be to reduce our selling prices and/or improve our salesmanship.

13. Profits in the engineering trades being already either too low or totally lacking, there is no possibility of reducing selling prices by cutting them. Therefore, the only way to reduce prices would be to lower our costs of production and/or distribution. But we ought to do this in any case, with the object of increasing the volume of our sales and profits, regardless of the competition of foreign countries, of their respective shares of the trade, and of the exact percentage by which they are under-selling us. For every good reason, and more particularly in view of our war legacy of debt, we should conduct our manufacturing and our export trade with the greatest attainable efficiency and economy. It should not be a question of calculating exactly the extent to which we might, in the face of our competitors, dare to indulge in sloth, inefficiency and waste.

14. Subject to these limitations and considerations, the statistics appended to this Report are not only useful but indispensable as an aid to gauging the present state of the engineering and allied industries. They are not merely a reprint of official statistics or a re-statement of what is already familiar. Much thought and work have been expended on their preparation in tabular and graphic form, and the calculation of comparable figures, such as corrected ratios, with the object of making it easy to read their meaning quickly and correctly. It is hoped they may have some permanent value for purposes of reference.

## II. THE IMPORTANCE OF BRITISH ENGINEERING INDUSTRY TO GREAT BRITAIN AND THE BRITISH EMPIRE OVERSEAS.

15. Under modern conditions it would be impossible on an adequate scale and at a low enough cost to till the land; mine coal and other minerals; produce iron and steel; manufacture foodstuffs and clothing; supply water, heat and light; provide transportation for goods and passengers or means of communicating at a distance, without the machinery, tools and structures which it is the special province of the engineering industry to supply.

16. In view of our recent experiences in the Great War, it is almost superfluous to remark that the resources of a great shipbuilding and engineering industry are essential to the national defence.

17. Engineering being thus the basic industry supporting the entire material structure of our civilisation, its preservation in a state of robust vitality is of the utmost concern to every citizen of the Empire.

18. Just as engineering is essential to a manufacturing country, so is a great centre of shipbuilding and engineering industry within itself essential to a world-wide Empire.

19. There could be no safety for countries within the British Empire if they were dependent on foreign iron, steel, shipbuilding and engineering industries, and for obvious reasons such a position would be economically unsound.

20. There can be no doubt whatever that the decay of our iron and steel, shipbuilding and engineering industries would bring about the dissolution of the British Empire.

### III. THE PRESENT STATE OF THE ENGINEERING INDUSTRY.

21. This must be ascertained by the comparative examination of exports, imports, home trade, financial results and unemployment. These are the only available indicators pending the publication of the results of this year's Census of Production, which cannot be much earlier than the middle of 1927. Their readings and the lessons they convey are given below under their appropriate headings, but it may be helpful to the Committee to present, at this stage, the following summarised statement and tables showing the present state of the engineering industry.

22. Tables A and B have been compiled from fully detailed figures given in the Statistical Appendix, and show at a glance the state of the engineering and allied industries as indicated by exports and imports:

#### THE METAL, ENGINEERING AND ALLIED TRADES IN 1924

*Table A.* Ratio Figures.

			1913	1920	1923	1924
			Corrected Values			
(a) Iron and Steel, Ships, Vehicles, Machinery and other metal and engineering products.	Exports.	£000's.	138,011	110,936	104,873	109,260
		Ratio.	100	80.4	76.0	79.2
	Imports.	£000's.	66,672	64,200	55,597	68,010
		Ratio.	100	96.3	83.4	102.0
(b) Machinery only.	Exports.	Tons 000's.	689	462	432	464
		Ratio.	100	67.0	62.7	67.3
	Imports.	Tons 000's.	104	90	54	60
		Ratio.	100	85.6	51.9	57.7

(a) All quantities not being available, these ratios are calculated from the declared values corrected to 1913 basis.

(b) Ratios calculated from the tonnage figures only which are all available.

*Table B.* Comparative Values per Ton of Exports and Imports of Machinery.

		1913	1923	1924
Exports . . . . .	£. per ton	48.77	102.79	96.30
	Ratios	100	211.0	197.8
Imports . . . . .	£. per ton	70.00	172.80	175.35
	Ratios	100	246.9	250.5

23. It will be seen from the ratio figures, referred to the basis of 100 for the year 1913, that in 1924 our exports of metal, shipbuilding and engineering products were only 79.2%, whilst our imports of the same classes of articles were 102%. In other words, these exports and imports were respectively 20.8% below and 2% above the corresponding figures for 1913, after making the due corrections for the difference in prices in the two years.

24. Table B shows that exports of machinery alone, although 4.6% heavier than in 1923, amounted to only 67.3% of the 1913 quantity, whilst the imports had risen from 51.9% to 57.7%.

25. It also reveals the disquieting fact that, on the average, the machinery imported is of a more highly developed and costly character than that exported. This was the case even before the war, their average values per ton in 1913 being £70 and £48.77 respectively. In 1924 the corresponding figures were £175.35 (imports) and £96.3 (exports). No less than 60,100 tons of this high class machinery, for which we paid £10,521,000, were imported last year. Of these imports, 55,600 tons, having a value of £9,264,000, were retained in this country.

26. Table C is also compiled from fuller tables in the Appendix, and shows the relative percentages of employment in the engineering and allied industries, and in the distributive trades. These figures speak for themselves.

Table C.

Employment (as per cent) of total insured workpeople in:	1923		1924	
	June	December	June	December
	(End of Month)			
All Trades and Industries . . . . .	88.7	89.3	90.6	89.1
Engineering . . . . .	79.1	81.7	86.0	86.3
Iron and Steel . . . . .	79.4	82.9	81.3	72.4
Shipbuilding . . . . .	56.3	65.8	72.9	68.1
Distributive Trades . . . . .	94.2	94.0	93.8	93.5

27. The financial result of the operations of engineering and allied concerns in 1924 are not yet available, but at best they are unlikely to show more than a small improvement on the 1923 figures.

28. In 1923, the average dividend paid by 31 representative firms having a paid-up capital of nearly £98,000,000, was only 4.9%. Even this low rate involved the distribution of an undesirably large proportion of the earned profits and the starving of reserves. As a matter of fact, the proportion distributed in 1923 was 86.8% to pay an average dividend of 4.9%, as compared with an average of only 64.8% to pay an average dividend of 7.6% in the years 1911/1913.

29. Special attention is directed to Table 1 — "Summary of Index Numbers, Based on Pre-War, Shewing the Trend in Post-War Years of the Principal Trade and Other Statistics of Importance to the Engineering Industry". This Table condenses in the form of comparable index numbers the most vital statistics relating to engineering trade and finance, referred to the pre-war basis, and may be regarded as the ultimate presentment of the composite facts given in detail in the following tables and graphs.

30. The chief object of the appended statistical tables and graphs being to set out the essential facts and figures in concise and readily understandable form and thereby avoid a long wordy dissertation, we shall comment only very briefly on the salient points arising on exports, imports, home trade, financial results and unemployment.

#### IV. EXPORTS AND IMPORTS.

31. The volume of engineering and allied exports in relation to the total exports of manufactured articles has been well maintained, but only because both have decreased since pre-war years in almost equal proportions. The facts of essential significance are that the exports of all metal products, reckoned on 1913 values, amounted last year to only 79.2% of the exports of 1913, whereas in the case of imports the corresponding figure was 102% (see Tables 3 and 4, and Fig. 4). Imports have thus gained upon exports to an extent which cannot but be viewed with grave concern.

32. Export tonnage of machinery in 1924 was only 67.3% of the 1913 total, that of railway locomotives only 50%, and of new ships as low as 33.5%. The tonnage of machinery imported

in 1924 represented 57.7% of the 1913 total, but it is to be noted that the average value of the machinery imported rose from £70 per ton in 1913 to £175.35 last year, an increase of 150%, whereas the average value of the machinery exported in 1913 was £48.77 and in 1924 £96.30 per ton, an increase of only 98% (see Tables 5 and 6). The tendency for machinery imported into this country to be of a more costly character than exports has become accentuated since pre-war days.

33. As to the geographical distribution of our export trade in machinery (see Table 9 and Figs. 10 and 11), it is to be noted that the exports to British Possessions amounted in 1913 to 234,000 tons, and in 1923 to 228,000 tons, their proportion of the total exports having risen, however, from 34.0 % to 52.8 %. On the other hand, exports to Europe fell from 268,000 tons to only 98,000 tons and to South America from 73,000 to 24,000. This heavy slump in the exports of machinery to Europe is more clearly shown by an analysis of the exports of the various classes of machinery. Thus in textile and agricultural machinery, two leading items of our pre-war machinery export trade, exports to Europe now only represent respectively 44 % and 25 % of the corresponding amounts sold to European countries before the war (see Table 1). These two classes of machinery, along with prime movers, have been the hardest hit in the export trade. The position in textile machinery would have been worse but for the increased demand from India in recent years. Electrical machinery affords the only example of a post-war increase in export tonnage; the principal markets, India and Australia, having substantially increased their purchases.

34. The analysis of the general import situation in regard to machinery (Table 6) shows that the most highly priced imports are those of electrical and textile machinery and machine tools, and that these costly imports come mainly from Germany and the United States. The import values per ton of electrical and textile machinery in 1924 were respectively £243 and £245, as compared with £116 and £73 in 1913.

35. An analysis of the export trade in railway locomotives (Table 25 and Fig. 31) reveals that the demand from individual markets fluctuates appreciably from year to year. The slump in exports in 1924 was largely caused by the dual failure of European countries and of India to maintain their previous level of purchases.

36. From a survey of recent shipbuilding statistics in this country and throughout the world, and of the present economic position of the shipping industry (Tables 22 and 23), it seems highly improbable that there will be any early recovery from the present very low annual level (38 % of 1911/1913 average) of exports of new vessels, and consequentially of marine propulsive and auxiliary machinery.

## V. HOME TRADE.

37. The Census of Production taken in 1907 showed that, in the engineering industry, the proportions of the home and export orders in terms of value were 46.65 % and 53.35 % respectively.

38. Pending the publication of the 1925 Census figures, the only later information on this point is that provided by the recent investigation made by the Engineering and Allied Employers' National Federation, according to which the average proportions of home and export trade in 1923 and 1924 were 73.5 % and 26.5 % respectively.

39. The preponderance of the home trade marks an important change to which further reference will be made later.

40. By applying the above export percentages to the known tonnages of machinery exports in the two years, it is estimated that our total output of machinery in 1907 and 1924 must have been about 1,224,700 tons and 1,787,000 tons respectively, the increase in output during the 17 years being therefore about 46 %.

41. Unhappily, as will be shown under the appropriate heading, the greatly increased proportions of the home trade have been unattended by satisfactory financial results.

42. This may reasonably be attributed to the combined effects of the following causes:

(a). The insufficiency of the increased total demand for machinery in relation to the still more increased productive capacity of the industry whereby the latter suffered from irregular and under-employment, with its inevitable adverse effects on cost of production and profits.

(b). Unfair foreign competition in the home market.

(c). Uneconomically severe competition between home manufacturers in the home market, induced by the scarcity of orders in relation to the available productive power.

(d). The cutting of prices by the home manufacturer in a desperate attempt to cope with unfair competition.

VI. FINANCIAL RESULTS.

43. Tables 30 and 31 and Graphs 35 and 36 show the financial results of 31 representative engineering and allied firms, for the financial years 1921, 1922 and 1923, compared with pre-war results.

44. Except in the case of a very small number of Companies, the financial results for 1924 are not yet available, but at the best they are unlikely to show more than a small improvement on the 1923 figures.

45. On reference to the tables and graphs it will be seen that, in the period 1911/1913, the average total paid-up Capital of the 31 Companies was a little over £39.5 millions, and in 1923 £97.8 millions, an increase of 147.6 %, whilst the debenture burden had been reduced to 51.8 % of its pre-war proportions.

46. During the period under review, earned profits fell from 11.8 % to 5.7 %, and dividends from 7.6 % to 4.9 %, whilst the proportion placed to reserve decreased from 3.5 % to 0.9 %.

47. In 1911/1913, a dividend of 7.6 % absorbed only 64.8 % of the earned profits, but in 1923 no less than 86.8 % of the latter went to pay the lower dividend of 4.9 %.

48. Further light is thrown on the margin of profit and its decline by the results of an enquiry recently conducted by the Engineering and Allied Employers' National Federation, from which the following figures emerge, showing how the cost of the total turnover is made up and the balance remaining to cover expenses, other than those specified, and to provide dividends:

	Financial years ending in	
	1923	1924
	% of turnover %	
Materials . . . . .	43.26	45.06
Wages, direct . . . . .	19.96	21.37
Wages, indirect . . . . .	13.07	12.87
Charges . . . . .	19.39	17.40
	<hr/>	<hr/>
Management expenses . . . . .	1.50	1.50
	<hr/>	<hr/>
Balance available for other expenses and dividends . . . . .	97.18	98.20
	<hr/>	<hr/>
	2.82	1.80
	<hr/>	<hr/>
	100.00	100.00

49. We understand that fuller details will be given in the Federation's evidence.

50. From the evidence given under this and preceding headings, the conclusion must be drawn that, under the conditions now existing, the engineering industry offers no attraction to the new capital required for its progressive development, and that its present tendency is retrogressive.

VII. UNEMPLOYMENT.

51. On reference to Table 29 and Fig. 34 it will be seen that, with the exception of the slight re-action in October last, the percentage of unemployment in the engineering trades has steadily decreased from 20.9% in June, 1923, to 13.7% in December, 1924. In January it rose again to 14.0%.

52. The decrease in unemployment is satisfactory as far as it goes, but it is merely a change from worse to bad, and the present amount of unemployment must be viewed with the gravest concern.

53. There is no real cure for it except an adequate increase in the sale of the products of engineering labour at profitable prices.

54. Two serious consequences of the present state of affairs are the emigration of skilled mechanics and the discouragement of new entries into apprenticeship.

55. Other distressing features of the situation which receive little or no publicity are the enforced idleness of large numbers of young trained engineers of staff rank, and the very restricted opportunities of advancement afforded to those who are fortunate enough to be in employment. Many senior men of proved ability and energy are also unable to obtain suitable positions, and the nation is losing the value of their wealth productive services.



### VIII. THE EFFICIENCY OF THE ENGINEERING INDUSTRY.

56. Before proceeding to enumerate the causes of the present state of the industry, it is necessary for reasons which will appear, to deal with the involved question of efficiency.

57. The term " efficiency " has different meanings, and it is necessary to know the sense in which it is being used. If efficiency be measured by the ratio of values produced to values consumed, it must be admitted, in the light of the financial results, that the efficiency of the engineering industry as a wealth producer is very low at the present time. This, however, is due to the combined effects of numerous internal and external causes largely beyond the control of those responsible for conducting the industry. Even the vital factor of output per man-hour, or, which is more important, per £sterling paid in wages, is mainly determined by conditions imposed on the industry by labour and law.

58. On the other hand its efficiency is high if expressed in terms of organising power, administrative ability, technical knowledge, practical skill, a vast accumulated experience and the material means of production.

59. In other words, the engineering industry has a high potential efficiency.

60. There are exceptions, but on the whole our engineering works are well laid out and equipped with modern machinery and plant. Our methods of production are skilfully planned and supervised, and our skilled labour is probably second to none in its ability to produce high-class work.

61. For these reasons, the unsatisfactory position of the engineering industry cannot fairly be attributed to its own internal inefficiency in the sense that it lacks the ability, skill and equipment to produce the right classes of articles in the required quantities.

62. Its troubles are mainly due to the high costs of production and distribution.

63. It must, however, be admitted that, on the commercial side of the industry, there is considerable room for improvement in trade propaganda and publicity at home and abroad, and in the overseas representation of British engineering interests.

64. To turn to another aspect of the question, it may be remarked that there is still room for further development of the spirit and policy of combination and association, whereby economies might be effected, and the competitive power of the industry strengthened.

### IX. THE IMMEDIATELY APPARENT BUT SECONDARY CAUSES OF THE STATE OF THE INDUSTRY.

65. These are as follows:

- (a) Inadequate demand for products at present prices.
- (b) Foreign competition.
- (c) Placing of public and other contracts abroad.
- (d) High cost of raw materials.
- (e) High wages per unit of output.
- (f) High cost of transportation.
- (g) Excessive burden of taxation.
- (h) Excessive standing charges due to insufficient employment of productive capacity.

66. It is unnecessary to expatiate on all of these causes, some of them being so well known and understood that their existence is unlikely to be challenged. This applies to (a), (d), (e), (g), (h), which may, therefore, be dismissed with a few brief explanatory remarks.

67. The inadequacy of the present demand for our engineering products is shown by the accompanying statistics of export trade, unemployment and financial results.

68. The relatively high prices of the raw materials of the engineering industry are shown in the statistical appendix. They are partly attributable to the high cost of marine and railway transportation, but where they are of home origin, they are due, in different degrees, to the same causes which have inflated the costs of converting them into the finished products of engineering industry.

69. In view of the fact that wages, direct and indirect, including the home wages value contained in the raw materials, amount to from 70/80 per cent of the total costs of production in the engineering trades, it is evident that our high selling prices must be due, in a great measure, to the high wages costs per unit of output.

70. Taxation on the existing basis and its effects on industry and trade are the subjects of enquiry by another Committee, but the evidence already published and the utterances of numerous competent authorities have established the fact that the present burden of taxation on industry is excessive and cannot be borne without serious loss of vitality.

71. It is unnecessary to demonstrate that the burden of standing charges per unit of output increases in an increasing ratio as the total output falls in relation to the full load output of an engineering works.

72. We think it may be useful to deal at greater length with the three following causes:

### X. FOREIGN COMPETITION.

73. An inevitable consequence of our relatively high prices has been the growth of foreign competition, both at home and abroad. But for the fact that their manufacturing activities have been hampered by shortage of capital and credit, we would have experienced even severer competition from Germany, France, Italy, Belgium, and some other European countries where the labour and other conditions keep their costs of production far below our possible minimum.

74. As already indicated in the earlier part of this Report (see Pars. 10, 11, and 12), it would be impracticable to make a comprehensive examination of foreign competition with all its variants, in these times of rapid change, and, if it could be done, it would be of little practical value.

75. The following examples are typical and are just as instructive as a much larger number:

Product	British Price	Foreign Price and Nationality	Foreign Price below lowest British Price
(1) Locomotives for India . . .	£4,300/5,332 each	£2,320 (German)	46%
(2) Locomotives for Egypt . . .	£E4,920/6,600 each	£E2,050 (German)	59%
(3) Locomotives for Brazil . . .	No tenders presented	£3,895/4,335 each (German)	At least 33%
(4) Cast Steel Railway Wheels .	£23 per ton	£16 per ton (Belgian)	31%
(5) Wagon Wheel Tyres d/d Cardiff	£19 0s. 6d. per ton	£12 10s. per ton (Continental)	34%
(6) Semi-Rotary Pumps. No. 2, Double Acting	16s. 9½d. each	14s. each (German)	17%
(7) Stage Compressors for Holland	(1) £205 (2) £119	£63 £39 10s. (both German)	69.3% 67.0%
(8) Worm Pulley Blocks . . . .	£4 2s. 6d. to £6 12s. 0d.	£2 4s. 0d. to £4 17s. 6d. (German)	26/47%
(9) Pulley Blocks (W. Indian, S. American & Pacific markets)	—	U.S.A. (Specific prices not quoted)	15%
(10) Steel Wire Ropes . . . . .	—	German	33⅓%
(11) Steam Traps (½") . . . . .	7s. 9d.	2s. 4d. (German)	70%
(12) Cast Iron Pipes . . . . .	£11 5s. 0d. to £13	£10 5s. 0d. (French)	10%
(13) Cast Iron Pinions . . . . .	—	Sweden	40%
(14) Geared Scroll Lathe Chucks:			
4" . . . . .	£2 9s. 10d.	£1 3s. 6d.	53%
12" . . . . .	£7 1s. 1d.	£5 17s. 4d. (German)	17%
(15) Agricultural Machinery: In Foreign & Colonial Markets	— —	Germany, Hungary, } Austria, France, } Italy, Czechoslovakia)	25—50% (Average 40%)
(16) Weaving Machinery: Empire & Foreign Markets	—	Germany	25/35%
(17) Six Oil Tank Ships (Diesel engined)	£1,370,000	£1,200,000 (Holland)	12½%
(18) Ice-breaker for Finland . . .	£195,000	£156,625 (Holland) £120,800 (Germany)	20% 38%
Passenger Vessel . . . . .	—	France	20—25%
Cable-Laying Steamer . . . .	—	do.	12%
(19) Ships Propellers . . . . .	(1) £130/138 (2) £96/144	£80/85 (German) £57 (German)	39% 41%
(20) Turbo-Alternators . . . . .	—	Switzerland	15%
Winders . . . . .	—	Germany	50%

76. Foreign competition in the home market is a matter of grave concern in view of the present state of the engineering industry and the large amount of unemployment. Its ill effects are out of proportion to its volume, because it tends to force down the prices of the home manufacturers below the level of sound economic relationship to cost of production.

77. Most of the foreign competition in the home market is grossly unfair, but the whole of this question has been so well ventilated in connection with the Safeguarding of Industries that it would be superfluous to recapitulate here all the well-known facts and arguments.

#### XI. PLACING PUBLIC CONTRACTS ABROAD.

78. Having regard to the national and imperial importance of our engineering industry and its present serious position, we are of opinion that it is contrary to the national interest to place public engineering contracts abroad.

79. The home market component of the employed industrial capacity of the country, *i.e.*, the home market component of the industrial "load factor", exercises a powerful influence upon the nation's ability to survive in the struggle for the export markets.

80. It is a common economic fallacy that, because imports are paid for by exports, the volume of imports may be regarded with equanimity. This argument, however, entirely ignores the vitally important factor of the respective kinds and qualities of the goods so exchanged. Having regard to the desirability of maintaining a decent standard of living for our own people, it is highly unprofitable, for example, to pay for turbogenerators or machine tools with coal, pig-iron or rolled joists.

81. The standard of living and general ease of circumstance of our people is inevitably reflected in our selling prices, with the result that they are high as compared with the prices of similar manufactured articles which can be purchased from other countries. In these circumstances, our own unconditional pursuit of cheapness, in our capacity as consumers, would soon imperil the very existence of some of our own manufacturing industries.

#### XII. HIGH COST OF TRANSPORTATION.

82. Detailed returns, calculated over a sufficiently wide variety of goods and range of distances, giving the present percentage increases in railway transport charges over pre-war rates for commodities which are either the raw materials for, or the products of, the engineering industry, show that over all the general increase in rates is from 52 per cent to 55 per cent. This coincides fairly closely with the intention of the last readjustment in goods rates made in August, 1923, which aimed at a general increase of 50 per cent, plus the application of flat rates which varied from 3d. to 6d. per ton.

83. It is more difficult to assess the percentage increase in the cumulative transport charges on a finished engineering product, but a careful estimate for a finished shaft manufactured in Sheffield to be delivered in Glasgow, commencing with the carriage of the necessary pig-iron from Middlesbrough to Sheffield and ending with delivery in Glasgow, shows an increase of 57½ per cent. This result may be taken as a fairly reliable indication of the general burden of railway rates on the finished metal industries of this country.

84. It must be pointed out, however, that at the present time the heavier finished products (not exceeding 12 tons) of the engineering industry are exempt from the additional payment known as the "heavy weight surcharge," with which they will be charged from the "appointed day," when the new standard rates come into operation. It is estimated that this surcharge may mean a further increase of from 25 per cent to 30 per cent.

85. The high cost of railway transportation being cumulative, from the coal and iron to the delivered finished product, has a much greater effect on selling price than would appear at first sight. To-day, it is a heavy handicap on our industry and trade, and it is necessary that it should be reduced as quickly as possible.

#### XIII. THE PRIMARY CAUSES OF THE PRESENT STATE OF INDUSTRY AND TRADE.

86. In our opinion these primary causes are as follows and, as they are common to all our exporting trades, the engineering industry cannot be considered independently under this heading:

87. Under-consumption of many of the markets of the world, in relation to the full capacity output of the manufacturing countries, due to the inadequacy of their active purchasing power.

88. The relative dearth of our manufactures due to the high costs of their production and distribution, and our consequent failure to secure a large enough share of the export trade to satisfy our minimum economic requirements.

89. Our relatively high costs of production and distribution are, in the main, due to the following causes:

(a). The attempt of our people to live on a higher economic plane than is justified by their annual output of new values; in other words, individual and national extravagance.

(b). The hours of working determined, not by the economic needs of the situation, but by the bargaining powers of the Trade Unions.

(c). The remuneration of labour not determined by the economic needs and possibilities of the situation, but by the power of the Trade Unions to enforce the payment of wages at rates unbalanced by a commensurate output of values, having regard to the foreign competition to be met and the purchasing power of the customer.

(d). The arbitrary and frequent mal-adjustment of wages rates in obedience to the demands of strongly organised Trade Unions, under threat of strikes, whereby wages rates are fixed, not in fair and equitable proportion to the skill and effort required of the worker, but in some rough proportion to the inconvenience and loss that would be inflicted upon the public by the withdrawal of the particular class of labour in question.

(e). In addition to its direct evil economic consequences, as reflected in cost of production and cost of living, this has had the effect of producing a grossly inequitable distribution of wages, more especially as between skilled and unskilled labour, and thereby further fomenting industrial unrest.

(f). Restriction of output, which, on the part of labour is due largely though not entirely to fear of unemployment, and on the part of employers to financial limitations and the extreme uncertainty of factors beyond their control whereby what, in more stable times, would be legitimate enterprise, becomes a hazardous gamble.

(g). A burden of national and local taxation too great to be borne, without serious loss of vitality, by our industry and commerce.

(h). Too many non-producers taking too large a share of the consumers' payments for the products of industry, by increasing selling prices out of fair proportion to any increment of value contributed by their efforts.

90. The undermining of confidence by the perpetual state of industrial unrest and the direct and indirect monetary losses due to the frequency of actual disputes often involving cessation of work.

91. The throttling effect on our export trade of certain Customs tariffs in foreign countries, and in countries within the British Empire.

92. The restriction of our export trade with countries whose sterling exchanges are seriously depreciated, which evil has been intensified by the recent appreciation of the £ sterling, and our home market at the same time made more vulnerable.

93. The fact that in some countries with depreciated currencies the internal value of the currency, expressed in commodities and services, is substantially higher than its corresponding external value, whereby they are enabled to export certain manufactures at prices with which we cannot compete.

94. Unfair foreign competition in our home market, which is one of the causes, not only of unemployment, but of our high cost of production, because it helps to rob our factories of the volume of work required to employ continuously a large enough proportion of their productive capacity to enable them to function economically.

95. Our failure to recognise that if our own people, while in the enjoyment of a relatively high purchasing power, are unwilling to support the home industries, which maintain them, by paying the high prices for which they themselves are mainly responsible, it cannot be expected that overseas purchasers, mostly less fortunately situated, will be either willing or able to pay them.

96. The application to unproductive purposes of too large a proportion of our financial resources, having regard to our heavy load of debt and the needs of our wealth productive industries on which the national solvency finally depends.

97. It will be seen that the causes referred to in Paragraphs 87, 94, 92, 93 are beyond our direct control, though the British Government, by taking appropriate action, may be able to influence in varying degrees their future trend and magnitude.

98. From the immediately practical point of view, we would, therefore, suggest that attention should be directed chiefly to the causes within our own control.

99. The most exhaustive study of the external causes would not provide us with solutions of our home problems, but would merely supply an unneeded confirmation of the known necessity of substantially reducing our costs of production and distribution with the least possible delay.

#### XIV. THE FUTURE PROSPECTS OF THE ENGINEERING INDUSTRY.

100. These will, of course, depend partly on political, industrial and financial developments abroad, and partly on the action taken at home to remove or counteract the causes of depression within our own control.

101. At the best this country can influence, only to a very limited extent, the course of events abroad, especially outside the British Empire.

102. The remedies urgently needed at home are indicated by the above-mentioned causes of the disease. Unless they are applied and given a fair chance to be effective, our only hope will lie in the possibility of our foreign competitors sinking to our level of productive efficiency as expressed in our high selling prices and low profits.

103. Our share of the world trade in manufactured articles will inevitably depend on the relative efficiencies of ourselves and our competitors in manufacture and trade. At present the balance is against us, and to redress it either our efficiency must rise or theirs must fall.

104. A little encouragement may, however, be extracted from the fact that, to some extent, the margin of competitive power against us at the present time is due to abnormal conditions of a transitory nature. For example, Germany's costs of production are now rising, and it may be assumed that they are still below the level at which they may be expected to become stabilised.

105. Nevertheless it would be lunacy to drift along on our present course in the belief and expectation that we will be saved from disaster by political and economic follies of our rivals causing their selling prices to rise to the same level as our own.

106. If the gold prices of engineering and other manufactures were artificially forced up, until they bore no economically warrantable relationship to the prices of food and raw materials, the demand for them would necessarily fall in order to maintain the balance between active demand and available purchasing power.

107. The bulk of the annual wealth production of the world is the produce of agricultural and allied industries and mineral mining. The average real wages of the workers engaged in them are, and must remain, far below those engaged in the manufacturing industries of Europe and America. The vast majority of the workers are of races having a much lower standard of living than our own. But it is their purchasing power in the aggregate which directly or indirectly determines the volume of manufactures that can be absorbed, and as a whole the prices of manufactured articles cannot rise appreciably without reducing the demand for them.

108. It would, therefore, appear that we should not build any high hopes on the international spread of the disease of inefficiency and its consequent high costs of production.

109. In the light of these facts, it is impossible to escape the conclusion that our only hope lies in reduced costs of production and distribution, but its fulfilment is dependent on the willing co-operation of capital, administration and labour.

110. It is true that some things lying outside the labour question might be done to improve the state of the engineering industry. We refer to such matters as invention, research, standardisation, simplification, trade propaganda, publicity and salesmanship. But they all involve more or less speculative expenditure requiring confidence and the ability to take financial risks. Unhappily, confidence has been badly shaken and the spirit of enterprise consequently subdued.

111. We share the opinion of those who believe that a truce in industry is the first essential to the recovery of our trade. The mere calling of a truce, however, would be of little value unless it were used to negotiate the terms and conditions of a prolonged peace.

112. Everything points to our having reached a stage in the evolution of industry when some readjustments are necessary to check retrogression and enable progress to be resumed.

113. Unless these things we have indicated can be done, and done quickly, we fear that the future prospects of the engineering industry in this country will give cause for the gravest concern.

By order of the Council,

D. A. BREMNER, *Director.*

## STATISTICAL APPENDIX B

### INTRODUCTORY DESCRIPTION OF THE APPENDED STATISTICAL TABLES AND GRAPHS

The object of this introduction is merely to describe briefly the outstanding features of the tables and graphs in the hope of thereby assisting the reader to grasp their import with a minimum of effort.

