

SECTION IX.

PAPER, PRINTING, AND ALLIED TRADES.

	Report.	Tables.
	PAGE.	PAGE.
GENERAL REPORT	594	—
DETAILED REPORTS AND TABLES:—		
PAPER TRADE	599	624
PRINTING AND BOOKBINDING TRADES:—		
(a) PRIVATE FIRMS AND COMPANIES	602	627
(b) GOVERNMENT DEPARTMENTS	606	630
PRINTING AND PUBLISHING OF NEWSPAPERS AND OTHER PERIODICALS	608	632
TYPEFOUNDING, STEREOTYPING, ENGRAVING, AND DIE-SINKING TRADES	610	635
MANUFACTURED STATIONERY TRADES:—		
(a) PRIVATE FIRMS AND COMPANIES	612	638
(b) GENERAL POST OFFICE, SAVINGS BANK DEPARTMENT ...	615	641
CARDBOARD BOX TRADE	615	642
PEN, PENCIL, AND ARTISTS' MATERIALS TRADES...	618	645
INK, GUM, AND SEALING WAX TRADES	620	647
TRADE PHOTOGRAPHY	622	649

SECTION IX.—PAPER, PRINTING, AND ALLIED TRADES.

GENERAL REPORT.

The following Section deals with the trades engaged in the manufacture of paper, stationery, cardboard boxes, pens, pencils, artists' materials, ink, gum, and sealing wax, in printing and bookbinding, in printing and publishing of newspapers and other periodicals, in typefounding, stereotyping, engraving, and die-sinking, and in trade photography.

The "output" shown in the Tables is the gross output of each trade, *i.e.*, where goods pass through the hands of several manufacturers at different stages, their quantity and value have been registered at each stage. The value of this gross output is, therefore, greater in the aggregate than the value of the goods, taken as a whole, when ready for export or consumption.

In the Tables the quantities and values of the principal products are generally shown in the classification adopted in the Export and Import Lists, but in the case of some trades a different classification was adopted in order to suit the convenience of manufacturers and, in accordance with the limitations imposed by the Census of Production Act, 1906, values only were then required to be stated.

The figures entered against each class of product show the output of that product in the year of return, whether sold or not, after deducting any amount worked up in the same factory into goods of a kind separately classified. Thus, for example, the entry against paper shows only that portion of the paper, made in the year of return, which was either sold as paper or remained in stock at the end of the year as paper, and does not include paper made into paper bags or coated or printed in the same works. Some firms, however, have made two Returns for two separate establishments (*e.g.*, a paper mill and a stationery works) and have treated the goods transferred from one works to the other as sales and purchases. The consequent duplication, as well as that arising from goods being sold by one firm and worked up by another, is eliminated when the total cost of materials used is deducted from the value of the gross output in order to arrive at the net output (*see below*).

Where a firm makes goods for sale the value entered is the net selling value of the goods, including, of course, the value of any work done on the goods by other firms working on commission. Where a firm does work on commission or "for the trade," the value entered is the amount received for the work, exclusive of the value of the material worked upon. In so far as such work is done for firms also making Returns, the figures for gross output necessarily include twice over the payments for such work, and in order, therefore, to enable the Census Office to eliminate such duplication, the Schedules required a statement to be made showing the amount paid to other firms for work given out.

The result of deducting the total cost of materials and the amount paid to other firms for work given out from the value of the gross output for any industry or group of factories is to give a figure which may, for convenience, be called the "net output" of the industry or of the group. This figure expresses completely and without duplication the total amount by which the value of the products of the industry or of the group, taken as a whole, exceeded the value of the materials purchased from outside, *i.e.*, it represents the value added to the materials in the course of manufacture, and when added to the cost of those materials it would give the selling value of the products of the industry ready for export or for sale outside the industry. The net output constitutes for any industry the fund from which wages, salaries, rents, rates, taxes, depreciation, sales expenses, and other similar charges, as well as profits, have to be defrayed.

The following statement shows, for the trades covered by the present Section of the Report, the gross output, the cost of materials used, the amount paid for work given

out to other firms, the net output as defined above, the number of persons employed, the net output per person employed, and the horse-power of engines at factories. The figures relate to the United Kingdom as a whole. The horse-power shown does not include power rented from other establishments or the capacity of motors driven by purchased electricity. The output for private factories and workshops is calculated on a profit basis, while that for the printing and envelope factories of the General Post Office (Savings Bank Department) and for the Ordnance Survey Department is calculated on the cost of production. The figures for private factories and workshops in the printing and stationery trades are, therefore, not strictly comparable as regards gross output and net output with those relating to the General Post Office (Savings Bank Department) and to the Ordnance Survey Department.

Trade.	Gross Output.— Selling Value or Value of Work Done.	Materials Used.— Cost.	Work Given out.— Amount Paid to other firms.	Net Output.— Excess of Column (1) over Columns (2) and (3).	Persons Employed (except Out-workers). Total.	Net Output per Person Employed (excluding Out-workers).	Horse-Power of Engines at Factories.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Paper Trade	£ 13,621,000	£ 9,079,000	£ —	£ 4,542,000	40,955	£ 111	H.P. 172 224
Printing and Bookbinding Trades: Private Firms and Companies.	24,709,000	8,623,000	742,000	15,344,000	174,116	88	38,611
Printing and Publishing of Newspapers and Other Periodicals.	13,548,000	4,494,000	187,000	8,867,000	46,786	190	16,365
Typefounding, Stereotyping, Engraving, and Die-sinking Trades.	970,000	304,000	—	666,000	6,519	102	680
Manufactured Stationery Trades: Private Firms and Companies.	4,414,000	2,342,000	95,000	1,977,000	26,227	75	3,620
Cardboard Box Trade ...	2,129,000	1,002,000	13,000	1,114,000	21,368	52	2,288
Pen, Pencil, and Artists' Materials Trades.	734,000	234,000	10,000	490,000	6,368	77	1,450
Ink, Gum, and Sealing Wax Trades.	888,000	425,000	—	463,000	1,655	280	2,125
Trade Photography	209,000	90,000	—	119,000	1,011	118	210
Total—Private Firms...	61,222,000	26,593,000	1,047,000	33,582,000	325,005	—	237,573
General Post Office (Savings Bank Department) Printing and Envelope Factories.	9,398	4,727	19	4,652	37	126	*
Ordnance Survey Department	76,670	12,762	—	63,908	433	148	*
Total—Government Establishments.	86,068	17,489	19	68,560	470	—	—

* The machinery used was entirely driven by electricity purchased.

In the following Table the number of persons employed in factories and workshops is distributed by sex and age and according as they were wage-earners or salaried persons; a column is also added showing the number of outworkers returned as borne on the books of the employing firms:—

Trade.	Average Number of Persons Employed in Factories and Workshops.								Average Number of Outworkers.	
	Wage-earners.				Salaried Persons.					
	Males.		Females.		Males.		Females.		Males.	Females.
	Under 18 years of age.	Over 18 years of age.	Under 18 years of age.	Over 18 years of age.	Under 18 years of age.	Over 18 years of age.	Under 18 years of age.	Over 18 years of age.		
Paper Trade	3,331	22,222	2,876	10,213	211	1,857	48	197	—	—
Printing and Book-binding Trades: Private Firms and Companies.	21,863	82,270	18,809	34,510	1,600	12,162	576	2,326	—	—
Printing and Publishing of Newspapers and Other Periodicals.	4,857	26,469	892	1,992	1,216	10,323	157	880	—	—
Typefoundry, Stereotyping, Engraving, and Die-sinking Trades.	997	3,707	338	572	63	748	24	70	—	—
Manufactured Stationery Trades: Private Firms and Companies.	1,719	6,379	4,734	10,234	324	2,122	162	553	4	180
Cardboard Box Trade	936	2,879	4,988	11,041	118	900	145	361	3	1,405
Pen, Pencil, and Artists' Materials Trades.	348	1,306	897	3,474	31	245	11	56	2	21
Ink, Gum, and Sealing Wax Trades.	71	896	96	138	23	385	4	42	—	—
Photography Trade	88	372	49	263	9	170	6	54	—	—
Total—Private Firms...	34,210	146,500	33,679	72,437	3,595	28,912	1,133	4,539	9	1,606
General Post Office (Savings Bank Department) Printing and Envelope Factories.	17	19	—	—	—	1	—	—	—	—
Ordnance Survey Department...	25	243	5	87	1	72	—	—	—	—
Total—Government Establishments.	42	262	5	87	1	73	—	—	—	—

In the whole group 88·2 per cent. of the persons employed were wage-earners and 11·8 per cent. were salaried persons (including principals).

Of the wage-earners 63·0 per cent. were males and 37·0 per cent. were females; 18·9 per cent. of the males and 31·7 per cent. of the females were under 18 years of age.

Of the salaried persons 85·2 per cent. were males and 14·8 per cent. were females; 11·0 per cent. of the males and 20·0 per cent. of the females were under 18 years of age.

The total of 1,615 outworkers does not necessarily represent as many individual persons, many outworkers being on the books of more than one firm. On the other hand, it is probable in certain cases that the persons actually working for a firm include members of outworkers' families in addition to the outworkers actually on the firm's books. For these reasons, and as most outworkers are not in constant employment, they have not been taken into account in calculating the net output per person employed, but in comparing the figures given above an allowance should be made for them.

The aggregate gross value of the products of this group of trades as returned to the Census of Production Office on the Schedules for the group, is £61,308,000, to which should be added £377,000, the value of similar products included in their statements of output by manufacturers that made their Returns on Schedules for trades outside the group, and £1,890 the cost of stationery made in the telegraph and telephone departments of the Post Office, thus raising the total to about £61,687,000. This figure does not represent the actual value of the goods as sold or as warehoused at the end of the year. In the first place there is considerable duplication within the paper and printing trades in respect of (a) goods made by some firms and sold to others for further manufacture, the value being returned by the former as the value of their output and being included by the latter in the value of the finished goods, and (b) work done by some firms for others and returned as output by both. The amount of such duplication is estimated to lie between £859,000 and £1,359,000. Secondly, there is a similar duplication (estimated not to exceed 10 million pounds sterling) between different trades in respect of goods made and returned in one trade and sold to firms (by whom their value is also returned) in other trades in this group for further manufacture. Thirdly, there is no information as to the selling value of goods made on commission for merchants, as merchants were not required to furnish Returns to the

Census Office; only the amount received for the work by the firms doing it was returned to the Census Office. In the following statement the approximate value of each class of goods made or work done is shown free from duplication within the class (*e.g.*, the value of machine-ruling done by an outside firm for a firm making account-books is not included, but only the value of the account-books). In the case of goods made on commission for merchants, only the amount paid for the work is taken into account.

	Value.
Paper Trade Products (except Paper Bags and Articles of Paper)	£ 12,500,000 to 13,000,000
Printing, Bookbinding, &c. (including waste products)	24,830,000
Printing and Publishing of Newspapers and Magazines (including waste products)	11,750,000
Typefoundry, Stereotyping, &c.	1,097,000
Manufactured Stationery, including Paper Bags	5,471,000
Cardboard Boxes... ..	2,276,000
Pens, Pencils, and Artists' Materials	750,000
Ink, Gum, Sealing Wax, &c.	1,047,000
Trade Photography	199,000
Government Departments	88,000
Other Products chiefly made outside this Group	320,000
Total	60,328,000 to 60,828,000

Taking the main products of the paper and printing trades group as set forth in the first ten lines above, their value at works, free from duplication, (*i.e.*, after deducting about £10,000,000 for the value of paper, type, and ink, sold to, and of stereotyping and engraving of blocks done for, other firms who have also made Returns in their respective trades), may be estimated at a sum lying between 50 and 51 million pounds sterling. The value of the net imports (*i.e.*, imports less re-exports) of similar goods in the year of return was about £6,645,000 at port of landing, while the exports were valued at about £6,599,000 free on board.

