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BOARD OF TRADE

(HA 251)

STATISTICS
BACK-UP

THE REPORT on the

CENSUS OF PRODUCTION
FOR 1949

INTRODUCTORY NOTES



Presented by the Board of Trade to Parliament in pursuance of the Statistics of Trade Act, 1947 (10 & 11 Geo. 6, Ch. 39, Sec. 7).

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1952

PRICE NINEPENCE NET

The Report on the Census of Production for 1949

Introductory Notes

Introduction

1. The census of 1949 was the second census of production taken under the Statistics of Trade Act, 1947, the first having been taken for 1948. The first census of production was taken in this country for 1907 under the Census of Production Act of 1906. Other censuses were taken under that Act for 1912, 1924, 1930 and 1935. In addition to the censuses of production, surveys of a similar kind but with a rather more limited industrial coverage were taken for 1933, 1934, 1937 and 1938 under the Import Duties Act, 1932, which conferred somewhat different powers from that of the Census of Production Act. For the survey of industrial production taken in respect of 1935, the powers conferred by both the Census of Production Act and the Import Duties Act were used. A partial census was taken for 1946 under Defence Regulation 55A.

2. Detailed information on sales and purchases was not collected for 1949, but questions were asked about wages and salaries and capital expenditure, about which compulsory information was collected for the first time in a full census in 1948, Other matters on which questions were asked are enumerated in paragraph 18.

3. The subjects to be covered were decided after consultation, as provided for in the Act, with the Census of Production Advisory Committee. This Committee, appointed by the President of the Board of Trade, included members representative of industry, the universities, the public service and organized labour.

Area Covered

4. The censuses for 1907 and 1912 covered the United Kingdom (which then included Southern Ireland). Southern Ireland (now the Irish Republic) has not, however, been included since 1912. The 1924 census included Northern Ireland but for 1930 and 1935 the Northern Ireland Government held their own censuses. The results of the Northern Ireland censuses were incorporated in the reports prepared by the Board of Trade, which thus covered the whole of the United Kingdom. The 1946 partial census, which covered establishments in the United Kingdom, was, however, entirely conducted by the Board of Trade. A full census was taken for 1948 in Great Britain but no census was taken for Northern Ireland; the figures for that year, therefore, related to Great Britain only. The Statistics of Trade (Northern Ireland) Act, very similar to the 1947 Act which applied to Great Britain only, was passed in 1949 and a census relating to that year was taken, the results of which are included in this report.

Scope of the Census

5. The census for 1949 covered undertakings in the field of industrial production, including building and contracting, public utilities, and mines and quarries; private firms, nationalized undertakings, and government establishments were included. For certain trades (e.g. boot and shoe repairing, and motor and cycle repairing), firms mainly engaged in repairing were included if they worked mainly for the trade but were excluded if they mainly worked for the public. As in 1948 the census included textile converting, laundry work, dyeing and dry cleaning, wig-making, and tea blending and coffee roasting, which were excluded from the 1935 census. The scrap metal trade, however, was not included for 1949; otherwise the scope of the census for 1949 was the same as that for 1948.

Period Covered

6. Firms were required to make returns for the calendar year 1949, but, if the calendar year was not their year of account, a return for a business year ending between April 5, 1949 and April 6, 1950 was accepted. A similar concession was made at previous censuses.

Treatment of Small Firms

7. Apart from the film production and textile converting trades, in which all firms, irrespective of size, were required to complete the normal form, firms employing ten persons or fewer were required to give information only about the number of persons employed and the nature of their business. No further information was required from these firms, whereas for 1948 small firms in a number of trades were required to complete a simplified form.

Method of Canvass

8. In October 1949 a special form was sent to establishments in all trades, except the film production and textile converting trades, known or believed to be employing not more than ten persons. This form required simply a statement of the nature of the business and the number of persons employed in the establishment on the average during the twelve months ended September 30, 1949; firms that employed not more than ten persons on the average and satisfactorily completed the form were not required to make any further returns in connection with the 1949 census.