*Certain of the tables (marked\*) are in essence a continuation of the corresponding tables in the original report of the Association to the Government Committee on Industry and Trade (March 1925). In some of these instances the data for the earlier post-war years has had to be omitted to allow space for the inclusion of particulars up to June 1926, or the latest possible date.*

Tables	Graphs	Pages	Description
*1	—	39	<p><i>Summary of Index Numbers, based on pre-war, shewing the trend in post-war years of the principal trade and other statistics of importance to the Engineering Industry.</i></p> <p>This table condenses in the form of comparable index numbers the most vital statistics relating to engineering trade and finance, referred to pre-war basis, and may be regarded as the ultimate presentment of the composite facts given in detail in the following tables and graphs.</p>
2	—	40, 41	<p><i>Abstract of Current Financial and Trade Statistics of the United Kingdom of Importance to the Engineering Industry.</i></p> <p>This table is an epitome of the more recent statistics of economic movements which are of peculiar interest to engineering industry. The data recorded embrace production, foreign trade, employment, wholesale and retail prices, bank rate, the principal foreign sterling exchanges, and the shipbuilding and shipping quarterly returns. The particulars are shown as a monthly average for each month of 1925 and 1926 to the latest possible date and, for the purpose of comparison, the monthly averages for each of the years 1924 and 1925 are also given.</p>
*3	1	42, 43	<p><i>Relative proportions of exports of metal and textile products to total exports of manufactured articles, 1913 and 1922-1926, shewing declared values and the relative volumes of post-war trade on the basis of 1913 values.</i></p> <p>The chief object of this Table is to show the importance of the export trade in the products of our metal industries, as measured by comparison with that of the Textile Industry, which is our largest exporter.</p> <p>It will be seen that their declared values represented respectively in 1913, 33.3% and 43.5%, and in 1925, 30.4% and 46.7% of the total exports of manufactured articles.</p>

Tables	Graphs	Pages	Description
			<p>Owing, however, to the abnormal relationship of metal and textile prices in post-war years, the declared values are not a fair measure of the volume of export trade as indicating production and employment. To make this point clearer it may be stated that, in 1925, the declared value exceeds the corrected value by 87% for all manufactured articles, 118% for textiles, and only 58% for metal products.</p> <p>When the necessary corrections are applied to ascertain the comparable volume of the metal and textile export trades, they are found to represent respectively 35.9% and 40.1% of the total exports of manufactured articles. In other words, the metal trade exports in 1925 were equivalent to 89.5% of the textile exports.</p>
*4 & 5	2-5	44-47	<p><i>Exports and Imports of Metal, Engineering, and Allied Products, 1913 and 1923-1926, shewing quantities where available, declared values, average values per ton, and estimated volume of trade on basis of 1913 values.</i></p> <p>The declared values, when corrected on the basis of 1913 values, show that exports in 1925 were equivalent in volume to 85.5% of the 1913 total, while the corresponding figure for imports was 125.3%.</p>
*6 & 7	6 & 7	48-50	<p><i>Analysis of Exports and Imports of Machinery, 1913 and 1922-1926.</i></p> <p>These tables detail the exports and imports of machinery by classes, and show also the quantities exported to or imported from British Possessions and foreign countries. The graphs depict the principal features of the trade in machinery (tonnage, value, and average value per ton) on the basis of index numbers (1913 = 100).</p>
*8 & 9	—	51	<p><i>Exports and Retained Imports of Machinery, shewing relative percentages of total tonnage and value represented by each kind, 1913 and 1923-1926.</i></p> <p>These Tables show that textile machinery is the biggest item in the export trade in general machinery, both in tonnage and in value; while electrical machinery as regards value remains the chief item in the imports.</p>
*10	8	52-54	<p><i>Analysis by markets of Exports of Machinery, 1913 and 1919-1924, shewing quantities, total values, and average values per ton.</i></p> <p>As the Annual Trade Returns for 1925 have not yet been published, particulars for that year are not available. The present Table shows that exports to British Possessions have steadily risen in proportion to the whole, and in 1923 and 1924 were fully one-half of the total, and in absolute tonnage almost equal to pre-war. The serious post-war decline in exports to European and South American markets is to be noted, though in both cases some recovery was effected in 1924.</p>
*11	9 & 10	55-57	<p><i>Imports and Exports of Textile Machinery analysed by country and by kind, 1913 and 1923-1926.</i></p> <p>This Table shows that exports to European countries have notably recovered in the last two years, but a decided slump in the exports to India and other Eastern markets has caused the total exports since 1923 to fall further below pre-war tonnage.</p>
*12	11-13	58, 59	<p><i>Imports and Exports of Electrical Machinery, 1911-1913 and 1923-1926.</i></p> <p>This Table analyses the imports and exports according to country of origin or destination, and also by kind. Imports had fallen by 1925 to 43% of pre-war, the decline being largely due to the</p>

Tables	Graphs	Pages	Description
			falling-away of imports from Germany. Exports in 1924-5 have exceeded the pre-war total. Both India and Australia, which are the principal markets, are now taking larger quantities than before the war.
*13	14-16	60, 61	<p><i>Imports and Exports of Agricultural Machinery, 1911-1913 and 1923-1926.</i></p> <p>The tonnage of gross imports is now less than one-half of the average figure for 1911-13. The huge imports from America in pre-war days (the bulk of which were re-exported) are now reduced to 20% of their former extent. Exports have recovered since 1922, but even in 1925 were only 50% of pre-war. European markets are making a very slow recovery.</p>
*14	17-19	62, 63	<p><i>Imports and Exports of Machine Tools, 1911-1913 and 1923-1926.</i></p> <p>The total tonnages imported and retained are now higher than before the war. Imports from Germany have considerably increased, while those from the United States have fallen away. Exports are again close to the pre-war total, after having declined somewhat in 1924. A satisfactory feature of the exports is the increased proportion consigned to British Possessions, compared with pre-war.</p>
*15 & 16	—	64	<p><i>Imports and Exports of Internal Combustion Engines and of other Prime Movers (not electrical), 1923-1926.</i></p> <p>Until 1922 no distinction was made in the Board of Trade returns between steam and internal combustion engines, therefore separate figures for pre-war years cannot be given. The exports of internal combustion engines have much more than doubled since 1922, being principally oil engines (including Diesel).</p>
*17 & 18	—	65	<p><i>Analysis by Markets of Exports of Boilers and of Boiler House Plant, 1913 and 1922-1924.</i></p> <p>The export figures for 1913 relate to boilers only. The export tonnage of boilers in 1924 was just over 50% of that in 1913. Comparison of the exports of boiler house plant is only possible for the years 1922-24, and reveals a gradual decrease of exports.</p>
*19	—	66	<p><i>Imports and Exports of Complete Locomotives, 1911-1913, and 1923-1926.</i></p> <p>This Table analyses the foreign trade in rail and road locomotives. Export statistics of rail locomotives reveal a fluctuating demand in most markets. For example, exports to Europe increased enormously in 1922 (11,886 tons), but this export consisted almost entirely of a large order for 148 locomotives to Belgium alone. The total export of rail locomotives in 1925 was only 65.7% of pre-war. India, which is now the chief market, is another instance where the demand fluctuates between extremes from year to year.</p> <p>The exports of road locomotives (tractors and steam rollers) in 1925-26 approach pre-war total. The imports in post-war years, particularly in 1920, have been out of all proportion to pre-war, on account of the large importation of agricultural tractors from the United States, many of which were re-exported.</p>
*20	—	67	<p><i>Imports and Exports of Miscellaneous Machinery, 1922-1924, detailed by kinds.</i></p>
*21 22	20 & 21	68, 69	<p><i>Total Tonnage of Shipping Launched in the World and in the U. K., 1911-1913 and 1919-1926; Tonnage of Ships under construction and commenced in each quarter in the U. K., and the Total Tonnage of Shipping Idle in British Ports, 1924-1926.</i></p>



Tables	Graphs	Pages	Description
			These Tables show the grave decline of activity in the Shipbuilding Industry of this country in recent years. The tonnage now under construction is the lowest recorded since 1909.
*23	—	68	<i>Exports of New Ships and of Machinery in Ships, 1911-1913 and 1920-1926.</i> The inevitable effect of the shipbuilding slump is seen in the figures of recent exports of new ships for foreign owners, and also in the exports of engines and other machinery installed in vessels.
24 & 25	—	70	<i>Imports of Mineral Oils into the United Kingdom and their origin, 1913 and 1922-1926.</i> These statistics have been inserted because of the very important effects of the uses of liquid fuel on the development and prospects of engineering industry. They are also of serious importance from another point of view, namely, the dangers attending our growing dependence on foreign supplies of what has become an essential source of heat energy.
*26	—	71	<i>Market Prices of Iron and Steel Products in the United Kingdom, 1913 and 1925-1926.</i> This table traces the course of the quoted prices of these important raw materials of engineering industry. It shows the temporary general increase that occurred in the early part of 1923, owing to improved demand following on the occupation of the Ruhr. Prices subsequently receded, but in recent months have risen again slightly.
*27	—	71	<i>Price of Non-Ferrous Metals, 1924-1926.</i> This Table shows the fluctuations in the quoted prices for tin, lead, copper and spelter on the Swansea and Manchester Exchanges. The price of block tin has increased almost 80% since 1922.
*28	22	72-74	<i>Unemployment amongst Insured Workpeople in Engineering and other Industries in the United Kingdom, 1924-1926.</i> This table gives both the numbers and percentages of insured workpeople unemployed at various dates over the last three years. Apart from illustrating the abnormal conditions since May 1926, it shows that unemployment in the engineering and other metal industries has all along been much more severe than in the majority of the non-metal industries, and appreciably higher than the average level of unemployment. The relative immunity of the distributive trades, as contrasted with the principal wealth-producing industries, is very noticeable.
29	—	75	<i>Principal Industrial Disputes in the United Kingdom affecting the Engineering and Allied Industries, 1910-1926.</i> A condensed list is given of the principal disputes occurring in each year, the class of workpeople concerned, the approximate numbers involved, and the aggregate number of working days lost. Naturally the list concludes with the coal stoppage of the present year, which has already far exceeded any previous dispute since 1910 in duration reckoned in working days.
30	—	76	<i>Emigration of Engineering and other Skilled Workers to Non-European Countries, 1921-1925.</i> Over this period of five years skilled men constitute fully one-third of the total adult male emigration, the skilled metal and engineering workers representing no less than 14.8% of the total. The

Tables	Graphs	Pages	Description
			<p>peak of emigration in the period surveyed occurred in the year 1923; in subsequent years the number has been much less.</p> <p>Fully one-half of the skilled metal and engineering emigrants were of the ages 18 to 30, representing the maximum of potential labour efficiency to the home industry which they have left.</p>
31	—	77, 78	<p><i>Relative Wages Rates in Engineering, Metal and Other Trades and Industries, September 1925, compared with August 1914.</i></p> <p>This table presents a striking contrast between the levels of wages rates paid in the industries which are exposed to foreign competition, and in those which are not, commonly referred to as "unsheltered" and "sheltered" trades respectively. On the basis of the increases represented by the respective current rates over pre-war levels, there are obvious inequities in the relative real wages as between industry and industry, considering the grades of labour involved and the varying degrees of importance to the national economy.</p>
32	23	79, 80	<p><i>Comparative Weekly and Hourly Wages Rates in Coal Mining, Engineering and Other Industries, September 1925.</i></p> <p>This table together with the accompanying graph clearly indicates that the hourly wages rates paid in the engineering and shipbuilding industries are lower, both as regards skilled and unskilled labour, than those in most other principal trades and industries. The particulars are abstracted from the Coal Commission Report, and, in view of the present crisis, it is most significant that the hourly wages rate of a skilled engineering fitter in September 1925 was lower than that of the coal-mining labourer.</p>
33	24	81, 82	<p><i>Comparative Exports of Machinery and Locomotives from the United Kingdom, Germany, France, and the United States, 1913 and 1923-1925.</i></p> <p>The statistics shown in this table embrace for each country an almost identical range of engineering products comprising railway locomotives, agricultural tractors, and machinery in ships, as well as general machinery in the ordinary sense of our trade returns. International comparison of exports is only possible on the basis of value since for the United States no particulars of weight are available. The table shows that the United States, which even in pre-war days was a formidable competitor in the engineering export trade of the world, now takes the largest share, whilst Britain has barely succeeded in retaining her pre-war proportion. Owing to the territorial and economic changes following on the war, the exports of France have been more than doubled, whilst Germany's exports have declined by 40%, though on a much larger volume.</p> <p>The figures of the average value per ton exported from the respective countries are of considerable interest as affording some indication of the differences in the cost of production.</p>
34	25	83, 84	<p><i>Distribution of Exports in 1924 from United Kingdom, United States, France and Germany.</i></p> <p>The purpose of this table is to compare the extent and distribution of the general export trades of the United Kingdom, United States, France and Germany, in terms of total value in sterling, the national currencies in dollars, francs, and marks having been converted at the average rates of exchange current in 1924.</p>

Tables	Graphs	Pages	Description
35 & 36	—	85	<p><i>Exports and Imports of Engineering Products from and to the United States, 1924-1925.</i></p> <p>The exports and imports of 1925 compared with 1924 show in each case an increase in value of approximately 20%. On the conversion of dollar values into sterling, it is found that the ratio of corresponding British to American exports is a little over 80% in each year. The United States is now responsible for fully 40% of the world's engineering export trade (see Table 33 above), whereas Britain accounts for one-third. American exports, however, are less than 10% of total output, whereas Britain in pre-war days exported 50% of her production, and at the present time 25 to 30%.</p>
*37 & 38	—	86	<p><i>Financial results of Thirty-one Representative Engineering and Allied Firms for the Financial Years 1921-1924, compared with pre-war average.</i></p> <p><i>Financial results of Sixty-five Representative Engineering and Allied Firms for the Financial Years 1924-1925.</i></p> <p>The first of these two tables summarises the financial results of the thirty-one companies, when taken in the aggregate, for the years specified, and is a continuation of the corresponding table (No. 30) in the original report of this Association to the Government Committee on Industry and Trade.</p> <p>The second table showing the combined results of sixty-five firms (including twenty-seven of the above thirty-one) is designed to afford a wider survey of engineering and allied industry. In this case particulars are only available for the financial years 1924 and 1925, but these serve in some measure as a connecting link with the previous table.</p> <p>The general inference to be drawn from the two tables is that the financial results in 1924 showed but a slight, if any, improvement over 1923; but the figures for 1925 indicate a definite relapse, which inevitably will be found to be still more disastrous when the results for 1926 become available. Taking a long view back to the pre-war status, the tables reveal a declining ratio of earned profits to capital, and also of dividends to capital, and show that dividends are being paid at an increasing expense of profits and appropriation from reserves.</p>

TABLEAU 1.

RÉSUMÉ DES INDICES, CALCULÉS SUR LA BASE DES DONNÉES D'AVANT-GUERRE ET INDIQUANT POUR 1921-1925 LE MOUVEMENT DES PRINCIPALES STATISTIQUES DU COMMERCE ET AUTRES DU ROYAUME-UNI, QUI PRÉSENTENT UNE CERTAINE IMPORTANCE AU POINT DE VUE DE L'INDUSTRIE DES CONSTRUCTIONS MÉCANIQUES.

L'année de base est 1913 (= 100), sauf dans le cas d'indication contraire.

TABLE 1.

SUMMARY OF INDEX NUMBERS, BASED ON PRE-WAR, SHOWING THE TREND IN THE YEARS 1921-1925 OF THE PRINCIPAL TRADE AND OTHER STATISTICS OF THE UNITED KINGDOM OF IMPORTANCE TO THE ENGINEERING INDUSTRY.

Basis year is 1913 (= 100), except where otherwise stated.

	Pour renseignements détaillés cf. Tableau N° For detailed information refer to Table No.	1921	1922	1923	1924	1925	
<b>CHARBON (tonnage):</b>							<b>COAL (tonnage):</b>
Production	—	56,8	86,9	96,9	93,9	86,0	Production.
Exportations (y compris le charbon de soute des navires étrangers)	—	37,7	87,3	103,4	84,0	71,2	Exports (including foreign bunkers).
Consommation intérieure	—	66,2	86,7	93,7	98,6	93,4	Home Consumption.
<b>FER ET ACIER (tonnage):</b>							<b>IRON AND STEEL (tonnage):</b>
Production: Fonte	—	25,5	47,8	72,5	71,4	60,8	Production: Pig Iron.
Lingots et moulages d'acier	—	48,3	76,7	110,7	107,2	96,5	Steel Ingots and Castings.
<b>PRODUITS DE LA METALLURGIE, DE L'INDUSTRIE DES CONSTRUCTIONS MÉCANIQUES ET INDUSTRIES CONNEXES:</b>							<b>METAL, ENGINEERING AND ALLIED PRODUCTS:</b>
Importations (valeur rectifiée sur la base des valeurs de 1913)	5	65,1	65,3	83,4	102,0	125,3	Imports (corrected value on basis of 1913 values).
Exportations (valeur rectifiée sur la base des valeurs de 1913)	4	60,7	66,7	76,0	79,2	85,5	Exports (corrected value on basis of 1913 values).
<b>MACHINES:</b>							<b>MACHINERY:</b>
Importations (tonnage)	7	52,9	44,2	51,9	57,7	70,2	Imports (tonnage).
(valeur moy. par tonne)		279,7	253,9	246,9	250,9	233,0	(average value per ton).
Exportations (tonnage)	6	73,3	58,1	62,7	67,3	74,9	Exports (tonnage).
(valeur moy. par tonne)		303,0	263,5	211,0	198,2	195,2	(average value per ton).
<b>ANALYSE DU TONNAGE D'EXPORTATION DES MACHINES:</b>							<b>ANALYSIS OF EXPORT TONNAGE OF MACHINERY:</b>
Machines textiles	11	—	86,6	77,8	58,1	69,1	Textile Machinery.
Machines électriques	12	—	62,3	78,2	117,1	123,6	Electrical Machinery.
Machines agricoles	13	—	41,0	18,0	24,4	29,9	Agricultural Machinery.
Machines électriques	14	—	72,6	85,3	72,5	86,4	Machine Tools.
Générateurs de force motrice (non élec.)	15 & 16	—	30,7	44,2	53,6	60,1	Prime Movers (not electrical).
Exportations:							Exports:
à destination de possessions britann.		105,2	83,0	97,4	98,7	—	to British Possessions.
à destination de pays étrangers	10	57,2	45,5	44,8	50,9	—	to Foreign Countries.
à destination de l'Europe		44,0	34,0	36,6	40,3	—	to Europe.
<b>EXPORTATIONS D'AUTRES PRODUITS DE L'INDUSTRIE DES CONSTRUCTIONS MÉCANIQUES:</b>							<b>EXPORTS OF OTHER ENGINEERING PRODUCTS:</b>
Locomotives de chemins de fer (tonnage)	19	100,7	68,3	73,5	49,9	62,2	Rail Locomotives (tonnage).
Locomotives routières (tonnage)	19	65,7	48,2	64,8	86,7	85,6	Road Locomotives (tonnage).
Navires neufs (tonnage brut)	23	117,8	96,6	35,9	33,5	39,2	New Ships (gross tonnage).
<b>CONSTRUCTIONS MARITIMES (tonn. b.)</b>							<b>SHIPBUILDING (gross tonnage):</b>
Production mondiale (tonnage lancé)	21	130,3	74,0	49,3	67,4	65,8	World Output (tonnage launched).
Production du Royaume-Uni (tonnage lancé)	21	79,6	53,3	33,4	74,5	56,1	United Kingdom Output (tonnage launched).
Tonnage des navires en construction au Royaume-Uni à la fin de l'année (déduction faite des constr. suspendues)	22	101,5	59,4	65,1	65,4	41,7	United Kingdom Tonnage under construction at end of year (less suspended).
<b>PRIX DE GROS:</b> (Indices du Board of Trade)							<b>WHOLESALE PRICES:</b> (B. of T. Index Nos.)
Tous les articles	—	197,2	158,8	158,9	166,2	159,7	All Commodities.
Matières premières	—	190,7	155,2	161,3	165,9	154,9	Materials.
Fer et acier	—	209,9	136,8	147,2	142,9	125,9	Iron and Steel.
Charbon	—	236,1	170,5	180,8	172,7	146,1	Coal.
<b>PRIX DE DÉTAIL — COUT DE LA VIE:</b> (Indices du Ministère du Travail: Juillet 1914 = 100)	—	223,2	182,2	173,9	174,8	175,5	<b>RETAIL PRICES — COST OF LIVING:</b> (Ministry of Labour Index No.: July 1914 = 100).
<b>RÉSULTATS FINANCIERS de 31 maisons représentatives de l'industrie des Constructions mécaniques (moyenne 1911-13 = 100)</b>							<b>FINANCIAL RESULTS of 31 representative engineering firms (average 1911-13 = 100).</b>
<b>Rapport entre:</b>							<b>Ratio of:</b>
les bénéfices et le capital versé		68,6	61,0	47,5	41,5	—	Earned Profits to Paid-up Capital.
le montant payé en dividendes et le capital		72,4	75,0	63,1	61,8	—	Amount paid in Dividends to Capital.
le montant payé en dividendes et les bénéfices	37	104,0	121,4	133,2	148,0	—	Amount paid in Dividends to Earned Profits.
<b>NOMBRE DE PERSONNES EMPLOYÉES</b> (en pourcentage de la totalité de la main-d'œuvre assurée) dans:		1924	1925	1926			<b>EMPLOYMENT (as per cent. of total insured work-people) in:</b>
		Août Aug.	Févr. Feb.	Août Aug.	Févr. Feb.	Août Aug.	
		(Fin du mois) — (End of month)					
Tous les commerces et industries		89,4	88,4	87,9	89,5	76,9*	All Trades and Industries.
L'industrie des constructions mécaniques		85,7	87,0	87,3	87,4	82,4	Engineering.
L'industrie minière		92,3	89,6	77,4	90,4	?	Coal-mining.
les industries sidérurgiques		77,4	77,8	73,4	79,6	44,6	Iron and Steel.
les constructions maritimes	28	69,9	67,0	64,6	63,9	59,6	Shipbuilding.

\* En tenant compte des mineurs qui ne travaillent pas.

\* Allowing for coal-miners not at work.

**TABLEAU 2.**

RÉSUMÉ DES STATISTIQUES FINANCIÈRES ET COMMERCIALES PÉRIODIQUES DU ROYAUME-UNI,  
PRÉSENTANT UNE CERTAINE IMPORTANCE AU POINT DE VUE DE L'INDUSTRIE DES CONSTRUCTIONS  
MÉCANIQUES, DE 1924 A 1926.

	1924	1925	1925								
	Moyenne mens. Monthly aver.		Janv. Jan.	Févr. Feb.	Mars March	Avril April	Mai May	Juin June	Juillet July	Août Aug.	Sept. Sept.
<b>PRODUCTION:</b>											
Charbon . . . . . (en milliers de tonnes)	22.467	20.617	23.431	21.387	22.721	19.863	21.296	17.730	21.164	17.068	18.808
Fonte . . . . . ( " " )	610	520	574	532	608	570	568	510	493	444	449
Lingots et moult. d'acier ( " " )	685	616	605	652	685	598	652	585	590	477	639
<b>COMMERCE EXTÉRIEUR:</b>											
<b>Importations:</b>											
Fer et acier et pro- duits manufacturés (en milliers de tonnes)	202	227	235	235	245	274	205	202	213	233	199
Machines . . . . . ( " " )	5,0	6,1	5,0	6,2	6,5	5,8	8,2	6,4	7,9	6,0	5,2
Machines . . . . . (valeur moyenne par tonne)	175,6	163,3	187,2	150,4	165,6	175,7	130,5	152,6	140,4	166,8	164,9
<b>Exportations (Produits du Royaume-Uni):</b>											
Charbon (y compris le charbon de soufre autre que pour cabotage) (en milliers de tonnes)	6.612	5.605	5.807	5.738	5.811	5.695	6.032	5.027	5.870	4.487	5.256
Fer et acier et pro- duits manufact. . . . . ( " " )	321	311	325	299	312	297	322	276	307	288	273
Machines . . . . . ( " " )	39	43	44	41	44	39	46	41	40	44	43
Machines . . . . . (valeur moyenne par tonne)	99,6	95,1	96,0	94,8	95,8	99,1	95,9	95,2	97,6	94,6	91,3
<b>MAIN-D'ŒUVRE:</b>											
Total des chômeurs inscrits (Grande-Bretagne seulement) en milliers . . . . . (fin du mois)	1.145	1.245	1.238	1.236	1.194	1.187	1.186	1.304	1.198	1.354	1.336
<b>Pourcentage des chômeurs assurés:</b>											
Toutes industries . . . . . (fin du mois)	10,5	11,4	11,5	11,6	11,4	11,2	11,2	12,2	11,2	12,1	12,0
Industr. des construct. mécan. ( " " )	14,6	12,6	13,5	13,0	12,7	12,8	12,2	12,3	12,5	12,7	12,6
Industrie sidérurgique . . . . . ( " " )	20,2	24,2	22,9	22,2	23,2	26,0	22,9	24,0	24,6	26,6	26,4
Constructions navales . . . . . ( " " )	29,7	34,1	31,7	33,0	33,2	31,4	31,5	32,8	34,9	35,4	35,7
<b>PRIX DE GROS:</b>											
Indice du Board of Trade (moyenne mensuelle de 1913 = 100)											
Tous les articles . . . . .	166,2	159,7	171,0	168,8	166,3	162,6	159,0	157,7	157,5	157,0	156,0
Fer et acier . . . . .	142,9	125,9	135,2	134,1	132,9	131,1	128,3	126,0	124,5	123,2	121,1
Charbon . . . . .	172,7	146,1	158,5	156,2	152,9	150,6	148,9	143,9	145,6	141,9	139,1
<b>COUT DE LA VIE:</b>											
Indice du Ministère du Travail (fin du mois, Juillet 1914 = 100) . . . . .	175	176	179	179	175	173	172	173	173	174	176
<b>TAUX DE L'ESCOMPTE (fin du mois) . . . %</b>											
	4	4½	4	4	5	5	5	5	5	4½	4½
<b>PRINCIPAUX CHANGES ÉTRANGERS:</b>											
France (pair 1 £ = 25,22 francs) . . . . .	85,23	101,98	88,43	89,99	91,79	91,85	93,78	101,82	102,99	103,53	102,66
Pays-Bas (pair 1 £ = 12,11 florins) . . . . .	11,57	12,01	11,81	11,88	11,94	12,01	12,08	12,10	12,11	12,06	12,04
Italie (pair 1 £ = 25,22 lire) . . . . .	101,36	121,18	114,31	115,91	116,94	116,69	118,96	126,12	132,73	132,47	118,92
Allemagne (pair 1 £ = 20,43 mark) . . . . .	18,98	20,27	20,06	20,06	20,02	20,14	20,38	20,40	20,40	20,39	20,34
Etats-Unis (pair 1 £ = 4,868 dollars) . . . . .	4,419	4,827	4,78	4,780	4,770	4,790	4,850	4,860	4,860	4,860	4,844
	Moy. trimestr.										
<b>CONSTRUCTIONS MARITIMES (en milliers de tonnes brutes):</b>											
Tonnage lancé (au cours du trimestre terminé)	360	269	—	—	339	—	—	298	—	—	295
Tonnage net des navires construits (fin de trim.)	1.376	956	—	—	1.091	—	—	1.018	—	—	928
Tonnage inutilisé dans les ports du Royaume- Uni (fin de trimestre) . . . . .	425	538	—	—	393	—	—	777	—	—	574

\* Non compris les mineurs qui ne travaillaient pas.  
Y compris le nombre évalué des mineurs qui ne travaillaient pas.

**TABLE 2.**

**ABSTRACT OF CURRENT FINANCIAL AND TRADE STATISTICS OF THE UNITED KINGDOM OF IMPORTANCE TO THE ENGINEERING INDUSTRY, 1924-1926.**

1926											
Oct. Oct.	Nov. Nov.	Déc. Dec.	Janv. Jan.	Févr. Feb.	Mars March	Avril April	Mai May	Juin June	Juillet July	Août Aug.	
21,368	20,585	21,990	22,774	21,602	24,133	22,379	—	—	—	—	<b>PRODUCTION:</b>
474	494	503	533	502	568	539	89	42	18	14	Coal . . . . . (thousands of tons)
647	654	607	636	704	784	661	46	33	32	52	Pig Iron . . . . . ( " " " )
											Steel Ingots and Castings ( " " " )
											<b>FOREIGN TRADE:</b>
											<b>Imports:</b>
218	212	250	222	229	259	262	167	233	217	315	Iron and Steel and
4,8	5,0	6,1	5,4	5,9	8,0	7,5	7,1	7,2	5,9	4,9	Manufactures . . . . . (thousands of tons)
185,2	178,4	192,8	183,4	160,6	157,6	166,8	147,1	152,6	181,7	176,7	Machinery . . . . . ( " " " )
											Machinery . . . . . (average value per ton) £
											<b>Exports (United Kingdom Produce):</b>
5,792	5,661	6,078	5,428	5,646	6,081	5,584	2,033	217	162	150	Coal (including Foreign
											Bunkers) . . . . . (thousands of tons)
369	322	341	337	339	407	313	274	231	244	164	Iron and Steel and
45	42	48	41	46	43	38	35	37	44	39	Manufactures . . . . . ( " " " )
96,1	93,1	92,7	94,5	91,4	95,8	94,5	90,4	92,3	95,1	96,4	Machinery . . . . . ( " " " )
											Machinery . . . . . (average value per ton) £
											<b>EMPLOYMENT:</b>
1,232	1,165	1,252 (Jan. 4)	1,175	1,107	1,014	982	1,614*	1,639*	1,605*	1,550*	Total Registered Unemployed (Great Britain
11,4	11,0	10,5	11,1	10,5	9,8	9,2	23,6§	23,7§	23,6§	23,1§	only) in 000's . . . . . (end of month)
12,4	12,4	12,1	12,8	12,6	12,5	11,6	17,4	18,3	17,3	17,6	Per cent. Insured Workpeople Unemployed:
23,8	23,3	23,9	21,8	20,4	19,5	19,5	53,7	56,9	57,0	55,4	All Trades . . . . . (end of month)
37,0	37,6	36,9	37,1	36,1	36,7	34,7	38,3	39,2	38,5	40,4	Engineering . . . . . ( " " " )
											Iron and Steel . . . . . ( " " " )
											Shipbuilding . . . . . ( " " " )
											<b>WHOLESALE PRICES:</b>
154,8	153,7	153,2	151,3	148,8	144,4	143,6	144,9	146,4	148,7	149,1	Board of Trade Index No. (average for month:
119,6	118,5	118,3	118,8	118,0	117,6	117,2	117,0	119,8	124,5	125,0	1913 = 100)
138,2	138,0	140,7	142,0	141,6	139,3	142,1	—	—	—	—	All Commodities.
											Iron and Steel.
											Coal.
											<b>COST OF LIVING:</b>
176	177	175	173	172	168	167	168	170	170	172	Ministry of Labour Index No. (end of month:
4	4	5	5	5	5	5	5	5	5	5	July 1914 = 100).
											<b>BANK RATE (end of month) %.</b>
											<b>PRINCIPAL FOREIGN EXCHANGES:</b>
108,61	120,42	127,87	128,09	131,97	134,50	142,85	151,00	163,94	195,10	168,90	France (par. fr. 25,22 to £1).
12,04	12,04	12,06	12,08	12,13	12,12	12,11	12,09	12,11	12,10	12,11	Holland (par. fl. 12,11 to £1).
120,65	120,34	120,14	120,22	120,73	120,90	120,82	125,75	131,75	142,82	146,97	Italy (par. lire 35,32 to £1).
20,33	20,34	20,35	20,39	20,42	20,41	20,42	20,40	20,43	20,42	20,39	Germany (par. marks 20,43 to £1).
4,843	4,845	4,843	4,858	4,863	4,861	4,863	4,861	4,865	4,864	4,860	U.S.A. (par. \$4,866 to £1).
		216	—	—	191	—	—	172	—	—	<b>SHIPBUILDING (in thousand gross tons):</b>
		788	—	—	763	—	—	763	—	—	Tonnage Launched (in quarter ended).
		408	—	—	360	—	—	860	—	—	Net Tonnage Building (end of quarter).
											Tonnage Idle in United Kingdom Ports (end
											of quarter).

\* Exclusive of coal-miners out.  
 § Including estimate of coal-miners not at work.