The following statement shows the net output of factories and workshops separately in the several trades, so far as the Returns were made on the Schedules for the respective trades:—

	Factories. Net Output. £	Workshops. Net Output. £
Paper Trade	4,542,000	—
Printing and Bookbinding Trades—Private Firms and Companies	14,789,000	555,000
Printing and Publishing of Newspapers and Other Periodicals	8,831,000	36,000
Typefoundry, Stereotyping, Engraving, and Die-sinking Trades	509,000	157,000
Manufactured Stationery Trades—Private Firms and Companies	1,750,000	227,000
Cardboard Box Trade	937,000	177,000
Pen, Pencil, and Artists' Materials Trades	483,000	7,000
Ink, Gum, and Sealing Wax Trades	422,000	41,000
Trade Photography	55,000	64,000
	32,318,000	1,264,000
General Post Office (Savings Bank Department) Printing and Envelope Factories	4,652	—
Ordnance Survey Department	63,908	—
	68,560	—

Fuel Consumed.—Firms with factories receiving the Schedules for this group of trades were asked to furnish a voluntary statement respecting the quantity of fuel consumed by them. The replies received are summarised below and shown in relation

to the aggregate net output of the firms furnishing information. It should be remembered that information respecting fuel consumption has not as a rule been furnished in respect of workshops, where the quantity used is naturally much less than in factories in proportion to output:—

Trade.	Net Output of Firms furnishing particulars.		Fuel Consumed by Firms furnishing particulars.	
	Amount.	Percentage of Total Net Output.	Coal.	Coke.
	£		Tons.	Tons.
Paper Trade	3,447,000	75·9	1,501,859	12,063
Printing and Bookbinding Trades—Private Firms and Companies.	10,363,000	67·5	71,347	7,587
Printing and Publishing of Newspapers and Other Periodicals.	7,075,000	79·8	34,899	4,982
Typefoundry, Stereotyping, Engraving and Die-sinking Trades.	365,000	54·8	2,687	238
Manufactured Stationery Trades—Private Firms and Companies.	1,355,000	68·5	9,016	2,367
Cardboard Box Trade	778,000	69·8	5,377	1,126
Pen, Pencil, and Artists' Materials Trades	290,000	59·2	7,105	342
Ink, Gum, and Sealing Wax Trades	348,000	75·2	8,053	529
Trade Photography	55,000	46·2	245	114
Total	24,076,000	71·7	1,640,588	29,348
General Post Office (Savings Bank Department) Printing and Envelope Factories.	4,652	100	—	—
Ordnance Survey Department	63,908	100	105	161
Total	68,560	100	105	161

DETAILED REPORTS.

Paper Trade.

Output.—The Tables on pages 624 to 626 are based on Returns received from factories mainly engaged in the manufacture, coating, and printing of paper (except paper hangings) or in the manufacture of pasteboard, cardboard, or millboard. The manufacture of paper bags by paper-making firms (and in a few cases by firms that were bag-makers only) is also included. The aggregate gross value of the output of those factories is returned as £13,621,000, a figure which, however, contains some duplication.

The following statement shows the particulars furnished respecting the output of paper-makers:—

	Quantity.	Value.
	Cwts.	£
Paper for Writing and Drawing and for Envelopes	2,366,000	3,059,000
Paper for Printing and for Posters, &c.	9,091,000	5,894,000
Packing and Wrapping Paper, Biscuit Caps, &c.	3,764,000	2,032,000
Printed and Coated Papers (not Hangings)	767,000	975,000
Other Sorts of Paper	283,000	440,000
Pasteboard, Cardboard, and Millboard	1,071,000	626,000
Paper Bags	656,000	462,000
Other Articles of Paper and Cardboard	—	59,000
Waste Products	—	18,000
Other Products	—	37,000
Amount Received for Waterproofing, Waxing, &c., Paper	—	19,000
Total ... ..	...	13,621,000

The printed and coated papers, the pasteboard, cardboard, and millboard, and the paper bags were in part returned by firms that themselves made the paper or board, but in part they were returned by firms that purchased paper or board either imported or made by British manufacturers and returned by them to the Census Office as such; in this last case there is duplication with other headings in the foregoing statement. Examination of the individual Returns shows that firms making Returns of other classes of paper made Returns of printed and coated papers, pasteboard, &c., and bags as follows:—

	Quantity.	Value.
	Cwts.	£
Printed and Coated Papers (not Hangings)	431,000	516,000
Pasteboard, Cardboard, and Millboard	646,000	380,000
Paper Bags	257,000	150,000

These quantities may be taken as representing the minimum output of those classes of manufactures which is additional to that of the other classes of paper shown in the first statement. The "other articles of paper and pasteboard" to the value of about £38,000 were made by paper-making firms and represent about 45,000 cwts. of paper and board. The waterproofing, waxing, and other work (for which £19,000 was received) was done for merchants, and is an addition to the value of the paper shown as such in the Tables.

Taking the paper-making trade as a whole, the value of the output of paper and cardboard and of bags and other articles of paper made in paper-mills, may be estimated, free from duplication, at a sum lying between £12,600,000 and £13,600,000, the exact sum depending upon the extent to which the paper and board for making 1,185,000 cwts. of printed and coated papers, pasteboard, cardboard, and millboard, paper bags, and articles of paper were imported or were purchased from British paper-makers. The total quantity of paper and board made in the United Kingdom in the census year may be estimated at about 17,000,000 cwts., and its value at somewhat over 12 million pounds sterling. The value of the total output of paper bags (returned as such), together with the value of articles of paper or cardboard, is dealt with in the Report on the manufactured stationery trade (*see page 613*).

Comparisons between the production in the paper trade and exports and imports, 1907, are rendered difficult by the fact that the classification of exports in 1907 differs from the classification adopted for the Census of Production, which was based on the

classification of exports for 1908, while the classification of imports differs from both. In these circumstances the exports for both 1907 and 1908 are given in order to facilitate comparison :—

	Production.	Exports, 1907.	Exports, 1908.
	Cwts.	Cwts.	Cwts.
Paper for Writing and Drawing	2,366,000	1,302,000	219,000
Paper for Printing	9,091,000		1,061,000
Envelopes	*		20,000
Packing and Wrapping Paper	3,764,000	243,000	122,000
Printed and Coated Papers (not Hangings)	767,000		14,000
Other Sorts of Paper and Paper Articles (excluding Bags).	328,000		81,000
Pasteboard, Cardboard, &c.	1,071,000	79,000†	75,000
Pasteboard, Manufactures of	*		26,000

* Information not available.

† Including Playing Cards, the exports of which amounted to 2,000 cwts. in the year 1908.

It will be seen that in 1907 about 11·4 per cent. of the paper made in the United Kingdom for writing, drawing, printing, and for envelopes was exported.

The net imports (*i.e.*, imports less re-exports) for 1907 were :—

	Quantity.	Value.
	Cwts.	£
Unprinted Paper on Reels	1,689,000	1,014,000
Unprinted Paper not on Reels	3,568,000	2,796,000
Printed or Coated (not Hangings)	163,000	431,000
Strawboard	2,179,000	614,000
Millboard and Wood Pulp Board	1,080,000	507,000

Imports of packing and wrapping paper were not separately distinguished in 1907, but in 1908 the net imports of unprinted paper not on reels amounted to 4,126,000 cwts., of which 2,368,000 cwts. were paper for packing and wrapping.

The total net imports of paper and board in 1907 amounted to 8,679,000 cwts., valued at £5,362,000. This includes, however, 2,179,000 cwts. of strawboard valued at £614,000, and it is understood that this class of board is manufactured only in small quantities in the United Kingdom.

In order to obtain an estimate of the products of the trade under its technical classification manufacturers were asked to furnish a voluntary statement on the lines of the classification adopted by the Paper Makers' Association of Great Britain and Ireland (Incorporated) for the purpose of statistics previously published by them. The information, which relates to 10,324,000 cwts. or about 60 per cent. of the total quantity of paper and board manufactured in the United Kingdom, is as follows :—

	Quantities.	Selling Value at Works.
	Tons.	£
A. Hand-made Paper	1,800	240,000
B. Machine-made, tub-sized, and air-dried papers of all kinds, excepting those classified separately	19,700	794,000
C. Tissues, Cigarette, Copying	1,100	76,000
D. Engine-sized Writings and Cartridges, Fine Printings and Lithos, white or tinted, both machine-finished, water finish, super calendered, and plate glazed, including fine papers made for coating and enamelling, and Imitation parchments	212,800	3,729,000
E. Blottings and Plate Papers	3,100	94,000
F. News, White Middles, Wall-papers	121,700	1,199,000
G. Browns, Wrappers, Grocery, and Packing Papers	95,100	829,000
H. Pulp Boards, white or tinted, Folding Box Boards, Mill Boards, Leather Boards, Glazed Boards, &c., Straw Boards	24,600	283,000

	Quantity.	Selling Value at Works.
	Tons.	£
I. M.G. Envelopes, Printing, Litho, and Cover Papers, <i>i.e.</i> , pamphlet and copy-book backs	8,100	125,000
J. M.G. Wrappings of all kinds, including M.G. Krafts and Small Hands, Biscuit Caps, Wall-papers, together with Manilla Papers and Glazed Casings	18,600	300,000
K. Any other variety	9,600	200,000
Total	516,200	7,869,000

Net Output.—The net output of the factories covered by the Tables on pages 624 to 626 (whose gross output was valued at £13,621,000) was £4,542,000, that sum representing the total amount by which the value of the output of those factories and workshops exceeded the cost of the materials used. The actual cost of materials used by those factories and workshops, taken as a whole, cannot be precisely stated, but it may be estimated at a sum lying between 8 and 9 million pounds sterling.

The net output per head of persons employed in the censal year was nearly £111.

Persons Employed.—The average number of persons employed on the last Wednesdays in January, April, July, and October in the factories covered by the Tables on pages 624 to 626 is returned as 40,955, viz., 38,642 wage-earners and 2,313 salaried persons, the total number being distributed by age and sex as follows :—

Males :—		Females :—	
Under 18	Over 18	Under 18	Over 18
3,542	24,079	2,924	10,410

The variation in employment during the censal year is shown in the following statement :—

	Persons Employed on the last Wednesday in			
	January.	April.	July.	October.
Wage-earners	38,647	38,710	38,345	38,865
Salaried Persons	2,313	2,316	2,304	2,318
Total	40,960	41,026	40,649	41,183

Power.—The particulars furnished with regard to power are summarised below, electricity purchased not being included :—

	Gross Value of Output.	Average Number of Persons Employed.	Total Capacity of Engines.
	£		Horse-Power.
Factories with their own Engines	13,596,000	40,850	172,224
Factories renting their Power	25,000	105	—
Total	13,621,000	40,955	172,224

Classed according to kinds of power, the particulars are :—

Steam Engines :—		Horse-Power.
Reciprocating ... ..	...	153,354
Steam Turbines ... ..	...	3,470
Total—Steam Engines ... ..	...	156,824
Internal Combustion Engines (gas, oil, &c.) ... ..	...	4,784
Water Power ... ..	...	10,578
Other Power ... ..	...	38
Total ... ..	...	172,224

As shown above, whereas the total number of persons employed in factories in the paper-making trade was 40,955, firms employing 105 persons rented their power. Precise details as to the amount and kind of such power are not available, since landlords frequently included in their special Returns power supplied to several firms engaged in different industries (see pages 15 to 18).

Firms using dynamos driven by their own engines were required to state their capacity, and the information furnished is summarised below :—

Capacity of Dynamos driven by :—				Kilowatts.
Steam Engines: Reciprocating	...	...	...	11,172
Steam Turbines	...	...	...	2,609
Other Power	...	...	...	1,501
Total				15,282

The capacity of those dynamos should not, of course, be added to that of the engines owned. What the information shows is that (taking 746 kilowatts as equivalent to 1,000 horse-power, and allowing about 10 per cent. for loss of energy in conversion) about 13 per cent. of the engine-power belonging to paper-making factories was required for driving dynamos for the production of electric power and light.

Manufacturers were also required to state the quantity of electricity generated by their own dynamos, but owing to the insufficiency of their records a number of them were unable to do so. The following statement summarises the information furnished :—

Dynamoes driven by	Total Capacity of Dynamos.	Electricity Generated, so far as particulars were returned.	
		Capacity of Dynamos.	Electricity Generated.
	Kilowatts.	Kilowatts.	Board of Trade Units.
Steam Engines, Reciprocating	11,172	7,789	18,129,000
Steam Turbines	2,609	1,959	5,889,000
Other Power	1,501	1,202	4,311,000
Total	15,282	10,950	28,329,000

About 1,472,000 Board of Trade units of electricity were purchased by manufacturers for power and lighting purposes. This figure includes estimates made in the Census Office in respect of the quantities of electricity purchased by a number of small firms who were able to state only the amounts paid by them, but the total quantity so estimated forms a very small proportion of the whole.

Plant.—In order to obtain a measure of the equipment of the trade paper-makers were asked to furnish a voluntary statement respecting the numbers of their machines and vats and their maximum annual capacity. Firms with an output of 12,593,000 cwts. of paper and board, or nearly three quarters of the estimated total output, stated that they owned 407 paper-making machines and 96 vats in the censal year. Further, firms with an actual output of 12,150,000 cwts. of paper and board stated that their maximum annual capacity was 13,297,000 cwts.

Printing and Bookbinding Trades.

(a) PRIVATE FIRMS AND COMPANIES.