9. At the beginning of 1950 a statutory form was sent to all the remaining establishments in Great Britain on the census register, numbering about 190,000, a number of which had to be removed subsequently as non-effective (e.g. defunct businesses). Three months were allowed for the completion and return of the forms and in February and March postcards were sent out to about 120,000 establishments reminding them of the date by which the forms must be completed. Second reminders were required in about 65,000 cases. A final application was made by registered post to about 12,400 establishments whose returns were still outstanding. Prosecution was resorted to in 227 cases. About 71,500 returns were received from firms employing more than ten persons. About 18 per cent. of these returns were found to be defective or inaccurate and were queried with the firms concerned. The number of small firms claiming, on the special form (see paragraph 8) and on the statutory form, exemption from making a detailed return was about 205,000. In addition, about 3,000 returns were received by the Ministry of Fuel and Power, of which 450 related to establishments employing ten or fewer persons.

10. In Northern Ireland about 1,700 returns were received from firms employing more than ten persons. About 3,600 small firms employing ten persons or fewer were exempted from completing a detailed census return.

11. The censuses were conducted by correspondence, no local staff of enumerators being employed by the census office.

Trade Classification

12. As in the census for 1948, establishments in Great Britain were classified to trades according to the nature of their output and, as far as possible, in conformity with the Standard Industrial Classification. For the 1948 census, certain products, called principal products, were identified as characteristic of the production of individual trades, the principal products for a given trade being, of course, of a similar nature or commonly associated in production. An establishment was classified to a trade if its production of principal products of that trade accounted for a greater proportion of the value of its output than did the production of principal products of any other trade. As, however, firms were not required for 1949 to return detailed information concerning their output, it was not possible to classify establishments to particular trades in this manner and, in the main, establishments were classified to the same trades as for 1948. Firms were asked, however, to state if there had been any substantial change in the nature of their output since their 1948 return and, as a result, a number of establishments were reclassified. The report on each trade includes a note on the minimum list headings of the Standard Industrial Classification covered by the report.

13. In Northern Ireland, where the census for 1949 was the first full census since the war, firms were required to give brief particulars of the quantity and value of the most important items of output. This information was of value in classifying establishments to trades.

14. The trade classification differs in many cases from that adopted in the reports for the 1935 census. The returns made for 1935 were, however, reclassified as far as possible on the new basis for inclusion in the reports of the 1948 census and these figures have been included in the 1949 reports. In some cases it was not possible to reclassify the 1935 returns and, where necessary, a reference to the limited comparability is included in the introduction to the relative 1949 report.

The Establishment

15. The basic unit for the collection of information was generally the "establishment". In the majority of cases an establishment comprises the whole of the premises under the same ownership or manage-

houses laboratories and other ancillary places of business which were situated apart from the producing works were not regarded as separate establishments, and the persons employed therein and the value of their services were included in the return for the works. The activities, however, of separate selling or transport organizations, for which separate accounts were kept, were excluded from the return.

16. Undertakings with more than one establishment covered by the census of production were required to make a return in respect of each establishment and to include in each return an appropriate proportion of the employees, wages, salaries, materials purchased, etc. of any "common service" departments such as central offices, research facilities, etc. Where two or more distinct trades were carried on in separate departments of a single works, the firm was generally required to treat these as separate establishments and make a separate return for each department on the appropriate form.

17. If, owing to the system of accounting, firms with more than one establishment were unable to make separate returns for each establishment, they were generally allowed to make one return covering all establishments in one trade but were required, in addition, to give certain summary information separately for each establishment.

Subjects on which Information was Obtained in 1949

- 18. The following sections were included in the 1949 census:
 - Working proprietors.
 - Persons employed.
 - Wages and salaries, etc.
 - Expenditure on plant, machinery and vehicles.
 - Expenditure on new building work.
 - Materials and fuel purchased in year of return.
 - Amount paid for work given out.
 - Stocks at the beginning and end of the year of return.
- Output in year of return.

All these sections were included in the census for 1948, which also included sections on payments for certain services rendered by other firms, and analysis of sales. The information obtained in 1949 in sections 2, 3, 5, 6, 8 and 9 differed in some respects from that obtained in 1948. Notes on these differences are included in the following paragraphs. In the 1935 census information was collected relating to items 2 6 7 and 9 only

Instructions for Making Returns

- 19. The following notes outline the general instructions given to firms on the way in which returns were to be completed, and should be of use in interpreting the results published in the reports. Any differences in the instructions given to firms in Northern Ireland are indicated.
- 20. In many trades it was found necessary to amend or supplement the general instructions in order to fit the special circumstances of the particular trade. Where these supplementary instructions affect the basis of the figures returned, a note of explanation is included in the report of the trade concerned. In interpreting the figures in any particular report, it is necessary to bear in mind the explanations and qualifications accompanying the report, as well as the general instructions summarized below

Working Proprietors

21. In Great Britain, firms, other than limited companies, were required to state the number of working proprietors engaged in the business. If the business was a partnership, all active partners were to be included, as well as members of their families who worked in it without receiving fixed wages or salaries. Proprietors working less than half the normal hours were to be excluded. In Northern Ireland the instructions were similar except that directors of limited companies, other than those paid by fee only, were included with working proprietors.