**TABEAU 3.**

**PROPORTIONS RELATIVES DES EXPORTATIONS DE PRODUITS MÉTALLIQUES ET TEXTILES PAR RAPPORT AU TOTAL DES EXPORTATIONS D'ARTICLES ENTIÈREMENT OU PRESQUE ENTIÈREMENT MANUFACTURÉS (PRODUITS DU ROYAUME-UNI),**

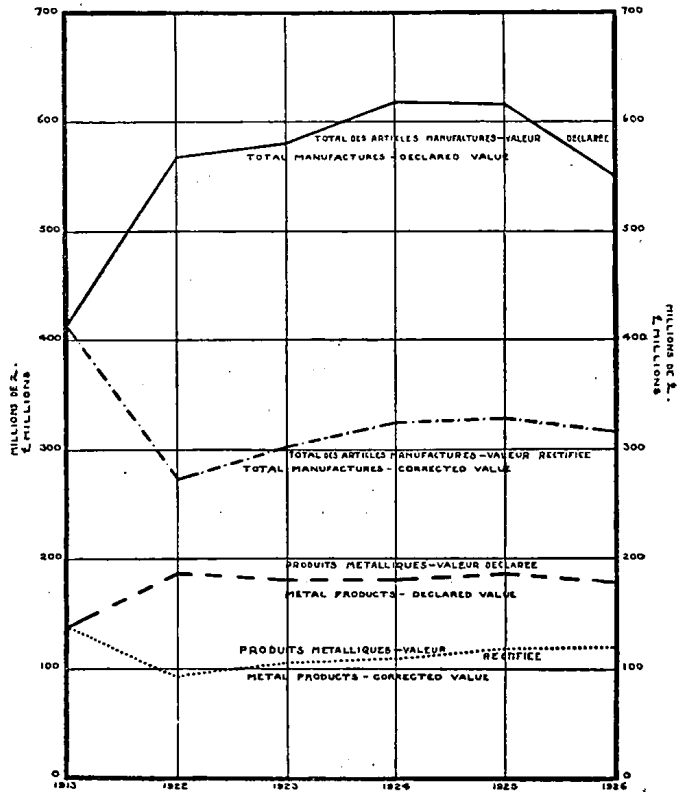
*Avec indication des valeurs déclarées et des volumes relatifs du commerce d'après-guerre, en prenant pour base les valeurs de 1913 d'après les évaluations du Board of Trade.*

**TABLE 3.**

**RELATIVE PROPORTIONS OF EXPORTS OF METAL AND TEXTILE PRODUCTS TO TOTAL EXPORTS OF ARTICLES WHOLLY OR MAINLY MANUFACTURED (UNITED KINGDOM PRODUCE),**

*Showing declared values and relative volumes of post-war trade on the basis of 1913 values according to Board of Trade Estimate.*

Exportations	1913	1922	1923	1924	1925	1926 6 mois 6 mths.	Exports of
	(en milliers de £) — (in 1000's)						
<b>TOTAL DES ARTICLES ENTIÈREMENT OU PRESQUE ENTIÈREMENT MANUFACTURÉS :</b>							<b>TOTAL MAINLY OR WHOLLY MANUFACTURED ARTICLES :</b>
Valeur déclarée . . . . .	413.820	568.524	579.950	618.855	616.279	275.452	Declared value.
Valeur rectifiée . . . . .	413.820	274.611	303.526	325.076	329.900	158.480	Corrected value.
(en prenant pour base les valeurs de 1913)							(on basis of 1913 average values)
<b>PRODUITS MÉTALLURGIQUES.</b>							<b>METAL PRODUCTS.</b>
<b>Fer et acier et produits manufacturés :</b>							<b>Iron and Steel and Manufactures thereof</b>
Valeur déclarée . . . . .	55.351	60.862	76.156	74.534	68.162	32.301	Declared value.
(% des exportations totales) . . . . .	(13,4)	(10,7)	(13,1)	(12,1)	(11,0)	(11,7)	(% of total exports).
Valeur rectifiée, comme ci-dessus . . . . .	55.351	38.374	49.693	47.917	47.250	24.640	Corrected value, as above.
(% des exportations totales) . . . . .	(13,4)	(14,0)	(16,4)	(14,7)	(14,3)	(13,3)	(% of total exports).
<b>Métaux non ferreux et produits manufacturés :</b>							<b>Non-Ferrous Metals and Manufactures thereof :</b>
Valeur déclarée . . . . .	12.036	11.523	14.494	15.658	16.841	9.379	Declared value.
(% des exportations totales) . . . . .	(2,9)	(2,0)	(2,5)	(2,5)	(2,6)	(3,4)	(% of total exports).
Valeur rectifiée, comme ci-dessus . . . . .	12.036	11.237	12.744	12.871	13.610	7.294	Corrected value, as above.
(% des exportations totales) . . . . .	(2,9)	(4,1)	(4,2)	(4,0)	(4,1)	(4,6)	(% of total exports).
<b>Coutellerie, quincaillerie, outillages et instruments :</b>							<b>Cutlery, Hardware, Implements and Instruments :</b>
Valeur déclarée . . . . .	7.128	6.426	7.410	8.491	9.085	4.229	Declared value.
(% des exportations totales) . . . . .	(1,7)	(1,1)	(1,3)	(1,4)	(1,4)	(1,5)	(% of total exports).
Valeur rectifiée, comme ci-dessus . . . . .	7.128	3.251	4.380	5.504	5.690	2.759	Corrected value, as above.
(% des exportations totales) . . . . .	(1,7)	(1,2)	(1,4)	(1,7)	(1,7)	(1,7)	(% of total exports).
<b>Articles et appareils électriques :</b>							<b>Electrical Goods and Apparatus :</b>
Valeur déclarée . . . . .	5.386	7.313	10.226	10.681	11.589	5.212	Declared value.
(% des exportations totales) . . . . .	(1,3)	(1,3)	(1,8)	(1,7)	(1,8)	(1,9)	(% of total exports).
Valeur rectifiée, comme ci-dessus . . . . .	5.386	2.868	4.262	4.294	4.863	2.243	Corrected value, as above.
(% des exportations totales) . . . . .	(1,3)	(1,1)	(1,4)	(1,3)	(1,5)	(1,5)	(% of total exports).
<b>Machines :</b>							<b>Machinery :</b>
Valeur déclarée . . . . .	33.602	51.535	44.516	44.783	49.069	22.379	Declared value.
(% des exportations totales) . . . . .	(8,1)	(9,1)	(7,7)	(7,2)	(7,8)	(8,1)	(% of total exports).
Valeur rectifiée, comme ci-dessus . . . . .	33.602	19.300	20.857	22.282	25.050	11.620	Corrected value, as above.
(% des exportations totales) . . . . .	(8,1)	(7,0)	(6,9)	(6,9)	(7,6)	(7,3)	(% of total exports).
<b>Véhicules (y compris les locomotives, navires et appareils d'aéronautique) :</b>							<b>Vehicles (including Locomotives, Ships and Aircraft) :</b>
Valeur déclarée . . . . .	24.508	49.504	27.749	26.925	32.754	16.133	Declared value.
(% des exportations totales) . . . . .	(5,9)	(8,7)	(4,7)	(4,3)	(5,2)	(5,8)	(% of total exports).
Valeur rectifiée, comme ci-dessus . . . . .	24.508	16.943	12.940	16.392	21.950	11.605	Corrected value, as above.
(% des exportations totales) . . . . .	(5,9)	(6,2)	(4,3)	(5,0)	(6,7)	(7,3)	(% of total exports).
<b>TOTAL DE TOUS LES PRODUITS MÉTALLIQUES :</b>							<b>TOTAL — ALL METAL PRODUCTS :</b>
Valeur déclarée . . . . .	138.011	187.172	180.551	181.072	187.500	89.633	Declared value.
(% des exportations totales) . . . . .	(33,3)	(32,9)	(31,1)	(29,2)	(30,4)	(32,4)	(% of total exports).
Valeur rectifiée, comme ci-dessus . . . . .	138.011	91.973	104.873	109.260	118.413	60.161	Corrected value, as above.
(% des exportations totales) . . . . .	(33,3)	(33,6)	(34,6)	(33,6)	(35,9)	(37,9)	(% of total exports).
<b>PRODUITS TEXTILES.</b>							<b>TEXTILE PRODUCTS.</b>
<b>Filés de coton et articles manufacturés :</b>							<b>Cotton Yarns and Manufactures :</b>
Valeur déclarée . . . . .	126.467	186.920	177.394	199.162	199.305	82.395	Declared value.
(% des exportations totales) . . . . .	(30,5)	(32,8)	(30,6)	(32,2)	(32,3)	(29,9)	(% of total exports).
Valeur rectifiée, comme ci-dessus . . . . .	126.467	82.815	81.942	86.743	88.820	41.990	Corrected value, as above.
(% des exportations totales) . . . . .	(30,5)	(30,2)	(27,0)	(26,7)	(26,9)	(26,5)	(% of total exports).
<b>Fils de laine, filés de laine peignée et articles manufacturés :</b>							<b>Woolen and Worsted Yarns and Manufactures :</b>
Valeur déclarée . . . . .	35.710	58.478	62.626	67.797	58.957	24.733	Declared value.
(% des exportations totales) . . . . .	(8,6)	(10,3)	(10,8)	(10,9)	(9,6)	(9,0)	(% of total exports).
Valeur rectifiée, comme ci-dessus . . . . .	35.710	30.983	33.245	35.158	28.830	12.780	Corrected value, as above.
(% des exportations totales) . . . . .	(8,6)	(11,0)	(10,9)	(10,8)	(8,7)	(8,1)	(% of total exports).
<b>TOTAL DE TOUS LES PRODUITS TEXTILES :</b>							<b>TOTAL — ALL TEXTILE PRODUCTS :</b>
Valeur déclarée . . . . .	180.405	270.077	265.780	296.678	287.992	121.400	Declared value.
(% des exportations totales) . . . . .	(43,5)	(47,4)	(45,8)	(48,0)	(46,7)	(44,0)	(% of total exports).
Valeur rectifiée, comme ci-dessus . . . . .	180.405	124.267	128.696	137.958	132.347	62.225	Corrected value, as above.
(% des exportations totales) . . . . .	(43,5)	(45,3)	(42,4)	(42,5)	(40,1)	(39,3)	(% of total exports).



• FIG. 1. Exportations de tous les articles manufacturés (Produits du Royaume-Uni) et de tous les produits métalliques, en 1913 et de 1922 à 1926<sup>1</sup> avec indication des valeurs déclarées et des valeurs rectifiées.

FIG. 1. Exports of all Manufactured Articles (U.K. Produce), and of all Metal Products, 1913 and 1922-1926<sup>2</sup>, showing declared and corrected values.

<sup>1</sup> Les totaux de 1926 sont évalués d'après les relevés effectifs de 6 mois.  
<sup>2</sup> 1926 totals are estimated from six months' actual returns.



**TABLEAU 4.**

EXPORTATIONS DE PRODUITS DE LA MÉTALLURGIE, DE L'INDUSTRIE DES CONSTRUCTIONS MÉCANIQUES  
ET INDUSTRIES CONNEXES, EN 1913 ET DE 1923 A 1926 (PRODUITS ET ARTICLES DU ROYAUME-UNI)

*Avec indication des quantités, lorsqu'il a été possible d'obtenir ces données ; Total des valeurs déclarées ; Valeurs moyennes par tonne ;  
Estimation du volume des exportations, en prenant pour base les valeurs de 1913.*

Exportations du Royaume-Uni Exports from the United Kingdom of		QUANTITÉS (en milliers de tonnes)			QUANTITIES (thousands of tons)		
		1913	1923	1924	1925	1926 (6 mois) (6 months)	1926 (taux ann.) (ann. rate*)
Fer et acier et produits manu- facturés . . . . . <i>(Proportion par rapport à 1913, 1913 = 100)</i> . . . . .	Iron and Steel and Manufac- tures thereof . . . . . <i>(Ratio to 1913 = 100)</i> . . . . .	4.969 (100)	4.318 (87,0)	3.851 (77,6)	3.731 (75,2)	1.901	3.802 (76,5)
Métaux non ferreux et produits manufacturés . . . . .	Non-Ferrous Metals and Manu- factures thereof . . . . .	163	132	126	113	55	110
Coutellerie, quincaillerie, outil- lages et instruments . . . . .	Cutlery, Hardware, Implements and Instruments . . . . .	689	432	463	516	240	480
Articles et appareils électriques Machines . . . . . <i>(Proportion par rapport à 1913, 1913 = 100)</i> . . . . .	Electrical Goods and Apparatus Machinery . . . . . <i>(Ratio to 1913 = 100)</i> . . . . .	(100)	(62,7)	(67,3)	(74,9)		(69,7)
Véhicules (y compris les navires, locomotives et appareils d'aéronautique) . . . . .	Vehicles (including ships, loco- motives and aircraft) . . . . .						
<b>Total des valeurs déclarées des exportations de produits métalliques . . . . .</b> Valeurs rectifiées, sur la base des valeurs moyennes de 1913 (d'après l'évaluation du Board of Trade) . . . . .		<b>Total Declared Values of Exports of Metal Products . . . . .</b> Corrected values, on basis of 1913 average values (according to Board of Trade Estimate) . . . . .					
Volume relatif du commerce, exprimé en pourcentage du total de 1913 . . . . .		Relative volume of trade, in percentage of 1913 total . . . . .					

\* Calculé en prenant pour base les relevés effectifs de 6 mois.

**TABLEAU 5.**

IMPORTATIONS DE PRODUITS DE LA MÉTALLURGIE, DE L'INDUSTRIE DES CONSTRUCTIONS MÉCANIQUES  
ET INDUSTRIES CONNEXES, EN 1913 ET DE 1923 A 1926.

*Avec indication des quantités lorsqu'il a été possible d'obtenir ces données ; Total des valeurs déclarées ; Valeurs moyennes par tonne ;  
Estimation du volume des importations, en prenant pour base les valeurs de 1913.*

Importations dans le Royaume-Uni Imports into the United Kingdom of		QUANTITÉS (en milliers de tonnes)			QUANTITIES (thousands of tons)		
		1913	1923	1924	1925	1926 (6 mois) (6 months)	1926 (taux ann.) (ann. rate*)
Fer et acier et produits manu- facturés . . . . . <i>(Proportion par rapport à 1913, 1913 = 100)</i> . . . . .	Iron and Steel and Manufac- tures thereof . . . . . <i>(Ratio to 1913 = 100)</i> . . . . .	2.231 (100)	1.322 (59,3)	2.429 (108,9)	2.721 (122,0)	1.371	2.742 (122,9)
Métaux non ferreux et produits manufacturés . . . . .	Non-Ferrous Metals and Manu- factures thereof . . . . .	104	54	60	73	41	82
Coutellerie, quincaillerie, outil- lages et instruments . . . . .	Cutlery, Hardware, Implements and Instruments . . . . .	104	54	60	73	41	82
Articles et appareils électriques Machines . . . . . <i>(Proportion par rapport à 1913, 1913 = 100)</i> . . . . .	Electrical Goods and Apparatus Machinery . . . . . <i>(Ratio of 1913 = 100)</i> . . . . .	(100)	(51,9)	(57,7)	(70,2)		(79,6)
Véhicules (y compris les navires, locomotives et appareils d'aéronautique) . . . . .	Vehicles (including ships, loco- motives and aircraft) . . . . .						
<b>Total des valeurs déclarées des importations de produits métalliques . . . . .</b> Valeurs rectifiées, sur la base des valeurs moyennes de 1913 (d'après l'évaluation du Board of Trade) . . . . .		<b>Total Declared Values of Imports of Metal Products . . . . .</b> Corrected values, on basis of 1913 average values (according to Board of Trade Estimate) . . . . .					
Volume relatif du commerce, exprimé en pourcentage du total de 1913 . . . . .		Relative volume of trade, in percentage of 1913 total . . . . .					

\* Calculé en prenant pour base les relevés effectifs de 6 mois.

**TABLE 4.**

**EXPORTS OF METAL, ENGINEERING AND ALLIED PRODUCTS, 1913 AND 1923-1926  
(PRODUCE AND MANUFACTURES OF THE UNITED KINGDOM).**

*Showing Quantities where Available ; Total Declared Values ; Average Values per Ton ;  
and Estimated Volume of Exports on Basis of 1913 Values.*

VALEUR en milliers de £		VALUE (£000's)				VALEURS PAR TONNE en £			VALUES PER TON (£)	
1913	1923	1924	1925	1926 (6 mois) (6 months)	1926 (Taux annuel) (Annual rate)*	1913	1923	1924	1925	1926 (6 mois) (6 months)
55.351 (100)	76.156 (137,6)	74.534 (134,7)	68.162 (123,2)	32.301	64.602 (116,7)	11,14 (100)	17,65 (158,4)	19,36 (173,8)	18,27 (164,0)	17,00 (152,6)
12.036	14.494	15.658	16.841	9.379	18.758	73,84	109,80	124,38	149,00	170,53
7.128	7.410	8.491	9.085	4.229	8.458					
5.386	10.226	10.681	11.589	5.212	10.424					
33.602 (100)	44.516 (132,5)	44.783 (133,2)	49.069 (146,0)	22.379	44.758 (133,2)	48,77 (100)	102,79 (211,0)	96,63 (198,2)	95,10 (195,2)	93,28 (191,4)
24.508	27.749	26.925	32.754	16.133	32.266					
<b>138.011</b>	<b>180.551</b>	<b>181.072</b>	<b>187.500</b>	<b>89.633</b>	<b>179.266</b>					
138.011 100%	104.873 76,0%	109.260 79,2%	118.413 85,5%	60.161	120.322 87,2%					

\* Based on six months' actual returns.

**TABLE 5.**

**IMPORTS OF METAL, ENGINEERING AND ALLIED PRODUCTS, 1913 AND 1923-1926.**

*Showing Quantities where Available ; Total Declared Values ; Average Values per Ton ;  
and Estimated Volume of Imports on Basis of 1913 Values.*

VALEUR en milliers de £		VALUE (£000's)				VALEURS PAR TONNE en £			VALUES PER TON (£)	
1913	1923	1924	1925	1926 (6 mois) (6 months)	1926 (Taux annuel) (Annual rate)*	1913	1923	1924	1925	1926 (6 mois) (6 months)
15.889 (100)	13.773 (86,7)	22.387 (140,8)	23.999 (151,0)	11.339	22.678 (146,7)	7,12 (100)	10,43 (144,2)	9,22 (129,4)	8,82 (124,0)	8,27 (116,2)
29.601	25.629	32.717	38.142	19.075	38.150					
6.699	7.081	7.634	9.666	3.221	6.442					
1.587	2.395	3.372	4.271	1.653	3.306					
7.267 (100)	9.331 (128,5)	10.546 (145,2)	11.891 (163,6)	6.602	13.204 (181,8)	70,00 (100)	172,80 (246,9)	175,60 (250,9)	163,30 (233,0)	160,30 (229,0)
5.629	7.506	9.140	12.308	4.181	8.362					
<b>66.672</b>	<b>65.715</b>	<b>85.796</b>	<b>100.277</b>	<b>46.071</b>	<b>92.142</b>					
66.672 100%	55.597 83,4%	68.010 102,0%	83.516 125,3%	37.944	75.888 113,8%					

\* Based on six months' actual returns.

FIG. 2. Valeurs des importations et exportations des produits de la métallurgie, de l'industrie des constructions mécaniques et industries connexes, en 1913 et de 1923 à 1926<sup>1</sup>, rectifiées en prenant pour base les valeurs moyennes de 1913, en vue de montrer les volumes relatifs du commerce d'après-guerre et de celui d'avant-guerre.

Les marchandises exportées sont des produits et articles du Royaume-Uni.

FIG. 2. Values of Imports and Exports of Metal, Engineering and Allied Products (Exports are Produce and Manufactures of the U.K.), 1913 and 1923-1926<sup>2</sup>, corrected on the basis of 1913 average values to show relative volumes of post-war and pre-war trade.

<sup>1</sup> Les totaux de 1926 sont évalués d'après les relevés effectifs de 6 mois.

<sup>2</sup> 1926 totals are estimated from six months' actual returns.

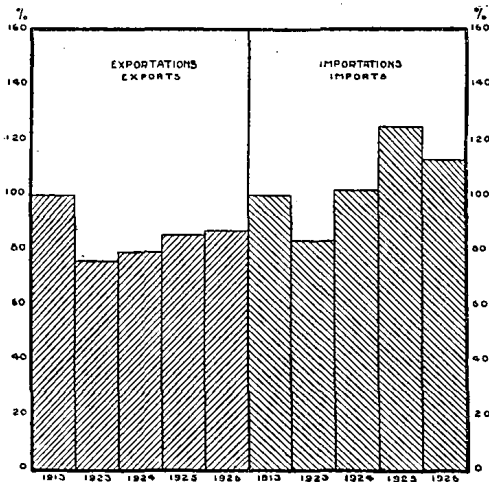
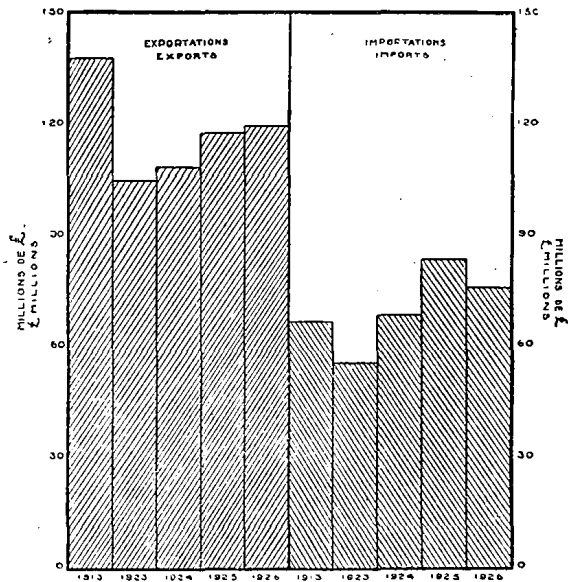


FIG. 3. Valeurs des importations et exportations de produits de la métallurgie, de l'industrie des constructions mécaniques et industries connexes<sup>1</sup> (rectifiées comme ci-dessus) exprimées en pourcentage des totaux de 1913.

FIG. 3. Values of Imports and Exports of Metal, Engineering and Allied Products<sup>2</sup> (corrected as above), expressed as percentages of 1913 totals.

<sup>1</sup> Les totaux de 1926 sont évalués d'après les relevés effectifs de 6 mois.

<sup>2</sup> 1926 totals are estimated from six months' actual returns.

Fig. 4. Importations et exportations de machines (les marchandises exportées sont celles produites ou fabriquées dans le Royaume-Uni) en 1913 et de 1920 à 1926 <sup>1</sup>.

Fig. 4. Imports and Exports of Machinery (Exports are Produce and Manufactures of the U.K.), 1913 and 1920-1926 <sup>2</sup>.

<sup>1</sup> Les totaux de 1926 sont évalués d'après les relevés effectifs de 6 mois.

<sup>2</sup> 1926 totals are estimated from six months' actual returns.

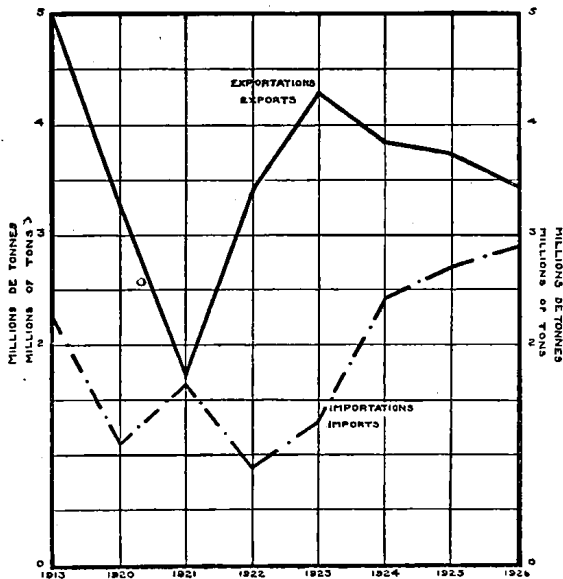
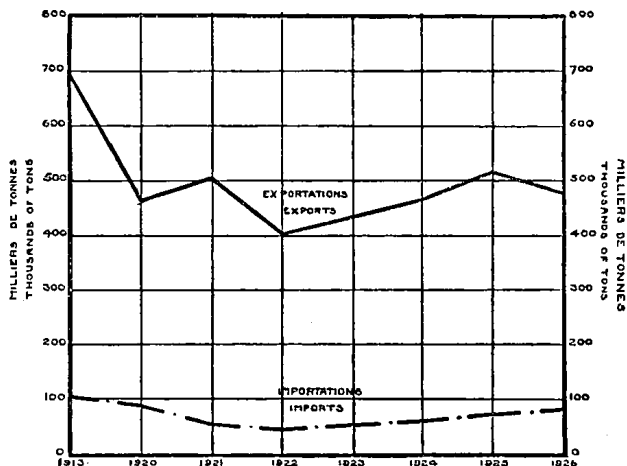


Fig. 5. Importations et exportations de fer et d'acier et produits manufacturés (les marchandises exportées sont celles produites ou fabriquées dans le Royaume-Uni) en 1913 et de 1920 à 1926 <sup>1</sup>.

Fig. 5. Imports and Exports of Iron and Steel and Manufactures thereof (Exports are Produce and Manufactures of the U.K.), 1913 and 1920-1926 <sup>2</sup>.

<sup>1</sup> Les totaux de 1926 sont évalués d'après les relevés effectifs de 6 mois.

<sup>2</sup> 1926 totals are estimated from six months' actual returns.

**TABEAU 6.**

**ÉTUDE ANALYTIQUE DES EXPORTATIONS DE MACHINES (PRODUITS ET ARTICLES DU ROYAUME-UNI), EN 1913 ET DE 1922 A 1926.**

Exportations — Exports of	QUANTITÉS (en milliers de tonnes)			QUANTITIES (thousands of tons)			
	1913	1922	1923	1924	1925	1926 (6 mois) (6 months)	
Machines agricoles . . . . .	Agricultural Machinery . . .	73	8	13	18	22	10
Chaudières et outillage de chaufferies . . . . .	Boilers and Boiler house Plant Electrical Machinery . . . . .	69*	55	52	55	56	31
Machines électriques . . . . .	Machine Tools (metal-working)	27	17	21	31	33	17
Machines-outils (travail du métal)	Prime Movers (not electrical) .	17	12	14	12	14	7
Générateurs de force motrice (non électrique) . . . . .	Textile Machinery . . . . .	94	29	42	51	57	24
Machines textiles . . . . .	All other sorts of Machines and Machinery . . . . .	178	154	139	104	123	51
Toutes autres catégories de machines et d'outillage mé- canique . . . . .		231	126	151	193	211	100
A destination de possessions britanniques . . . . .	To British Possessions . . . . .	234	194	228	231	?	?
A destination de l'étranger . . . . .	To Foreign Countries . . . . .	455	207	204	232	?	?
<b>Total des exportations de machines . . . . .</b>	<b>Total Exports of Machinery . .</b>	<b>689</b>	<b>401</b>	<b>432</b>	<b>463</b>	<b>516</b>	<b>240</b>
<i>Proportion par rapport à 1913, 1913 = 100 . . .</i>	<i>Ratio to 1913 = 100 . . .</i>	<i>100</i>	<i>58,1</i>	<i>62,7</i>	<i>67,3</i>	<i>74,9</i>	<i>69,7†</i>

\* Non compris l'outillage de chaufferies, compris sous la rubrique « Toutes autres catégories de machines ».

† Proportion pour l'année entière, calculée d'après les relevés effectifs de 6 mois.

**TABEAU 7.**

**ÉTUDE ANALYTIQUE DES IMPORTATIONS DE MACHINES  
AU ROYAUME-UNI EN 1913 ET DE 1922 A 1926.**

Importations — Imports of	QUANTITÉS (en milliers de tonnes)			QUANTITIES (thousands of tons)			
	1913	1922	1923	1924	1925	1926 (6 mois) (6 months)	
Machines agricoles . . . . .	Agricultural Machinery . . .	22,8	3,2	4,9	6,1	8,2	5,3
Chaudières et outillage de chaufferies . . . . .	Boilers and Boiler house Plant Electrical Machinery . . . . .	0,8*	0,7	0,6	0,7	1,2	0,6
Machines électriques . . . . .	Machine Tools (metal-working)	11,6	4,5	4,2	4,2	4,3	2,1
Machines-outils (travail du métal) . . . . .	Prime Movers (not electrical) .	3,9	3,4	3,8	3,4	5,0	3,6
Générateurs de force motrice (non électrique) . . . . .	Textile Machinery . . . . .	4,0	4,7	4,1	6,7	5,5	4,4
Machines textiles . . . . .	All other sorts of Machines and Machinery . . . . .	5,0	2,4	2,6	3,8	4,1	2,8
Toutes autres catégories de machines et d'outillage mé- canique . . . . .		55,5	26,8	33,6	35,2	44,5	22,4
En provenance de possessions britanniques . . . . .	From British possessions . . .	3,6	1,8	3,3	2,9	?	?
En provenance de pays étrangers	From Foreign Countries . . .	100,0	43,9	50,5	57,2	?	?
<b>Total des importations de machines . . . . .</b>	<b>Total Imports of Machinery .</b>	<b>103,6</b>	<b>45,7</b>	<b>53,8</b>	<b>60,1</b>	<b>72,8</b>	<b>41,2</b>
<i>Proportion par rapport à 1913, 1913 = 100 . . .</i>	<i>Ratio to 1913 = 100 . . .</i>	<i>100</i>	<i>44,2</i>	<i>51,9</i>	<i>57,7</i>	<i>70,2</i>	<i>79,6†</i>

\* Non compris l'outillage de chaufferies, compris sous la rubrique « Toutes autres catégories de machines ».

† Proportion pour l'année entière, calculée d'après les relevés effectifs de 6 mois.

**TABLE 6.**  
ANALYSIS OF EXPORTS OF MACHINERY (PRODUCE AND MANUFACTURES  
OF THE UNITED KINGDOM), 1913 AND 1922-1926.

VALEURS (en millier de £)		VALUES (£000's)				VALEURS PAR TONNE (en £)			VALUES PER TON (£)		
1913	1922	1923	1924	1925	1926 (6 mois) (6 months)	1913	1922	1923	1924	1925	1926 (6 mois) (6 months)
2.989	712	1.021	1.369	1.707	753	40,94	89,00	78,52	76,00	77,60	75,30
1.773*	3.791	2.467	2.632	2.803	1.539	25,70*	67,70	47,44	47,85	50,03	49,63
2.269	4.145	3.951	5.353	5.762	2.740	84,00	243,82	188,10	172,80	174,60	161,40
1.013	1.516	1.506	1.362	1.561	776	59,59	126,33	107,78	113,50	111,50	110,86
5.210	4.089	4.180	4.725	5.428	2.323	55,42	141,00	99,54	92,67	95,18	96,78
8.282	21.449	15.734	10.831	12.158	4.926	46,53	139,21	113,18	104,20	98,90	96,50
12.066	15.837	15.657	18.511	19.650	9.322	52,23	126,70	103,80	95,94	93,10	93,22
10.929	24.655	21.823	22.183	?	?	46,70	127,12	95,61	95,62	?	?
22.673	26.884	22.693	22.600	?	?	49,83	129,90	111,21	97,42	?	?
<b>33.602</b>	<b>51.539</b>	<b>44.516</b>	<b>44.783</b>	<b>49.069</b>	<b>22.379</b>	<b>48,77</b>	<b>128,52</b>	<b>102,79</b>	<b>96,63</b>	<b>95,10</b>	<b>93,28</b>
<i>100</i>	<i>153,4</i>	<i>132,5</i>	<i>133,2</i>	<i>146,0</i>	<i>133,2†</i>	<i>100</i>	<i>263,5</i>	<i>211,0</i>	<i>198,2</i>	<i>195,2</i>	<i>191,4</i>

\* Exclusive of boiler-house plant, which is included in "All Other Sorts of Machinery".  
† Ratio for the complete year based on six months' actual returns.

**TABLE 7.**  
ANALYSIS OF IMPORTS OF MACHINERY INTO THE  
UNITED KINGDOM, 1913 AND 1922-1926.

VALEURS (en milliers de £)		VALUES (£000's)				VALEURS PAR TONNE (en £)			VALUES PER TON (£)		
1913	1922	1923	1924	1925	1926 (6 mois) (6 months)	1913	1922	1923	1924	1925	1926 (6 mois) (6 months)
776	249	366	430	516	310	34,03	77,81	74,69	70,50	62,94	58,51
24*	84	63	89	106	36	30,00*	120,00	105,00	127,14	88,33	60,00
1.346	1.159	1.016	1.072	1.085	573	116,03	257,55	241,66	255,22	252,43	273,00
361	423	500	554	770	435	92,56	124,41	131,58	163,11	154,00	120,80
235	564	430	673	555	464	58,75	120,00	104,88	100,50	101,00	105,50
367	587	596	932	990	582	73,40	244,58	229,23	245,50	241,51	207,78
4.158	5.104	6.360	6.796	7.869	4.202	74,90	190,10	189,40	193,14	176,81	187,60
163	287	418	533	?	?	45,27	159,44	130,61	183,82	?	?
7.104	7.883	8.913	10.013	?	?	71,04	179,11	176,84	175,00	?	?
<b>7.267</b>	<b>8.170</b>	<b>9.331</b>	<b>10.546</b>	<b>11.891</b>	<b>6.602</b>	<b>70,00</b>	<b>177,70</b>	<b>172,80</b>	<b>175,60</b>	<b>163,30</b>	<b>160,30</b>
<i>100</i>	<i>112,5</i>	<i>128,5</i>	<i>145,2</i>	<i>163,6</i>	<i>131,8†</i>	<i>100</i>	<i>253,9</i>	<i>246,9</i>	<i>250,9</i>	<i>233,0</i>	<i>229,0†</i>

\* Exclusive of boiler-house plant, which is included in "All Other Sorts of Machinery".  
† Ratio for the complete year based on six months' actual returns.