Output.—The Tables on pages 627 to 629 are based on Returns received from factories and workshops engaged in printing, bookbinding, and allied trades. The Returns furnished by newspaper proprietors who do their own printing are not included in those Tables but are dealt with separately (see pages 608 to 610). The aggregate gross value of the output of the firms that made their Returns on the Schedules for the printing and bookbinding trades is returned as £24,709,000, to which should be added £2,071,000, the value of similar goods manufactured and work done, included in their statements of output by firms that made their Returns on Schedules for other trades. The resulting total of £26,780,000 contains, however, a certain amount of duplication.

The value of printing, map-making, &c., done by Government Departments, amounting to about £84,000 (see page 607) is not included in this total.

The following statement shows the particulars furnished respecting the chief classes of output :—

	Returned on Schedules for the Printing and Bookbinding Trades.	Returned on Schedules for other Trades.	Total.
Book Production (Printing, Binding, &c.) :—	£	£	£
Printed Books	1,360,000	318,000	1,678,000
Account and Blank Books	1,487,000	4,000	1,491,000
Printing of Newspapers :—			
Daily	180,000	—	180,000
Other than Daily (including Trade Journals)	1,005,000	1,000	1,006,000
Total—Printing of Newspapers	1,185,000	1,000	1,186,000
Printing of Magazines and other Periodicals (published at least quarterly).	1,216,000	43,000	1,259,000
Job and General Printing	11,563,000	1,635,000	13,198,000
Music Printing	120,000	1,000	121,000
Lithographic and Photo-lithographic Printing (other than Music).	2,939,000	25,000	2,964,000
Photographic and Process Engraving and Printing	565,000	7,000	572,000
Copper and Steel Plate Printing (other than Music)	343,000	4,000	347,000
Bookbinding :—			
Printed Books	1,359,000	—	1,359,000
Account and Blank Books	744,000	—	744,000
Bookbinding, not separately distinguished	123,000	14,000	137,000
Total—Bookbinding	2,226,000	14,000	2,240,000
Maps, Plans, Drawings, &c.	42,000	8,000	50,000
Machine-Ruling	314,000	1,000	315,000
Gold Blocking, Stamping, &c.	61,000	10,000	71,000
Waste Products	80,000	—	80,000
Total	23,501,000	2,071,000	25,572,000

The firms that made their Returns on the Schedules for the printing and bookbinding trades also included in their statements of output the following classes of work and goods which form the main output of other trades and are dealt with in the Reports on those trades :—

	Value.
	£
Stereotyping and Electrotyping	132,000
Relief-Stamping	31,000
Ticket and Showcard Writing	26,000
Engraving of Copper and Steel Plates and Wood Blocks	19,000
Manufactured Stationery	363,000
Paper Bags	157,000
Cardboard Boxes	107,000
Christmas Cards, Picture Post Cards, &c.	96,000
Pattern Cards	84,000
Type, Ink, Pens, &c.	100,000
Other Products and Work Done	93,000
Total	1,208,000

Under the heading "book production" is shown the output of those firms for whom it was convenient to return their output of printed books and account and blank books in its finished form, whether they performed all the operations of printing, binding, ruling, &c., themselves or gave out one or more of those operations to other firms who

made their Returns of the amounts received by them against the headings appropriate to their trades as printers, bookbinders, &c. A certain amount of duplication has arisen from this source. Firms that simply printed books in sheets were instructed to enter their Returns of output against the heading "job and general printing," which contains the great bulk of ordinary commercial printing. A small amount of lithographic printing is also unavoidably included under this heading, and in the case of many small firms the whole of their printing work has been so returned although parts of it should have been more properly assigned to newspaper printing, &c. There is, moreover, some duplication within this heading owing to firms of printers occasionally sub-letting some of their printing to other firms, in which case the value is returned by both firms. The amounts entered as received for the printing of newspapers, magazines, and other periodicals do not represent the total income of such newspapers, &c., but only the amounts received from the proprietors by the printers. The amount entered against the heading "photographic and process engraving and printing" includes both the sum received for making the blocks and also the charge made for printing from the blocks. The entries against "machine ruling" and "gold blocking, stamping, and other work done for the trade" are mainly duplicated in the Returns of the bookbinders and manufacturers of stationery, cardboard boxes, &c., for whom the work was done.

It is not possible to eliminate the duplicated items completely from the headings in the foregoing statement in which they occur, but, as practically the whole of the work given out was executed by firms making Returns on the same Schedule, it appears that, taking as a whole the factories and workshops covered by the Tables on pages 627 and 629 the value of their output can be ascertained with some degree of precision by deducting from the total gross value as shown above (£24,709,000) the amount stated to have been paid by the several firms for work which they gave out to other firms (£742,000). The resultant total is £23,967,000. The value, taken as a whole, of the various classes of printing and binding (except the printing of newspapers and magazines which have their own printing works), as returned on all Schedules, may be estimated at about £24,830,000, including the value of waste products. Other work done and goods made, to the value of £1,208,000, are dealt with in the Reports on the trades to which they belong.

The bulk of the output shown above is that of firms who supplied the paper which they printed, and, consequently, returned the selling value of the printed books or other documents produced by them, including at the same time the cost of the paper in their cost of materials used. Other firms, however, were supplied with paper by their customers, and such firms returned as the value of their output the amount received by them for printing, &c., exclusive of the value of the paper, which was also excluded from the statements of the cost of materials used. A few firms that kept their books by a departmental method and were not able to allocate the cost of paper (and in some cases not of any materials) to the various classes of product made by them, were allowed to make their Returns on the basis of the estimated value of the work done by them exclusive of the value of such paper or other materials. The amounts included in Tables I and II on pages 627 and 628 are, consequently, less than the aggregate output and the aggregate cost of materials by the cost of the paper not taken into account, but no estimate is possible as to the actual amount involved.

In order to obtain a measure of certain branches of the printing trade, the firms with factories receiving the Schedule for the printing and bookbinding trade were asked to furnish a voluntary statement as to the quantity of paper used by them for certain purposes. Firms whose output of newspaper printing was valued at £472,000, or 40 per cent. of the total, stated that they used about 10,000 tons of paper. It was also stated that 24,000 tons of paper were used for magazines and 10,000 tons for printed books, but as the printing of books, &c., on sheets is included under "job and general printing" it cannot be stated what proportion of the total output is represented by those quantities.

Net Output.—The net output of the factories and workshops covered by the Tables on pages 627 to 629 (whose gross output was valued at £24,709,000) was £15,344,000, that sum representing the total amount by which the value of the output of those factories and workshops exceeded the cost of the materials used and the amount paid to other firms for work done by them on those materials for the principal firms. The actual cost of materials used by those factories and workshops, taken as a whole, was about £8,623,000. The amount paid to other firms for work given out to them was £742,000.

The net output per head of persons employed in the censal year was a little over £88.

Persons Employed.—The average number of persons employed on the last Wednesdays in January, April, July, and October in the factories, together with the number ordinarily employed in the workshops, covered by the Tables on pages 627 to 629 is returned as 174,116, viz., 157,452 wage-earners and 16,664 salaried persons, the total number being distributed by age and sex as follows:—

Males:—		Females:—	
Under 18	23,463	Under 18	19,385
Over 18	94,432	Over 18	36,836

The variation in employment in factories during the censal year is shown in the following statement:—

	Persons Employed on the last Wednesday in			
	January.	April.	July.	October.
Wage-earners	150,254	150,693	148,981	152,237
Salaried Persons	15,407	15,444	15,348	15,520
Total	165,661	166,137	164,329	167,757

There were also 6,911 wage-earners and 1,234 salaried persons ordinarily employed in workshops.

Power.—The particulars furnished with regard to power are summarised below, electricity purchased not being included:—

	Gross Value of Output.	Average Number of Persons Employed.	Total Capacity of Engines.
	£		Horse-Power.
Factories with their own Engines	23,808,000	163,136	38,611
Factories renting their Power	103,000	835	—
Workshops (not using Power)	798,000	8,145	—
Total	24,709,000	174,116	38,611

Classed according to kinds of power, the particulars are:—

	Horse-Power.
Steam Engines:—	
Reciprocating	15,239
Steam Turbines	18
Total—Steam Engines	15,257
Internal Combustion Engines (gas, oil, &c.)	23,127
Water Power	227
Total	38,611

As shown above, whereas the total number of persons employed in factories in the printing and bookbinding trades was 165,971, firms employing 835 persons rented their power. Precise details as to the amount and kind of such power are not available, since landlords frequently included in their special Returns power supplied to several firms engaged in different industries (see pages 15 to 18).

Firms using dynamos driven by their own engines were required to state their capacity, and the information furnished is summarised below:—

	Kilowatts.
Capacity of Dynamos driven by:—	
Steam Engines: Reciprocating	5,305
Steam Turbines	12
Other Power	2,610
Total	7,927

The capacity of those dynamos should not, of course, be added to that of the engines owned. What the information shows is that (taking 746 kilowatts as equivalent to 1,000 horse-power, and allowing about 10 per cent. for loss of energy in conversion) about 30 per cent. of the engine-power belonging to printing and bookbinding factories was required for driving dynamos for the production of electric power and light.

Manufacturers were also required to state the quantity of electricity generated by their own dynamos, but owing to the insufficiency of their records a few of them were unable to do so. The following statement summarises the information furnished:—

Dynamoes driven by	Total Capacity of Dynamoes.	Electricity Generated, so far as particulars were returned.	
		Capacity of Dynamoes.	Electricity Generated.
	Kilowatts.	Kilowatts.	Board of Trade Units.
Steam Engines : Reciprocating	5,305	5,002	4,713,000
Steam Turbines	12	12	13,000
Other Power	2,610	2,195	1,672,000
Total	7,927	7,209	6,398,000

About 10,936,000 Board of Trade units of electricity were purchased by manufacturers for power and lighting purposes. This figure includes estimates made in the Census Office in respect of the quantities of electricity purchased by a number of small firms who were able to state only the amounts paid by them, but the total quantity so estimated forms a very small proportion of the whole.

Machinery.—In order to obtain a measure of the equipment of the printing industry, firms with factories receiving the Schedule for the printing and bookbinding trades were requested to make a voluntary statement respecting the number and kinds of important machines used by them. The total value of the output of printed books, newspapers, magazines, job and general printing, music printing, and lithographic and photo-lithographic printing, as returned to the Census Office on the Schedules for the printing and bookbinding trades was £18,383,000. Firms with an output in those classes valued at £5,985,000, or 32·6 per cent. of the total, did not furnish any information, but firms with an output valued at £12,398,000, or 67·4 per cent. of the total, furnished particulars which are summarised in the following statement:—

Machines:—	Number.
Linotype and Type-setting	913
Letterpress:—	
Platen	8,714
Cylinder { Quad Crown and over	2,825
Under Quad Crown	7,175
Rotary	142
Lithographic:—	
Flat-bed { Quad Crown and over	632
Under Quad Crown	1,871
Rotary { Quad Crown and over	64
Under Quad Crown	118

Machines owned by firms of newspaper publishers that do their own printing are not included in the foregoing figures, but are dealt with on page 610.

(b) GOVERNMENT DEPARTMENTS.

Output.—The Tables on pages 630 and 631 give separately particulars respecting (1) printing done by the General Post Office, Savings Bank Department, and (2) map-making and other work done by the Ordnance Survey Department.

The work done in the twelve months ended 31st March, 1908, is summarised in the following statement:—

	Value.
1. General Post Office, Savings Bank Department:—	£
Job and General Printing	7,221
Other Products	22
Total—General Post Office... ..	7,243

	Value.
2. Ordnance Survey Department:—	£
Maps, &c., made for sale	63,470
Work Done for other Government Departments	13,200
Total—Ordnance Survey Department	76,670

The total value of the output of these Departments amounts to £83,913.

The value of the maps, &c., made for sale by the Ordnance Survey Department is the selling value of such maps, but in the case of the printing done by the General Post Office and the work done by the Ordnance Survey Department for other Government Departments the value stated for the production is a sum representing the actual cost, *i.e.*, it is made up of wages, materials used, and a proportion of the establishment charges. It differs, therefore, from the value of the output returned by private firms, which is naturally on a profit basis.

In the Ordnance Survey Department, 91 tons of paper were used for maps; in the printing department of the Savings Bank 170 tons of paper were used.

Net Output.—The total cost of the materials used in these two Departments was £16,058 and £19 was paid to other firms for work given out. The difference—£67,836—between the total of these sums and the value of the output represents the total amount of wages and establishment charges and, in the case of maps, &c., made for sale by the Ordnance Survey Department, the profit on such maps, &c.

The net output per head of persons employed in the year of return was £146.