Persons Employed

22. Firms were required to classify persons employed by them under the two main headings of (i) administrative, technical, and

clerical employees and (ii) operatives.

'Administrative, technical, and clerical employees" included, for Great Britain only, directors (other than those paid by fee only), and, for Great Britain and Northern Ireland, managers, superintendents, and works foremen; research, experimental, development, technical and design employees, other than operatives; draughtsmen and tracers; travellers and office (including works office) employees.

"Operatives" included all other classes of employees, i.e. broadly speaking, all manual wage earners. The figures include operatives engaged in outside work of erection, fitting, etc., in Great Britain, as

ment at a particular address (e.g. a mine or factory). Offices, ware- well as those employed in or about the factory or works; inspectors, viewers and similar workers; operatives employed in transport work, stores and warehouses (unless employed at a separate selling or transport organization) and cleaners.

23. All of these figures were to exclude canteen employees, outworkers, and persons engaged in a merchanting business or any other business not covered by a firm's return.

24. The particulars required related to the persons on the payroll (i.e. whose National Insurance cards were held) whether full-time or part-time employees.

- Firms were required to state numbers employed in the pay week ended on or about September 24, 1949, distinguishing males and females and those under 18 years of age. Firms were asked to state the number of canteen and of other excluded employees (see paragraph 23). In addition firms were required to state the average numbers of operatives and of administrative, technical, and clerical employees on the pay-roll during the year of return, the average to be calculated from figures relating to the last week of each calendar
- 26. In trades where outworkers are employed, the average numbers employed during the year of return were required to be stated, the average to be calculated in a similar manner to that of operatives and of administrative, technical, and clerical employees. Outworkers were defined as persons employed by the firm who worked on materials supplied by the firm but who did not work on the premises. Operatives directly employed who worked out of doors (e.g. maintenance workers) and sub-contractors were not to be included as out-
- 27. Questions relating to the number of operatives employed at specified dates during each month of the year of return, and, for firms employing 100 or more persons, the number of persons included in the return who were employed in a separate selling organization or on certain types of work, which were asked for 1948, were not included for 1949; nor were firms employing outworkers required to state the numbers employed at four dates during the year, as for 1948.

Wages and Salaries

28. Firms were required to state the amount paid during each quarter of the year of return to operatives and in Great Britain the total amount paid during the year of return to administrative, technical, and clerical employees; in Northern Ireland quarterly payments to administrative, technical, and clerical employees were to be stated. Payments to working proprietors, whether salaries or not, were to be excluded for Great Britain. In Northern Ireland this exclusion extended also to payments to directors of limited com-The amounts returned were to include all overtime payments, bonuses, and commissions, and were to be stated before deductions for income tax, insurance, contributory pensions, etc. Payments in kind, travelling expenses, lodging allowances, etc., were to be ignored. Other information asked for included the employers' contributions to all national insurance schemes, and payments to

29. For 1948 firms in Great Britain were required to state the amount paid during each quarter of the year of return to administrative, technical and clerical employees. Apart from this, the information obtained for 1949 was the same as for 1948. There were no prewar figures of comparable scope because the Census of Production Act, 1906 excluded wages from the subjects about which questions might be asked in a census of production. However, in conjunction with the 1935 Census, a voluntary enquiry was conducted by the Ministry of Labour into the total wages bills of firms making census The proportion of respondent firms sending replies which could be directly related to census of production data varied widely in different trades, but they provided a basis for estimating the approximate relationship between net output and the total wages bill of each trade for 1935. The available data, together with an indication of the size of the sample and the extent to which they were representative, were published for each trade in the final report on the 1935 census. In many trades these figures need to be used with caution, where comparisons are made with 1949 and 1948, in view of the subsequent reclassification in accordance with the Standard Industrial Classification.