FIG. 6. Exportations de machines (fabriqués dans le Royaume-Uni) en 1913 et de 1920 à 1926<sup>1</sup> exprimées en pourcentage de 1913.

FIG. 6. Exports of Machinery (Produce and Manufactures of the U.K.), 1913 and 1920-1926<sup>2</sup>, expressed as percentages of 1913.

<sup>1</sup> Les totaux de 1926 sont évalués d'après les relevés effectifs de 6 mois.

<sup>2</sup> 1926 totals are estimated from six months' actual returns.

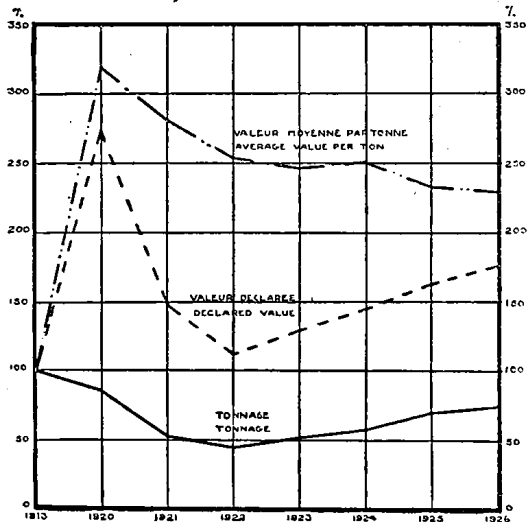
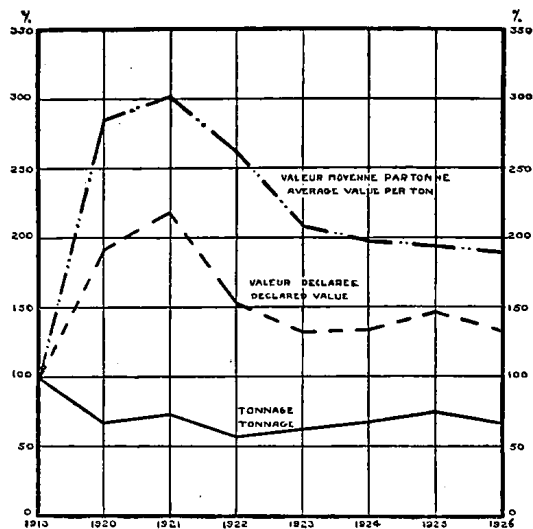


FIG. 7. Importations de machines au Royaume-Uni, en 1913 et de 1920 à 1926<sup>1</sup>, exprimées en pourcentages de 1913.

FIG. 7. Imports of Machinery into the U.K., 1913 and 1920-1926<sup>2</sup>, expressed as percentages of 1913.

<sup>1</sup> Les totaux de 1926 sont évalués d'après les relevés effectifs de 6 mois.

<sup>2</sup> 1926 totals are estimated from six months' actual returns.

**TABLEAU 8.**

COMMERCE EXTÉRIEUR DU ROYAUME-UNI EN MACHINES, CLASSÉES PAR CATÉGORIES, AVEC INDICATION DES POURCENTAGES RELATIFS AU TONNAGE TOTAL, EN 1913 ET DE 1923 A 1926.

**TABLE 8.**

UNITED KINGDOM FOREIGN TRADE IN MACHINERY BY KINDS, SHOWING RELATIVE PERCENTAGES OF TOTAL TONNAGE, 1913 AND 1923-1926.

Catégories de machines	1913		1923		1924		1925		1926 (6 mois) (6 months)		Machinery
	Importations non réexportées Retained Imports	Exportations Exports	Importations non réexportées Retained Imports	Exportations Exports	Importations non réexportées Retained Imports	Exportations Exports	Importations non réexportées Retained Imports	Exportations Exports	Importations non réexportées Retained Imports	Exportations Exports	
<b>Tonnage total (en milliers de tonnes)</b>	<b>82.8</b>	<b>689.0</b>	<b>50.1</b>	<b>432.5</b>	<b>55.6</b>	<b>463.4</b>	<b>65.7</b>	<b>515.9</b>	<b>38.1</b>	<b>240.1</b>	<b>Total Tonnage (in 000's).</b>
<b>Pourcentage du total:</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>Percentage of Total.</b>
Machines agricoles . . .	11,6	10,6	8,8	3,0	9,0	3,9	8,9	4,3	11,5	4,1	Agricultural.
Chaudières, etc. . . .	1,0*	10,2*	1,2	12,3	1,4	12,1	1,8	10,8	1,6	13,1	Boilers, etc.
Machines électriques . . .	13,2	3,9	7,8	4,9	7,4	6,7	6,2	5,2	6,4	5,2	Electrical.
Machines-outils . . .	4,6	2,5	7,2	3,3	5,2	2,6	7,0	2,8	8,9	2,9	Machine Tools.
Générateurs de force motrice . . . . .	4,2	13,6	8,0	9,7	11,7	10,6	8,1	11,0	11,1	10,1	Prime Movers.
Machines à coudre . . .	2,5	4,9	1,4	4,6	1,4	4,5	1,2	5,6	1,0	5,9	Sewing Machines.
Machines textiles . . .	5,9	25,8	4,6	32,1	6,3	32,4	5,6	23,9	7,1	21,2	Textile.
Toutes autres catégories	57,0	28,5	61,0	30,1	56,7	37,2	61,2	35,2	53,6	35,7	All other sorts.
	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	

\* Non compris l'outillage de chambres des chaudières en 1913.

\* Does not include boiler-house plant in 1913.

**TABLEAU 9.**

COMMERCE EXTÉRIEUR DU ROYAUME-UNI EN MACHINES, CLASSÉES PAR CATÉGORIES, AVEC INDICATION DES POURCENTAGES RELATIFS DE LA VALEUR TOTALE, EN 1913 ET DE 1923 A 1926.

**TABLE 9.**

UNITED KINGDOM FOREIGN TRADE IN MACHINERY BY KINDS, SHOWING RELATIVE PERCENTAGES OF TOTAL VALUE, 1913 AND 1923-1926.

Catégories de machines	1913		1923		1924		1925		1926 (6 mois) (6 months)		Machinery
	Importations non réexportées Retained Imports	Exportations Exports	Importations non réexportées Retained Imports	Exportations Exports	Importations non réexportées Retained Imports	Exportations Exports	Importations non réexportées Retained Imports	Exportations Exports	Importations non réexportées Retained Imports	Exportations Exports	
<b>Valeur globale en espèces (en milliers de £)</b>	<b>5.961</b>	<b>33.602</b>	<b>8.202</b>	<b>44.516</b>	<b>9.291</b>	<b>44.783</b>	<b>10.317</b>	<b>49.069</b>	<b>5.929</b>	<b>22.379</b>	<b>Aggregate Money Value (in £000's).</b>
<b>Pourcentage du total:</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>Percentage of Total:</b>
Machines agricoles . . .	3,4	8,9	4,0	5,3	4,0	5,0	3,6	5,5	3,3	4,3	Agricultural.
Chaudières, etc. . . .	0,4*	5,3*	0,8	5,5	0,9	5,9	1,0	5,7	0,6	6,9	Boilers, etc.
Machines électriques . . .	20,2	6,7	11,0	8,9	10,6	12,0	9,9	11,8	9,1	12,2	Electrical.
Machines-outils . . .	5,7	3,0	5,5	3,4	5,3	3,0	7,0	3,2	6,9	3,5	Machine Tools.
Générateurs de force motrice . . . . .	3,5	15,5	5,0	9,4	6,9	10,6	5,1	11,0	6,8	10,4	Prime Movers.
Machines à coudre . . .	4,6	7,0	3,3	5,7	3,9	5,4	3,0	6,0	3,1	6,3	Sewing Machines.
Machines textiles . . .	5,9	24,7	5,3	35,4	8,8	24,2	8,0	24,8	8,3	22,0	Textile.
Toutes autres catégories	53,9	28,9	65,1	29,4	59,6	35,9	62,4	34,0	60,9	35,4	All other sorts.
	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	

\* Non compris l'outillage de chambres des chaudières en 1913.

\* Does not include boiler-house plant in 1913.



**TABLEAU 10.**

**ÉTUDE ANALYTIQUE, PAR MARCHÉS, DES EXPORTATIONS DE MACHINES, EN 1913 ET DE 1919 A 1924,  
AVEC INDICATION DES QUANTITÉS DES VALEURS TOTALES ET DES VALEURS PAR TONNE.**

Exportations (Produits et articles du Royaume-Uni) à destination de: Exports (Produce and Manufacture of the United Kingdom) to		QUANTITÉS (en milliers de tonnes)			QUANTITIES (thousands of tons)			
		1913	1919	1920	1921	1922	1923	1924
<b>Possessions britanniques :</b>	<b>British Possessions :</b>							
Canada . . . . .	Canada . . . . .	19	6	8	6	4	10	10
Australie . . . . .	Australia . . . . .	40	11	18	24	22	32	33
Nouvelle-Zélande . . . . .	New Zealand . . . . .	9	3	5	6	6	9	11
Union Sud-Africaine . . . . .	Union of South Africa . . . . .	31	11	21	22	13	20	24
Inde britannique . . . . .	British India . . . . .	104	48	102	145	125	124	104
<b>Total des exportations à destination de toutes les possessions britan. (% des exportations totales) . . . . .</b>	<b>Total to all British Possessions (% of total exports) . . . . .</b>	<b>234</b> <i>34,0</i>	<b>97</b> <i>34,3</i>	<b>186</b> <i>40,3</i>	<b>246</b> <i>48,6</i>	<b>194</b> <i>48,4</i>	<b>228</b> <i>52,8</i>	<b>231</b> <i>49,9</i>
<b>Pays étrangers :</b>	<b>Foreign Countries :</b>							
<b>Europe :</b>	<b>Europe :</b>							
France . . . . .	France . . . . .	46	61	68	49	33	27	23
Allemagne . . . . .	Germany . . . . .	34	0,1	0,8	1	2	2	5
Belgique . . . . .	Belgium . . . . .	22	10	19	22	17	16	16
Pays-Bas . . . . .	Holland . . . . .	23	8	15	14	9	9	13
Suède . . . . .	Sweden . . . . .	6	4	5	2	2	2	3
Norvège . . . . .	Norway . . . . .	5	3	4	1	1	1	2
Danemark . . . . .	Denmark . . . . .	4	2	3	2	1	2	3
Russie . . . . .	Russia . . . . .	71	2	2	0,4	0,7	4	7
Espagne . . . . .	Spain . . . . .	15	12	22	14	8	14	13
Portugal . . . . .	Portugal . . . . .	6	2	5	4	3	4	3
Italie . . . . .	Italy . . . . .	16	3	9	7	6	9	13
<b>Total des exportations à destina- tion de toute l'Europe.</b>	<b>Total to all Europe . . . . .</b>	<b>268</b>	<b>120</b>	<b>161</b>	<b>118</b>	<b>91</b>	<b>98</b>	<b>108</b>
<b>Asie :</b>	<b>Asia :</b>							
Chine . . . . .	China . . . . .	8	6	14	31	26	14	9
Japon . . . . .	Japan . . . . .	37	19	35	42	34	29	27
<b>Total (approximatif) des exporta- tions à destin. de toute l'Asie</b>	<b>Total to all Asia (approx.) . . . . .</b>	<b>47</b>	<b>32</b>	<b>53</b>	<b>75</b>	<b>65</b>	<b>46</b>	<b>40</b>
<b>Amérique du Sud :</b>	<b>South America :</b>							
Argentine . . . . .	Argentina . . . . .	25	4	7	8	4	7	10
Bésil . . . . .	Brazil . . . . .	28	6	11	11	13	9	17
Chili . . . . .	Chile . . . . .	12	2	4	3	3	4	8
<b>Total (approx.) des exportations à destin. de toute l'Am. du Sud</b>	<b>Total to all South America (approx.) . . . . .</b>	<b>73</b>	<b>14</b>	<b>25</b>	<b>27</b>	<b>23</b>	<b>24</b>	<b>40</b>
<b>Egypte . . . . .</b>	<b>Egypt . . . . .</b>	<b>12</b>	<b>3</b>	<b>8</b>	<b>5</b>	<b>4</b>	<b>6</b>	<b>7</b>
<b>Etats-Unis d'Amérique . . . . .</b>	<b>United States of America . . . . .</b>	<b>7</b>	<b>4</b>	<b>6</b>	<b>9</b>	<b>8</b>	<b>9</b>	<b>8</b>
<b>Total des exportations à destination de tous les pays étrangers . . . . .</b>	<b>Total to all Foreign Countries . . . . .</b>	<b>455</b> <i>66,0</i>	<b>186</b> <i>65,7</i>	<b>276</b> <i>59,7</i>	<b>260</b> <i>51,4</i>	<b>207</b> <i>51,6</i>	<b>204</b> <i>47,2</i>	<b>232</b> <i>50,1</i>
<b>Total des exportations . . . . .</b>	<b>Total Exports . . . . .</b>	<b>689</b>	<b>283</b>	<b>462</b>	<b>506</b>	<b>401</b>	<b>432</b>	<b>463</b>

TABLE 10.

ANALYSIS BY MARKETS OF EXPORTS OF MACHINERY, 1913 AND 1919-1924. SHOWING QUANTITIES,  
TOTAL VALUES, AND VALUES PER TON.

VALEURS — VALUES (en milliers de £) — (£000's)							VALEURS PAR TONNE — VALUES PER TON (en £) — (£)						
1913	1919	1920	1921	1922	1923	1924	1913	1919	1920	1921	1922	1923	1924
867	570	1.050	951	505	955	947							
2.127	1.315	2.685	3.899	3.267	3.867	3.735							
547	352	796	1.008	829	1.090	1.285							
1.368	1.138	2.647	3.354	1.690	2.065	2.741							
4.502	5.360	13.562	20.404	15.152	11.487	8.999							
<b>10.929</b> 32,5	<b>10.520</b> 31,3	<b>24.724</b> 39,0	<b>35.200</b> 47,2	<b>24.211</b> 47,0	<b>22.693</b> 51,0	<b>22.183</b> 49,5	<b>46,70</b>	<b>108,45</b>	<b>132,92</b>	<b>143,09</b>	<b>124,80</b>	<b>99,53</b>	<b>96,00</b>
2.369	6.579	10.152	7.640	4.550	3.075	3.506							
1.741	34	164	318	355	280	664							
1.092	1.137	2.823	2.407	1.829	1.494	1.400							
933	930	2.034	2.338	1.601	955	1.163							
300	417	724	442	248	303	339							
205	302	479	190	131	118	181							
182	247	505	282	175	212	221							
3.927	251	336	36	107	331	761							
941	1.287	2.851	2.162	1.213	1.491	1.247							
270	298	635	521	383	409	287							
887	1.467	1.343	1.094	752	929	1.184							
<b>13.938</b>	<b>13.419</b>	<b>23.386</b>	<b>18.535</b>	<b>12.494</b>	<b>10.476</b>	<b>11.000</b>	<b>52,00</b>	<b>111,82</b>	<b>145,25</b>	<b>157,08</b>	<b>137,30</b>	<b>106,90</b>	<b>101,80</b>
358	585	1.687	3.979	3.440	1.443	931							
1.873	1.793	4.180	5.486	4.330	3.297	2.823							
2.342	2.867	6.225	9.879	8.249	5.051	4.130	49,83	89,60	117,45	131,72	126,90	109,80	103,30
1.239	447	995	1.456	619	714	939							
1.304	691	1.661	1.677	1.415	1.012	1.581							
564	194	510	469	322	357	476							
3.427	1.584	3.772	4.291	2.721	2.451	3.471	46,94	113,14	150,88	158,93	118,30	102,12	86,54
538	342	1.096	753	444	523	589							
457	721	1.396	1.983	1.512	1.309	394							
<b>22.673</b> 67,5	<b>20.222</b> 65,7	<b>38.708</b> 61,0	<b>39.407</b> 52,8	<b>27.328</b> 53,0	<b>21.823</b> 49,0	<b>22.600</b> 60,5	<b>49,83</b>	<b>108,72</b>	<b>140,24</b>	<b>151,56</b>	<b>132,02</b>	<b>106,45</b>	<b>97,40</b>
<b>33.602</b>	<b>30.742</b>	<b>63.432</b>	<b>74.607</b>	<b>51.539</b>	<b>44.516</b>	<b>44.783</b>	<b>48,77</b>	<b>108,62</b>	<b>137,30</b>	<b>147,44</b>	<b>128,52</b>	<b>102,79</b>	<b>96,63</b>

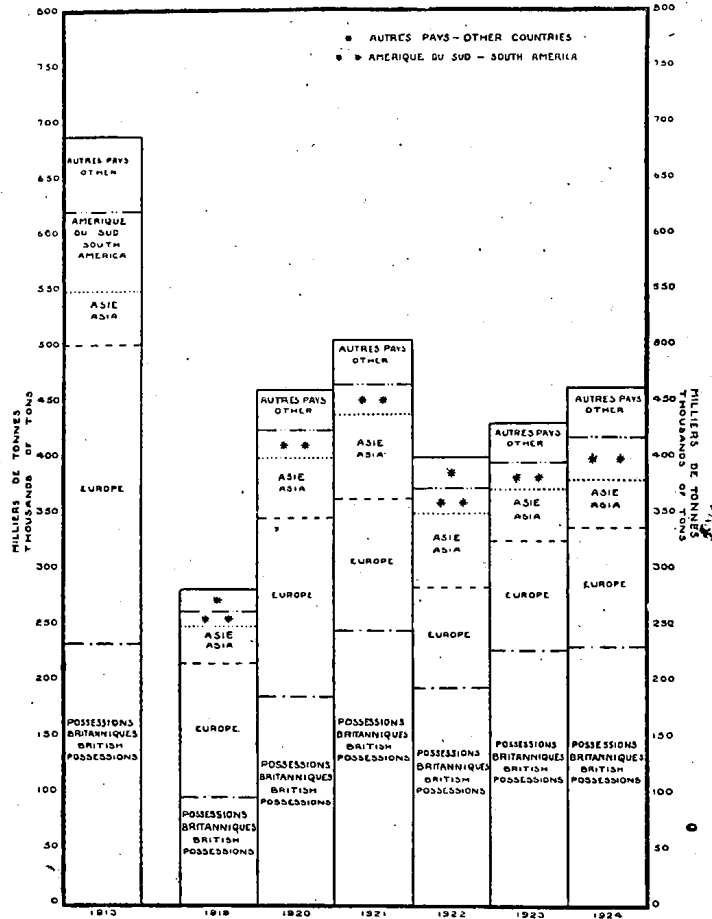


Fig. 8. Tonnage des exportations de machines (fabriquées dans le Royaume-Uni) en 1913 et de 1919 à 1924, avec indication de la répartition entre les possessions britanniques, l'Europe, l'Asie, l'Amérique du Sud et les autres pays.

Fig. 8. Export Tonnage of Machinery (Produce and Manufactures of the U.K.), 1913 and 1919-1924, showing distribution between British Possessions, Europe, Asia, South America and other countries.

Fig. 9. Exportations de machines textiles (fabriquées dans le Royaume-Uni) en 1913 et de 1922 à 1926<sup>1</sup> exprimées en pourcentages de 1913.

Fig. 9. Exports of Textile Machinery (Produce and Manufactures of the U.K.), 1913 and 1922-1926<sup>2</sup>, expressed as percentages of 1913.

<sup>1</sup> Les totaux de 1926 sont évalués d'après les relevés effectifs de 6 mois.  
<sup>2</sup> 1926 totals are estimated from six months' returns.

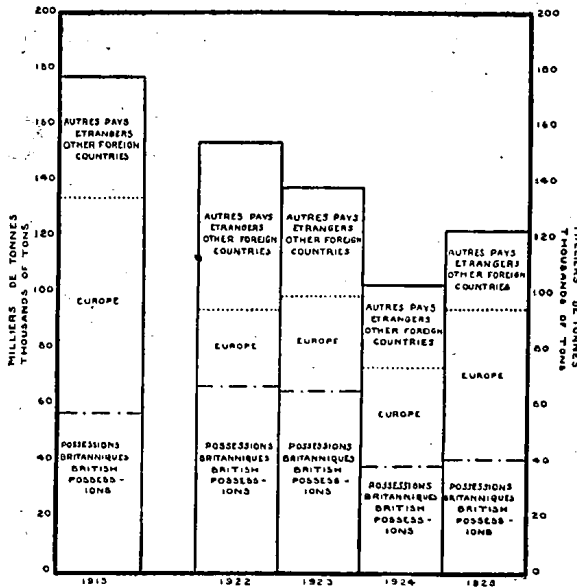
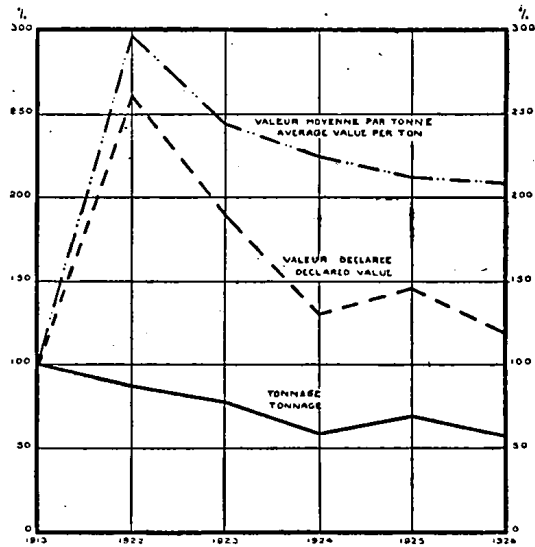


Fig. 10. Tonnage des exportations de machines textiles (fabriquées dans le Royaume-Uni) en 1913 et de 1922 à 1925 avec indication de la répartition entre les possessions britanniques, l'Europe et les autres pays étrangers.

Fig. 10. Export Tonnage of Textile Machinery (Produce and Manufactures of the U.K.), 1913 and 1922-1925, showing distribution between British Possessions, Europe and other foreign countries.

**TABEAU 11.**

ÉTUDE ANALYTIQUE, PAR MARCHÉS ET PAR CATÉGORIES, DES IMPORTATIONS ET EXPORTATIONS DE MACHINES TEXTILES, AVEC INDICATION DES QUANTITÉS ET DES VALEURS POUR 1913 ET DE 1923 A 1926.

		TONNAGE (en milliers de tonnes)			TONNAGE (in thousands)	
		1913	1923	1924	1925	1926 (6 mois) (6 months)
<b>Importations en provenance de :</b>	<b>Imports from :</b>					
Allemagne . . . . .	Germany . . . . .	2,6	0,6	0,8	Détails manquent. Details not available .	
France . . . . .	France . . . . .	0,7	0,3	0,3		
Suisse . . . . .	Switzerland . . . . .	0,1	0,3	0,5		
Etats-Unis d'Amérique . . . . .	United States of America . . . . .	1,3	0,8	1,6		
Autres pays . . . . .	Other countries . . . . .	0,3	0,6	0,6		
<b>Importations de :</b>	<b>Imports of :</b>	Détails manquent. Details not available.	0,4	0,9	Détails manquent. Details not available.	
Machines pour filatures, etc.	Spinning, etc. . . . .		0,9	0,9		
Machines pour tissages, etc.	Weaving, etc. . . . .		0,7	1,2		
Machines pour bonneterie, etc.	Hosiery, etc. . . . .		0,6	0,8		
Toutes autres catégories . . . . .	All other sorts . . . . .					
<b>TOTAL DES IMPORTATIONS</b>	<b>TOTAL IMPORTS . . . . .</b>	<b>5,0</b>	<b>2,6</b>	<b>3,8</b>	<b>4,1</b>	<b>2,8</b>
<i>Proportion par rapport à 1913</i>	<i>Ratio to 1913 (1913 = 100) . . . . .</i>	<i>100</i>	<i>52,0</i>	<i>76,0</i>	<i>82,0</i>	<i>112,0*</i>
<b>Exportations à destination de :</b>	<b>Exports to :</b>					
Russie . . . . .	Russia . . . . .	15,3	0,2	0,9	1,9	3,9
Allemagne . . . . .	Germany . . . . .	13,9	0,8	3,3	7,8	2,8
Suède . . . . .	Sweden . . . . .	2,0	0,8	0,6	?	?
Pays-Bas . . . . .	Netherlands . . . . .	12,2	2,8	3,8	11,5	5,5
Belgique . . . . .	Belgium . . . . .	10,3	6,4	7,2	?	?
France . . . . .	France . . . . .	12,6	10,0	6,7	7,9	3,8
Espagne . . . . .	Spain . . . . .	3,2	3,3	2,3	?	?
Italie . . . . .	Italy . . . . .	2,4	3,3	5,5	?	?
<b>Total des exportations en Europe</b>	<b>Total Europe . . . . .</b>	<b>76,7</b>	<b>33,6</b>	<b>35,6</b>	<b>53,9</b>	<b>27,1</b>
Chine . . . . .	China . . . . .	3,3	7,1	2,5	1,6	0,9
Japon . . . . .	Japan . . . . .	19,7	17,5	9,0	3,9	2,9
Etats-Unis d'Amérique . . . . .	United States of America . . . . .	3,9	6,8	5,5	4,2	1,1
Brsil . . . . .	Brazil . . . . .	11,9	4,9	9,6	?	?
<b>Total des exportations en Amérique du Sud . . . . .</b>	<b>Total South America . . . . .</b>	<b>12,9</b>	<b>7,1</b>	<b>11,5</b>	<b>16,0</b>	<b>4,8</b>
Canada . . . . .	Canada . . . . .	4,5	2,5	1,1	?	?
Australie . . . . .	Australia . . . . .	1,4	4,5	2,3	2,5	0,9
Indes-Orientales britanniques . . . . .	British East Indies . . . . .	50,4	57,1	33,9	35,0	11,4
<b>Total des exportations à l'étranger</b>	<b>Total Foreign Countries . . . . .</b>	<b>121,1</b>	<b>73,4</b>	<b>65,5</b>	<b>82,4 §</b>	<b>37,8 §</b>
<i>(% des exportations totales)</i>	<i>(% of total exports) . . . . .</i>	<i>(67,9)</i>	<i>(52,9)</i>	<i>(63,3)</i>	<i>(66,9)</i>	<i>(74,4)</i>
<b>Total des exportations aux possessions britanniques</b>	<b>Total British Possessions . . . . .</b>	<b>57,0</b>	<b>65,3</b>	<b>38,1</b>	<b>40,7 §</b>	<b>13,0 §</b>
<i>(% des exportations totales)</i>	<i>(% of total exports) . . . . .</i>	<i>(32,1)</i>	<i>(47,1)</i>	<i>(36,7)</i>	<i>(33,1)</i>	<i>(25,6)</i>
<b>Exportations de :</b>	<b>Exports of :</b>					
Machines						
pour filatures, etc. . . . .	Spinning, etc. . . . .	Détails manquent. Details not available.	109,7	78,4	92,2	36,1
pour tissages, etc. . . . .	Weaving, etc. . . . .		23,0	20,1	25,6	12,3
pour blanchisseries et teintureries . . . . .	Bleaching and dyeing . . . . .		0,7	0,8	} 5,3	} 2,4
à imprimer et à finir . . . . .	Printing and finishing . . . . .		2,6	2,3		
pour bonneterie et à tricoter à broder . . . . .	Hosiery and knitting . . . . .		0,4	0,3		
Métiers à dentelle . . . . .	Embroidery . . . . .	—	—			
Toutes autres catégories . . . . .	Lace . . . . .	0,3	0,3			
	All other sorts . . . . .		2,0	1,4		
<b>TOTAL DES EXPORTATIONS</b>	<b>TOTAL EXPORTS . . . . .</b>	<b>178,1</b>	<b>138,7</b>	<b>103,6</b>	<b>123,1</b>	<b>50,8</b>
<i>Proportion par rapport à 1913</i>	<i>Ratio to 1913 (1913 = 100) . . . . .</i>	<i>100</i>	<i>77,8</i>	<i>58,1</i>	<i>69,1</i>	<i>57,1*</i>

\* Proportion pour l'année entière calculée en prenant pour base les relevés effectifs de 6 mois.  
 § Approximativement.

**TABLE 11.**

**ANALYSIS BY MARKETS AND BY KINDS OF IMPORTS AND EXPORTS OF TEXTILE MACHINERY,  
SHOWING QUANTITIES AND VALUES FOR 1913 AND 1923-1926.**

VALEUR (en milliers de £)		VALUE (in £000's)			VALEURS PAR TONNE (en £)			VALUES PER TON (£)	
1913	1923	1924	1925	1926 (6 mois) (6 months)	1913	1923	1924	1925	1926 (6 mois) (6 months)
140 50 16 144 16	101 45 92 266 92	139 44 143 509 97	Détails manquant. Details not available.		52,97 75,65 115,00 110,85 57,70	171,80 130,80 264,80 352,00 168,60	173,55 161,40 293,20 312,00 163,05	Détails manquant. Details not available.	
Détails manquant. Details not available.	64 126 317 89	171 145 495 121	Détails manquant. Details not available.		Détails manquant. Details not available.	152,00 143,40 422,60 148,33	180,90 170,70 415,00 151,25	Détails manquant. Details not available.	
366 100	596 163,0	932 254,6	990 270,6	582 313,4*	73,40 100	229,23 314,4	245,50 340,0	241,51 332,8	207,78 233,9*
995 784 99 413 491 736 162 150	47 144 123 323 712 1.290 390 380	218 399 104 372 698 772 241 476	323 848 ? 892 ? 856 ? ?	313 291 ? 400 ? 384 ? ?	65,59 56,40 49,50 33,85 47,67 58,41 50,62 62,50	— — — 115,36 111,25 129,00 118,18 116,15	— — 129,90 97,90 96,92 115,30 104,88 86,55	170,00 108,71 — 77,50 108,46 — — —	80,22 103,90 — 72,72 101,10 — — —
4.090	4.211	4.003	5.382	2.476	53,30	125,40	112,40	122,60	91,35
135 803 251 480	782 2.156 967 590	274 1.026 667 848	198 545 557 ?	117 312 198 ?	40,90 40,76 64,36 40,33	110,18 123,21 143,34 122,45	109,65 114,00 121,30 88,30	123,77 139,78 132,60 —	130,00 107,60 180,00 —
531	814	1.058	1.408	427	41,18	114,36	92,00	88,00	89,08
176 64 2.004	303 513 5.608	133 261 3.047	? 278 3.000	? 127 1.018	39,11 45,71 39,62	121,21 114,00 98,21	120,90 113,50 91,40	— 111,20 85,70	— 141,11 89,30
6.006 (72,5)	9.199 (58,0)	7.205 (66,5)	8.485 § (69,8)	3.656 § (74,2)	49,59	124,37	110,10	103,00	96,70
2.276 (27,5)	6.605 (42,0)	3.626 (33,5)	3.673 § (30,2)	1.270 § (25,8)	39,93	101,14	95,20	90,30	97,78
Détails manquant. Details not available.	12.867 2.057 92 296 156 3 43 220	8.360 1.754 87 264 157 1 46 162	9.291 2.077 790	3.641 937 348	Détails manquant. Details not available.	117,40 89,50 126,25 116,00 408,30 185,20 144,55 110,00	106,70 87,25 105,75 116,20 542,00 — 178,00 115,70	100,80 81,15 — — — — — —	100,85 76,15 — — — — — —
8.282 100	15.794 190,0	10.831 130,8	12.158 146,8	4.926 119,0*	46,53 100	113,18 244,0	104,20 225,0	98,90 212,4	96,50 208,6*

\* Ratio for the complete year, based on six months' actual returns.  
§ Approximate.