Persons Employed.—The average number of persons employed in the printing and map-making works of these two Departments on the last Wednesdays in April, July, and October, 1907, and January, 1908, is returned as 464, *viz.*, 390 wage-earners and 74 salaried persons, the total number being distributed by age and sex as follows:—

Males:—		Females:—	
Under 18	39	Under 18	5
Over 18	333	Over 18	87

The variation in employment in factories during the censal year is shown in the following statement:—

	Persons Employed on the last Wednesday in			
	January.	April.	July.	October.
Wage-earners	382	389	396	394
Salaried Persons	75	74	73	72
Total	457	463	469	466

Power.—No steam, internal combustion, or other engines were used, but 66,325 Board of Trade units of electricity were purchased and used in the Ordnance Survey Department for power and lighting purposes and 20,000 units in the printing department of His Majesty's Post Office (Savings Bank Department).

Machines.—The following machines were in use in the Ordnance Survey Department in 1907-1908:—

Letterpress:—	
Platen Machines	2 3
Cylinder Machines: Under Quad Crown	1 1
Lithographic:—	
Flat-bed Machines { i. Quad Crown and over	4
ii. Under Quad Crown	10
Copper Plate:—	
Flat-bed Machines: Quad Crown and over	2

In the Savings Bank Department three Platen Machines and two Cylinder Machines (one quad crown and over and one under quad crown) were in use.

Printing and Publishing of Newspapers and other Periodicals.

Output.—The Tables on pages 632 to 634 are based on Returns received from the proprietors of newspapers and other periodicals who have factories or workshops where their own printing is done. Firms and companies that did not do their own printing, but gave it out to other firms are not included in these Tables, but the value of the printing done for them is included in the Tables on pages 627 to 629 and is dealt with in the preceding Report on the printing and bookbinding trades (*see* pages 602 to 606). Representations were made to the Census Office that proprietors of newspapers and other periodicals would not as a rule be able to furnish separate Returns of their business as printers on the same lines as other printers, that part of their business being unavoidably involved with their business as publishers of newspapers, &c. They were accordingly instructed to state as the value of their output the total receipts of their newspapers and periodicals from sales, subscriptions, and advertisements. In respect of other branches of their output the value returned represents, as in the case of other printers and bookbinders, the amount charged to customers for printing or other work done for them.

The following statement gives the particulars furnished respecting the output of such establishments, and is substantially free from duplication :—

	Value. £
Newspapers :—	
Daily	7,093,000
Other than Daily (including Trade Journals) ...	3,754,000
Total—Newspapers	10,847,000
Magazines and other Periodicals (published at least quarterly)	772,000
Printing and Binding of Printed Books	320,000
Job and General Printing	1,418,000
Stereotyping and Electrotyping... ..	13,000
Other Work Done (Bookbinding, Engraving, &c.) ...	25,000
Manufactured Stationery	22,000
Waste Products	131,000

The total value of the output included in the foregoing statement amounts to £13,548,000. There may, however, be some duplication between the sums entered under the headings "stereotyping and electrotyping" and "other work done" and the amounts entered under "newspapers." There is no information as to its extent, but the amount so duplicated can only be small. Further, in this case the amount (£187,000) paid by the firms making Returns for work given out to other firms does not represent work (such as printing) returned by the latter firms in the Returns summarised in the Tables on pages 632 to 634 and in this part of the Report, but work such as the engraving of process blocks, &c., the value of which is returned on Schedules for other trades.

In order to obtain another measure of this branch of the printing trade, the firms receiving the Schedule for newspaper printing and publishing were asked to state the quantity of paper used by them in the printing of newspapers. Firms whose output of newspapers was valued at £3,387,000, or 31.2 per cent. of the value of the total output of newspapers, did not furnish any information, but firms whose production of newspapers was valued at £7,460,000, or 68.8 per cent. of the whole, stated that they used 189,000 tons of paper for producing newspapers and newspaper posters, 7,000 tons for producing magazines, and 480 tons for producing books.

Net Output.—The net output of the factories and workshops covered by the Tables on pages 632 to 634 (whose gross output was valued at £13,548,000) was £8,867,000, that sum representing the total amount by which the value of the output of such factories exceeded the cost of the materials used and the amount paid to other firms for work done by them for the principal firms. The actual cost of materials used was about £4,494,000. The amount paid to other firms for work given out to them was £187,000.

The net output per head of persons employed in the censal year was nearly £190. The net output per head is large, but it should be noted that payments to news agencies and literary contributors and the expenses of distribution have to be defrayed from the net output as well as wages, salaries, rent, rates, insurance, and other establishment charges and profits.

Persons Employed.—The average number of persons employed on the last Wednesdays in January, April, July, and October in the factories, together with the number ordinarily employed in the workshops, covered by the Tables on pages 632 to 634 is returned as 46,786, viz., 34,210 wage-earners and 12,576 salaried persons, the total number being distributed by age and sex as follows :—

Males :—		Females :—	
Under 18	6,073	Under 18	1,049
Over 18	36,792	Over 18	2,872

The number of salaried persons includes clerks, travellers, and canvassers, and the editorial and management staffs, but not contributors who devote only a part of their time to the service of the paper.

The variation in employment in factories during the censal year is shown in the following statement :—

	Persons Employed on the last Wednesday in			
	January.	April.	July.	October.
Wage-earners	33,899	33,966	33,873	34,187
Salaried Persons	12,498	12,487	12,491	12,518
Total	46,397	46,453	46,364	46,705

There were also 229 wage-earners and 77 salaried persons ordinarily employed in workshops.

Power.—The particulars furnished with regard to power are summarised below, electricity purchased not being included :—

	Gross Value of Output.	Average Number of Persons Employed.	Total Capacity of Engines.
	£		Horse-Power.
Factories with their own Engines	13,487,000	46,466	16,365
Factories renting their Power	2,000	14	—
Workshops (not using Power)	59,000	306	—
Total	13,548,000	46,786	16,365

Classed according to kinds of power, the particulars are :—

	Horse-Power.
Steam Engines :—	
Reciprocating	7,028
Steam Turbines	10
Total—Steam Engines	7,038
Internal Combustion Engines (gas, oil, &c.)	9,316
Water Power	11
Total	16,365

Precise details as to the amount and kind of power rented are not available.

Firms using dynamos driven by their own engines were required to state their capacity, and the information furnished is summarised below :—

	Kilowatts.
Capacity of Dynamos driven by :—	
Steam Engines, Reciprocating	829
Other Power	1,498
Total	2,327

The capacity of those dynamos should not, of course, be added to that of the engines owned. What the information shows is that (taking 746 kilowatts as equivalent to 1,000 horse-power, and allowing about 10 per cent. for loss of energy in conversion) about 21 per cent. of the engine-power belonging to newspaper printing factories was required for driving dynamos for the production of electric power and light.

Manufacturers were also required to state the quantity of electricity generated by their own dynamos, but owing to the insufficiency of their records a number of them were unable to do so. The following statement summarises the information furnished :—

Dynamoes driven by	Total Capacity of Dynamoes.	Electricity Generated, so far as particulars were returned.	
		Capacity of Dynamoes.	Electricity Generated.
	Kilowatts.	Kilowatts.	Board of Trade Units.
Steam Engines, Reciprocating	829	818	1,672,000
Other Power	1,498	872	671,000
Total	2,327	1,690	2,343,000

The number of Board of Trade units of electricity purchased by manufacturers for power and lighting purposes was about 16,540,000 units. This figure includes estimates made in the Census Office in respect of the quantities of electricity purchased by a number of small firms who were able to state only the amounts paid by them, but the total quantity so estimated forms a very small proportion of the whole.

Machines.—In order to obtain a measure of the equipment of the trade, all firms that received the Schedule for establishments engaged in the printing and publication of newspapers were requested to make a voluntary statement as to the number and kind of important machines used by them. Firms with an output of newspapers valued at £2,383,000 (or 22 per cent. of the total value of newspapers) and an output of other products valued at £492,000 (or 18·2 per cent. of the total value of other products) did not furnish any information. Firms whose output of newspapers was valued at £8,464,000 (or 78 per cent. of the total value of newspapers) and whose output of other products was valued at £2,209,000 (or 81·8 per cent. of the total value of other products) stated the number of their machines as under :—

	Number.
Linotype and Type-setting Machines	2,197
Letterpress Machines—	
Platen	1,339
Cylinder { Quad Crown and over	1,004
{ Under Quad Crown	1,310
Rotary	495
Lithographic Machines—	
Flat-bed { Quad Crown and over	50
{ Under Quad Crown	70
Rotary { Quad Crown and over	17
{ Under Quad Crown	—

Typefoundry, Stereotyping, Engraving, and Die-sinking Trades.

Output.—The Tables on pages 635 to 637 are based on Returns received from factories and workshops engaged in typefoundry, stereotyping, electrotyping, engraving of blocks, plates, &c., die-sinking and relief-stamping. The aggregate gross value of the output of the firms that made their Returns on the Schedules for the typefoundry, stereotyping, engraving, and die-sinking trades is returned as £970,000, to which should be added £251,000, the value of similar goods and work included in their statements of output by firms that made their Returns on Schedules for other trades. The resulting total of £1,221,000 is free from duplication.

The following statement shows the value of the output of the principal branches of the trade :—

	Returned on Schedules for the Typefoundry, &c., Trades.	Returned on Schedules for other Trades.	Total.
	£	£	£
Printing Type	285,000	4,000	289,000
Printers' Sundries (Leads, Quads, Rules, &c.)	72,000	29,000	101,000
Stereotyping and Electrotyping	89,000	145,000	234,000
Engraving of Blocks, Plates, &c. :—			
Steel and Copper Plates (Intaglio Work)	38,000	24,000	62,000
Wood Blocks (Relief Work)	33,000	1,000	34,000
Process Blocks (Relief Work)	202,000	—	202,000
Total—Engraving of Blocks, Plates, &c.	273,000	25,000	298,000
Die-sinking	39,000	37,000	76,000
Relief-stamping	32,000	—	32,000
Die-sinking and Relief-stamping, not separately distinguished.	15,000	—	15,000
Metal Stamps, Marks, and Stencils	22,000	—	22,000
Rubber Stamps and Accessories	19,000	11,000	30,000
Total	846,000	251,000	1,097,000

The quantity of type made was about 2,300 tons. The exports and imports of printing type were not shown separately in the Annual Statement of Trade before 1908, when 533 tons were exported and 40 tons were imported and retained in the United Kingdom. "Printers' materials, unenumerated," valued at £50,000, free on board, were exported in 1907, but this heading, while excluding type, covers a wider range of goods than does that of "printers' sundries" above.

It should be noted that work done by printing firms for their own use, such as the preparation of linotype metal, the engraving of process blocks, &c., is not included in the foregoing statement, the value of such work being covered by the value of the books, periodicals, &c., printed (*see* pages 603 and 608).

Firms that received the Schedules for the typefoundry, stereotyping, engraving, and die-sinking trades also included in their statements of output the value of the following classes of work which are chiefly executed by other trades and are dealt with in the Reports on those trades :—

	Value.
	£
Engraving on Gold and Silver Goods, Copper, Zinc, &c. ; Heraldic and other Work	51,000
Engraving on Brass	23,000
Engraving Rollers for Calico Printers, Wall Paper Manufacturers, &c.	11,000
Other Products and Work Done	39,000
Total	124,000

Engraving, &c., when done in men's workshops, is not included in the above totals, as such workshops were, as a rule, not included in the official list of workshops.

Net Output.—The net output of the factories and workshops, covered by the Tables on pages 635 to 637 (whose gross output was valued at £970,000) was £666,000, that sum representing the total amount by which the value of the output of those factories and workshops exceeded the cost of the materials used. The actual cost of materials used by those factories and workshops, taken as a whole, was £304,000.

The net output per head of persons employed in the censal year was a little over £102.

Persons Employed.—The average number of persons employed on the last Wednesdays in January, April, July, and October in the factories, together with the number ordinarily employed in the workshops, covered by the Tables on pages 635 to 637,

is returned as 6,519, viz., 5,614 wage-earners and 905 salaried persons, the total number being distributed by age and sex as follows:—

Males:—		Females:—	
Under 18	1,060	Under 18	362
Over 18	4,455	Over 18	642

The variation in employment in factories during the censal year is shown in the following statement:—

	Persons Employed on the last Wednesday in			
	January.	April.	July.	October.
Wage-earners	4,073	4,127	4,057	4,121
Salaried Persons	506	515	514	514
Total	4,579	4,642	4,571	4,635

There were also 1,519 wage-earners and 393 salaried persons ordinarily employed in workshops.