Plant, Machinery and Vehicles

30. Firms were required to state the total value of plant and machinery and of vehicles acquired or disposed of during the year, and to include the same items as would be regarded as capital for income tax purposes, but including all renewals to plant where it was dealt with on a renewals basis for income tax purposes. Office machinery owned by firms was to be included as "plant". The value of plant, etc., acquired (new and secondhand had to be stated separately) was to be assessed at the actual cost less any discounts

received but including the cost of transport and installation. Plant produced by firms for their own use was to be included at the income tax value. In respect of items disposed of, the proceeds of sales were to be stated, including the estimated proceeds of insurance claims for plant, etc., destroyed or damaged. Similar information was obtained

New Building Work

31. Firms were required to state the cost incu ted by them during the year on building and other constructional work (including office buildings, canteens and the like) used in connection with their businesses. The amount returned was to include capital expenditure on new buildings, including the extension or reconstruction of old buildings, the cost of replacing any buildings destroyed by fire or war damage, and the cost of any newly constructed buildings purchased. The cost of old buildings and dwelling houses for employees, and site values, development charges, legal charges, etc., were to be excluded

32. Similar information was obtained for 1948, but questions relating to the value of buildings and land at the beginning of the year, land and old buildings acquired and relinquished during the year. and the amount of rates payable during the year, which were included in this section for 1948, were not asked for 1949.

Materials and Fuel

33. Firms were required to state in one sum the cost of materials and fuel purchased during the year; no detailed information was required, as it was for 1948, relating to the cost and quantity of particular items purchased. To be included in the total cost were all purchases of materials for use in production and of fuel (including oil, gas, and electricity) for all purposes, including heating, lighting, and transport; all packing materials, including the full cost of returnable cases and containers; workshop materials; office materials; water charges; materials for repair to firms' own buildings, plant and vehicles when carried out by their own workpeople included in the return; and consumable tools and parts for machinery purchased during the year as replacements. Materials, components, etc., which were purchased and re-sold in the same state (i.e. merchanted or factored goods), and materials supplied by customers for processing were excluded.

34. The declared cost of materials was to include transport charges to the works, other than transport carried out by the establishment's own staff and, generally, any duty paid (less rebates, etc.). Materials, gas, or electricity transferred from other departments of the firm not covered by the same return were to be included at the value recorded as output by the other departments, plus any payment for transport. Firms were not asked for 1949, as they were for 1948, to state the quantity of electricity generated and consumed at the establishments covered by their returns.

35. The information obtained for 1935 was on a different basis from that obtained for 1949 and 1948. In pre-war censuses questions were asked not about materials, etc., purchased but about materials, etc., used, that is, materials, etc., purchased during the year, adjusted by the firms for stock changes.

Work Given Out

36. For 1949 firms giving out materials for processing, etc., to other firms or to any of their establishments for which separate returns were made were required to state, in one sum, the amount paid for the work given out during the year. Separate particulars for different types of work done, which were obtained for some trades for 1948, were not required for 1949. Payments made to individual outworkers in respect of work done by them were excluded from this heading.

Stocks and Work in Progress

37. Firms were required to state separately the value (as assessed for income-tax purposes) of their stocks of products on hand for sale and of materials and fuel at the beginning and end of the year of return; separate particulars for some of the more important items of finished goods and of materials and fuel, which were obtained for most trades for 1948, were not required for 1949.

The value of work in progress at the two dates was also required. Firms were instructed not to include any progress payments made by them to sub-contractors working on their own materials, nor to make any deductions on account of progress payments received from customers.

39. Differences may arise between the values of stocks and work in progress recorded at the end of 1948 and the beginning of 1949, and in some trades may be substantial. These differences are due to various causes, e.g. changes in the classification of establishments, changes in the periods covered by individual firms' returns, transfers

by firms between materials and work in progress, and the replacement estimates by figures taken from audited accounts.

40. Before the war firms were required to adjust individual items of their sales of finished products and purchases of materials and fuel for changes in stocks, and separate information relating to stocks was not then asked for

Output in the Year of Return

41. For 1949 firms were required to state, in one sum, the total net selling value of goods and waste products sold and the amount charged for work done during the year. No detailed information was required for 1949 relating to the value and quantity of particular items sold. To be included in the total value was the value of sales during the year of goods made in the establishment covered by the return, whether produced in the year or not the value of sales of waste products, and of goods made for the firm by outworkers or by other firms from materials given out to them, and the net amount charged for packing materials. The value of sales of merchanted goods was excluded. For industries such as building, shipbuilding, and cinematograph film production, in which the productive processes are complex and extend over long periods, a return of the value of work done during the year was required.