**TABLEAU 12.**

**IMPORTATIONS ET EXPORTATIONS DE MACHINES  
ÉLECTRIQUES, DE 1911 A 1913 ET DE 1923 A 1926.**

**TABLE 12.**

**IMPORTS AND EXPORTS OF ELECTRICAL  
MACHINERY, 1911-1913 AND 1923-1926.**

	1911-13 (moyenne) (average)	1923	1924	1925	1926 (6 mois) (6 months)	
	(Tonnes) (Tons)	(Tonnes) (Tons)	(Tonnes) (Tons)	(Tonnes) (Tons)	(Tonnes) (Tons)	
<b>Importations en provenance de :</b>						<b>Imports from :</b>
Suède . . . . .	620	754	839			Sweden.
Allemagne . . . . .	5.697	545	586			Germany.
Belgique . . . . .	422	116	139			Belgium.
France . . . . .	458	161	372			France.
Suisse . . . . .	210	495	622			Switzerland.
États-Unis d'Amérique . . . . .	2.620	1.650	1.062			United States of America
Canada . . . . .	22	181	246			Canada.
Autres pays . . . . .	215	269	364			Other countries.
Total . . . . .	9.964	4.171	4.230			Total.
Réexportations . . . . .	644	290	189	4.286	2.131	Re-exported.
Quantités non réexportées . . . . .	9.320	3.881	4.041	4.069	2.012	Retained.
<b>Importations non réexportées de :</b>						<b>Retained Imports of :</b>
<b>Générateurs :</b>						<b>Generators :</b>
à courant alternatif . . . . .		234	420			Alternating current.
à courant continu . . . . .		288	140			Direct current.
<b>Moteurs :</b>						<b>Motors :</b>
de chemins de fer et tramways . . . . .	Détails manquent.	17	5			Railway and tramway.
<b>Autres :</b>						<b>Other :</b>
à courant alternatif . . . . .	Details not available.	652	536			Alternating current.
à courant continu . . . . .		591	511			Direct current.
<b>Convertisseurs et transformateurs</b> <b>(y compris les bobines) :</b>						<b>Converters and transformers</b> <b>(including coils) :</b>
rotatifs . . . . .		70	458			Rotary.
statiques . . . . .		86	248			Static.
<b>Dispositifs de contrôle et de com-</b> <b>mutation :</b>						<b>Control and switch gear.</b>
Magnétos d'allumage . . . . .		73	101			Magnetos, ignition.
Autres machines électriques . . . . .		19	29			Other electrical machinery.
Autres machines électriques . . . . .		1.851	1.593			
Total . . . . .	9.320	3.881	4.041	4.069	2.012	Total.
<b>Exportations à destination de :</b>						<b>Exports to :</b>
Belgique . . . . .	400	243	132			Belgium.
France . . . . .	614	941	486			France.
Espagne . . . . .	567	912	449			Spain.
Chine . . . . .	280	710	592			China.
Chili . . . . .	580	269	400			Chile.
Bésil . . . . .	1.213	599	733			Brazil.
Argentine . . . . .	2.248	443	550			Argentina.
Union Sud-Africaine . . . . .	1.794	1,550	5.197			Union of South Africa.
Inde . . . . .	2.587	4.775	5.509			India.
Australie . . . . .	3.606	4.062	5.700			Australia.
Nouvelle-Zélande . . . . .	936	1.392	2.476			New Zealand.
Autres pays . . . . .	9.696	5.107	9.205			Other countries.
Total . . . . .	24.531	21.003	31.429	33.207	16.825	Total.
<b>Exportations de :</b>						<b>Exports of :</b>
<b>Générateurs :</b>						<b>Generators :</b>
à courant alternatif . . . . .		2.452	4.671	13.335	6.264	Alternating current.
à courant continu . . . . .		1.854	3.283			Direct current.
<b>Moteurs :</b>						<b>Motors :</b>
de chemins de fer et tramways . . . . .	Détails manquent.	1.993	3.023	2.959	1.724	Railway and tramway.
<b>Autres :</b>						<b>Other :</b>
à courant alternatif . . . . .	Details not available.	3.293	3.640	Compris dans les générateurs. Included with generators.		Alternating current.
à courant continu . . . . .		3.907	2.845			Direct current.
<b>Convertisseurs et transformateurs</b> <b>(y compris les bobines) :</b>						<b>Converters and transformers</b> <b>(including coils) :</b>
rotatifs . . . . .		859	1.907			Rotary.
statiques . . . . .		1.933	3.492			Static.
<b>Dispositifs de contrôle et de com-</b> <b>mutation :</b>						<b>Control and switch gear.</b>
Magnétos d'allumage . . . . .		2.178	3.925	16.913	8.837	Magnetos, ignition.
Autres machines électriques . . . . .		20	28			Other electrical machinery.
Autres machines électriques . . . . .		3.514	4.615			
Total . . . . .	24.531	21.003	31.429	33.207	16.825	Total.

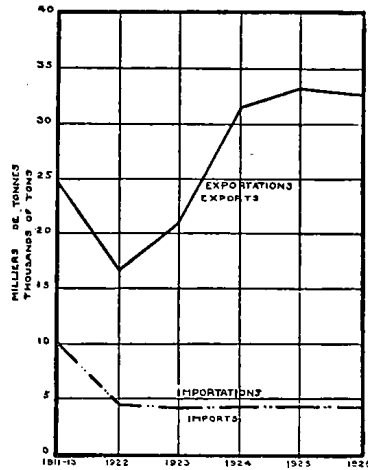


FIG. 11. Importations et exportations des machines électriques (les marchandises exportées sont celles fabriquées dans le Royaume-Uni) de 1911 à 1913 (moyennes) et de 1922 à 1926 <sup>1</sup>.

FIG. 11. Imports and Exports of Electrical Machinery (Exports are Produce and Manufactures of the U.K.), 1911-13 (average) and 1922-1926 <sup>2</sup>.

<sup>1</sup> Les totaux de 1926 sont évalués d'après les relevés effectifs de 6 mois.

<sup>2</sup> 1926 totals are estimated from six months' actual returns.

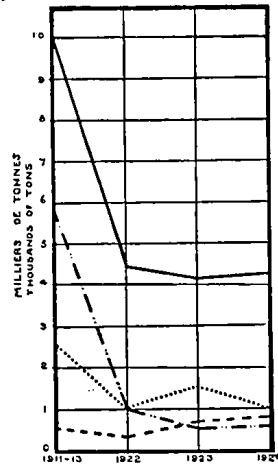


FIG. 12. Importations de machines électriques de 1911 à 1913 (moyenne) et de 1922 à 1924 avec indications des importations totales et des quantités relatives importées d'Allemagne, de Suède et des Etats-Unis.

FIG. 12. Imports of Electrical Machinery, 1911-13 (average) and 1922-24, showing total imports and relative quantities imported from Germany, Sweden and U.S.A.

Total	—————	Total	—————
Allemagne	- - - - -	Germany	- - - - -
Suède	.....	Sweden	.....
Etats-Unis	- · - · -	U.S.A.	- · - · -

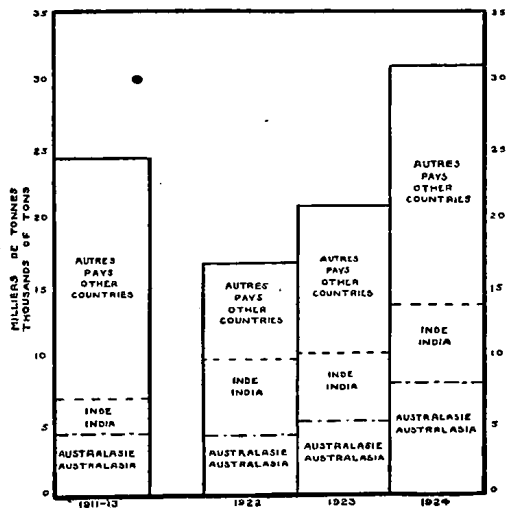


FIG. 13. Exportations de machines électriques (fabriquées dans le Royaume-Uni) de 1911 à 1913 (moyenne) et de 1922 à 1924 avec indication des exportations totales et de la répartition entre l'Inde, l'Australasie et les autres pays.

FIG. 13. Exports of Electrical Machinery (Produce and Manufactures of the U.K.), 1911-1913 (average) and 1922-1924, showing total exports and distribution between India, Australasia and other countries.



**TABLEAU 13.**

**TABLE 13.**

**IMPORTATIONS ET EXPORTATIONS DE MACHINES AGRICOLES, DE 1911 A 1913 ET DE 1923 A 1926.**

**IMPORTS AND EXPORTS OF AGRICULTURAL MACHINERY, 1911-1913 AND 1923-1926.**

	1911-13 (moyenne) (average)	1923	1924	1925	1926 (6 mois) (6 months)	
	(Tonnes) (Tons)	(Tonnes) (Tons)	(Tonnes) (Tons)	(Tonnes) (Tons)	(Tonnes) (Tons)	
<b>Importations en provenance de:</b>						<b>Imports from:</b>
Etats-Unis d'Amérique . . . . .	15.913	2.513	3.247			United States of America.
Canada . . . . .	1.867	1.749	1.461			Canada.
Suède . . . . .	437	1	62			Sweden.
Allemagne . . . . .	464	32	94			Germany.
Autres pays . . . . .	1.100	627	1.192			Other countries.
<b>Total . . . . .</b>	<b>19.781</b>	<b>4.922</b>	<b>6.056</b>	<b>8.237</b>	<b>5.271</b>	<b>Total.</b>
Quantités réexportées . . . . .	11.311	493	554	2.408	905	Re-exported
Quantités non réexportées . . . . .	8.470	4.429	5.502	5.829	4.366	Retained.
<b>Importations non réexportées:</b>						<b>Retained Imports:</b>
<b>Charrues:</b>						<b>Ploughs:</b>
à traction mécanique . . . . .		91	170			Mechanical power.
à traction animale . . . . .	Détails manquent.	509	489			Animal power.
Tondeuses à gazon . . . . .		1.416	1.717			Grass and lawn mowers.
Plantoirs et semoirs . . . . .		59	23			Planters and seeders.
Moissonneuses et moissonneuses-leuses . . . . .	Détails not available.	2.083	1.740			Reapers and binders.
Tondeuses à moutons, etc. . . . .		30	5			Sheep shearers, etc.
Batteuses . . . . .		11	10			Threshers.
Autres catégories . . . . .		530	1.348			Other sorts.
<b>Total . . . . .</b>	<b>8.470</b>	<b>4.429</b>	<b>5.502</b>	<b>5.829</b>	<b>4.366</b>	<b>Total.</b>
<b>Exportations à destination de:</b>						<b>Exports to:</b>
Russie . . . . .	11.554					Russia.
Allemagne . . . . .	6.244	4.365	6.759	6.585	3.871	Germany.
Autres pays d'Europe . . . . .	9.719					Rest of Europe.
Amérique du Sud . . . . .	5.830	1.328	1.335	2.393	775	South America.
Union Sud-Africaine . . . . .	1.666	2.615	3.245	5.149	1.807	Union of South Africa.
Indes-Orientales britanniques . . . . .	708	625	626	1.134	537	British East Indies.
Australie . . . . .	1.409	1.273	1.332	1.976	843	Australia.
Nouvelle-Zélande . . . . .	453	543	791	1.081	408	New Zealand.
Autres pays . . . . .	6.018	2.572	3.883	3.640	1.522	Other countries.
<b>Total . . . . .</b>	<b>43.601</b>	<b>13.221</b>	<b>17.971</b>	<b>21.958</b>	<b>9.763</b>	<b>Total.</b>
<b>Exportations de:</b>						<b>Exports of:</b>
<b>Charrues:</b>						<b>Ploughs:</b>
à traction mécanique . . . . .		1.678	1.848			Mechanical power.
à traction animale . . . . .	Détails manquent.	2.632	4.358			Animal power.
Tondeuses à gazon . . . . .		867	1.468			Grass and lawn mowers.
Plantoirs et semoirs . . . . .		29	40			Planters and seeders.
Moissonneuses et moissonneuses-leuses . . . . .	Détails not available.	629	1.175			Reapers and binders.
Tondeuses à moutons, etc. . . . .		110	171			Sheep shearers, etc.
Batteuses . . . . .		2.866	3.297			Threshers.
Autres catégories . . . . .		4.410	5.614			Other sorts.
<b>Total . . . . .</b>	<b>43.601</b>	<b>13.221</b>	<b>17.971</b>	<b>21.958</b>	<b>9.763</b>	<b>Total.</b>

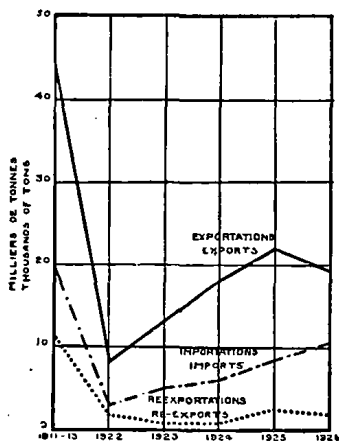


FIG. 14. Importations, exportations et réexportations de machines agricoles (les marchandises exportées sont celles fabriquées dans le Royaume-Uni) de 1911 à 1913 (moyenne) et de 1922 à 1926 <sup>1</sup>.

FIG. 14. Imports, Exports and Re-exports of Agricultural Machinery (Exports are Produce and Manufactures of the U.K.), 1911-13 (average) and 1922-1926 <sup>2</sup>.

<sup>1</sup> Les totaux de 1926 sont évalués d'après les relevés effectifs de 6 mois.  
<sup>2</sup> 1926 totals are estimated from six months' actual returns.

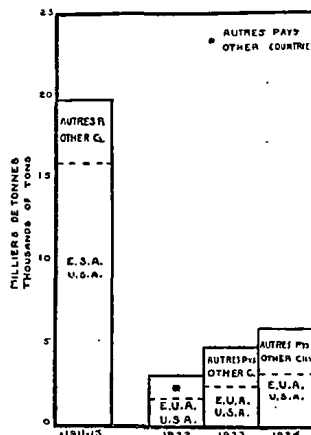


FIG. 15. Importations de machines agricoles de 1911 à 1913 (moyenne) et de 1922 à 1924 avec indication des importations totales et des importations relatives en provenance des Etats-Unis et des autres pays.

FIG. 15. Imports of Agricultural Machinery 1911-13 (average) and 1922-1924, showing total imports and relative imports from the U.S.A. and other countries.

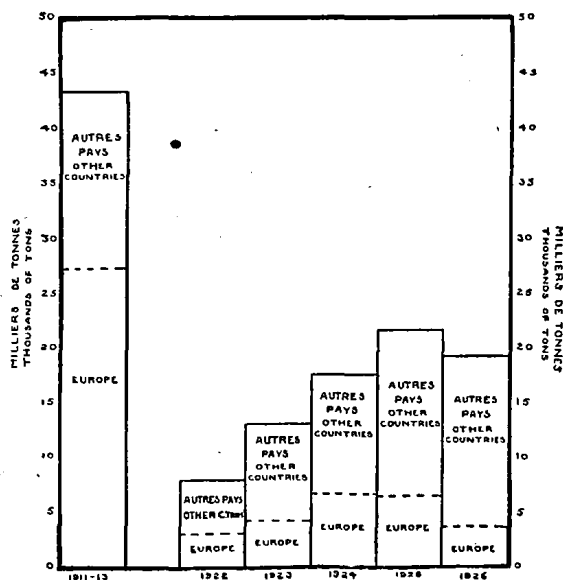


FIG. 16. Exportations de machines agricoles (fabriquées dans le Royaume-Uni) de 1911 à 1913 (moyenne) et de 1922 à 1926 <sup>1</sup> avec indication des exportations totales et de leur répartition entre l'Europe et les autres pays.

FIG. 16. Exports of Agricultural Machinery (Produce and Manufactures of the U.K.), 1911-13 (average) and 1922-1926 <sup>2</sup>, showing total exports and distribution between Europe and other countries.

<sup>1</sup> Les totaux de 1926 sont évalués d'après les relevés effectifs de 6 mois.  
<sup>2</sup> 1926 totals are estimated from six months' actual returns.

**TABLEAU 14.**

**TABLE 14.**

**IMPORTATIONS ET EXPORTATIONS DE MACHINES-  
OUTILS, DE 1911 A 1913 ET DE 1923 A 1926.**

**IMPORTS AND EXPORTS OF MACHINE TOOLS,  
1911-1913 AND 1923-1926.**

	1911-13 (moyenne) (average)	1923	1924	1925	1926 (6 mois) (6 months)	
	(Tonnes) (Tons)	(Tonnes) (Tons)	(Tonnes) (Tons)	(Tonnes) (Tons)	(Tonnes) (Tons)	
<b>Importations en provenance de :</b>						<b>Imports from :</b>
Allemagne . . . . .	201	1.963	1.306			Germany.
Etats-Unis d'Amérique . . . . .	2.449	1.203	1.425			United States of America.
Autres pays . . . . .	154	655	624			Other countries.
<b>Total . . . . .</b>	<b>2.804</b>	<b>3.821</b>	<b>3.355</b>	<b>4.993</b>	<b>3.568</b>	<b>Total.</b>
Quantités réexportées . . . . .	95	192	466	384	125	Re-exported.
Quantités non réexportées . . . . .	2.709	3.629	2.889	4.609	3.443	Retained.
<b>Importations non réexportées de :</b>						<b>Retained Imports of :</b>
Machines à perforeur . . . . .		550	393			Drilling machinery.
Machines à meuler . . . . .	Non	338	412			Grinding machinery.
Tours . . . . .	relevées sé-	829	370			Lathes machinery.
Machines à fraiser . . . . .	parément.	394	327			Milling machinery.
Machines à raboter et à limer . . . . .		198	172			Planing and shaping machinery.
Presses, machines à poinçonner	Not	342	600			Presses, and punching and
et cisailles mécaniques . . . . .	separately	828	541			shearing machines.
Autres . . . . .	shown.					Other machinery.
Pièces détachées :						Parts :
Mandrins et autres dispositifs		150	74			Chucks and other work-
de fixation . . . . .						holders.
<b>Total . . . . .</b>	<b>2.709</b>	<b>3.629</b>	<b>2.889</b>	<b>4.609</b>	<b>3.443</b>	<b>Total.</b>
<b>Exportations à destination de :</b>						<b>Exports to :</b>
Russie . . . . .	1.018	5	141			Russia.
France . . . . .	1.149	744	802			France.
Espagne . . . . .	260	1.222	446			Spain.
Italie . . . . .	1.166	450	464			Italy.
Japon . . . . .	2.250	1.133	412			Japan.
Brésil . . . . .	1.117	122	178			Brazil.
Argentine . . . . .	570	415	238			Argentina.
Autres pays étrangers . . . . .	2.935	1.803	2.444			Other foreign countries.
Union Sud-Africaine . . . . .	372	243	523			Union of South Africa.
Indes-Orientales britanniques . . . . .	1.310	4.418	3.451			British East Indies.
Australie . . . . .	2.163	1.889	1.646			Australia.
Autres pays de l'Empire Britann.	1.058	1.969	1.250			Rest of Empire.
<b>Total . . . . .</b>	<b>15.368</b>	<b>14.113</b>	<b>11.995</b>	<b>14.289</b>	<b>7.033</b>	<b>Total.</b>
<b>Exportations de :</b>						<b>Exports of :</b>
Machines à perforeur . . . . .		1.820	1.613			Drilling machinery.
Machines à meuler . . . . .	Non	666	828			Grinding machinery.
Tours . . . . .	relevées sé-	4.894	4.523			Lathes machinery.
Machines à fraiser . . . . .	parément.	494	374			Milling machinery.
Machines à raboter et à limer . . . . .		1.169	870			Planing and shaping machinery.
Presses, machines à poinçonner	Not	1.513	750			Presses, and punching and
et cisailles mécaniques . . . . .	separately	3.533	3.011			shearing machines.
Autres . . . . .	shown.					Other machinery.
Pièces détachées :						Parts :
Mandrins et autres dispositifs		24	26			Chucks and other work-
de fixation . . . . .						holders.
<b>Total . . . . .</b>	<b>15.368</b>	<b>14.113</b>	<b>11.995</b>	<b>14.289</b>	<b>7.033</b>	<b>Total.</b>

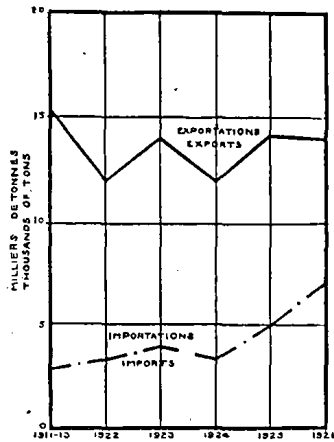


FIG. 17. Importations et exportations de machines-outils (les marchandises exportées sont celles fabriquées dans le Royaume-Uni) de 1911 à 1913 (moyenne) et de 1922 à 1926<sup>1</sup>.

FIG. 17. Imports and Exports of Machine Tools (Exports are Produce and Manufactures of the U.K.), 1911-13 (average) and 1922-1926<sup>2</sup>.

<sup>1</sup> Les totaux de 1926 sont évalués d'après les relevés effectifs de 6 mois.  
<sup>2</sup> 1926 totals are estimated from six months' actual returns.

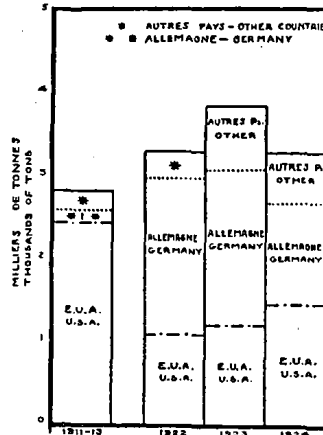


FIG. 18. Importations de machines-outils de 1911 à 1913 (moyenne) et de 1922 à 1924 avec indication des importations totales et des importations en provenance de l'Allemagne et des Etats-Unis.

FIG. 18. Imports of Machine Tools, 1911-13 (average) and 1922-1924, showing total imports and imports from Germany and U.S.A.

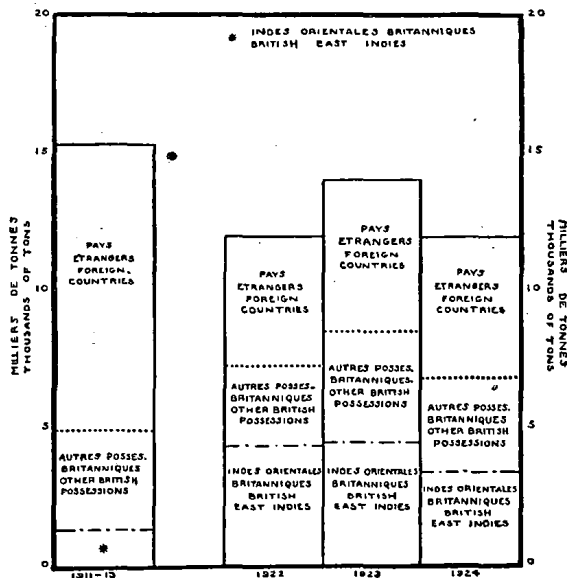


FIG. 19. Exportations de machines-outils (fabriquées dans le Royaume-Uni) de 1911 à 1913 (moyenne) et de 1922 à 1924 avec indication des exportations totales et leur répartition entre les Indes-Orientales britanniques, les autres possessions britanniques et les pays étrangers.

FIG. 19. Exports of Machine Tools (Produce and Manufactures of the U.K.), 1911-13 (average) and 1922-1924, showing total exports and distribution between British East Indies, other British possessions and foreign countries.

**TABLEAU 15.**  
IMPORTATIONS ET EXPORTATIONS DE MOTEURS  
A COMBUSTION INTERNE, DE 1923 A 1926.

	1923	1924	1925	1926 (6 mois (6 months))	
	(Tonnes) (Tons)	(Tonnes) (Tons)	(Tonnes) (Tons)	(Tonnes) (Tons)	
<b>Importations de :</b>					<b>Imports of :</b>
Moteurs à gaz . . . . .	45	629			Gas.
Moteurs à huile lourde (y compris les moteurs Diesel) . . . . .	2,031	3,918			Oil (including Diesel).
Moteurs à essence et autres huil- les légères . . . . .	563	314			Petrol and other light spirit.
Total . . . . .	2,639	4,861			Total.
Réexportations . . . . .	84	176			Re-exported.
Quantités non réexportées . . . . .	2,555	4,685			Retained.
<b>Importations en provenance de :</b>					<b>Imports from :</b>
Suède . . . . .	221	346			Sweden.
Danemark . . . . .	639	1,850			Denmark
Etats-Unis d'Amérique . . . . .	641	381			United States of America.
Autres pays . . . . .	1,138	2,284			Other countries.
Total . . . . .	2,639	4,861			Total.
			Détails manquent Details not available		
<b>Exportations de :</b>					<b>Exports of :</b>
Moteurs à gaz . . . . .	5,985	4,662			Gas.
Moteurs à huile lourde (y compris les moteurs Diesel) . . . . .	17,912	24,959			Oil (including Diesel).
Moteurs à essence et autres huil- les légères . . . . .	1,294	1,580			Petrol and other light spirit.
Total . . . . .	25,191	31,201	39,138	17,849	Total.
<b>Exportations à destination de :</b>					<b>Exports to :</b>
France . . . . .	923	1,057			France.
Espagne . . . . .	1,269	944			Spain.
Egypte . . . . .	2,239	3,012			Egypt.
Chine . . . . .	510	386			China.
Japon . . . . .	289	1,095			Japan.
Bésil . . . . .	242	551			Brazil.
Argentine . . . . .	786	1,359			Argentina.
Union Sud-Africaine . . . . .	554	746			Union of South Africa.
Inde britannique . . . . .	8,130	8,743			British India.
Ceylan, Etabliss <sup>ts</sup> des Détroits, etc.	1,224	1,885			Ceylon, Straits, etc.
Australie . . . . .	2,281	2,141			Australia.
Autres pays . . . . .	6,744	9,282			Other countries
Total . . . . .	25,191	31,201	39,138	17,849	Total.
			Détails manquent Details not available		
			Détails manquent Details not available		

**TABLEAU 16.**  
IMPORTATIONS ET EXPORTATIONS DE GÉNÉRA-  
TEURS DE FORCE MOTRICE, AUTRES QUE LES  
MOTEURS A COMBUSTION INTERNE, DE 1923 A 1926.  
(Non électriques.)

**TABLE 16.**  
IMPORTS AND EXPORTS OF PRIME MOVERS,  
OTHER THAN INTERNAL-COMBUSTION ENGINES,  
1923-1926.  
(Not electrical.)

	1923	1924	1925	1926 (6 mois (6 months))	
	(Tonnes) (Tons)	(Tonnes) (Tons)	(Tonnes) (Tons)	(Tonnes) (Tons)	
<b>Importations de :</b>					<b>Imports of :</b>
Machines à vapeur à mouvement alternatif :					Steam reciprocating engines :
Pompes . . . . .	110	74			Pumping.
Appareils de levage . . . . .	37	1			Winding.
Machines marines . . . . .	45	119			Marine.
Laminoirs . . . . .	496	715			Rolling mill.
Autres catégories . . . . .	294	209			Other sorts.
Total . . . . .	982	1,118			Total.
Turbines à vapeur et autres moteurs à mouvement rotatif . . . . .	441	682			Steam turbine and other rotary.
Autres catégories . . . . .	35	86			Other descriptions.
Total . . . . .	1,458	1,886			Total.
<b>Exportations de :</b>					<b>Exports of :</b>
Machines à vapeur à mouvement alternatif :					Steam reciprocating engines :
Pompes . . . . .	722	686	1,151	278	Pumping.
Appareils de levage . . . . .	993	1,127	752	413	Winding.
Machines marines . . . . .	1,015	1,842			Marine.
Laminoirs . . . . .	1,321	3,379	10,854	4,506	Rolling mill.
Autres catégories . . . . .	7,495	6,843			Other sorts.
Total . . . . .	11,546	13,877	12,757	5,197	Total.
Turbines à vapeur et autres moteurs à mouvement rotatif . . . . .	3,353	3,016	3,137	915	Steam turbine and other rotary.
Autres catégories . . . . .	1,722	2,601	1,815	388	Other descriptions.
Total . . . . .	16,621	19,494	17,709	6,500	Total.
<b>Exportations à destination de :</b>					<b>Exports to :</b>
France . . . . .	166	612			France.
Espagne . . . . .	1,048	2,586			Spain.
Italie . . . . .	185	877			Italy.
Autres pays d'Europe . . . . .	488	630*			Rest of Europe.
Amérique du Sud . . . . .	377	729			South America
Union Sud-Africaine . . . . .	1,067	1,432			Union of South Africa.
Inde britannique . . . . .	6,156	5,408			British India.
Australie . . . . .	1,824	1,336			Australia.
Nouvelle-Zélande . . . . .	375	190			New Zealand.
Canada . . . . .	199	498			Canada.
Autres pays . . . . .	4,736	5,146			Other countries.
Total . . . . .	16,621	19,494	17,709	6,500	Total.
			Détails manquent Details not available		

\* Chiffres approximatifs, dans la mesure où ils sont publiés séparément.

\* Approximate so far as published separately.

**TABEAU 17.**

ÉTUDE ANALYTIQUE, PAR MARCHÉS, DES EXPORTATIONS DE CHAUDIÈRES (FABRIQUÉES DANS LE ROYAUME-UNI) AVEC INDICATION DES QUANTITÉS ET DES VALEURS, POUR 1913 ET 1922-24.

Exportations à destination de	TONNAGE — TONNAGE (en milliers de tonnes) — (in thousands)				VALEUR — VALUE (en milliers de £) — (in £000's)				Exports to
	1913	1922	1923	1924	1913	1922	1923	1924	
Russie . . . . .	3,6	—	1,6	2,7	159	—	78	176	Russia.
Allemagne . . . . .	4,4	—	—	—	75	—	—	—	Germany.
Danemark . . . . .	0,5	0,1	0,3	0,3	13	11	18	13	Denmark.
Pays-Bas . . . . .	1,9	1,5	1,1	0,6	42	186	51	31	Netherlands.
Belgique . . . . .	2,8	1,2	1,6	1,7	67	70	70	71	Belgium.
France . . . . .	5,0	0,6	0,3	0,7	84	52	23	48	France.
Portugal . . . . .	0,3	0,1	0,4	0,4	10	8	25	13	Portugal.
Afrique-orientale portugaise	1,1	0,6	0,4	—	30	36	23	2	Portuguese E. Africa.
Espagne . . . . .	2,2	0,4	0,8	0,7	63	37	44	44	Spain.
Italie . . . . .	1,5	0,7	0,5	0,8	43	49	28	44	Italy.
Chine . . . . .	0,2	1,9	2,2	1,2	42	148	108	67	China.
Japon . . . . .	2,0	3,5	3,0	5,8	45	253	140	232	Japan.
Etats-Unis d'Amérique . . .	0,1	—	—	—	3	—	—	—	United States of America.
Mexique . . . . .	2,4	0,3	0,3	0,3	56	24	16	18	Mexico.
Chili . . . . .	2,3	0,4	0,7	0,4	65	29	30	24	Chile.
Bésil . . . . .	1,6	0,7	0,7	1,1	50	43	44	96	Brazil.
Argentine . . . . .	2,2	0,5	0,6	1,5	92	37	40	69	Argentine.
Union Sud-Africaine . . . . .	4,3	1,0	1,5	2,7	98	117	102	185	Union of South Africa.
Inde britannique . . . . .	9,3	10,6	8,9	7,7	246	678	448	336	British India.
Australie . . . . .	4,7	2,9	1,8	2,4	136	222	106	131	Australia.
Nouvelle-Zélande . . . . .	0,3	0,3	0,5	0,3	7	30	29	15	New Zealand.
Canada . . . . .	2,6	0,5	0,3	0,3	71	41	11	16	Canada.
Total des exportations à destination de tous les pays étrangers (% des exportations totales)	45,5 (66,4)	14,6 (44,2)	18,2 (54,2)	21,2 (56,1)	1.161 (65,5)	1.154 (46,4)	939 (53,0)	1.100 (55,8)	Total to all foreign countries. (% of total).
Total des exportations à destination de toutes les Possessions britanniques (% des exportations totales)	23,0 (33,6)	18,4 (55,8)	15,3 (45,8)	16,6 (43,9)	612 (34,5)	1.334 (53,6)	831 (47,0)	870 (44,2)	Total to all British possessions. (% of total).
<b>Total des exportations . . . . .</b>	<b>68,5</b>	<b>33,0</b>	<b>33,4</b>	<b>37,8</b>	<b>1.773</b>	<b>2.488</b>	<b>1.770</b>	<b>1.970</b>	<b>Total Exports.</b>

**TABLE 17.**

ANALYSIS BY MARKETS OF EXPORTS OF BOILERS (PRODUCE AND MANUFACTURES OF THE UNITED KINGDOM), SHOWING QUANTITIES AND VALUES, 1913 AND 1922-1924.