Power.—The particulars furnished with regard to power are summarised below, electricity purchased not being included:—

	Gross Value of Output.	Average Number of Persons Employed.	Total Capacity of Engines.
	£		Horse-Power.
Factories with their own Engines	762,000	4,597	680
Factories renting their Power	1,000	10	—
Workshops (not using Power)	207,000	1,912	—
Total	970,000	6,519	680

Classed according to kinds of power, the particulars are:—

	Horse-Power.
Steam Engines, Reciprocating	180
Internal Combustion Engines (gas, oil, &c.)	500
Total	680

Precise details as to the amount and kind of power rented are not available.

Firms making Returns also owned dynamos driven by other power than steam engines, their capacity being 33 kilowatts.

The capacity of those dynamos should not, of course, be added to that of the engines owned. What the information shows is that (taking 746 kilowatts as equivalent to 1,000 horse-power, and allowing about 10 per cent. for loss of energy in conversion) about 7 per cent. of the engine-power belonging to typefoundry and allied factories was required for driving dynamos for the production of electric power and light.

Manufacturers were also required to state the quantity of electricity generated by their own dynamos, but owing to the insufficiency of their records a number of them were unable to do so. Firms, however, with dynamos of 10 kilowatts capacity stated that the amount of electricity generated was 14,000 Board of Trade units.

About 699,000 Board of Trade units of electricity were purchased by manufacturers for power and lighting purposes. This figure includes estimates made in the Census Office in respect of the quantities of electricity purchased by a number of small firms who were able to state only the amounts paid by them.

Manufactured Stationery Trades.

(a) PRIVATE FIRMS AND COMPANIES.

Output.—The Tables on pages 638 to 640 are based upon Returns received from factories and workshops engaged in the manufacture of stationery and other articles of paper and cardboard. The aggregate gross value of the output of the firms that made their Returns on the Schedules for the manufactured stationery trades is returned as

£4,414,000, to which should be added £1,342,000, the value of similar goods included in their statements of output by firms that made their Returns on Schedules for other trades. The resulting total of £5,756,000 contains, however, some duplication. There should also be added £2,155 the cost of articles of stationery made by the Post Office Savings Bank (*see* page 615) and £1,890 for stationery made by the telegraph and telephone departments of the Post Office (*see* page 868).

Manufacturing stationers were not required to give separate particulars of the various classes of goods made by them, representations having been received to the effect that these particulars would not ordinarily be available, since such firms generally combined a manufacturing with a merchant business and the two classes of transactions were frequently not kept separate in their books. Such firms, accordingly, were allowed to estimate the value of the goods manufactured by them, which they stated in one sum as “manufactured stationery of paper or cardboard, including notepaper, envelopes, account books, blank books, cards, cardboard boxes, paper bags, &c.” Some firms, however, that either kept accounts of the various branches of their output or specialised in the manufacture of certain classes of goods, returned separate particulars of the values of the goods made by them, and the total for each of such classes is given in Table I. on page 638, and in the statement below, but it must be remembered that other sums in respect of these classes of goods are included under the general heading of “manufactured stationery.”

The following statement shows the details furnished respecting the output of the chief products of the trade:—

	Returned on Schedules for the Manufactured Stationery Trades.	Returned on Schedules for other Trades.	Total.
	£	£	£
Manufactured Stationery of Paper or Cardboard not separately distinguished (including Notepaper Envelopes, Account Books, Blank Books, Cards, Cardboard Boxes, Paper Bags, &c.)	2,687,000	387,000	3,074,000
Christmas Cards, Picture Postcards, &c.	337,000	101,000	438,000
Paper Bags	290,000	620,000	910,000
Pattern Cards	143,000	95,000	238,000
Paper, Enamelled, Stained, Marbled, Gummed, Waxed, &c.	137,000	—	137,000
Other Articles of Paper	144,000	6,000	150,000
Albums, Calendars, Almanacs, &c.	99,000	36,000	135,000
Picture and Photo Mounts, and other Articles of Cardboard.	78,000	28,000	106,000
Luggage Labels	54,000	14,000	68,000
Cardboard Boxes	16,000	—	16,000
Articles of Stationery other than Paper and Cardboard	60,000	—	60,000
Other Products	100,000	—	100,000
Ticket and Showcard Writing and Mounting	105,000	50,000	155,000
Printing	135,000	—	135,000
Gold Blocking and Stamping	10,000	—	10,000
Amount Received for Work Done for the Trade:—			
On Stationery	11,000	5,000	16,000
Other Work	8,000	—	8,000
Total	4,414,000	1,342,000	5,756,000

The principal output of cardboard boxes is dealt with on page 616, that of printing, gold blocking, and stamping on page 603, and that of “other products” and “other work” in the Reports on the trades to which they belong. The weight of paper bags, valued at £466,000 and returned as such, was 663,000 cwts.

The amount received for work done for the trade on stationery (£16,000) is probably all included in the value of the finished goods made, and part of the sums received for printing (£135,000) and for gold blocking and stamping (£10,000) may also be so included, but, as the amount paid to other firms for work given out to them was returned as £95,000, it follows that work to the value of £66,000 consisted of printing, gold-blocking, and stamping done for customers not in the stationery trade. The “other work” (valued at £8,000) was done for merchants and retailers. Making allowance for this possible duplication the total value of the output, taken as a whole, of the factories and workshops covered by the Tables on pages 638 to 640 may be estimated at approximately £4,317,000 and that of the whole trade (exclusive of cardboard boxes, printing, gold blocking, stamping, other products, and other work) at £5,471,000.

The imports and exports of manufactured stationery and the other articles included in the foregoing statement cannot be compared with the production in the United Kingdom as the classification adopted for the purposes of the Census differs from that given in the Export and Import lists (*see* page 600). The exports of paper bags in 1907 were 30,000 cwts.; the imports were not recorded separately.

Net Output.—The net output of the factories and workshops covered by the Tables on pages 638 to 640 (whose gross output was valued at £4,414,000) was £1,977,000, that sum representing the total amount by which the value of the output of those factories and workshops exceeded the cost of the materials used and the amount paid to other firms for work done by them on those materials for the principal firms. The actual cost of materials used by those factories and workshops, taken as a whole, was £2,342,000. The amount paid to other firms for work given out to them was £95,000.

The net output per head of persons employed (exclusive of outworkers) in the censal year was a little over £75.

Persons Employed.—The average number of persons employed on the last Wednesdays in January, April, July, and October in the factories, together with the number ordinarily employed in the workshops, covered by the Tables on pages 638 to 640 is returned as 26,227, viz., 23,066 wage-earners and 3,161 salaried persons, the total number being distributed by age and sex as follows:—

Males:—		Females:—	
Under 18	2,043	Under 18	4,896
Over 18	8,501	Over 18	10,787

In addition, the average number of outworkers on the books of the employing firms on 1st February and 1st August, 1907, was 184, viz., 4 males and 180 females.

The variation in employment in factories during the censal year is shown in the following statement:—

	Persons Employed on the last Wednesday in			
	January.	April.	July.	October.
Wage-earners	19,802	19,731	19,858	20,578
Salaried Persons	2,682	2,666	2,649	2,694
Total	22,484	22,397	22,507	23,272

There were also 3,074 wage-earners and 488 salaried persons ordinarily employed in workshops.

Power.—The particulars furnished with regard to power are summarised below, electricity purchased not being included:—

	Gross Value of Output.	Average Number of Persons Employed.	Total Capacity of Engines.
	£		Horse-Power.
Factories with their own Engines	3,934,000	22,229	3,620
Factories renting their Power	47,000	436	—
Workshops (not using Power)	433,000	3,562	—
Total	4,414,000	26,227	3,620

Classed according to kinds of power, the particulars are:—

	Horse-Power.
Steam Engines, Reciprocating...	1,111
Internal Combustion Engines (gas, oil, &c.)	2,400
Water Power	109
Total	3,620

As shown above, whereas the total number of persons employed in factories in the manufactured stationery trade was 22,665, firms employing 436 persons rented their power. Precise details as to the amount and kind of such power are not available, since landlords frequently included in their special Returns power supplied to several firms engaged in different industries (*see* pages 15 to 18).

Firms using dynamos driven by their own engines were required to state their capacity, and the information furnished is summarised below:—

Capacity of Dynamos driven by:—		Kilowatts.
Steam Engines, Reciprocating	...	101
Other Power	...	263
Total	...	364

The capacity of those dynamos should not, of course, be added to that of the engines owned. What the information shows is that (taking 746 kilowatts as equivalent to 1,000 horse-power, and allowing about 10 per cent. for loss of energy in conversion) about 15 per cent. of the engine-power belonging to manufactured stationery factories was required for driving dynamos for the production of electric power and light.

Manufacturers were also required to state the quantity of electricity generated by their own dynamos, but owing to the insufficiency of their records a number of them were unable to do so. The following statement summarises the information furnished:—

Dynamos driven by	Total Capacity of Dynamos.	Electricity Generated, so far as particulars were returned.	
		Capacity of Dynamos.	Electricity Generated.
	Kilowatts.	Kilowatts.	Board of Trade Units.
Steam Engines, Reciprocating	101	85	79,000
Other Power	263	207	238,000
Total	364	292	317,000

About 837,000 Board of Trade units of electricity were purchased by manufacturers for power and lighting purposes. This figure includes estimates made in the Census Office in respect of the quantities of electricity purchased by a number of small firms who were able to state only the amounts paid by them.

(b) GENERAL POST OFFICE, SAVINGS BANK DEPARTMENT.

Output.—The Tables on page 641 give particulars respecting the output of the envelope factory of the Savings Bank Department of the General Post Office in the twelve months ended 31st March, 1908.

The output consisted of envelopes valued at £2,144 and waste paper valued at £11, the total being £2,155. In this case, as in that of other classes of Government output, the value stated for the production is a sum representing the actual cost, *i.e.*, it is made up of wages, materials used, and a proportion of the establishment charges. It differs, therefore, from the value of the output returned by private manufacturers, which is naturally on a profit basis.

Net Output.—The total cost of the materials used was £1,431, and the difference—£724—between this sum and the value of the output represents the total amount of wages and establishment charges. It is, therefore, not strictly comparable with the net output of private factories, which contains the element of profit.

The net output per head of persons employed in the year of return was nearly £121. *Persons Employed.*—The average number of persons employed on the last Wednesdays in April, July, and October, 1907, and January, 1908, is returned as 6, all male wage-earners, of whom four were under and two over 18 years of age.

Power.—4,000 Board of Trade units of electricity were purchased and used for power and lighting purposes.

Cardboard Box Trade.

Output.—The Tables on pages 642 to 644 are based on Returns received from factories and workshops engaged in the manufacture of cardboard boxes. Manufacturers in other trades who made cardboard boxes in which to pack their own goods were not required to make Returns of such boxes, the value of the goods sold being returned inclusive of all packing materials. A certain proportion of the output of cardboard boxes is also included in the Returns of manufacturing stationers who returned the value of all their products (*see* page 613) in one total. The aggregate gross value of the output of the

firms making Returns on Schedules for the cardboard box trade is returned as £2,129,000, to which should be added £198,000, the value of cardboard boxes included in their statements of output by firms that made their Returns on Schedules for other trades. The resulting total of £2,327,000 is free from duplication, except as regards an amount of £2,000.

The following statement gives the particulars furnished respecting the output of the factories and workshops covered by the Tables on pages 642 to 644 :—

	Value. £
Plain and Fancy Cardboard Boxes—	
Rigid	1,189,000
Folding	271,000
Not separately distinguished	607,000
Total—Cardboard Boxes	2,067,000
Boxes of Cardboard and Wood	11,000
Other Articles of Cardboard	19,000
Manufactured Stationery and Printing	20,000
Other Products	10,000

The value of the products included in the above statement amounts to £2,127,000. The sum of £2,000 was also received for work done for the trade, but it is included in the value of the finished goods made. Adding in the value (£198,000) of cardboard boxes, not separately distinguished into rigid and folding, returned on Schedules for other trades, the total value of the boxes of cardboard or of cardboard and wood made for sale was £2,276,000 exclusive of those made but not separately returned by manufacturing stationers.

The imports and exports of cardboard boxes were not separately distinguished in the Import and Export Lists in 1907.

Net Output.—The net output of the factories and workshops covered by the Tables on pages 642 to 644 (whose gross output was valued at £2,129,000) was £1,114,000, that sum representing the total amount by which the value of the output of those factories and workshops exceeded the cost of the materials used and the amount paid to other firms for work done by them on those materials for the principal firms. The actual cost of materials used by those factories and workshops, taken as a whole, was £1,002,000. The amount paid to other firms for work given out to them was £13,000.

The net output per head of persons employed (exclusive of outworkers) in the censal year was a little over £52.