42. The value of sales was the net selling value, and this was defined as the amount charged to customers, whether on an ex-works or delivered basis, and net of any trade discounts, agents' commissions, allowances for returnable cases, purchase tax, etc. Where goods were charged on a delivered basis to customers overseas, firms were asked to give the f.o.b. value. Firms were required to state, in one sum, the estimated amount included in the value of their sales which represented payments made by them to other firms for transport outwards.

43. Where separate returns were made for different departments of the same firm, and goods produced in one department were used another department, the value of the goods was required to be included in the output of the first (producing) department, and in the materials of the second (using) department, on the common basis of the charge that would have been made to an independent purchaser buying similar quantities, with due allowances for transport costs. Goods transferred to a separate selling organization under the same control were to be valued on the same basis.

The method of valuation used for 1949 was the same as that used in the censuses for 1948 and 1946. It differed from that used pre-war. In 1935 the net selling value related to the production for sale of each item specified, i.e. sales during the year of goods made by the firm plus the book value of stocks at the end of the year, less that at the beginning of the year. Net selling value was defined as the actual amount charged to customers after deduction, inter alia, of payments to other firms for carriage outwards. Where separate returns were made for different departments of the same firm, transfers of goods between them were included at the values which were entered in the firm's books.

45. In post-war censuses firms working on commission or for the trade on materials given out to them by other firms were required to include, as the value of their output, only the net amount charged by them to customers. Where the work was done for manufacturing firms covered by the census, the value of the goods is included in the final selling value recorded by these firms.

46. Information obtained for 1948 in a number of trades concerning the total quantities of the more important products made during the year, was not required for 1949.

Calculations made from Census Returns

Gross Output

47. The gross output of a trade is the total value of goods made and other work done during the year. For 1949, as for 1948, this is derived by subtracting from the value of sales and work done the value of stocks at the beginning of the year and adding the value at the end of the year. A deduction is then made for any payments made to other firms for transport outwards to offset a similar sum included in the recorded value of goods sold.

48. For 1935, however, the values of individual items related to output in the year, allowances having already been made by firms for changes in stocks between the beginning and the end of the year and for payments made to other firms for transport outwards; it was unnecessary, therefore, to make any adjustments for these

49. The net output of a trade is defined, as in previous censuses, as the amount left after deducting from the value of gross output the aggregate of the cost of materials and fuel used and the amount paid for work given out. This residual figure represents the value added

to materials by the process of production and constitutes the fund from which wages, salaries, rents, rates and taxes, advertising and other selling expenses, and all other similar charges have to be met, as well as depreciation and profit.

50. Normally any customs or excise duty on materials purchased was included in the cost of materials if purchased duty paid, and excluded if purchased duty-free, the amount of the duty in the latter case being separately stated. Similarly, finished goods sold were valued accordingly as they were sold duty-paid or duty-free, the amount of duty and of drawback being separately stated; the net amount of duty payable is deducted in arriving at net output. The amounts of subsidies, allowances, and levies receivable or payable for particular branches of production were, where practicable, required to be stated separately.

51. The figures for net output per person employed are derived by dividing the net output by the average number of persons employed (full-time and part-time) including operatives, administrative, technical, and clerical employees and working proprietors, but excluding outworkers

List of Trade Reports

52. With the exception of the scrap metal trade, which was not included in the 1949 census, the trades for which separate particulars will be published are the same as for 1948. A list of these trades will be found in Appendix A. For the purposes of the 1948 census these trades were grouped together in twelve volumes, and the trade reports of the census for 1949 will be published in twelve booklets each containing the reports of the trades in the corresponding 1948 volumes.

Contents of the Reports

53. Each booklet will contain a summary table for each trade, giving the main results for each trade and will include, for larger establishments, the following details: the number of establishments; information necessary for the calculation of gross output (production), net output, and net output per person employed; wages and salaries of operatives and of other workers; acquisitions and disposals of plant and machinery, and of vehicles; and capital expenditure on new buildings. They will also include the number of small firms, the average number of persons employed by them, and the estimated average employment in all firms including those which did not make satisfactory returns. For 1949, this information will, where possible,

be shown separately for England, Wales, Scotland, Great Britain, Northern Ireland, and the United Kingdom; corresponding information for Great Britain for 1948 and for the United Kingdom for 1935 will be included for comparison. For a few trades the figures for 1935 relate to Great Britain only because of the risk of disclosure of information relating to individual firms in Northern Ireland.