**TABEAU 18.**

ÉTUDE ANALYTIQUE, PAR MARCHÉS, DES EXPORTATIONS D'OUTILLAGE DE CHAUFFERIES (FABRIQUÉ DANS LE ROYAUME-UNI) AVEC INDICATION DES QUANTITÉS ET DES VALEURS POUR 1922-1924.

**TABLE 18.**

ANALYSIS BY MARKETS OF EXPORTS OF BOILER-HOUSE PLANT (PRODUCE AND MANUFACTURES OF THE UNITED KINGDOM), SHOWING QUANTITIES AND VALUES, 1922-1924.

Exportations à destination de :	TONNAGE — TONNAGE (en milliers de tonnes - (in thousands)			VALEURS — VALUES (en milliers de £) — (in £000's)			Exports to
	1922	1923	1924	1922	1923	1924	
Pays-Bas . . . . .	0,7	1,1	1,5	31	45	52	Netherlands.
Belgique . . . . .	5,8	3,2	2,2	223	83	50	Belgium.
France . . . . .	5,0	3,1	2,6	259	78	70	France.
Chine . . . . .	0,7	1,0	0,8	42	50	28	China.
Japon . . . . .	1,3	1,6	1,9	56	52	67	Japan.
Argentine . . . . .	0,1	0,1	0,4	5	3	22	Argentine.
Persie . . . . .	0,7	—	—	30	—	—	Persia.
Union Sud-Africaine . . . . .	0,1	0,1	0,5	4	5	25	Union of South Africa.
Inde britannique . . . . .	3,6	2,1	1,4	177	95	76	British India.
Australie . . . . .	0,7	1,4	1,3	39	80	74	Australia.
Nouvelle-Zélande . . . . .	0,3	0,4	0,1	20	19	7	New Zealand.
Canada . . . . .	0,2	0,3	0,3	10	11	11	Canada.
Total des exportations à destination de tous les pays étrangers (% des exportations totales)	16,5 (75,3)	13,7 (73,2)	13,1 (74,3)	771 (73,2)	446 (63,9)	427 (64,6)	Total to all foreign countries. (% of total).
Total des exportations à destination de toutes les possessions britanniques (% des exportations totales)	5,4 (24,7)	5,0 (26,8)	4,4 (25,2)	282 (26,8)	251 (36,1)	234 (35,4)	Total to all British possessions. (% of total).
<b>Total des exportations . . . . .</b>	<b>21,9</b>	<b>18,7</b>	<b>17,5</b>	<b>1,053</b>	<b>697</b>	<b>661</b>	<b>Total Exports.</b>

TABLEAU 19.

IMPORTATIONS ET EXPORTATIONS DE LOCOMOTIVES COMPLÈTES, DE 1911 A 1913 ET DE 1923 A 1926

TABLE 19.

IMPORTS AND EXPORTS OF COMPLETE LOCOMOTIVES, 1911-1913 AND 1923-1926.

	1911-13 (moyenne) (average)	1923	1924	1925	1926 (6 mois) (6 months)	
	(Tonnes) (Tons)	(Tonnes) (Tons)	(Tonnes) (Tons)	(Tonnes) (Tons)	(Tonnes) (Tons)	
<b>Importations de locomotives pour voie ferrée.</b>	58	125	60	126	64	<b>Imports of Rail Locomotives.</b>
Réexportations . . . . .	16	—	—	—	—	Re-exports.
Quantités non réexportées . . . . .	42	125	60	126	64	Retained.
<b>Importations non réexportées :</b>						<b>Retained Imports :</b>
Locomotives pour voies normales . . . . .	42	36	—	Détails manquent		Main-line locomotives.
Locomotives de chantier et locomotives légères . . . . .		89	60	Détails not available		Contractors' and light locomotives.
Total . . . . .	42	125	60	126	64	Total.
<b>Importations de locomobiles (tracteurs et rouleaux à vapeur) en provenance de :</b>						<b>Imports of Road Locomotives : (tractors and steam rollers) from :</b>
France . . . . .	30	343	157	Détails manquent		France.
Etats-Unis . . . . .	45	448	2.362	Détails not available		United States of America.
Autres pays . . . . .		56	206			Other countries.
Total . . . . .	75	847	2.725	2.187	1.196	Total.
Réexportations . . . . .	4	478	99	98	64	Re-exported.
Quantités non réexportées . . . . .	71	369	2.626	2.089	1.132	Retained.
<b>Importations non réexportées :</b>						<b>Retained Imports :</b>
Locomobiles agricoles . . . . .	71	— 62	2.055	Détails manquent		Agricultural.
Autres . . . . .		431	571	Détails not available		Other.
Total . . . . .	71	369	2.626	2.089	1.132	Total.
<b>Exportations de locomotives pour voie ferrée à destination de :</b>						<b>Exports of Rail Locomotives to :</b>
Pays d'Europe . . . . .	2.558*	1.227	861	486	50	Countries in Europe.
Argentine . . . . .	10.303	557	3.700	4.599	2.965	Argentina.
Autres pays de l'Amérique du Sud . . . . .	3.901	238	1.293	1.430	771	Rest of South America.
Afrique du Sud britannique . . . . .	2.780	177	1.228	2.195	853	British South Africa.
Inde britannique . . . . .	11.581	24.023	10.871	12.060	4.205	British India.
Etablissements des Détroits et Ceylan . . . . .	1.116	238	49	518	673	Straits and Ceylon.
Australie . . . . .	5.059	736	464	1.202	4.583	Australia.
Autres pays . . . . .	7.316	7.460	5.097	6.836	7.870	Other countries.
Total . . . . .	44.614	34.656	23.563	29.326	21.970	Total.
<b>Exportations de :</b>						<b>Exports of :</b>
Locomotives pour voie normale . . . . .	44.614	33.135	21.374	Détails manquent		Main-line locomotives.
Locomotives de chantier et locomotives légères . . . . .		1.521	2.189	Détails not available		Contractors and light locomotives.
Total . . . . .	44.614	34.656	23.563	29.326	21.970	Total.
<b>Exportations de locomobiles (tracteurs et rouleaux à vapeur) à destination de :</b>						<b>Exports of Road Locomotives (tractors and steam rollers) to :</b>
Allemagne . . . . .	2.889	29	84	Détails manquent		Germany.
Argentine . . . . .	478	341	314	Détails not available		Argentina.
Union Sud-Africaine . . . . .	212	371	504			Union of South Africa.
Indes-Orientales britanniques . . . . .	1.122	671	1.279			British East Indies.
Australie . . . . .	935	1.575	1.607			Australia.
Nouvelle-Zélande . . . . .	291	210	482			New Zealand.
Canada . . . . .	312	32	21			Canada.
Autres pays . . . . .	3.134	3.097	4.161			Other countries.
Total . . . . .	9.373	6.326	8.452	8.359	4.905	Total.
<b>Exportations de :</b>						<b>Exports of :</b>
Locomobiles agricoles . . . . .	Non relevées séparément.	2.245	1.664	Détails manquent		Agricultural.
Autres . . . . .	Not separately distinguished.	4.081	6.788	Détails not available		Other.
Total . . . . .	9.373	6.326	8.452	8.359	4.905	Total.

\* Il peut y avoir lieu d'ajouter à ce chiffre une certaine partie des 1.290 tonnes exportées à destination de pays étrangers non désignés dans le relevé annuel. — Some part of 1,290 tons exported to foreign countries not specified in annual statement may have to be added.

**TABLEAU 20.**

**IMPORTATIONS ET EXPORTATIONS DE MACHINES  
DIVERSES, DE 1922 A 1924.**

**TABLE 20.**

**IMPORTS AND EXPORTS OF MISCELLANEOUS  
MACHINERY, 1922-1924.**

	Importations non réexportées Retained imports			Exportations Exports			
	1922 (Tonnes) (Tons)	1923 (Tonnes) (Tons)	1924 (Tonnes) (Tons)	1922 (Tonnes) (Tons)	1923 (Tonnes) (Tons)	1924 (Tonnes) (Tons)	
Compresseurs et pompes à air et à gaz:							Air and Gas Compressors and Exhausters:
à mouvement alternatif . . .	341	408	310	567	579	892	Reciprocating.
à mouvement rotatif . . . . .	63	106	179	148	104	179	Rotary.
Autres . . . . .	187	78	155	464	216	294	Other.
Total des compresseurs, etc.	591	592	644	1.179	899	1.365	Total of Compressors, etc.
Roulements à billes et à galets, etc.	85	187	318	272	434	271	Ball and Roller Bearings, etc.
Condensateurs . . . . .	51	54	20	1.295	1.258	1.019	Condensers.
Machines pour fabriques de chaussures	310	321	245	526	579	588	Boot and Shoe-making Machinery.
Appareils sécheurs centrifuges	3	—	19	1.474	1.714	3.736	Centrifugal Drying.
Appareils élévateurs, téléferiques, transporteurs . . . . .	135	95	121	1.879	2.397	2.423	Conveyors, Telfers, Transporters.
Grues, élévateurs, etc. . . . .	645	468	1.608	19.780	18.067	19.425	Cranes, Hoists, etc.
Machines pour l'industrie laitière:							Dairy Machinery:
Ecrémeuses . . . . .	523	440	455	94	101	223	Cream Separators.
Autres . . . . .	573	447	368	75	94	121	Other.
Total des machines pour l'industrie laitière . . . . .	1.096	887	823	169	195	347	Total of Dairy Machinery.
Presses à filtrer . . . . .	132	81	49	160	497	952	Filter presses.
Machines pour le travail du verre:							Glass-working Machinery:
Machines soufflantes . . . . .	26	41	45	3	—	6	Blowing.
Autres . . . . .	127	294	155	28	55	131	Other.
Total des machines pour le travail du verre . . . . .	153	335	200	31	55	137	Total of Glass-working Machinery.
Machines pour la mouture du grain	264	233	227	3.155	3.430	3.932	Grain-milling Machinery.
Machines hydrauliques (sauf les générateurs de force motrice) . . . . .	352	257	64	2.321	3.519	4.259	Hydraulic Machinery (except Prime Movers).
Haveuses de mines . . . . .	277	690	565	195	317	302	Mining Coal-cutters.
Machines-outils à air comprimé . . . . .	99	189	232	252	354	130	Pneumatic Tools.
Machines à emballer . . . . .	16	57	42	157	155	112	Packing Machines.
Machines pour la fabric. du papier . . . . .	557	1.607	1.081	1.434	3.636	8.144	Paper-making Machines.
Machines à imprimer, à relier, etc.:							Printing, Bookbinding, etc., Mach.:
Machines à composer . . . . .	160	234	118	350	517	705	Typesetting.
Presses à journal, presses à impression typograph. et lithogr. . . . .	1.606	3.258	2.497	1.515	2.067	2.394	Newspaper, Letterpress and Lithographic.
Machines à relier, à cliquer, à brocher, etc. . . . .	393	465	531	217	564	446	Bookbinding, Blocking, Stitching, etc.
Machines à fabriquer les sachets, et enveloppes . . . . .	30	97	104	43	24	34	Bag- and Envelope-making.
Machines à fabriquer les boîtes en carton . . . . .	192	152	213	30	49	42	Cardboard-Box-making.
Autres . . . . .	300	223	245	417	496	633	Other.
Total des machines d'imprimerie, etc.	2.681	4.429	3.708	2.572	3.717	4.254	Total of Printing, etc., Machines.
Pompes:							Pumps:
à main . . . . .	633	729	1.227	178	303	248	Hand.
à force motrice:							Power:
à mouvement alternatif . . . . .	484	750	536	1.609	1.803	2.075	Reciprocating.
centrifuge . . . . .	238	424	610	1.637	2.050	2.527	Centrifugal.
Autres . . . . .	157	127	121	1.057	1.248	1.569	Other.
Total des pompes . . . . .	1.512	2.030	2.494	4.481	5.404	6.419	Total of Pumps.
Machines à fabriquer et à raffiner le sucre (sauf les centrifuges) . . . . .	152	517	205	5.433	10.579	11.837	Sugar-making and Refining (except Centrifugal).
Appareils de pesage . . . . .	131	276	283	1.421	1.648	1.909	Weighing Machinery.
Machines pour le travail du bois . . . . .	1.122	1.028	1.124	1.824	2.773	2.970	Woodworking Machinery.
Machines non dénommées ailleurs . . . . .	13.268	15.324	16.148	56.321	70.481	96.037	Machinery not elsewhere specified.



**TABLEAU 21.**

**TONNAGE DES NAVIRES MARCHANDS (DE PLUS DE 100 TONNES BRUTES) LANCÉS AU ROYAUME-UNI ET DANS LE MONDE ENTIER, DE 1911 A 1913 ET DE 1919 A 1926.**

	1911-13 (moy.) (avg.)	1919	1920	1921	1922	1923	1924	1925	1926 6 mois 6 mths.	
	(En milliers de tonnes brutes) — (In thousands of gross tons)									
Production mondiale . . .	2.962	7.145	5.862	4.342	2.467	1.643	2.248	2.193	837	World Output.
Production du Royaume-Uni	1.825	1.620	2.056	1.538	1.031	646	1.440*	1.085	363	United Kingdom Output.
% de la production du Royaume-Uni par rapport à la production mondiale	61.6	22.7	35.1	35.4	41.8	39.3	64.1	49.5	43.4	Percentage of United Kingdom output to world output.

\* L'augmentation constatée en 1924, par rapport à 1923, a été due, en partie, à la reprise des travaux de constructions navales qui avaient été arrêtés, et aux conflits ouvriers qui, en 1923, étaient survenus dans les chantiers et avaient restreint la production.

**TABLE 21.**

**TONNAGE OF MERCHANT VESSELS (OVER 100 TONS GROSS) LAUNCHED IN THE UNITED KINGDOM AND IN THE WORLD, 1911-1913 AND 1919-1926.**

\* The increase in 1924 over 1923 was partly attributable to resumption of work on suspended tonnage, and to the shipyard labour disputes which restricted output in 1923.

**TABLEAU 22.**

**TONNAGE DES NAVIRES MARCHANDS (DE PLUS DE 100 TONNES BRUTES) EN CONSTRUCTION AU ROYAUME-UNI, TONNAGE MIS EN CHANTIER AU COURS DE CHAQUE TRIMESTRE ET TONNAGE DES NAVIRES BRITANNIQUES ET ÉTRANGERS INUTILISÉS DANS LES PORTS DU ROYAUME-UNI, DE 1924 A 1926.**

	1924				1925				1926		
	1 <sup>er</sup> trim.	2 <sup>me</sup> trim.	3 <sup>me</sup> trim.	4 <sup>me</sup> trim.	1 <sup>er</sup> trim.	2 <sup>me</sup> trim.	3 <sup>me</sup> trim.	4 <sup>me</sup> trim.	1 <sup>er</sup> trim.	2 <sup>me</sup> trim.	
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	
	(En milliers de tonnes brutes) — (In thousands of gross tons)										
Tonnage en construction à la fin du trimestre . . .	1,474	1,517	1,468	1,297	1,165	1,094	1,009	885	843	841	Tonnage under construction at end of quarter.
Tonnage des navires dont la construction est suspendue . . . . .	101	52	37	60	74	76	81	97	80	78	Tonnage suspended (included above).
Tonnage mis en chantier au cours du trimestre . . . . .	228	375	253	195	202	190	261	161	193	168	Tonnage commenced during quarter.
Tonnage inutilisé à la fin du trimestre . . . . .	410	470	334	488	393	777	574	408	360	860	Idle tonnage at end of quarter.

**TABLE 22.**

**TONNAGE OF MERCHANT VESSELS (OVER 100 TONS GROSS) UNDER CONSTRUCTION IN THE UNITED KINGDOM, TONNAGE COMMENCED BUILDING IN EACH QUARTER, AND THE TONNAGE OF BRITISH AND FOREIGN SHIPPING LAID UP IDLE IN THE PORTS OF THE UNITED KINGDOM, 1924-1926.**

**TABLEAU 23.**

**EXPORTATIONS DE NAVIRES NEUFS ET DE MACHINES DE BORD (FABRIQUÉS DANS LE ROYAUME-UNI), DE 1911 A 1913 ET DE 1920 A 1926**

**TABLE 23.**

**EXPORTS OF NEW SHIPS AND OF MACHINERY IN SHIPS (PRODUCE AND MANUFACTURES OF THE UNITED KINGDOM), 1911-1913 AND 1920-1926.**

	1911-13 (moy.) (avg.)	1920	1921	1922	1923	1924	1925	1926 6 mois 6 mths.	
<b>NAVIRES NEUFS (non enregistrés comme britanniques):</b>									<b>NEW SHIPS (not registered as British):</b>
Tonnage brut . . . . .	415.971	474.683	568.418	466.265	173.373	161.472	189.038	76.598	Gross Tonnage.
Valeur (en milliers de £) . . . . .	7.906	26.554	30.626	29.986	9.700	5.522	6.289	2.197	Value (in £000's)
<b>MACHINES DE BORD.</b>									<b>MACHINERY IN SHIPS.</b>
1. Moteurs marins:									(1) Marine Engines:
a) à vapeur, à movem. altern.									(a) Steam Reciprocating:
Nombre d'appareils	Détails manquant.	148	178	88	62	65			Number of sets.
Valeur (en milliers de £)		3.777	3.925	1.771	532	500			Value (in £000's).
b) Turbines à vapeur:									(b) Steam Turbines:
Nombre d'appareils	Détails manquant.	6	21	34	14	7			Number of sets.
Valeur (en milliers de £)		441	863	1.988	903	249			Value (in £000's).
c) à combustion interne:									(c) Internal Combustion:
Nombre d'appareils	Détails not available.	125	134	59	59	95			Number of sets.
Valeur (en milliers de £)		70	419	784	281	334			Value (in £000's).
2. Chaudières:									(2) Boilers:
Nombre . . . . .		352	407	312	133	129			Number.
Valeur (en milliers de £)		2.013	2.206	2.466	702	397			Value (in £000's).
3. Autres machines:									(3) Other Machinery:
Valeur . . . . .		608	974	1.965	705	273			Value.
Valeur totale des exportations de machines de bord (milliers de £)	1.906	6.909	8.387	8.794	3.123	1.753			Total Value of Exports of Machinery in Ships (£000's).

FIG. 20. Tonnage brut des navires marchands lancés dans le monde entier et au Royaume-Uni, de 1911 à 1913 (moyenne) et de 1919 à 1926<sup>1</sup>.

FIG. 20. Gross Tonnage of Merchant Vessels Launched in the World and the U.K., 1911-13 (average) and 1919-1926<sup>2</sup>.

<sup>1</sup> Les totaux de 1926 sont évalués d'après les relevés effectifs de 6 mois.  
<sup>2</sup> 1926 totals are estimated from six months' actual returns.

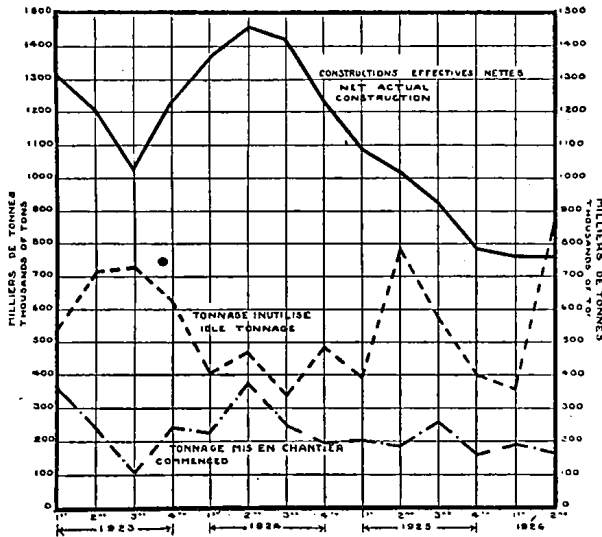
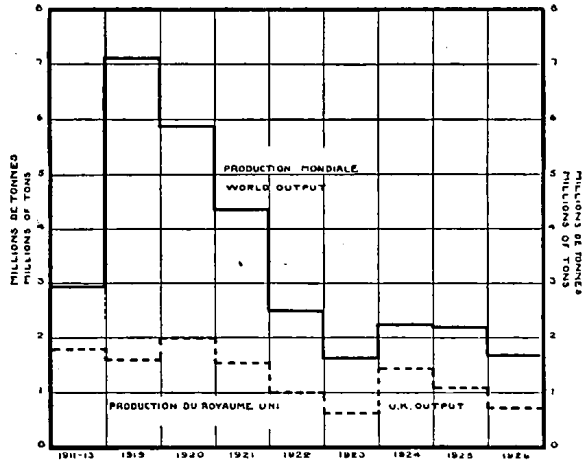


FIG. 21. Tonnage des navires marchands en construction au Royaume-Uni (déduction faite du tonnage dont la construction est suspendue) ainsi que le tonnage des navires britanniques et étrangers, inutilisés dans les ports du Royaume-Uni et le tonnage mis au chantier au cours de chaque trimestre, de 1913 à 1926.

FIG. 21. Tonnage of Merchant Vessels under construction in the U.K. (gross less suspended tonnage), together with the Tonnage of British and Foreign Vessels laid up Idle in the Ports of the U.K., and the Tonnage commenced building during Each Quarter, 1913-1926.

**TABLEAU 24.**

IMPORTATIONS D'HUILES MINÉRALES AU  
ROYAUME-UNI, EN 1913 ET DE 1922 A 1926.

**TABLE 24.**

IMPORTS OF MINERAL OILS INTO THE UNITED  
KINGDOM, 1913 AND 1922-1926.

Année Year	QUANTITÉS — QUANTITIES							
	HUILES COMBUSTIBLES (en milliers de gallons impériaux)			FUEL OILS (thousands of imperial gallons)			HUILE DE GRAISSAGE (en milliers de gallons impériaux)	PARAFFINE (en milliers de « hundred weights »)
	Pétrole brut (Crude Oil (Petroleum))	Essence à moteur (Motor Spirit)	Huile lampante Kerosene (or Lamp Oil)	« Gas oil » Gas Oil	« Fuel oil » Fuel Oil	Total	LUBRICATING OIL (thousands of imperial gallons)	PARAFFIN WAX (thousands of cwts.)
1913	1.109	100.858	157.141	65.950	95.062	420.120	67.962	1.140
1922	217.134	311.190	152.537	70.153	392.618	1.143.632	69.440	970
1923	334.618	327.234	144.129	70.746	363.738	1.240.465	82.223	1.146
1924	464.363	422.311	124.678	67.906	385.582	1.464.840	101.747	1.367
1925	561.621	404.875	141.649	72.635	334.402	1.515.182	85.473	1.242
1926 *	364.676	382.183	127.593	62.803	221.791	1.159.046	64.653	831
	VALEURS (en milliers de £).				VALUES (£000's)			
1913	15	3.803	2.680	735	1.150	8.383	2.473	984
1922	3.027	20.605	4.017	1.164	5.784	34.597	4.534	857
1923	5.270	15.827	3.150	1.085	4.789	30.121	4.746	970
1924	7.740	17.846	2.958	1.210	5.604	35.358	5.869	1.700
1925	8.843	16.828	2.928	1.276	4.654	34.529	4.740	1.690
1926 *	5.527	14.868	2.927	1.097	2.899	27.318	3.221	1.123

\* Huit mois. — Eight months.

**TABLEAU 25.**

PROVENANCE DES HUILES MINÉRALES  
IMPORTÉES, EN 1913 ET DE 1922 A 1924.

A = Possessions britanniques.  
B = Pays étrangers.

**TABLE 25.**

ORIGIN OF IMPORTS OF MINERAL OILS,  
1913 AND 1922-1924.

A = From British Possessions.  
B = From Foreign Countries.

Importations de:	En proven- ance de:  From:	1913		1922		1923		1924		Imports of:
		En milliers de gallons impériaux	% du total	En milliers de gallons impériaux	% du total	En milliers de gallons impériaux	% du total	En milliers de gallons impériaux	% du total	
		Thousand Imperial Gallons	% of total	Thousand Imperial Gallons	% of total	Thousand Imperial Gallons	% of total	Thousand Imperial Gallons	% of total	
Pétrole brut . . .	A	1.104	99,5	754	0,3	2.457	0,7	3.034	0,7	Crude Oil.
	B	5	0,5	216.380	99,7	332.161	99,3	461.329	99,3	
Essence à moteur .	A	19.072	18,9	21.188	6,8	25.447	7,8	27.576	6,5	Motor Spirit.
	B	81.786	81,1	290.002	93,2	301.787	92,2	394.735	93,5	
Huile lampante . .	A	—	—	2.967	1,9	835	0,6	2.858	2,3	Kerosene.
	B	157.141	100,0	149.570	98,1	143.276	99,4	121.820	97,7	
« Gas Oil » . . . .	A	—	—	242	0,3	1.931	2,7	4.355	6,4	Gas Oil.
	B	65.950	100,0	69.914	99,7	68.815	97,3	63.551	93,6	
« Fuel Oil » . . . .	A	1.995	2,1	26.139	6,7	36.525	10,0	38.727	10,1	Fuel Oil.
	B	93.067	97,9	366.479	93,3	327.213	90,0	346.855	89,9	
Total des importations d'huiles combust.	A	22.171	5,3	51.290	4,5	67.213	5,4	76.550	5,6	Total Imports of Fuel Oils.
	B	397.949	94,7	1.092.342	95,5	1.173.252	94,6	1.388.290	94,6	
Huile de graissage .	A	11	—	421	0,6	16	—	28	—	Lubricating Oil.
	B	67.951	100,0	69.019	99,4	82.207	100,0	101.719	100,0	
Paraffine . . . . .	A	31	7,1	136	14,0	115	10,0	245	17,9	Paraffin Wax.
	B	1.059	92,9	834	86,0	1.013	90,0	1.122	82,1	

**TABLEAU 26.**

**COURS DU FER ET DE L'ACIER AU ROYAUME-UNI.**  
(par tonne).

**TABLE 26.**

**UNITED KINGDOM IRON AND STEEL MARKET**  
**PRICES (per ton).**

Produit	1913	1925		1926						Product
		(début du mois) (beginning of month)		(début du mois, sauf en mai) (beginning of month, excepting May)						
		Moyenne Average	Janvier January	Juillet July	Janvier January	Mai (21 ct.) May (21st inst)	Juin June	Juillet July	Août August	
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
FONTE, No 3, Fonderie Cleveland, G.M.B. . .	3 1 6	4 1 6	3 12 6	3 9 0	3 12 6	3 12 6	4 4 0	4 10 0	4 10 6	PIG-IRON, No. 3, Foundry, Cleveland, G.M.B.
FONTE, No 4, Forge Cleveland . . . . .	3 0 6	4 0 0	3 11 0	3 7 0	3 11 0	3 10 6	4 2 6	4 8 6	4 9 0	PIG-IRON, No. 4, Forge, Cleveland.
FERRO-MANGA- NESE, 76-80% en vrac	11 15 0	15 10 0	15 10 0	15 7 6	15 0 0	15 0 0	15 0 0	15 0 0	14 0 0	FERRO-MANGA- NESE 76-80% loose
SILICO-MANGA- NESE, 20-25% . . . .	—	22 10 0	22 0 0	20 0 0	18 17 6	18 17 6	18 5 0	18 0 0	18 0 0	SILICO-MANGA- NESE, 20-25% . . . .
FER OUVRE: Barres, Crown bars	8 4 0	12 12 6	12 7 6	11 10 0	11 2 6	11 2 6	11 5 0	11 5 0	13 0 0	MANUFACT. IRON: Stalls, Crown Bars.
BILLETTES D'ACIER: Acier doux . . . . .	6 3 0	7 15 0	7 2 6	6 12 6	6 3 9	6 5 0	6 10 0	6 10 0	—	STEEL BILLETS: Soft Steel.
Acier dur . . . . .		9 5 0	9 0 0	8 2 6	8 2 6	8 2 6	8 2 6	8 2 6	8 2 6	Hard Steel.
POUTRELLES, etc.	7 3 0	9 5 0	8 8 9	7 2 6	7 2 6	7 2 6	7 7 6	7 7 6	7 8 9	JOISTS, etc.
RAILS, LOURDS.	6 12 6	9 0 0	8 10 0	8 0 0	8 0 0	8 0 0	8 0 0	8 0 0	8 10 0	RAILS, HEAVY.
TOLES POUR NA- VIRE, etc.	7 7 0	9 15 0	8 17 6	7 11 3	7 15 0	7 15 0	8 2 6	8 2 6	8 2 6	PLATES, SHIPS, etc.
PLAQUES POUR CHAUDIÈRES . . . . .	8 15 6	13 5 0	12 15 0	11 10 0	11 5 0	11 5 0	11 5 0	11 5 0	11 5 0	PLATES, BOILER.
TOLES NOIRES, 26 G. . . . .	9 4 6	13 7 6	12 10 0	12 0 0	11 10 0	11 10 0	11 10 0	11 15 0	11 17 6	BLACK SHEETS, 26 G.
TOLES GALVAN., ONDULEES, 24 G.	12 0 0	17 10 0	16 2 6	16 15 0	15 12 6	15 15 0	16 10 0	17 0 0	16 15 0	GALV. CORR. SHEETS, 24 G.

**TABLEAU 27.**

**COURS DES MÉTAUX NON FERREUX (ÉTAIN,  
CUIVRE, PLOMB ET ZINC)**  
(par tonne).

**TABLE 27.**

**MARKET PRICES OF NON-FERROUS METALS (TIN,  
COPPER, LEAD AND SELLTER)**  
(per ton).

Début du mois	SWANSEA				MANCHESTER			Beginning of Month
	Etain en saumons (disponible)	Cuivre (disponible)	Plomb espagnol (disponible)	Zinc (disponible)	Cuivre (lingots de 1 <sup>er</sup> choix) Copper (Best Selected Ingots)	Plomb (anglais)	Plomb (étranger)	
	Block Tin (cash)	Copper (cash)	Spanish Lead (cash)	Spelter (cash)	Lead (English)	Lead (Foreign)		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
1924								1924
Janvier . . . . .	234 5 0	62 7 6	31 5 0	32 11 3	66 10 0	32 10 0	31 0 0	January.
Avril . . . . .	257 10 0	65 0 0	34 7 6	33 3 9	71 0 0	36 5 0	34 17 6	April.
Juillet . . . . .	228 10 0	61 12 6	32 15 0	32 2 6	67 0 0	35 0 0	34 0 0	July.
Octobre . . . . .	239 5 0	62 5 0	32 2 6	32 12 6	67 10 0	35 10 0	34 0 0	October.
1925								1925
Janvier . . . . .	272 0 0	67 5 0	44 0 0	39 5 0	72 0 0	46 10 0	44 15 0	January.
Avril . . . . .	235 10 0	60 2 6	34 17 6	34 15 0	64 15 0	37 10 0	35 15 0	April.
Juillet . . . . .	252 15 0	60 0 0	33 11 3	34 7 6	63 10 0	35 15 0	34 10 0	July.
Octobre . . . . .	264 17 6	61 5 0	39 5 0	38 7 6	67 0 0	41 10 0	40 0 0	October.
1926								1926
Janvier . . . . .	287 0 0	59 5 0	35 7 6	39 0 0	65 5 0	36 10 0	35 10 0	January.
Avril . . . . .	282 10 0	57 2 6	31 12 6	33 17 6	62 15 0	30 15 0	30 6 3	April.
Mai . . . . .	268 15 0	56 10 0	28 10 0	32 3 9	61 10 0	30 17 6	29 10 0	May.
Juin . . . . .	266 0 0	56 5 0	29 3 9	32 3 9	61 15 0	31 5 0	30 2 6	June.
Juillet . . . . .	272 5 0	57 0 0	30 3 9	33 12 6	63 12 6	32 10 0	31 2 6	July.
Août . . . . .	289 7 6	58 7 6	33 7 6	34 7 6	65 15 0	34 17 6	32 15 0	August.
Septembre . . . . .	295 5 0	59 2 6	33 5 0	34 12 6	66 12 6	33 17 6	32 7 6	September.