Persons Employed.—The average number of persons employed on the last Wednesdays in January, April, July, and October in the factories, together with the number ordinarily employed in the workshops, covered by the Tables on pages 642 to 644 is returned as 21,368, viz., 19,844 wage-earners and 1,524 salaried persons, the total number being distributed by age and sex as follows :—

Males :—		Females :—	
Under 18	1,054	Under 18	5,133
Over 18	3,779	Over 18	11,402

In addition, the average number of outworkers, on the books of the employing firms on 1st February and 1st August, 1907, was 1,408, viz., 3 males and 1,405 females.

The variation in employment in factories during the censal year is shown in the following statement :—

	Persons Employed on the last Wednesday in			
	January.	April.	July.	October.
Wage-earners	16,175	16,238	16,258	16,755
Salaried Persons	1,215	1,240	1,253	1,268
Total	17,390	17,478	17,511	18,023

There were also 3,487 wage-earners and 280 salaried persons ordinarily employed in workshops.

Power.—The particulars furnished with regard to power are summarised below, electricity purchased not being included :—

	Gross Value of Output.	Average Number of Persons Employed.	Total Capacity of Engines.
	£		Horse-Power.
Factories with their own Engines	1,786,000	17,342	2,288
Factories renting their Power	26,000	259	—
Workshops (not using Power)	317,000	3,767	—
Total	2,129,000	21,368	2,288

Classed according to kinds of power, the particulars are :—

	Horse-Power.
Steam Engines, Reciprocating... ..	480
Internal Combustion Engines (gas, oil, &c.)	1,795
Water Power	7
Other Power	6
Total	2,288

As shown above, whereas the total number of persons employed in factories in the cardboard box trade was 17,601, firms employing 259 persons rented their power. Precise details as to the amount and kind of such power are not available, since landlords frequently included in their special Returns power supplied to several firms engaged in different industries (*see* pages 15 to 18).

Firms using dynamos driven by their own engines were required to state their capacity, and the information furnished is summarised below :—

Capacity of Dynamos driven by :—	Kilowatts.
Steam Engines, Reciprocating	158
Other Power	334
Total	492

The capacity of those dynamos should not, of course, be added to that of the engines owned. What the information shows is that (taking 746 kilowatts as equivalent to 1,000 horse power, and allowing about 10 per cent. for loss of energy in conversion) about 32 per cent. of the engine-power belonging to cardboard box factories was required for driving dynamos for the production of electric power and light.

Manufacturers were also required to state the quantity of electricity generated by their own dynamos, but owing to the insufficiency of their records a number of them were unable to do so. The following statement summarises the information furnished :—

Dynamos driven by	Total Capacity of Dynamos.	Electricity Generated, so far as particulars were returned.	
		Capacity of Dynamos.	Electricity Generated.
Steam Engines, Reciprocating	Kilowatts. 158	Kilowatts. 148	Board of Trade Units. 126,000
Other Power	334	162	198,000
Total	492	310	324,000

About 543,000 Board of Trade units of electricity were purchased by manufacturers for power and lighting purposes. This figure includes estimates made in the Census Office in respect of the quantities of electricity purchased by a number of small firms who were able to state only the amounts paid by them.

Machinery.—In order to obtain a measure of the equipment of the trade, all firms that occupied factories and received the Schedule for the cardboard box trade were asked to furnish a voluntary statement respecting the number of the principal kinds of machines

used by them. Firms whose output of cardboard boxes and articles of cardboard was valued at £857,000, or 48·2 per cent. of the total factory output of such goods (£1,778,000), did not furnish any information, but firms returning an output of £921,000, or 51·8 per cent. of the total value of boxes and articles of cardboard, returned on the Schedules for the cardboard box trade as made in factories supplied the following particulars :—

Machines for :—	Worked by Hand.		Worked by Power.	
	Number.		Number.	
Cutting	626	250	...	...
Scoring	177	336	...	...
Guillotining... ..	33	234	...	...
Corner and Slot Cutting	169	231	...	...
Punching and Stamping	154	281	...	...
Bending and Creasing	31	293	...	...
Wire Stitching	454	397	...	...
Corner Staying	39	242	...	...
Box Covering	213	314	...	...

Pen, Pencil, and Artists' Materials Trades.

Output.—The Tables on pages 645 and 646 are based on Returns received from factories and workshops engaged in the manufacture of pens, pencils, and artists' materials. The aggregate gross value of the output of the firms that made their Returns on the Schedules for the pen, pencil, and artists' materials trades is returned as £734,000, to which should be added £57,000 the value of similar goods included in their statements of output by firms that made their Returns on Schedules for other trades. The resulting total of £791,000, contains, however, some duplication.

The following statement shows the particulars furnished in respect of the output of such factories and workshops :—

	Returned on Schedules for the Pen, Pencil, and Artists' Materials Trades.	Returned on Schedules for other Trades.	Total.
	£	£	£
Gold Pens	13,000	—	13,000
Pen-Nibs of Metals other than Gold, and Holders, Tips, &c. for use therewith	414,000	1,000	415,000
Reservoir Pens and Stylographs, and parts thereof (including Repair Work)	54,000	50,000	104,000
Pencils, Pencil Leads, and Crayons	53,000	1,000	54,000
Artists' Materials (other than Pencils and Crayons)... ..	150,000	5,000	155,000
Artists' Cabinet Work (including easels and wooden paint boxes)	14,000	—	14,000
Small Steel Wares	29,000	—	29,000
Other Products	5,000	—	5,000
Work Done for the Trade	2,000	—	2,000
Total	734,000	57,000	791,000

As finished articles and parts thereof are included together in some classes it is not possible to state precisely the value of the products of the trade taken as a whole, but it may be estimated that the value, free from duplication, of the output of pens, pencils, artists' materials and cabinet work, and small steel wares was approximately £750,000. The amount received for work done for the trade is duplicated in the value of the finished goods made. "Other products," valued at £5,000, are dealt with in the Reports on the trades to which they belong.

In consequence of the restrictions imposed by the Census of Production Act it was not possible to require manufacturers to state the quantity of their output. All makers of pens, therefore, were requested to make a voluntary statement as to the quantities of pens made by them. On the basis of the answers received (which were almost complete in the case of gold pens) it is estimated that 3,600 gross of gold pens, valued at £13,000, were made, exclusive of those made by firms and used by them in the manufacture of

reservoir pens entered separately as such. Firms with an output of pen-nibs (of metals other than gold), holders, tips, &c., valued at £131,000 out of a total of £414,000, stated that they made 3,181,000 gross of pen-nibs of steel, and 32,000 gross of nibs of other metals.

Pens and pencils are included with "Stationery other than paper" in the Export and Import Lists, and the exports of artists' materials are included under the same heading with potters' colours and materials, exports of which were valued in 1907 at about £74,000, free on board.

Net Output.—The net output of the factories and workshops covered by the Tables on pages 645 and 646 (whose gross output was valued at £734,000) was £490,000, that sum representing the total amount by which the value of the output of those factories and workshops exceeded the cost of the materials used and the amount paid to other firms for work done by them on those materials for the principal firms. The actual cost of materials used by those factories and workshops, taken as a whole, cannot be stated precisely, but it may be estimated at approximately £200,000. The amount paid to other firms for work given out to them was £10,000.

The net output per head of persons employed (exclusive of outworkers) in the censal year was £77.

Persons Employed.—The average number of persons employed on the last Wednesdays in January, April, July, and October in the factories, together with the number ordinarily employed in the workshops, covered by the Tables on pages 645 and 646, is returned as 6,368, viz., 6,025 wage-earners and 343 salaried persons, the total number being distributed by age and sex as follows :—

Males :—		Females :—	
Under 18	379	Under 18	908
Over 18	1,551	Over 18	3,530

In addition, the average number of outworkers borne on the books of the employing firms on 1st February and 1st August, 1907, was 23, viz., 2 males and 21 females.

The variation in employment in factories during the censal year is shown in the following statement :—

	Persons Employed on the last Wednesday in			
	January.	April.	July.	October.
Wage-earners	5,984	5,980	5,956	5,898
Salaried Persons	327	328	327	330
Total	6,311	6,308	6,283	6,228

There were also 70 wage-earners and 15 salaried persons ordinarily employed in workshops.

Power.—The particulars furnished with regard to power are summarised below, electricity purchased not being included :—

	Gross Value of Output.	Average Number of Persons Employed.	Total Capacity of Engines.
Factories with their own Engines	£ 716,000	6,283	Horse-Power, 1,450
Workshops (not using Power)	18,000	85	—
Total	734,000	6,368	1,450

Classed according to kinds of power, the particulars are :—

	Horse-Power.
Steam Engines, Reciprocating... ..	936
Internal Combustion Engines (gas, oil, &c.)	469
Water Power	45
Total	1,450

Firms using dynamos driven by their own engines were required to state their capacity, and the information furnished is summarised below :—

Capacity of Dynamos driven by :—		Kilowatts.
Steam Engines, Reciprocating	...	108
Other Power	...	2
Total	...	110

The capacity of those dynamos should not, of course, be added to that of the engines owned. What the information shows is that (taking 746 kilowatts as equivalent to 1,000 horse-power, and allowing about 10 per cent. for loss of energy in conversion) about one-ninth of the engine-power belonging to pen, pencil, and artists' materials factories was required for driving dynamos for the production of electric power and light.

Manufacturers were also required to state the quantity of electricity generated by their own dynamos, but owing to the insufficiency of their records a few of them were unable to do so. The following statement summarises the information furnished :—

Dynamos driven by	Total Capacity of Dynamos.	Electricity Generated, so far as particulars were returned.	
		Capacity of Dynamos.	Electricity Generated.
Steam Engines, Reciprocating	Kilowatts. 108	Kilowatts. 68	Board of Trade Units. 47,000
Other Power	2	2	2,000
Total	110	70	49,000

About 54,000 Board of Trade units of electricity were purchased by manufacturers for power and lighting purposes. This figure includes estimates made in the Census Office in respect of the quantities of electricity purchased by some small firms who were able to state only the amounts paid by them.

Ink, Gum, and Sealing Wax Trades.

Output.—The Tables on pages 647 and 648 are based on Returns received from factories and workshops engaged in the manufacture of inks, gum, sealing wax, &c. The aggregate gross value of the output of the firms that made their Returns on the Schedules for the ink, gum, and sealing wax trades is returned as £888,000, to which should be added £222,000, the value of similar products included in their statements of output by firms that made their Returns on Schedules for other trades. The resulting total of £1,110,000 is free from duplication.

The following statement shows the values of the chief products of the trade :—

	Returned on Schedules for the Ink, Gum, and Sealing Wax Trades.	Returned on Schedules for other Trades.	Total.
	£	£	£
Printers' Ink	453,000	83,000	536,000
Printers' Rollers, &c.	34,000	35,000	69,000
Inks other than Printers' Ink (<i>i.e.</i> , Writing, Endorsing, Marking, &c., and Ink Powders).	231,000	23,000	254,000
Gum Mucilage, Paste, &c.	50,000	12,000	62,000
Sealing Wax	34,000	8,000	42,000
Typing and Copying Accessories	23,000	61,000	84,000
Varnish (including Litho and Letterpress Varnishes)	18,000	—	18,000
Other Products	45,000	—	45,000
Total	888,000	222,000	1,110,000

The "other products" are chiefly paints and oils, and, together with the varnish recorded above are dealt with in the Reports on the oils, paints, colours, and varnish trades. (See pages 554 and 563.)

The imports of ink and sealing wax are included under the heading "stationery other than paper"; the exports of writing ink and sealing wax are also entered under the heading of "stationery other than paper," and those of "printing ink" under the heading "goods manufactured, unenumerated." No comparison of production with exports and imports can, therefore, be made.

Net Output.—The net output of the factories and workshops covered by the Tables on pages 647 and 648 (whose gross output was valued at £888,000) was £463,000, that sum representing the total amount by which the value of the output of those factories and workshops exceeded the cost of the materials used. The actual cost of materials used by those factories and workshops, taken as a whole, was £425,000.

The net output per head of persons employed in the censal year was nearly £280.

Persons Employed.—The average number of persons employed on the last Wednesdays in January, April, July, and October in the factories, together with the number ordinarily employed in the workshops, covered by the Tables on pages 647 and 648 is returned as 1,655, viz., 1,201 wage-earners and 454 salaried persons, the total number being distributed by age and sex as follows :—

Males :—		Females :—	
Under 18	94	Under 18	100
Over 18	1,281	Over 18	180

The variation in employment in factories during the censal year is shown in the following statement :—

	Persons Employed on the last Wednesday in			
	January.	April.	July.	October.
Wage-earners	959	954	957	967
Salaried Persons	380	383	390	388
Total	1,339	1,337	1,347	1,355

There were in addition also 242 wage-earners and 69 salaried persons ordinarily employed in workshops.