54. There will also be a table showing, for each trade, detailed information relating to employment in the larger establishments in the pay week ended on or about September 24, 1949. This will generally differ from the totals given in the earlier summary tables, which show only average employment for the year. The table will show, separately for England and Wales, Scotland, Northern Ireland, and the United Kingdom, the number of operatives and of administrative, technical, and clerical employees in that week classified in each category between males and females and distinguishing employees under 18 years of age and the average number of outworkers employed during the year, distinguishing males and females. The number of excluded employees, distinguishing canteen and other workers, and males and females in each case, will be shown for the United Kingdom. The reports will therefore give, in the summary and employment tables, practically all the information collected in the census as well as certain "country" figures not available in earlier reports (e.g. Scottish and Welsh figures for capital expenditure) where there is no risk of

55. In interpreting the data in the tables, it is essential to bear in mind not only the qualifications mentioned in the tables but also the general explanations and qualifications in paragraphs 19 to 50 above.

Disclosure of Information

56. The reports have been prepared in conformity with the disclosure provisions of the Statistics of Trade Act, 1947.

Symbols Used

- 57. The following symbols are used throughout the reports:

 for not available.
- for nil or negligible (less than half of the final digit shown).

 58. The figures in the tables have, where necessary, been rounded off to the nearest integer. There may, therefore be an apparent slight discrepancy between the totals shown and the sum of the constituent

Appendix A

List of Trade Reports

Standard Industrial Classification Orders		Trades
II.—Mining and Quarrying III.—Treatment of Non-Metalliferous Mining Products other to		Coal Mines Non-Metalliferous Mines and Quarries (other than Coal, Salt, and Slate) Salt Mines, Brine Pits, and Salt Works Slate Quarries and Mines Metalliferous Mines and Quarries Brick and Fireclay China de Forethy
Coal	G. H. I. J. K. L. M.	Glass (Other than Containers) Cement Abrasives Building Materials
IV.—Chemicals and Allied Trades	VOLUME 2 A. B. C. D. E. F. G. H. I. J. K. L. M. N. O. P. Q.	Coke Ovens and By-products Dyes and Dyestuffs Fertiliser, Disinfectant, Insecticide, and Allied Trades Coal Tar Products Chemicals (General) Drugs and Pharmaceutical Preparations Toilet Preparations and Perfumery Explosives and Fireworks Paints and Varnish Soap, Candles, and Glycerine Polishes Ink Match Mineral Oil Refining Oils and Greases Seed Crushing and Oil Refining Glue, Gum, Paste, and Allied Trades
V.—Metal Manufacture XX.—Distributive Trades (Part) VII.—Vehicles	VOLUME 3 A. B. C. D. E. F. G. H. I. J. K. L. M. N.	Blast Furnaces. Iron and Steel (Melting and Rolling) Iron Foundries Steel Sheets Tinplate Wrought Iron and Steel Tubes Non-Ferrous Metals (Smelting, Rolling, etc.) Scrap Metal (Not covered by the Census for 1949) Motor Vehicles and Cycles (Manufacturing) Motor Vehicles and Cycles (Repairing) Aircraft Manufacture and Repair Railway Locomotive Shops and Locomotive Manufacturing Railway Carriages and Wagons and Trams Carts, Perambulators, etc.
VI. Engineering, Shipbuilding, and Electrical Goods	VOLUME 4 A. B. C. D. E. F. G. H. I. J. K. L. M. N.	Shipbuilding and Ship Repairing Marine Engineering Machine Tools Textile Machinery Small Arms Constructional Engineering Mechanical Handling Equipment Printing and Bookbinding Machinery Mechanical Engineering (General) Mechanical Engineering (Repairing) Electrical Engineering Electric Wires and Cables Radio and Telecommunications Batteries and Accumulators Electric Lighting Accessories and Fittings
VIII.—Metal Goods not elsewhere specified IX.—Precision Instruments, Jewellery, etc.	VOLUME 5 A. B. C. D. E. F. G. H. I. J. K. L.	Tool and Implement Cutlery Chain, Nail, Screw, and Miscellaneous Forgings Wire and Wire Manufactures Hardware, Hollow-ware, Metal Furniture, and Sheet Metal Brass Manufactures Needles, Pins, Fish Hooks, and Metal Smallwares Scientific, Surgical, and Photographic Instruments Watch and Clock Jewellery and Plate Precious Metals Refining Musical Instruments

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