**TABLEAU 28.**

**CHOMAGE DANS LE ROYAUME-UNI: NOMBRE ET POURCENTAGE DES CHOMEURS ASSURÉS DANS LES INDUSTRIES DES CONSTRUCTIONS MÉCANIQUES, DE LA MÉTALLURGIE ET AUTRES INDUSTRIES DE 1924 À 1926.**

Industrie	Industry	Evaluation des assurés, juillet 1924  Estimated Number of Insured Persons, July 1924	Nombre (de tous les assurés en juillet 1924) chômant en : Numbers (of total insured in July 1924) unemployed in :				
			1924		1925		
			Août August	Octobre October	Février February	Avril April	Juin June
<b>TOUS COMMERCES ET INDUSTRIES</b> (% des chômeurs) . . .	<b>ALL TRADES AND INDUSTRIES</b> (% unemployed) . . .	11.514.000	1.220.847 10,6	1.278.457 11,1	1.331.205 11,6	1.292.131 11,2	1.406.155 12,2
CONSTRUCTIONS MÉCANIQUES (a) . . . (% des chômeurs) . . .	ENGINEERING (a) . . . (% unemployed) . . .	789.030	112.925 14,3	114.833 14,6	102.387 13,0	101.333 12,8	97.042 12,3
Charbonnages . . . . . (% des chômeurs) . . .	Coal-mining . . . . . (% unemployed) . . .	1.260.350	97.208 7,7	130.034 10,3	131.016 10,4	146.133 11,6	314.746 25,0
Industrie sidérurgique (b) . . . (% des chômeurs) . . .	Iron and Steel (b) . . . (% unemployed) . . .	237.460	53.707 22,6	53.844 22,7	52.794 22,2	61.541 26,0	56.993 24,0
Constructions navales et chantiers de réparations de navires . . . . . (% des chômeurs) . . .	Shipbuilding and Ship Repairing . . . . . (% unemployed) . . .	253.090	76.671 30,1	80.088 31,4	84.253 33,0	80.255 31,4	83.662 32,8
Véhicules à moteur et appareils d'aéronautique (construction et réparation) . . . (% des chômeurs) . . .	Motor Vehicles and Aircraft (Construction and Repair) . . . . . (% unemployed) . . .	203.340	19.852 9,8	19.457 9,6	14.564 7,2	12.818 6,3	12.132 6,0
Industrie cotonnière . . . . . (% des chômeurs) . . .	Cotton . . . . . (% unemployed) . . .	562.390	37.930 16,6	65.011 11,6	38.390 6,8	40.158 7,1	48.835 8,7
Industrie lainière . . . . . (% des chômeurs) . . .	Woollen and Worsted . . . . . (% unemployed) . . .	260.890	20.807 8,0	20.761 8,0	35.124 13,5	43.200 16,6	51.349 19,7
Bâtiment . . . . . (% des chômeurs) . . .	Building . . . . . (% unemployed) . . .	721.560	78.068 10,8	74.508 10,3	84.562 11,7	59.918 8,3	53.819 7,5
Imprimerie, édition et reliure . . . . . (% des chômeurs) . . .	Printing, Publishing and Bookbinding . . . . . (% unemployed) . . .	240.140	11.773 4,9	12.273 5,1	14.305 6,0	12.938 5,4	11.813 4,9
Commerces de distribution . . . (% des chômeurs) . . .	Distributive Trades . . . (% unemployed) . . .	1.352.110	81.893 6,1	90.922 6,7	104.291 7,7	96.871 7,2	85.775 6,3

(a) Y compris l'industrie des constructions mécaniques en général; les constructions maritimes, etc.; les constructions électriques et les constructions d'ouvrages d'art; les fonderies de fer et d'acier pour constructions mécaniques.  
 (b) Y compris les fabriques de fonte (hauts fourneaux); fours à fondre l'acier et à puddler le fer; forges et laminaires de fer et d'acier.  
 (c) A l'exclusion de tous les ouvriers des charbonnages.

**TABLE 28.**  
**UNEMPLOYMENT IN THE UNITED KINGDOM: NUMBERS AND PERCENTAGES OF INSURED WORKPEOPLE**  
**UNEMPLOYED IN THE ENGINEERING, METAL AND OTHER INDUSTRIES, 1924-1926.**

Evaluation des assurés, juillet 1925 Estimated Number of Insured Persons, July 1925	Nombre (de tous les assurés en juillet 1925) chômant en: Numbers (of total insured in July 1925) unemployed in:											
	1925		1926									
	Août August	Octobre October	Janvier January	Février February	Mars March	Avril April	Mai May	Juin June	Juillet July	Août August		
			(Fin du mois — (End of month))									
11.892.000 10.651.550(d)	1.440.628 12,1	1.354.029 11,4	1.317.535 11,1	1.247.823 10,5	1.171.136 9,8	1.093.829 9,2	2.803.210 (c) 23,6 1.612.760 (d) 15,1	2.815.432 (c) 23,7 1.624.982 (d) 15,3	2.809.270 (c) 23,6 1.628.820 (d) 15,3	2.746.334 (c) 23,1 1.675.884 (d) 14,8		
791.850	100.348 12,7	98.373 12,4	101.442 12,8	99.913 12,6	98.784 12,5	92.232 11,6	137.571 17,4	145.232 18,3	137.109 17,3	139.267 17,6		
1.240.450	279.781 22,6	246.967 19,9	125.740 10,1	118.809 9,6	115.783 9,3	97.880 7,9	—	—	—	—		
225.910	60.015 26,6	54.102 23,8	49.276 21,8	46.164 20,4	44.183 19,5	44.148 19,5	131.268 58,1	128.710 56,9	128.787 57,0	125.241 55,4		
241.700	85.553 35,4	89.429 37,0	89.624 37,1	87.185 36,1	88.703 36,7	83.896 34,7	92.695 38,3	94.649 39,2	93.047 38,5	97.606 40,4		
214.840	16.476 7,7	15.424 7,2	14.323 6,7	13.919 6,6	12.732 5,9	12.414 5,8	21.478 10,0	22.295 10,4	21.609 10,1	24.617 11,5		
576.720	76.382 13,2	40.213 7,0	47.365 8,2	53.728 9,3	55.596 9,6	56.708 9,8	152.910 26,5	144.018 25,0	162.628 28,2	135.627 23,5		
257.700	47.150 18,3	27.825 10,8	28.574 11,1	28.687 11,1	26.323 10,2	25.012 9,7	54.119 21,0	64.058 24,9	59.462 23,1	53.631 20,8		
754.120	58.591 7,8	73.009 9,7	112.275 14,9	88.559 11,7	64.697 8,6	55.127 7,3	73.075 9,7	72.387 9,6	75.179 10,0	75.238 10,0		
245.340	10.874 4,4	10.321 4,2	11.939 4,9	11.552 4,7	10.821 4,4	10.258 4,2	14.172 5,8	14.848 6,1	14.459 5,9	14.549 5,9		
1.458.200	86.877 6,0	90.783 6,2	97.768 6,7	96.932 6,6	91.962 6,3	84.438 5,8	99.601 6,8	99.365 6,8	100.455 6,9	103.011 7,1		

- (a) Comprising general engineering; marine, etc.; electrical and constructional engineering; engineers' iron and steel founding.  
 (b) Comprising pig-iron manufacture (blast furnaces); steel melting and iron puddling furnaces; iron and steel rolling mills and forges.  
 (c) Including estimate of coal miners not at work.  
 (d) Exclusive of all workers in the coal-mining industry.

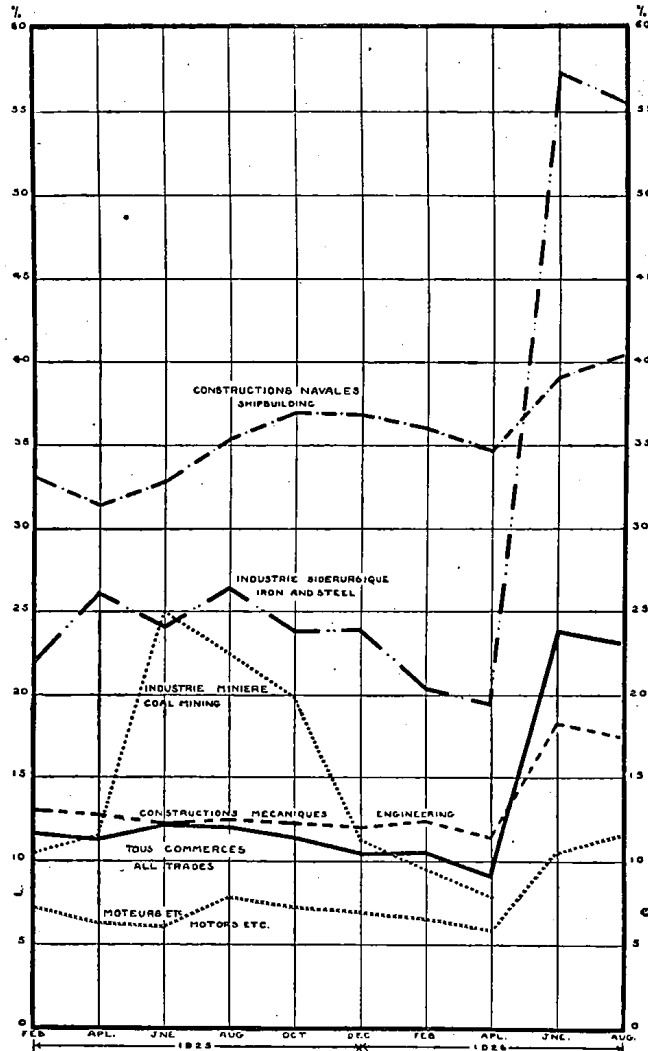


FIG. 22. Chômage dans le Royaume-Uni, 1925-1926. Pourcentage des chômeurs assurés dans :

Tous les commerces et industries  
 Les charbonnages  
 L'industrie sidérurgique  
 L'industrie des constructions mécaniques  
     maritimes  
     véhicules à moteurs, etc.

FIG. 22. Unemployment in the United Kingdom, 1925-1926; percentages of Insured Work-people Unemployed in:

— All Trades and Industries.  
 ..... Coal-mining.  
 - - - - - Iron and Steel.  
 - - - - - Engineering.  
 - - - - - Shipbuilding.  
 - - - - - Motor Vehicles, etc.

TABLEAU 29.

PRINCIPAUX CONFLITS INDUSTRIELS AU ROYAUME-UNI, AFFECTANT L'INDUSTRIE DES CONSTRUCTIONS MÉCANIQUES ET LES INDUSTRIES CONNEXES, 1910-1926.

(Extrait du Journal du Ministère du Travail)

TABLE 29.

PRINCIPAL INDUSTRIAL DISPUTES IN THE UNITED KINGDOM AFFECTING THE ENGINEERING AND ALLIED INDUSTRIES, 1910-1926.

(Extracted from the Ministry of Labour Gazette)

Année Year	Classe des ouvriers intéressés	Class of Workpeople Involved	Nombre approximatif des ouvriers intéressés Approximate Number of Workpeople Involved	Nombre global approximatif de journées de travail perdues Approximate Aggregate Number of Working Days Lost
1910	Mineurs (Rhondda Valley)	Coal-miners (Rhondda Valley)	13.000	2.385.000
1911	Charpentiers de navires, manœuvres, etc. (Angleterre septentrionale et Ecosse) Matelots, chauffeurs, ouvriers des docks et autres ouvriers employés aux transports (Royaume-Uni) Ouvriers des chemins de fer (Royaume-Uni)	Shipbuilders, labourers, etc. (North England and Scotland) Seamen, firemen, dock and other transport workers (United Kingdom) Railway workers (United Kingdom)	35.000 120.000 145.000	2.851.000 1.020.000 485.000
1912	Mineurs (Grande-Bretagne) Bateliers, ouvriers des docks, camionneurs, etc. (Londres, Medway et autres ports)	Coal-miners (Great Britain) Lightermen, dock workers, carters, etc. (London and Medway and other ports)	1.000.000	30.800.000
1914	Mineurs, etc. (Yorkshire)	Coal-miners, etc. (Yorkshire)	400.000	2.700.000
1915	Mineurs, etc. (Galles du Sud et Mon.)	Coal-miners, etc. (South Wales and Mon.)	150.000	2.654.000
1917	Mécaniciens, etc. (régions diverses)	Engineers, etc. (various districts)	200.000	1.300.000
1919	Mineurs, etc. (Yorkshire) Fondeurs de fer, noyateurs et apprêteurs (Angleterre, Galles et Irlande) Ouvriers des chemins de fer (Grande-Bretagne)	Coal-miners, etc. (Yorkshire) Ironfounders, coremakers and dressers (England, Wales and Ireland) Railway workers (Great Britain)	150.000 65.000 500.000	3.750.000 6.800.000 3.850.000
1920	Mineurs (Grande-Bretagne)	Coal-miners, etc. (Great Britain)	1.100.000	16.000.000
1921	Mineurs (Grande-Bretagne)	Coal-miners, etc. (Great Britain)	1.150.000	72.000.000
1922	Mécaniciens, etc. (Royaume-Uni: Districts fédérés) Ouvriers de chantiers maritimes (districts principaux)	Engineers, etc. (United Kingdom — federated districts) Shipyard workers (principal districts)	280.000 90.000	13.650.000 3.400.000
1923	Plaqueurs, riveurs, calfateurs, etc., de chantiers de constructions maritimes (districts fédérés)	Shipyard platers, riveters, caulkers, etc. (federated districts)	40.000	5.725.000
1924	Ouvriers des docks, etc. (Gde-Bretagne)	Dock workers, etc. (Great Britain)	110.000	510.000
1925	Mineurs (mines d'anthracite Galles du Sud)	Coal-miners (anthracite — South Wales)	20.000	670.000
1925	Mineurs (Durham)	Coal-miners (Durham)	10.000	1.865.000*
1926	Mineurs (Grande-Bretagne)	Coal-miners (Great Britain)	1.100.000	120.000.000**

\* Jusqu'au 30 avril 1926.

\*\* Evaluation minimum du 1er mai au 30 septembre 1926.

\* Up to April 30th, 1926.

\*\* Minimum estimate from May 1st to September 30th, 1926.



**TABLEAU 30.**

ÉMIGRATION D'OUVRIERS MÉCANICIENS ET  
AUTRES OUVRIERS QUALIFIÉS DES ILES BRI-  
TANNIQUES A DESTINATION DE PAYS NON  
EUROPÉENS, 1921-1925\*.

**TABLE 30.**

EMIGRATION OF ENGINEERING AND OTHER  
SKILLED WORKERS FROM THE BRITISH ISLES  
TO NON-EUROPEAN COUNTRIES,  
1921-1925.\*

Nombre total des	A desti- nation de l'Améri- que du Nord Bri- tannique	A desti- nation de l'Aus- tralie	A desti- nation de la Nou- velle- Zélande	A desti- nation de l'Afrique du Sud britannique	A desti- nation de l'Inde (y compris Ceylan)	Emigra- tion totale à destinat. de l'Empire britan.	A desti- nation des Etats- Unis	Indus- trie des pays non euro- péens	Pourcent. de l'émig- ration totale des adultes du sexe masculin	Number of
	To British North America	To Aus- tralia	To New Zealand	To British South Africa	To India (includ- ing Ceylon)	Total to British Empire	To United States	Trade to all Non- Euro- pean countries	Percent. of total adult male emigrat.	
Emigrants du 1921	24.643	10.342	4.307	4.977	3.361	50.983	19.392	73.205	100,0	1921 All Male
sexe masculin 1922	17.129	17.836	4.388	3.120	2.769	48.069	19.637	70.272	100,0	1922 Emigrants
(âgés de plus 1923	45.804	17.891	3.270	2.736	2.668	75.466	51.821	130.188	100,0	1923 (over 18 years
de 18 ans) 1924	28.444	15.839	3.833	2.901	2.659	56.584	9.430	68.931	100,0	1924 of age)
1925*	13.278	13.992	4.246	2.680	2.540	39.978	9.015	51.799	100,0	1925*
<b>Total 1921-1925</b>	<b>129.298</b>	<b>75.900</b>	<b>20.044</b>	<b>16.414</b>	<b>13.997</b>	<b>271.070</b>	<b>109.295</b>	<b>394.395</b>	<b>100,0</b>	<b>Total 1921-1925</b>
Ouvriers 1921	5.746	3.353	1.584	1.995	787	14.119	6.397	21.089	28,8	1921 All Skilled Men
qualifiés 1922	6.368	5.762	1.907	878	728	15.257	8.932	24.732	36,2	1922
1923	14.056	5.524	1.332	750	726	23.023	28.827	52.533	40,3	1923
1924	7.593	5.001	1.386	797	747	16.136	2.056	18.929	27,4	1924
1925*	3.857	5.134	1.403	651	678	12.347	4.127	17.185	33,1	1925*
<b>Total 1921-1925</b>	<b>37.620</b>	<b>24.774</b>	<b>7.612</b>	<b>5.071</b>	<b>3.666</b>	<b>80.882</b>	<b>50.339</b>	<b>134.448</b>	<b>34,1</b>	<b>Total 1921-1925</b>
Ouvriers quali- 1921	1.909	1.253	578	919	531	5.619	2.047	8.016	10,9	1921 Skilled Metal
fiés de la mé- 1922	2.065	2.216	633	418	509	6.219	3.956	10.536	15,0	1922 and Engin-
tallurgie et de 1923	6.068	2.185	387	396	498	9.951	14.274	24.724	19,0	1923 cing Work-
l'industrie des 1924	2.884	1.700	406	380	528	6.303	900	7.742	11,2	1924 ers
constr. méc. 1925*	1.690	1.731	462	354	492	5.160	1.813	7.515	14,5	1925*
<b>Total 1921-1925</b>	<b>14.616</b>	<b>9.085</b>	<b>2.466</b>	<b>2.467</b>	<b>2.558</b>	<b>33.252</b>	<b>22.990</b>	<b>58.533</b>	<b>14,8</b>	<b>Total 1921-1925</b>

\* Comprend en 1925 la Grande-Bretagne et l'Irlande septentrionale seulement; pour les années antérieures, la Grande-Bretagne et toute l'Irlande.

\* Covering Great Britain and Northern Ireland only in 1925; Great Britain and all Ireland in previous years.

**TABLEAU 31.**

**TAUX DES SALAIRES DANS LES INDUSTRIES DES CONSTRUCTIONS MÉCANIQUES, DE LA MÉTALLURGIE  
ET AUTRES INDUSTRIES ET COMMERCE PRINCIPAUX.**

*Résumé des niveaux relatifs en septembre 1925 avec indication des augmentations par comparaison avec août 1914.*

(Établi d'après les renseignements publiés dans le *Journal du Ministère du Travail.*)

Commerce ou industrie	Date	Taux ou salaire	District	Pourcentage de l'augmentation par comparaison avec août 1914	Observations									
Tous commerces et industries. . .	30-9-25	Taux hebdomadaires à plein travail	Royaume-Uni	75 %	Augmentation du coût de la vie = 76 %.									
Agriculture. . . . .	30-9-25	Taux hebdomadaires	Angleterre et Pays de Galles	74 %	Y compris les paiements en nature et les indemnités.									
Charbonnages. . . . .	Juillet 1925	Salaires par équipes	Principaux bassins miniers	61 %	—									
Mines de fer . . . . .	30-9-25	Taux hebdomadaires à plein travail	Cleveland	30—50 %	—									
Constructions mécaniques: Ajusteurs et tourneurs. . . . .	30-9-25	Id.	16 centres principaux	<table border="0"> <tr><td>{</td><td>45 %</td><td rowspan="4">}</td></tr> <tr><td></td><td>44 %</td></tr> <tr><td></td><td>45 %</td></tr> <tr><td></td><td>76 %</td></tr> </table>	{	45 %	}		44 %		45 %		76 %	Moyennes non pondérées
{					45 %	}								
					44 %									
					45 %									
	76 %													
Mouleurs de fer . . . . .														
Modeleurs . . . . .														
Manœuvres. . . . .														
Constructions maritimes: Charpentiers . . . . .	30-9-25	Id.	Neuf centres principaux	<table border="0"> <tr><td>{</td><td>35 %</td><td rowspan="3">}</td></tr> <tr><td></td><td>44 %</td></tr> <tr><td></td><td>68 %</td></tr> </table>	{	35 %	}		44 %		68 %			
{					35 %	}								
					44 %									
	68 %													
Menuisiers . . . . .														
Manœuvres. . . . .														
Industrie sidérurgique lourde . . .	Sept. 1925	Id.	Tous les districts	de (a) 20 % à (b) 70 %	(a) Tous les ouvriers de l'industrie sidérurgique de la Galles du Sud. (b) Manœuvres de hauts fourneaux.									
Plaques et tôles d'étain. . . . .	Sept. 1925	Id.	Galles du Sud	34 ½ %										
Industrie cotonnière . . . . .	30-9-25	Salaires aux pièces	Tous les districts	61 %	En admettant que la production horaire est demeurée la même. Salaires à la pièce et à l'heure, combinés.									
Industrie lainière . . . . .	30-9-25	Taux hebdomadaires	Yorkshire	80—90 %										
Bonneterie . . . . .	30-9-25	Taux hebdomadaire à plein travail	Midlands	67 %										
Fabriques de chaussures . . . . .	30-9-25	Taux hebdomadaires minimum	Tous les districts	100 %	Ouvriers qualifiés.									
Bâtiment . . . . .	30-9-25	Taux hebdomadaire, à plein travail	Grandes villes	96 %	Moyenne pondérée.									
Industrie du livre . . . . .	30-9-25	Id.	26 grandes villes	107—117 %	Moyenne non pondérée.									
Meubles . . . . .	30-9-25	Id.	17 grandes villes	88—101 %	Moyenne non pondérée.									
Service des chemins de fer . . . .	30-9-25	Id.	Tous les districts	80—155 %	—									
Ouvriers des docks . . . . .	Sept. 1925	Taux journaliers	Id.	119 %	Moyenne non pondérée.									
Conducteurs de tramways . . . . .	Id.	Taux hebdomadaires	50 grandes villes	<table border="0"> <tr><td>{</td><td>94 %</td><td rowspan="2">}</td></tr> <tr><td></td><td>106 %</td></tr> </table>	{	94 %	}		106 %	—				
{					94 %	}								
	106 %													
Receveurs de tramways . . . . .														
Ouvriers municipaux. . . . .	30-9-25	Taux hebdomadaires à plein travail	28 grandes villes	99 %	—									
Ouvriers des usines à gaz et à électricité . . . . .	30-9-25	Id.	50 à 60 grandes villes	107 %	—									

**TABLE 31.**

**WAGES RATES IN ENGINEERING, METAL, AND OTHER PRINCIPAL TRADES AND INDUSTRIES.**

*Summary of Relative Levels at September 1925, Showing Increases Compared with August 1914.*

(Compiled from information published in the *Ministry of Labour Gazette*)

Trade or Industry	Date	Rate or Earnings	District	Percentage Increase in August 1914	Notes										
All Trades and Industries. . . . .	30-9-25	Weekly Full-time Rates	Utd. Kingdom	75 %	<i>Cost of Living Increase = 76 %.</i>										
Agriculture. . . . .	30-9-25	Weekly rates	England and Wales	74 %	<i>Including payments in kind and allowances.</i>										
Coal mining . . . . .	July 1925	Earnings per shift	Principal coal-fields	61 %	—										
Iron Ore-mining . . . . .	30-9-25	Weekly full-time rate	Cleveland	30—50 %	—										
Engineering: Fitters and Turners . . . . . Ironmoulders . . . . . Patternmakers . . . . . Labourers . . . . .	} 30-9-25	Ditto	16 principal centres	{ 45 % 44 % 45 % 76 % }	<i>Unweighted averages.</i>										
Shipbuilding: Shipwrights . . . . . Ship Joiners . . . . . Labourers . . . . .						} 30-9-25	Ditto	Nine principal centres	{ 35 % 44 % 68 % }	<i>Unweighted averages.</i>					
Heavy Iron and Steel . . . . .											Sept. 1925	Ditto	All districts	From (a) 20 % to (b) 70 %	(a) <i>All Iron and Steel Workers in South Wales.</i> (b) <i>Blasifurnace Labourers.</i>
Tinplates and Sheets. . . . .											Sept. 1925	Ditto	South Wales	34 ½ %	
Cotton. . . . .	30-9-25	Piece rates	All districts	61 %	<i>Assuming output per hour unchanged.</i>										
Woollen . . . . .	30-9-25	Weekly rates	Yorkshire	80—90 %	<i>Piece and Time Rates together.</i>										
Hosiery . . . . .	30-9-25	Weekly full-time rate	Midlands	67 %											
Boot and Shoe . . . . .	30-9-25	Minimum weekly rate	All districts	100 %	<i>Skilled workers.</i>										
Building . . . . .	30-9-25	Weekly full-time rate	Large towns	96 %	<i>Weighted average.</i>										
Printing and Bookbinding . . . . .	30-9-25	Ditto	26 large towns	107—117 %	<i>Unweighted average.</i>										
Furniture . . . . .	30-9-25	Ditto	17 large towns	88—101 %	<i>Unweighted average.</i>										
Railway Service. . . . .	30-9-25	Ditto	All districts	80—155 %	—										
Deck Labourers. . . . .	Sept. 1925	Daily rate	Ditto	119 %	<i>Unweighted average.</i>										
Tramway Drivers . . . . . Tramway Conductors . . . . .	} Ditto	Weekly rates	50 large towns	{ 94 % 106 % }	—										
Municipal Labourers. . . . .					30-9-25	Weekly full-time rate	28 large towns	99 %	—						
Labourers in Gas Works and Electricity Supply. . . . .	30-9-25	Ditto	50-60 large towns	107 %	—										



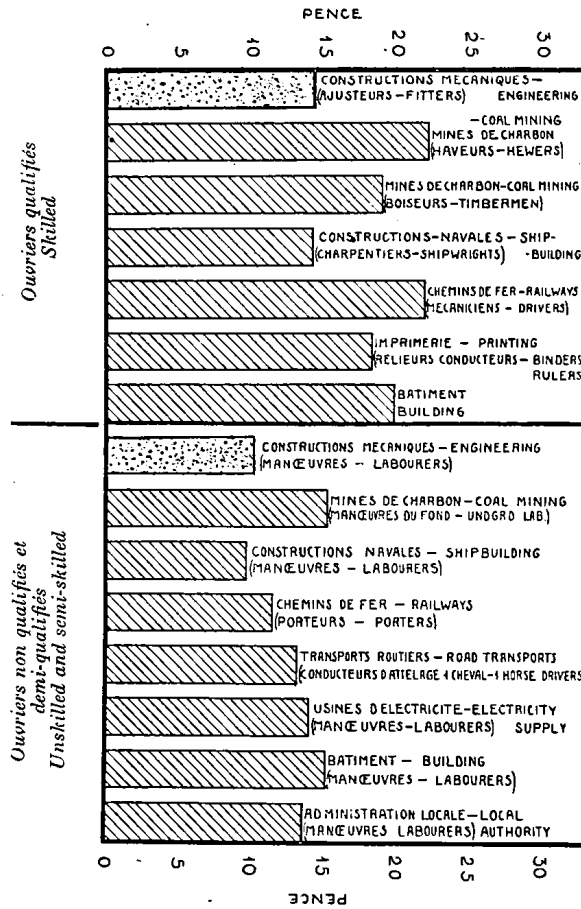


FIG. 23. Diagramme comparatif des taux des salaires des ouvriers qualifiés et non qualifiés dans l'industrie des constructions mécaniques et dans certaines autres industries. Septembre 1925.

FIG. 23. Comparative Hourly Wages Rates of Skilled and Unskilled Workers in Engineering and Certain Other Industries, September 1925.

**TABLEAU 33.**

TABLEAU COMPARATIF DES EXPORTATIONS DE  
MACHINES ET DE LOCOMOTIVES EN PROVENANCE  
DU ROYAUME-UNI, DE L'ALLEMAGNE, DE LA  
FRANCE ET DES ÉTATS-UNIS.

**TABLE 33.**

COMPARATIVE EXPORTS OF MACHINERY AND  
LOCOMOTIVES FROM THE UNITED KINGDOM,  
GERMANY, FRANCE, AND THE UNITED STATES.

	Tonnage (en milliers de tonnes de 2.240 lbs.)	Indices (1913 = 100)	Valeur déclarée (en milliers de £)	Pourcentage annuel des exportations de chaque pays par rapport aux exporta- tions totales	Valeur par tonne (en £)	
	Tonnage (thousands of tons of 2,240 lb.)	Index Nos. (1913 = 100)	Declared Value (£000's)	Percent. in Each Year of Exports of Each Country to the Total	Value per ton (£)	
1913.						1913.
Royaume-Uni . . . . .	800,8	(100)	39.350	(33,3)	49,1	United Kingdom.
Allemagne . . . . .	746,0	(100) } 100	39.458	(33,4) { 36,7	52,9	Germany.
France . . . . .	75,2	(100)	4.062	(3,3)	54,0	France.
Etats-Unis d'Amérique	—	—	35.439	(30,0)	—	United States of America.
1923.						1923.
Royaume-Uni . . . . .	523,4	(65,4)	52.006	(36,5)	99,3	United Kingdom.
Allemagne . . . . .	363,5	(48,7) } 58,8	28.061	(19,7) { 25,6	77,1	Germany.
France . . . . .	119,6	(159,2)	8.377	(5,9)	70,0	France.
Etats-Unis d'Amérique	—	—	54.061	(37,9)	—	United States of America.
1924.						1924.
Royaume-Uni . . . . .	524,6	(65,5)	49.512	(33,0)	94,5	United Kingdom.
Allemagne . . . . .	332,0	(44,5) } 58,1	30.059	(20,0) { 26,6	90,5	Germany.
France . . . . .	145,6	(193,6)	9.996	(6,6)	68,6	France.
Etats-Unis d'Amérique	—	—	60.781	(40,4)	—	United States of America.
1925.						1925.
Royaume-Uni . . . . .	579,8	(72,4)	54.245	(31,5)	93,5	United Kingdom.
Allemagne . . . . .	450,1	(60,3) } 73,3	37.950	(22,0) { 27,1	84,3	Germany.
France . . . . .	151,9	(202,2)	8.810	(5,1)	58,0	France.
Etats-Unis d'Amérique	—	—	71.380	(41,4)	—	United States of America.

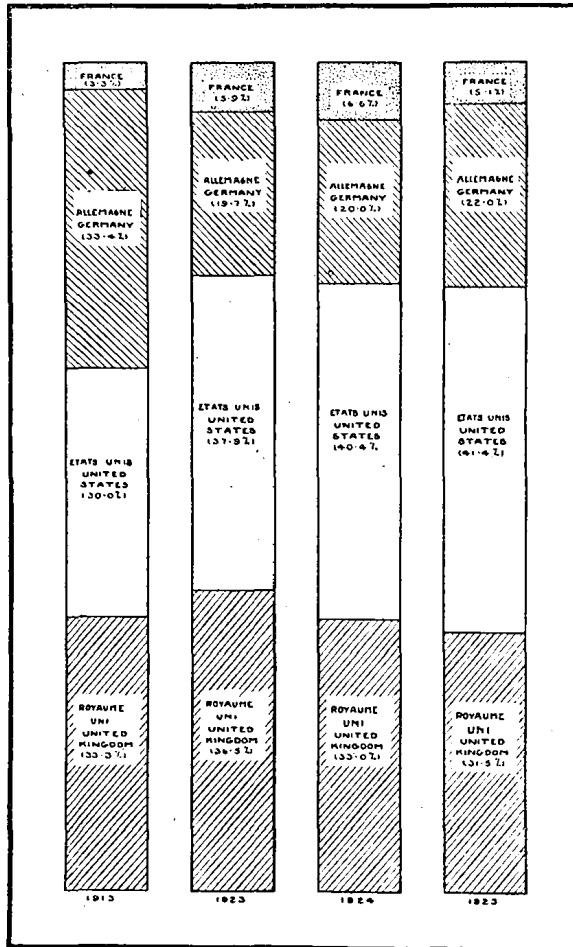


FIG. 24. Diagramme comparatif des exportations de machines et locomotives (calculées d'après la valeur déclarée ramenée en livres sterling) en provenance du Royaume-Uni, des Etats-Unis d'Amérique, de l'Allemagne et de la France, avec indication de la part proportionnelle du commerce total combiné, revenant à chaque pays, en 1913 et de 1923 à 1925.

FIG. 24. Comparative Exports of Machinery and Locomotives (calculated in terms of declared value, equated to £ sterling) from U.K., U.S.A., Germany and France, showing proportionate shares of the combined total trade by each country, 1913 and 1923-1925.