Power.—The particulars furnished with regard to power are summarised below, electricity purchased not being included :—

	Gross Value of Output.	Average Number of Persons Employed.	Total Capacity of Engines.
	£		Horse-Power.
Factories with their own Engines	806,000	1,340	2,125
Factories renting their Power	1,000	4	—
Workshops (not using Power)	81,000	311	—
Total	888,000	1,655	2,125

Classed according to kinds of power, the particulars are :—

	Horse-Power.
Steam Engines, Reciprocating	1,434
Internal Combustion Engines (gas, oil, &c.)	691
Total	2,125

Precise details as to the amount and kind of power rented are not available.

Certain firms also used dynamos driven by their own steam engines, their capacity being 39 kilowatts.

The capacity of those dynamos should not, of course, be added to that of the engines owned. What the information shows is that (taking 746 kilowatts as equivalent to 1,000 horse-power, and allowing about 10 per cent. for loss of energy in conversion) about 3 per cent. of the engine-power belonging to ink, gum, and sealing-wax factories was required for driving dynamos for the production of electric power and light. The amount of energy generated by those dynamos was 22,000 Board of Trade units.

About 569,000 Board of Trade units of electricity were purchased by manufacturers for power and lighting purposes. This figure includes estimates made in the Census Office in respect of the quantities of electricity purchased by a number of small firms who were able to state only the amounts paid by them.

Trade Photography.

Output.—The Tables on pages 649 and 650 are based on Returns received from factories and workshops engaged in photographic work other than portraiture. Firms mainly engaged in taking portraits of private customers were not required to make Returns.

The following statement gives the particulars furnished respecting the output of such establishments, and is free from duplication:—

	Value. £
Photographic work of all kinds (including Developing, Printing, Enlarging, &c.)	197,000.
Other Products	12,000.

In addition to the £209,000 shown above, firms that made their Returns on Schedules for other trades included in their statements of output photographic work to the value of £2,000.

Net Output.—The net output of the factories and workshops covered by the Tables on pages 649 and 650 (whose gross output was valued at £209,000) was £119,000, that sum representing the total amount by which the value of the output of those factories and workshops exceeded the cost of the materials used. The actual cost of materials used by the trade, taken as a whole, was £90,000.

The net output per head of persons employed in the censal year was nearly £118.

Persons Employed.—The average number of persons employed on the last Wednesdays in January, April, July, and October in the factories, together with the number ordinarily employed in the workshops, covered by the Tables on pages 649 and 650 is returned as 1,011, viz., 772 wage earners and 239 salaried persons, the total number being distributed by age and sex as follows:—

Males:—		Females:—	
Under 18	97	Under 18	55
Over 18	542	Over 18	317

The variation in employment in factories during the censal year is shown in the following statement:—

	Persons Employed on the last Wednesday in			
	January.	April.	July.	October.
Wage-earners	275	270	266	270
Salaried Persons	112	130	122	127
Total	387	400	388	397

There were also 502 wage earners and 116 salaried persons ordinarily employed in workshops.

Power.—The particulars furnished with regard to power are summarised below, electricity purchased not being included:—

	Gross Value of Output.	Average Number of Persons Employed.	Total Capacity of Engines.
	£		Horse-Power.
Factories with their own Engines	96,000	393	210
Workshops (not using Power)	113,000	618	—
Total	209,000	1,011	210

Classed according to kinds of power, the particulars are:—

	Horse-Power.
Internal Combustion Engines (gas, oil, &c.)	110
Water Power	100
Total	210

Certain firms also used dynamos driven by other engines than steam engines, their capacity being 117 kilowatts.

The capacity of those dynamos should not, of course, be added to that of the engines owned. What the information shows is that (taking 746 kilowatts as equivalent to 1,000 horse-power, and allowing about 10 per cent. for loss of energy in conversion) about 83 per cent. of the engine-power belonging to photographic factories was required for driving dynamos for the production of electric power and light. The amount of energy generated by those dynamos was 99,000 Board of Trade units.

About 88,000 Board of Trade units of electricity were purchased by manufacturers for power and lighting purposes. This figure includes estimates made in the Census Office in respect of the quantities of electricity purchased by some small firms who were able to state only the amounts paid by them.

TABLES.

PAPER TRADE.

TABLE I.—OUTPUT.

NOTE.—The figures in this Table are given to the nearest thousand in each case. Amounts lower than five hundred are not shown.

	England and Wales and Ireland.*	Scotland.	United Kingdom.
	Quantity.		
Paper :—	Cwts.	Cwts.	Cwts.
Paper for Writing and Drawing and for Envelopes.	1,186,000	1,180,000	2,366,000
Paper for Printing and for Posters, &c. ...	7,863,000	1,228,000	9,091,000
Packing and Wrapping Paper, Biscuit Caps, &c.	3,149,000	615,000	3,764,000
Printed and Coated Papers (not Hangings) ...	394,000	373,000	767,000
Pasteboard, Cardboard, and Millboard ...	915,000	156,000	1,071,000
Other Sorts	171,000	112,000	283,000
Paper Bags	497,000	159,000	656,000
	Value.		
Paper :—	£	£	£
Paper for Writing and Drawing and for Envelopes.	1,702,000	1,357,000	3,059,000
Paper for Printing and for Posters, &c. ...	4,866,000	1,028,000	5,894,000
Packing and Wrapping Paper, Biscuit Caps, &c.	1,657,000	375,000	2,032,000
Printed and Coated Papers (not Hangings) ...	512,000	463,000	975,000
Pasteboard, Cardboard, and Millboard ...	503,000	123,000	626,000
Other Sorts	303,000	137,000	440,000
Paper Bags	366,000	96,000	462,000
Other Articles of Paper and Cardboard ...	56,000	3,000	59,000
Waste Products	9,000	9,000	18,000
Other Products	29,000	8,000	37,000
Amount Received for Waterproofing, Waxing, &c., Paper	19,000	—	19,000
TOTAL VALUE OF GOODS MADE AND WORK DONE.	10,022,000	3,599,000	13,621,000
TOTAL VALUE FOR ENGLAND AND WALES	9,835,000	—	—
TOTAL VALUE FOR IRELAND	187,000	—	—

* The figures for England and Wales and for Ireland have been combined in order to avoid the possible disclosure of particulars relating to the few firms in Ireland; separate totals are, however, shown for each division of the United Kingdom.

Paper Trade—continued.

TABLE II.—COST OF MATERIALS USED, SHOWN IN RELATION TO VALUE OF OUTPUT.

NOTE.—The figures in this Table are given to the nearest thousand in each case.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
	£	£	£	£
I. Cost of Materials Used	6,529,000	2,423,000	127,000	9,079,000
II. Value of Output	9,835,000	3,599,000	187,000	13,621,000
III. Value of Output less Cost of Materials Used ...	3,306,000	1,176,000	60,000	4,542,000

TABLE III.—PERSONS EMPLOYED.

AVERAGE NUMBERS AT WORK ON THE LAST WEDNESDAYS IN JANUARY, APRIL, JULY, AND OCTOBER.

	Males.			Females.			Males and Females.		
	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.
ENGLAND AND WALES :—									
Wage-earners	2,589	16,002	18,591	1,762	7,062	8,824	4,351	23,064	27,415
Salaried Persons	154	1,295	1,449	24	111	135	178	1,406	1,584
TOTAL	2,743	17,297	20,040	1,786	7,173	8,959	4,529	24,470	28,999
SCOTLAND :—									
Wage-earners	691	5,877	6,568	1,081	3,021	4,102	1,772	8,898	10,670
Salaried Persons	53	533	586	21	80	101	74	613	687
TOTAL	744	6,410	7,154	1,102	3,101	4,203	1,846	9,511	11,357
IRELAND :—									
Wage-earners	51	343	394	33	130	163	84	473	557
Salaried Persons	4	29	33	3	6	9	7	35	42
TOTAL	55	372	427	36	136	172	91	508	599
UNITED KINGDOM :—									
Wage-earners	3,331	22,222	25,553	2,876	10,213	13,089	6,207	32,435	38,642
Salaried Persons	211	1,857	2,068	48	197	245	259	2,054	2,313
TOTAL	3,542	24,079	27,621	2,924	10,410	13,334	6,466	34,489	40,955

Paper Trade—continued.

TABLE IV.—CAPACITY OF ENGINES OWNED AND AMOUNT OF ELECTRICITY PURCHASED.

A.—CAPACITY OF ENGINES OWNED, COMPARED WITH GROSS VALUE OF OUTPUT AND NUMBER OF PERSONS EMPLOYED.

NOTE.—The Gross Value of Output in this Table is given to the nearest thousand pounds.

	ENGLAND AND WALES.			SCOTLAND.		
	£	Number of Persons Employed.	Total Capacity of Engines.	£	Number of Persons Employed.	Horse-Power.
Factories with their own Engines ...	9,813,000	28,913	119,679	3,596,000	11,338	48,595
Factories renting their Power ...	22,000	86	—	3,000	19	—
TOTAL	9,835,000	28,999	119,679	3,599,000	11,357	48,595
	IRELAND.			UNITED KINGDOM.		
	£	Number of Persons Employed.	Total Capacity of Engines.	£	Number of Persons Employed.	Horse-Power.
Factories with their own Engines ...	187,000	599	3,950	13,596,000	40,850	172,224
Factories renting their Power ...	—	—	—	25,000	105	—
TOTAL	187,000	599	3,950	13,621,000	40,955	172,224

B.—TYPE AND CAPACITY OF ENGINES AND CAPACITY OF DYNAMOS.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
	Horse-Power.	Horse-Power.	Horse-Power.	Horse-Power.
Steam Engines: Reciprocating ...	108,393	41,116	3,845	153,354
Steam Turbines ...	200	3,270	—	3,470
Internal Combustion Engines (gas, oil, &c.) ...	4,702	82	—	4,784
Water Power	6,346	4,127	105	10,578
Other Power	38	—	—	38
TOTAL	119,679	48,595	3,950	172,224
	Kilowatts.	Kilowatts.	Kilowatts.	Kilowatts.
	Capacity of Dynamos driven by:—	Capacity of Dynamos driven by:—	Capacity of Dynamos driven by:—	Capacity of Dynamos driven by:—
Steam Engines: Reciprocating ...	5,822	5,007	343	11,172
Steam Turbines ...	150	2,459	—	2,609
Other Power	1,170	306	25	1,501
TOTAL	7,142	7,772	368	15,282

C.—AMOUNT OF ELECTRICITY PURCHASED.

NOTE.—The figures in this Table are given to the nearest thousand in each case.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
	Board of Trade Units.	Board of Trade Units.	Board of Trade Units.	Board of Trade Units.
Amount of Electricity Purchased ...	811,000	657,000	4,000	1,472,000

PRINTING AND BOOKBINDING TRADES.

(a) PRIVATE FIRMS AND COMPANIES.

TABLE I.—OUTPUT.

NOTE.—The figures in this Table are given to the nearest thousand in each case. Amounts lower than five hundred are not shown.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
	£	£	£	£
Book Production (Printing, Binding, &c.) :—				
Printed Books	848,000	470,000	42,000	1,360,000
Account and Blank Books... ..	1,220,000	214,000	53,000	1,487,000
Printing of Newspapers :—				
Daily	*	*	*	180,000
Other than Daily (including Trade Journals).	*	*	*	1,005,000
TOTAL—Printing of Newspapers ...	1,132,000	25,000	28,000	1,185,000
Printing of Magazines and other Periodicals (published at least quarterly).	1,145,000	61,000	10,000	1,216,000
Job and General Printing	10,240,000	1,006,000	317,000	11,563,000
Music Printing	*	*	*	120,000
Lithographic and Photo-lithographic Printing (other than Music).	2,321,000	457,000	161,000	2,939,000
Photographic and Process Engraving and Printing.	540,000	25,000	—	565,000
Copper and Steel Plate Printing (other than Music).	*	*	*	343,000
Engraving of Copper and Steel Plates and Wood Blocks.	17,000	2,000	—	19,000
Bookbinding :—				
Printed Books	1,218,000	116,000	25,000	1,359,000
Account and Blank Books... ..	564,000	149,000	31,000	744,000
Bookbinding, not separately distinguished	97,000	20,000	6,000	123,000
TOTAL—Bookbinding	1,879,000	285,000	62,000	2,226,000
Machine-ruling	263,000	40,000	11,000	314,000
Electrotyping and Stereotyping	*	*	*	132,000
Relief-stamping	18,000	11,000	2,000	31,000
Gold Blocking, Stamping, &c.	58,000	2,000	1,000	61,000
Ticket and Showcard Writing	*	*	*	26,000
Manufactured Stationery	277,000	81,000	5,000	363,000
Paper Bags	140,000	12,000	5,000	157,000
Cardboard Boxes	*	*	*	107,000
Christmas Cards, Picture Postcards, &c. ...	*	*	*	96,000
Pattern Cards	*	*	*	84,000
Maps, Plans, Drawings, &c.	24,000	18,000	—	42,000
Type, Ink, Pens, &c.	*	*	*	100,000
Waste Products	67,000	10,000	3,000	80,000
Other Products and Work Done	80,000	9,000	4,000	93,000
TOTAL VALUE OF GOODS MADE AND WORK DONE.	21,209,000	2,779,000	721,000	24,709,000

* In order to avoid the possible disclosure of particulars relating to certain firms, figures can only be shown for the United Kingdom as a whole.