**TABLEAU 34.**

**RÉPARTITION POUR 1924 DES EXPORTATIONS  
EN PROVENANCE DU ROYAUME-UNI, DES ÉTATS-  
UNIS, DE LA FRANCE ET DE L'ALLEMAGNE.**

**TABLE 34.**

**DISTRIBUTION OF EXPORTS IN 1924 FROM  
UNITED KINGDOM, UNITED STATES,  
FRANCE AND GERMANY.**

	Valeur en milliers de £ — Value in £000's Sterling							
	Royaume- Uni  United Kingdom	Roy.-Uni Articles en- tièrement ou presque entièrement manufacturés  Unit. Kingd. (Articles wholly or mainly manu- factured)	Royaume- Uni (machines seulement)  United Kingdom (Machinery only)	Etats-Unis d'Amé- rique  United States of America	France	Allemagne  Germany	Total pour ces pays  Total for these countries	
A destination des trois autres pays désignés . (% des export. totales)	138.144 (17,25 %)	86.534 (14,00 %)	5.164 (11,53 %)	333.750 (37,06 %)	172.880 (35,52 %)	64.682 (18,62 %)	759.456 (28,38 %)	To the other three countries named. (% of total exports).
A destination d'autres pays producteurs importants . (% des export. totales)	92.280 (11,53 %)	62.771 (10,14 %)	6.570 (14,67 %)	159.160 (15,34 %)	117.023 (24,09 %)	60.262 (17,34 %)	428.725 (16,04 %)	To other principal manufacturing countries. (% of total exports).
Exportations totales à destination de tous les pays producteurs importants . (% des export. totales)	230.424 (28,78 %)	149.305 (24,14 %)	11.734 (26,20 %)	542.910 (51,40 %)	289.903 (59,61 %)	124.944 (35,96 %)	1.188.181 (44,42 %)	Total to all principal manufacturing countries. (% of total exports).
A destination des principaux Dominions britanniques . . . . .	230.208	211.862	17.707	192.200	64.747*	12.980	500.135*	To the principal British Dominions.
A destination d'autres pays, en général non producteurs . . . . .	340.335	257.688	15.342	303.890	131.950*	209.676	985.851*	To other countries, mainly non-manufacturing.
Exportations totales à destination de tous les pays en général non producteurs . . . . . (% des export. totales)	570.543 (71,22 %)	469.550 (75,86 %)	33.049 (73,30 %)	496.090 (47,60 %)	196.697 (40,39 %)	222.656 (64,04 %)	1.485.986 (55,58 %)	Total to all countries, mainly non-manufacturing. (% of total exports).
Total des exportations . (% des export. totales)	800.967 (100,00 %)	618.855 (100,00 %)	44.783 (100,00 %)	1.039.000 (100,00 %)	486.600 (100,00 %)	347.600 (100,00 %)	2.674.167 (100,00 %)	Total Exports. (% of total exports).
Total des produits semi-ouvrés et ouvrés (inclus ci-dessus) (% des export. totales)	618.855 (77,25 %)	—	—	495.500 (47,70 %)	291.800 (59,95 %)	296.500 (87,30 %)	1.702.655 (63,70 %)	Total of Semi-Manufactured and Manufactured Products (included above). (% of total exports).

\* Estimation évaluée.

\* Estimated distribution.



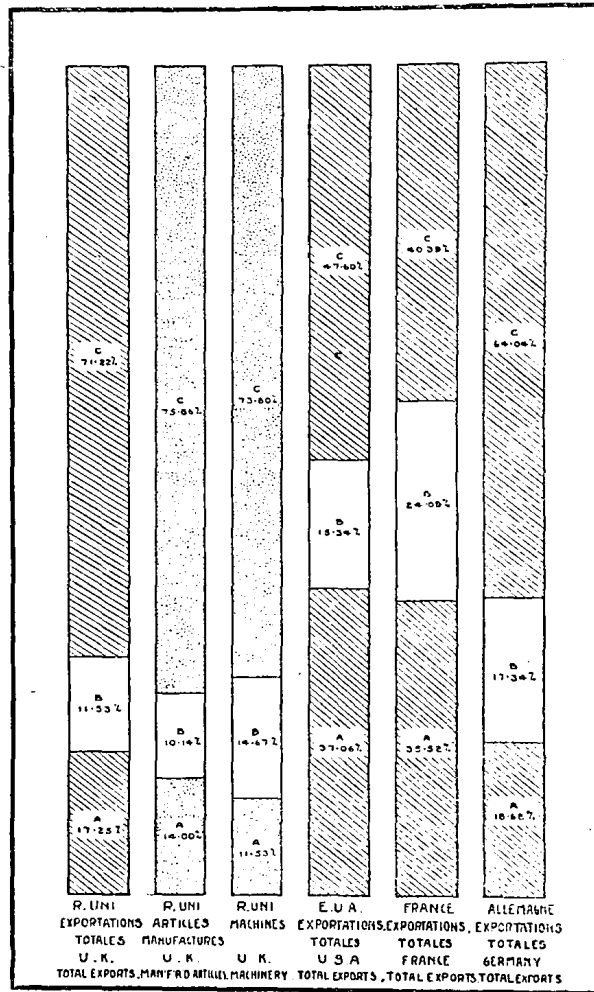


FIG. 25. Répartition pour 1924 des exportations en provenance du Royaume-Uni, des Etats-Unis d'Amérique, de France et d'Allemagne, exprimées en pourcentages des exportations totales en provenance de chacun de ces pays.

- A. Exportations à destination des trois autres pays désignés.
- B. Exportations à destination des autres pays producteurs importants.
- C. Exportations à destination de tous les pays en général non producteurs.

FIG. 25. Distribution of Exports in 1924 from U.K., U.S.A., France and Germany expressed as percentages of total exports from each country.

- A. Exports of the other three countries named.
- B. Exports of the other principal manufacturing countries.
- C. Exports of all countries mainly non-manufacturing.

**TABLEAU 35.**

**EXPORTATIONS DES PRODUITS DE L'INDUSTRIE  
DES CONSTRUCTIONS MÉCANIQUES EN PROVE-  
=NANCE DES ÉTATS-UNIS, EN 1924 ET 1925.**  
(Y compris les machines, locomotives, tracteurs, moteurs et  
appareils électriques.)

**TABLE 35.**

**ENGINEERING EXPORTS FROM THE UNITED  
STATES, 1924 AND 1925.**  
(Comprising Machinery, Locomotives, Tractors, Motor  
Engines, and Electrical Apparatus.)

Désignation	Description	Valeurs en dollars — Value in dollars	
		1925	1924
Locomotives . . . . .	Locomotives . . . . .	\$ 7,022,123	\$ 5,649,456
Autres machines à vapeur . . . . .	Other Steam Engines . . . . .	1,071,518	918,268
Chaudières . . . . .	Boilers . . . . .	1,929,736	1,864,454
Accessoires et pièces détachées de chaudières . . . . .	Accessories and Parts for Boilers . . . . .	2,087,002	1,723,428
Moteurs d'automobiles . . . . .	Automobile Engines . . . . .	15,273,952	4,188,426
Autres moteurs à combustion interne . . . . .	Other Internal-combustion Engines . . . . .	9,190,786	7,036,586
Accessoires et pièces détachées pour moteurs à combustion interne . . . . .	Accessories and Parts for Internal-combustion Engines . . . . .	4,110,659	3,471,783
Locomotives électriques . . . . .	Electric Locomotives . . . . .	811,321	2,243,040
Autres machines et appareils électriques . . . . .	Other Electric Machinery and Apparatus . . . . .	72,978,287	67,584,694
Machines à excavation . . . . .	Excavating Machinery . . . . .	3,124,937	2,233,296
Malaxeurs de béton . . . . .	Concrete Mixers . . . . .	807,464	642,513
Machines pour la construction des routes . . . . .	Road-making Machinery . . . . .	1,430,036	1,189,476
Élévateurs et appareils de levage . . . . .	Elevators and Elevating Machinery . . . . .	1,933,476	1,884,694
Machines pour mines et carrières . . . . .	Mining and Quarrying Machinery . . . . .	7,824,359	10,080,212
Machin. pour l'extraction des huiles minérales . . . . .	Oil Well Machinery . . . . .	10,249,069	6,399,165
Pompes . . . . .	Pumps . . . . .	7,593,499	7,119,119
Tours . . . . .	Lathes . . . . .	2,584,504	1,197,752
Aléseuses et foreuses . . . . .	Boring and Drilling Machines . . . . .	629,301	615,695
Raboteuses, liméuses et mortaiseuses . . . . .	Planers, Shapers and Slotters . . . . .	563,633	319,272
Presses à cintrer et presses mécaniques . . . . .	Bending and Power Presses . . . . .	594,916	618,998
Machines à tailler les engrenages . . . . .	Gear-cutters . . . . .	816,576	391,361
Machines à fraiser . . . . .	Milling Machines . . . . .	1,630,611	644,751
Mach. à fileter et mach. à fabriquer les vis . . . . .	Thread-cutting and Screw Machines . . . . .	1,192,596	590,290
Machines à poinçonner et cisailles mécaniques . . . . .	Punching and Shearing Machines . . . . .	194,510	100,285
Marteaux mécaniques . . . . .	Power Hammers . . . . .	246,092	241,504
Machines à aiguiser et à meuler . . . . .	Sharpening and Grinding Machines . . . . .	3,075,140	1,814,681
Autres machines pour le travail du métal, et pièces détachées . . . . .	Other Metal-working Machinery and Parts of . . . . .	5,581,844	4,146,414
Machines textiles . . . . .	Textile Machinery . . . . .	11,438,800	8,752,282
Machines à coudre . . . . .	Sewing Machines . . . . .	8,743,670	8,406,222
Machines pour les fabriques de chaussures . . . . .	Shoe Machinery . . . . .	1,370,142	1,473,049
Machines pour la minoterie . . . . .	Flour Mill and Grist Mill Machinery . . . . .	889,105	811,935
Machines pour l'industrie sucrière . . . . .	Sugar Mill Machinery . . . . .	8,270,021	8,304,990
Machines pour les fabriques de papier et de pâte à papier . . . . .	Paper and Pulp Mill Machinery . . . . .	1,717,451	2,130,685
Machines pour scieries . . . . .	Sawmill Machinery . . . . .	833,336	628,559
Autres machines pour le travail du bois . . . . .	Other Woodworking Machinery . . . . .	1,347,871	1,336,506
Machines pour l'industrie du froid . . . . .	Refrigerating and Ice-making Machinery . . . . .	2,485,291	2,180,425
Compresseurs à air . . . . .	Air Compressors . . . . .	3,886,690	2,958,936
Machines à écrire . . . . .	Typewriters . . . . .	18,020,494	15,110,536
Outillage mécanique de blanchisserie . . . . .	Power Laundry Machinery . . . . .	998,335	975,121
Machines à composer . . . . .	Type-setting Machines . . . . .	3,446,955	3,530,108
Presses à imprimer . . . . .	Printing Presses . . . . .	4,798,261	4,825,425
Machines et outillage agricoles . . . . .	Agricultural Machinery and Implements . . . . .	77,936,911	59,974,044
Toutes autres machines et pièces détachées . . . . .	All Other Machinery and Parts . . . . .	740,605,356	60,731,763
<b>Total . . . . .</b>	<b>Total . . . . .</b>	<b>\$ 385,376,676</b>	<b>\$ 317,040,424</b>
Équivalence approximative en livres sterling (au cours moyen de change pour chaque année) . . . . .	Approximate Sterling Equivalents (at average rate of exchange for each year) . . . . .	£ 79,850,000	£ 71,700,000
Valeur des exportations du Royaume-Uni correspondant aux machines désignées ci-dessus . . . . .	Value of United Kingdom Exports corresponding to above descriptions . . . . .	£ 64,692,000	£ 58,859,000
Proportion exprimée en valeur des exportations du Royaume-Uni, par rapport à celles des États-Unis d'Amérique . . . . .	Ratio of British to United States of America Exports in Value . . . . .	81 %	82 %

**TABLEAU 36.**

**IMPORTATIONS DE PRODUITS DE L'INDUSTRIE  
DES CONSTRUCTIONS MÉCANIQUES AUX ÉTATS-  
UNIS, EN 1924 ET 1925.**

**TABLE 36.**

**ENGINEERING IMPORTS INTO THE UNITED  
STATES, 1924 AND 1925.**

Désignation	Description	Valeur en dollars — Value in dollars	
		1925	1924
Machines-outils pour le travail du métal . . . . .	Metal-working Machine Tools . . . . .	\$ 373,575	\$ 335,903
Machines et outillage agricoles . . . . .	Agricultural Machinery and Implements . . . . .	3,094,104	2,285,830
Machines et appareils électriques . . . . .	Electrical Machinery and Apparatus . . . . .	938,726	1,191,185
Autres machines génératrices de force motrice . . . . .	Other Power-generating Machinery . . . . .	15,427	89,876
Autres machines . . . . .	Other Machinery . . . . .	5,216,626	3,982,381
Véhicules (sauf les véhicules pour l'agriculture) . . . . .	Vehicles (except agricultural) . . . . .	1,939,453	1,826,443
<b>Totaux . . . . .</b>	<b>Totals . . . . .</b>	<b>\$ 11,577,911</b>	<b>\$ 9,711,618</b>

**TABLEAU 37.**  
RÉSUMÉ DES RÉSULTATS FINANCIERS OBTENUS PAR TRENTE ET UNE\* ENTREPRISES REPRÉSENTATIVES DE L'INDUSTRIE DES CONSTRUCTIONS MÉCANIQUES ET INDUSTRIES CONNEXES, POUR LES EXERCICES 1921, 1922, 1923 ET 1924, PAR COMPARAISON AVEC LA MOYENNE D'AVANT-GUERRE.

**TABLE 37.**  
SUMMARY OF FINANCIAL RESULTS OF THIRTY-ONE\* REPRESENTATIVE ENGINEERING AND ALLIED FIRMS, FOR THE FINANCIAL YEARS 1921, 1922, 1923 AND 1924, COMPARED WITH PRE-WAR AVERAGE.

		EXERCICES <sup>1</sup> — FINANCIAL YEARS <sup>1</sup>				
		1911-13 (moyenne) (average)	1921	1922	1923	1924
		(en milliers de £)		(in £000's)		
<b>MONTANT TOTAL DU:</b>	<b>TOTAL AMOUNT OF:</b>					
Capital-actions ordinaires . . . . .	Ordinary Capital . . . . .	22.577	60.076	60.178	64.827	65.646
Capital-actions privilégiées . . . . .	Preference Capital . . . . .	16.968	38.223	38.808	38.943	38.943
Total du capital versé . . . . .	Total Paid-up Capital . . . . .	39.545	98.300	98.986	103.770	104.589
Indices (1911-13 = 100) . . . . .	Index Nos. (1911-13 = 100) . . . . .	100%	249,0%	250,5%	262,5%	264,5%
Obligations non remboursées . . . . .	Debentures Outstanding . . . . .	19.624	28.424	27.957	27.832	31.839
Indices (1911-13 = 100) . . . . .	Index Nos. (1911-13 = 100) . . . . .	100%	144,9%	142,2%	141,8%	162,4%
Bénéfices . . . . .	Earned Profits . . . . .	4.652	8.003	7.096	5.770	5.172
Indices (1911-13 = 100) . . . . .	Index Nos. (1911-13 = 100) . . . . .	100%	172,0%	152,3%	124,0%	111,1%
Dividende aux actions ordinaires . . . . .	Ordinary Dividend . . . . .	2.218	3.229	3.589	2.897	2.970
Dividende aux action privilégiées . . . . .	Preference Dividend . . . . .	799	2.158	1.984	2.087	1.991
Montant total distribué en dividendes . . . . .	Total Amount distributed in Dividends . . . . .	3.017	5.387	5.573	4.984	4.961
Indices (1911-13 = 100) . . . . .	Index Nos. (1911-13 = 100) . . . . .	100%	178,6%	184,8%	165,2%	164,6%
Montant affecté à la réserve . . . . .	Appropriation to Reserve . . . . .	1.374	1.476	1.740	872	683
Report . . . . .	Carried Forward . . . . .	1.926	5.693	5.407	5.283	4.468
<b>PROPORTION:</b>	<b>RATIO OF:</b>	%	%	%	%	%
des obligations non remboursées par rapport au capital versé . . . . .	Debentures outstanding to Paid-up Capital . . . . .	49,6	28,9	28,3	26,8	30,5
des bénéfices par rapport au capital versé . . . . .	Earned Profits to Paid-up Capital . . . . .	11,8	8,1	7,2	5,6	4,9
du montant distribué en dividendes par rapport au capital versé . . . . .	Amount distributed in Dividends to Paid-up Capital . . . . .	7,6	5,5	5,7	4,8	4,7
du montant distribué en dividendes par rapport aux bénéfices . . . . .	Amount distributed in Dividends to Earned Profits . . . . .	64,8	67,4	78,6	86,3	95,9
du montant placé en réserve par rapport au capital versé . . . . .	Amount placed to Reserve to Paid-up Capital . . . . .	3,5	1,5	1,8	0,8	0,7
du montant reporté par rapport au capital versé . . . . .	Amount Carried Forward to Paid-up Capital . . . . .	4,9	5,8	5,5	5,1	4,3

\* 30, dans les années d'après-guerre, par suite de la fusion de deux entreprises.

\* 30 in post-war years because of one amalgamation.

<sup>1</sup> L'exercice d'une société se terminant à une date postérieure au 31 décembre et au plus tard au 30 juin suivant est considéré comme l'exercice afférent à l'année civile précédente: p. ex. un rapport pour l'exercice se terminant au 31 mars 1925 est considéré comme un rapport pour 1924.

<sup>1</sup> The financial year of a company ending at any date after December 31st and before or on June 30th following is taken as for the former calendar year, e.g., a report as for year ended March 31st, 1925, is taken as 1924.

**TABLEAU 38.**  
RÉSUMÉ DES RÉSULTATS FINANCIERS OBTENUS PAR SOIXANTE-CINQ ENTREPRISES REPRÉSENTATIVES DE L'INDUSTRIE DES CONSTRUCTIONS MÉCANIQUES ET INDUSTRIES CONNEXES POUR LES EXERCICES 1924 ET 1925.

**TABLE 38.**  
SUMMARY OF FINANCIAL RESULTS OF SIXTY-FIVE REPRESENTATIVE ENGINEERING AND ALLIED FIRMS FOR THE FINANCIAL YEARS 1924 AND 1925.

(Y compris 27 des 30 entreprises du tableau ci-dessus.)

(Including 27 of the 30 companies embraced in above table.)

		EXERCICES <sup>1</sup> — FINANCIAL YEARS <sup>1</sup>	
		1924	1925
		(£ 000)	(£ 000)
<b>MONTANT TOTAL DU:</b>	<b>TOTAL AMOUNT OF:</b>		
Capital-actions ordinaires . . . . .	Ordinary Capital . . . . .	97.772 (89,562)(a)	89.931
Capital-actions privilégiées . . . . .	Preference Capital . . . . .	49.455	50.043
Total du capital versé . . . . .	Total Paid-up Capital . . . . .	147.227 (139,017)	139,974
Obligations non remboursées . . . . .	Debentures Outstanding . . . . .	50.246	52.728
Bénéfices . . . . .	Earned Profits . . . . .	7.905	4.768
Dividende aux actions ordinaires . . . . .	Ordinary Dividend . . . . .	4.161	3.534
Dividende aux actions privilégiées . . . . .	Preference Dividend . . . . .	2.445	2.208
Montant total distribué en dividendes . . . . .	Total Amount Distributed in Dividends . . . . .	6.606	5.742
Montant affecté à la réserve . . . . .	Appropriation to Reserve . . . . .	904	180
Report . . . . .	Carried Forward . . . . .	4.119 (3.487)	2.567
<b>PROPORTION:</b>	<b>RATIO OF:</b>		
des obligations non remboursées par rapport au capital versé . . . . .	Debentures outstanding to Paid-up Capital . . . . .	34,1 (36,1)	37,7
des bénéfices par rapport au capital versé . . . . .	Earned Profits to Paid-up Capital . . . . .	5,4 (5,7)	3,4
du montant distribué en dividendes par rapport au capital versé . . . . .	Amount distributed in Dividends to Paid-up Capital . . . . .	4,5 (4,8)	4,1
du montant distribué en dividendes par rapport aux bénéfices . . . . .	Amount distributed in Dividends, to Earned Profits . . . . .	83,6	120,4
du montant placé en réserve par rapport au capital versé . . . . .	Amount placed to Reserve to Paid-up Capital . . . . .	0,6 (0,6)	(—) 0,1
du montant reporté par rapport au capital versé . . . . .	Amount Carried Forward to Paid-up Capital . . . . .	2,8 (2,5)	1,8

a Les chiffres en italiques indiquent les ajustements auxquels il y a lieu de procéder si l'on donne un effet rétroactif à la reorganisation des Etablissements Vickers, S. A.

a The figures in italics represent the adjustments to be made for 1924 if retrospective effect is given to the reconstruction of Messrs. Vickers, Ltd.

<sup>1</sup> Voir note 1 ci-dessus.

<sup>1</sup> See note 1 above.

**NOTE ON THE AUSTRIAN MECHANICAL  
ENGINEERING INDUSTRY**

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*Communicated by M. WILDNER.*

*(January 1927)*

## THE AUSTRIAN MECHANICAL ENGINEERING INDUSTRY.

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The engineering industry made relatively speedy and satisfactory headway in the former Austrian Monarchy because all the natural conditions necessary for its development were present. In the first place, the Monarchy could rely on its own iron, coal and coke supplies and, secondly, it formed a vast protected market including large and industrially undeveloped areas which were good customers for the products of Austrian industry. The Austrian engineering industry therefore could count on a ready sale and was thus in no way compelled either to specialise or pay particular attention to exportation. At the same time, there was no inducement for it to strike out new lines in machine construction in order to stop the importation from abroad of machinery not produced in Austria.

The average output of the Austrian engineering industry in the last years of the pre-war period is estimated at about 300,000 tons, representing a value of approximately 300 million gold crowns. Imports averaged 140 to 150 million gold crowns and exports roughly 50 to 60 millions. In value, therefore, exports represented only about one-sixth of the home production.

The post-war boundaries of Austria have, however, entirely altered the position of the engineering industry. In the former Monarchy there were two main areas of production, one being Bohemia and Moravia and the other Lower Austria with Vienna and Styria. Present-day Austria only retains the second of these areas; we therefore now find in the country a disproportionately large number of engineering works, while the main outlets for such production — formerly found in the Monarchy itself — are now foreign Customs territory.

In the first years following on the separation of present-day Austria from the group of territories formerly belonging to the Monarchy, Austrian manufacturers had to cope with enormous difficulties in obtaining material. The works of the Austrian Alpine Montangesellschaft had been left in the territory of the new Austria, but they were only able to work on a reduced scale owing to lack of fuel. This scarcity of coal and coke was a direct handicap to the whole industry, so that it was forced to limit production and was unable to utilise the period immediately following the change in the political situation to tighten its hold on those of its markets which had now become foreign Customs territory, and to conquer new markets.

When the Austrian mechanical engineering industry at last succeeded in obtaining larger supplies of raw materials and in increasing output, it found that the Succession

States had inaugurated a strict policy of national production with a rigid system of import prohibitions and high duties to protect the engineering industries previously in existence or newly established within their territory. Consequently, Austrian machinery exports could only, with the greatest sacrifices, be maintained at approximately their former level; they could not surpass it, although this would have been specially desirable because, owing to the above-mentioned circumstances, a considerably larger proportion of Austrian production has been dependent since the war on markets outside the country. In 1920, 1921 and 1922, Austrian machinery exports represented a value of about 90-95 million gold crowns, while in quantity the figures were in 1920 about 53,600 tons, in 1921 about 73,500 tons and in 1922 about 59,500 tons, the latter figures being solely due, however, to the then existing inflation. This is amply proved by the fact that Austrian machinery exports in the years 1923, 1924 and 1925 were only about 35,000 tons, whereas the value of these goods was 82, 88 and 90 million gold crowns. This altered proportion between the weight and value of exports is naturally also a result of the rise in the level of prices.

The radical change in the position of the engineering industry in new Austria made specialisation and combination a matter of urgency, in order that in this way the cost of production might be diminished. Scarcity of capital and defective fiscal legislation rendered this natural process extremely difficult, and industrial groups are only just beginning to be formed within the various engineering branches in the country.

Unlike German and other competitors, Austrian manufacturers — and this is largely true to-day — have carried on a number of different branches of the engineering industry; but now they are faced with the difficult task of allocating certain spheres of production among their works and of creating, apart from already existing exceptions, a more rational system of “series” production with a view to increasing output and lowering costs. This process of reorganisation has only just begun, and it will in any case require some considerable time for completion.

The capacity of production of the Austrian engineering industry averaged in the last five pre-war years about 380,000 tons and the actual production — with a total number of 60,000 employed persons — was 300,000 tons. The factories were thus working up to about 80 per cent of their full capacity. The post-war total capacity of the Austrian machine-shops has increased, a fact which may be ascribed to the extension of certain works, partly during the war and partly during the period of inflation. At present, the capacity of the industry can be reckoned at about 500,000 tons per annum, which, in comparison with the pre-war period, represents an increase of 32 per cent. Actual output is about 40 per cent of the producing capacity, *i.e.*, about 200,000 tons. The value in round figures is 280 million gold crowns, which, in comparison with the pre-war period, represents an increase of 40 per cent. In the year 1925, 40,000 workers were employed in the Austrian engineering industry in about 1,580 workshops. In the whole Austrian metallurgical industry, which accounted for some 130,000 hands in 1925, 30,000 persons were returned as unemployed, of whom about 9,000 might be assigned to the engineering industry.

The present under-production is due to the difficulties in the way of exportation, resulting from circumstances indicated above. If the Austrian engineering industry

were in a position to work to a larger extent of its capacity, the whole of the additional production would have to be exported. The fall in actual production, above all, is due to the diminution in regular export markets.

Whereas in peace time the average number of working hours was 53 per week, the maximum number has now, as a result of the passing of the Eight-Hour Day Law, been reduced in Austria to 48. In comparison with the pre-war period, the work actually done has, as a result of the shorter day, fallen by, roughly, 20 per cent. If, however, we reckon present-day production per worker, the figure will be found to be the same as in the pre-war period, namely, five tons, this result being due to the modernisation and improved organisation of the works. As regards wages, we would refer the reader to the attached Table I.

Above all, the engineering industry requires for its manufactures grey and metal casting, bar-iron and sheet metal. These materials are mainly obtained within the country with the exception of thick tinned iron and large-sized medium plates, which, as a result of the stoppage of the rolling-mills of the Alpine company, have to be obtained from Witkowitz and from Germany. In addition, a considerable part of the pig-iron for the production of grey casting comes from Germany and from Czechoslovakia.

Austrian machinery exports, which are mainly taken by the Succession States — are severely handicapped by the restrictive measures adopted in those countries. Whereas these formerly consisted in a strictly applied system of import prohibitions, the national States have now, for the sake of appearance, concentrated their protectionist policy on import duties. At the present time import prohibitions are still in force only in Poland and to some extent in Czechoslovakia; in Austria import prohibitions on machinery practically no longer exist. On the other hand, the tariff wall raised by the national States constitutes an enormous obstacle to the exportation of Austrian products to those countries.

The following examples will illustrate this point. An Austrian 15 h.p. benzine-engine imported into Czechoslovakia is subject to an *ad valorem* duty of 30 per cent — this is also the case in Roumania; on importation into Hungary it is subject to 32 per cent and in the case of Poland to as much as 75 per cent, whereas Austria only subjects a similar article to 20 per cent. A two-cylinder 100-h.p. Diesel engine is subject on importation into Czechoslovakia to a duty of 24 per cent, into Hungary 43 per cent and into Poland 63 per cent. The same article coming from abroad is subject in Austria to only 15 per cent.

An ordinary shaft and water turbine on a horizontal axle is subject on importation into Czechoslovakia to a duty of 35 per cent as against the 23 per cent levied on importation into Austria.

On importation into Czechoslovakia a planing machine has to pay 30 per cent, and in Poland 43 per cent duty, whereas the Austrian duty is only 16 per cent.

A metal lathe with double action exported from Austria is subject on importation into Poland to a duty of 23 per cent, and in the case of Hungary 29 per cent, whereas the duty levied on importation into Austria is only 9 per cent.

A stone-breaker is subject on importation into Czechoslovakia from Austria to a duty of 70 per cent.

A table of import and export figures for machinery is given in the attached Table (2). The consumption of machinery per head of the population is 30 kilos, or 42 gold crowns in value.

The present prices for Austrian machinery is, on an average, 1.4 gold crowns per kilo, which represents an increase of 40 per cent on pre-war prices.

The Austrian engineering industry is organised in the Union of the Austrian mechanical engineering industry. There are no purchasing and selling corporations.



Table 1.

WAGES IN THE VIENNA AND UPPER AUSTRIAN METALLURGICAL INDUSTRY AT THE END OF 1925.

Category of workman	According to the statistics of		
	the Vienna Industrial Union	the Vienna Chamber of Commerce	the Upper Austrian Industrial Union
	Per week		
	Schillings	Schillings	Schillings
Turners (piece-work) . . . . .	62.40	57.50	60 —
Mechanics (wages) . . . . .	49.92	45.54	—
Tinsmiths (wages) . . . . .	52.08	50.—	43.40
Smiths (wages) . . . . .	52.32	47.50	56.40
Toolmakers (piece-work) . . . . .	62.88	57.09	58.80
Belt-makers and bronze-workers (wages) . . . . .	48.48	48.15	—
Skilled assistants (men) (piece-work)	54.72	44.11	49.20
Assistants (women) (wages) . . . .	24.—	22.69	24.20

Table 2.

Machinery and apparatus	IMPORTS		EXPORTS	
	Amount in tons	Value in thousands of gold crowns	Amount in tons	Value in thousands of gold crowns
1908 . . . . .	98,277.—	114,189.—	34,930.7	41,253.—
1909 . . . . .	89,440.3	105,939.—	36,616.8	41,317.—
1910 . . . . .	106,520.—	124,813.—	49,447.—	53,579.—
1911 . . . . .	118,513.7	140,113.—	53,913.2	59,141.—
1912 . . . . .	144,100.—	175,833.—	55,895.2	66,626.—
1913 . . . . .	114,030.3	145,668.—	59,501.4	71,790.—
1920 . . . . .	21,569.6	38,064.—	53,664.2	93,057.—
1921 . . . . .	19,295.1	28,897.—	73,492.4	96,906.—
1922 . . . . .	27,054.8	40,383.—	59,540.—	98,802.—
1923 . . . . .	21,178.—	46,402.—	35,455.—	82,113.—
1924 . . . . .	28,887.8	63,941.—	35,103.1	88,049.—
1925 . . . . .	20,313.9	54,324.—	35,335.3	90,246.—

## Industrie des Constructions Mécaniques

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### ERRATA

Page 51, Tableau, 1925. — *Au lieu de Suède lire Suisse.*

52, Tableau, colonne pour 1925. — *Lire:*

Canada . . . . .	243.499
Inde britannique. . . . .	225.392
Grande-Bretagne. . . . .	221.316
France . . . . .	212.303
Brésil. . . . .	172.800
Russie . . . . .	156.075
Italie . . . . .	153.334
Australie . . . . .	145.000
Argentine . . . . .	142.756
Pays-Bas . . . . .	125.205

1.797.680

(c'est-à-dire 50 % environ de la valeur totale des importations de machines.)

Page 133, Tableau, N° du tarif 529, dernière colonne:

châssis de scie *au lieu de* 52,60 *lire* 39,50  
 autres " 39,50 " 52,60

## Mechanical Engineering

Vol. I.

### CORRIGENDA

Page 50, line 1. — *For fifth read tenth.*

~~50~~ Table. — The column for 1925 should read:

Canada . . . . .	243,499
India . . . . .	225,392
Great Britain . . . . .	221,316
France . . . . .	212,303
Brazil. . . . .	172,800
Russia . . . . .	156,075
Italy . . . . .	153,334
Australia . . . . .	145,000
Argentine . . . . .	142,756
Netherlands . . . . .	125,205

1,797,680

(Equals about 50 per cent of total imports of machinery.)

Page 51, Table, Consumption per head. *For* In millions of Reichsmarks *read* In Reichsmarks.