Printing and Bookbinding Trades—continued.

(a) PRIVATE FIRMS AND COMPANIES—continued.

TABLE II.—COST OF MATERIALS USED AND AMOUNT PAID TO OTHER FIRMS FOR WORK GIVEN OUT TO THEM, SHOWN IN RELATION TO VALUE OF OUTPUT.

NOTE.—The figures in this Table are given to the nearest thousand in each case.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
I.	£	£	£	£
Cost of Materials Used	7,317,000	1,050,000	256,000	8,623,000
Amount Paid to Other Firms for Work Given Out to them.	636,000	94,000	12,000	742,000
TOTAL	7,953,000	1,144,000	268,000	9,365,000
II.				
Value of Output	21,209,000	2,779,000	721,000	24,709,000
III.				
Value of Output less Cost of Materials Used and Amount Paid to Other Firms for Work Given Out to them.	13,256,000	1,635,000	453,000	15,344,000

TABLE III.—PERSONS EMPLOYED.

AVERAGE NUMBERS AT WORK ON THE LAST WEDNESDAYS IN JANUARY, APRIL, JULY, AND OCTOBER.

NOTE.—These figures include (a) the average number of persons at work on the last Wednesdays in January, April, July, and October in establishments where power is used; and (b) the numbers "ordinarily" employed in establishments where no power is used.

	Males.			Females.			Males and Females.		
	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.
ENGLAND AND WALES :—									
Wage-earners	19,531	71,453	90,984	14,320	26,412	40,732	33,851	97,865	131,716
Salaried Persons	1,358	10,298	11,656	384	1,640	2,024	1,742	11,938	13,680
TOTAL	20,889	81,751	102,640	14,704	28,052	42,756	35,593	109,803	145,396
SCOTLAND :—									
Wage-earners	1,531	8,092	9,623	3,802	6,241	10,043	5,333	14,333	19,666
Salaried Persons	166	1,291	1,457	161	533	694	327	1,824	2,151
TOTAL	1,697	9,383	11,080	3,963	6,774	10,737	5,660	16,157	21,817
IRELAND :—									
Wage-earners	801	2,725	3,526	687	1,857	2,544	1,488	4,582	6,070
Salaried Persons	76	573	649	31	153	184	107	726	833
TOTAL	877	3,298	4,175	718	2,010	2,728	1,595	5,308	6,903
UNITED KINGDOM :—									
Wage-earners	21,863	82,270	104,133	18,809	34,510	53,319	40,672	116,780	157,452
Salaried Persons	1,600	12,162	13,762	576	2,326	2,902	2,176	14,488	16,664
TOTAL	23,463	94,432	117,895	19,385	36,836	56,221	42,848	131,268	174,116

Printing and Bookbinding Trades—continued.

(a) PRIVATE FIRMS AND COMPANIES—continued.

TABLE IV.—CAPACITY OF ENGINES OWNED AND AMOUNT OF ELECTRICITY PURCHASED.

A.—CAPACITY OF ENGINES OWNED, COMPARED WITH GROSS VALUE OF OUTPUT AND NUMBER OF PERSONS EMPLOYED.

NOTE.—The Gross Value of Output in this Table is given to the nearest thousand pounds.

	Gross Value of Output.	Number of Persons Employed.	Total Capacity of Engines.	Gross Value of Output.	Number of Persons Employed.	Total Capacity of Engines.
	ENGLAND AND WALES.			SCOTLAND.		
	£		Horse-Power.	£		Horse-Power.
Factories with their own Engines	20,379,000	137,290	33,977	2,734,000	21,254	3,207
Factories renting their Power	86,000	642	—	8,000	97	—
Workshops (not using Power)	744,000	7,464	—	37,000	466	—
TOTAL	21,209,000	145,396	33,977	2,779,000	21,817	3,207
	IRELAND.			UNITED KINGDOM.		
	£		Horse-Power.	£		Horse-Power.
Factories with their own Engines	695,000	6,592	1,427	23,808,000	165,136	38,611
Factories renting their Power	9,000	96	—	103,000	835	—
Workshops (not using Power)	17,000	215	—	798,000	8,145	—
TOTAL	721,000	6,903	1,427	24,709,000	174,116	38,611

B.—TYPE AND CAPACITY OF ENGINES AND CAPACITY OF DYNAMOS.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
Steam Engines :—	Horse-Power.	Horse-Power.	Horse-Power.	Horse-Power.
Reciprocating	13,821	1,159	259	15,239
Steam Turbines	18	—	—	18
Internal Combustion Engines (gas, oil, &c.)	19,920	2,045	1,162	23,127
Water Power	218	3	6	227
TOTAL	33,977	3,207	1,427	38,611
Capacity of Dynamoes driven by :—	Kilowatts.	Kilowatts.	Kilowatts.	Kilowatts.
Steam Engines :—				
Reciprocating	4,987	207	111	5,305
Steam Turbines	12	—	—	12
Other Power	2,352	87	171	2,610
TOTAL	7,351	294	282	7,927

C.—AMOUNT OF ELECTRICITY PURCHASED.

NOTE.—The figures in this Table are given to the nearest thousand in each case.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
	Board of Trade Units.	Board of Trade Units.	Board of Trade Units.	Board of Trade Units.
Amount of Electricity Purchased	9,490,000	1,338,000	108,000	10,936,000

Printing and Bookbinding Trades—*continued.*

(b) GOVERNMENT DEPARTMENTS :

1.—GENERAL POST OFFICE, SAVINGS BANK DEPARTMENT.

TABLE I.—OUTPUT.

	England.
Job and General Printing	£ 7,221
Other Products	22
TOTAL VALUE	7,243

TABLE II.—COST OF MATERIALS USED AND AMOUNT PAID TO OTHER FIRMS FOR WORK GIVEN OUT TO THEM, SHOWN IN RELATION TO VALUE OF OUTPUT.

	England.
I.	£
Cost of Materials Used	3,296
Amount Paid to Other Firms for Work Given Out to them.	19
TOTAL	3,315
II.	
Value of Output	7,243
III.	
Value of Output less Cost of Materials Used and Amount Paid to Other Firms for Work Given Out to them.	3,928

TABLE III.—PERSONS EMPLOYED.

AVERAGE NUMBERS AT WORK ON THE LAST WEDNESDAYS IN APRIL, JULY, AND OCTOBER, 1907, AND JANUARY, 1908.

	Males.		
	Under 18 years of age.	Over 18 years of age.	Total.
ENGLAND :—			
Wage-earners	13	17	30
Salaried Persons	—	1	1
TOTAL	13	18	31

TABLE IV.—AMOUNT OF ELECTRICITY PURCHASED.

	England.
Amount of Electricity Purchased	Board of Trade Units. 20,000

Printing and Bookbinding Trades—*continued.*(b) GOVERNMENT DEPARTMENTS—*continued.*

2.—ORDNANCE SURVEY DEPARTMENT.

TABLE I.—OUTPUT.

	England.
Maps, &c., made for sale	£ 63,470
Work Done for other Government Departments	13,200
TOTAL VALUE	76,670

TABLE II.—COST OF MATERIALS USED, SHOWN IN RELATION TO VALUE OF OUTPUT.

	England.
I.	£
Cost of Materials Used	12,762
II.	
Value of Output	76,670
III.	
Value of Output less Cost of Materials Used	63,908

TABLE III.—PERSONS EMPLOYED.

AVERAGE NUMBERS AT WORK ON THE LAST WEDNESDAYS IN APRIL, JULY, AND OCTOBER, 1907, AND JANUARY, 1908.

	Males.			Females.			Males and Females.		
	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.
ENGLAND :—									
Wage-earners	25	243	268	5	87	92	30	330	360
Salaried Persons	1	72	73	—	—	—	1	72	73
TOTAL	26	315	341	5	87	92	31	402	433

TABLE IV.—AMOUNT OF ELECTRICITY PURCHASED.

	England.
Amount of Electricity Purchased	Board of Trade Units. 66,325

PRINTING AND PUBLISHING OF NEWSPAPERS AND
OTHER PERIODICALS.

TABLE I.—OUTPUT.

NOTE.—The figures in this Table are given to the nearest thousand in each case. Amounts lower than five hundred are not shown.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
Newspapers:—	£	£	£	£
Daily	5,917,000	818,000	358,000	7,093,000
Other than Daily (including Trade Journals).	3,265,000	357,000	132,000	3,754,000
TOTAL—Newspapers	9,182,000	1,175,000	490,000	10,847,000
Magazines and other Periodicals (published at least quarterly).	652,000	110,000	10,000	772,000
Job and General Printing	1,202,000	135,000	81,000	1,418,000
Stereotyping and Electrotyping	13,000	—	—	13,000
Other Work Done (Bookbinding, Engraving, &c.).	19,000	1,000	5,000	25,000
Production of Printed Books (Printing and Binding).	307,000	11,000	2,000	320,000
Manufactured Stationery	5,000	—	17,000	22,000
Waste Products	118,000	10,000	3,000	131,000
TOTAL VALUE OF GOODS MADE AND WORK DONE.	11,498,000	1,442,000	608,000	13,548,000

TABLE II.—COST OF MATERIALS USED AND AMOUNT PAID TO OTHER FIRMS FOR WORK GIVEN OUT TO THEM, SHOWN IN RELATION TO VALUE OF OUTPUT.

NOTE.—The figures in this Table are given to the nearest thousand in each case.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
I.	£	£	£	£
Cost of Materials Used	3,894,000	423,000	177,000	4,494,000
Amount Paid to Other Firms for Work Given Out to them.	181,000	4,000	2,000	187,000
TOTAL	4,075,000	427,000	179,000	4,681,000
II.				
Value of Output	11,498,000	1,442,000	608,000	13,548,000
III.				
Value of Output less Cost of Materials Used and Amount Paid to other Firms for Work Given Out to them.	7,423,000	1,015,000	429,000	8,867,000

Printing and Publishing of Newspapers and other
Periodicals—continued.

TABLE III.—PERSONS EMPLOYED.
AVERAGE NUMBERS AT WORK ON THE LAST WEDNESDAYS IN JANUARY, APRIL,
JULY, AND OCTOBER.

	Males.			Females.			Males and Females.		
	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.
ENGLAND AND WALES:—									
Wage-earners	4,041	21,901	25,942	736	1,515	2,251	4,777	23,416	28,193
Salaried Persons	1,092	8,682	9,774	110	613	723	1,202	9,295	10,497
TOTAL	5,133	30,583	35,716	846	2,128	2,974	5,979	32,711	38,690
SCOTLAND:—									
Wage-earners	501	2,743	3,244	105	314	419	606	3,057	3,663
Salaried Persons	79	978	1,057	40	194	234	119	1,172	1,291
TOTAL	580	3,721	4,301	145	508	653	725	4,229	4,954
IRELAND:—									
Wage-earners	315	1,825	2,140	51	163	214	366	1,988	2,354
Salaried Persons	45	663	708	7	73	80	52	736	788
TOTAL	360	2,488	2,848	58	236	294	418	2,724	3,142
UNITED KINGDOM:—									
Wage-earners	4,857	26,469	31,326	892	1,992	2,884	5,749	28,461	34,210
Salaried Persons	1,216	10,323	11,539	157	880	1,037	1,373	11,203	12,576
TOTAL	6,073	36,792	42,865	1,049	2,872	3,921	7,122	39,664	46,786

TABLE IV.—CAPACITY OF ENGINES OWNED AND AMOUNT OF ELECTRICITY PURCHASED.

A.—CAPACITY OF ENGINES OWNED, COMPARED WITH GROSS VALUE OF OUTPUT AND NUMBER OF PERSONS EMPLOYED.

NOTE.—The Gross Value of Output in this Table is given to the nearest thousand pounds.

	Gross Value of Output.	Number of Persons Employed.	Total Capacity of Engines.	Gross Value of Output.	Number of Persons Employed.	Total Capacity of Engines.
	ENGLAND AND WALES.			SCOTLAND.		
	£		Horse-Power.	£		Horse-Power.
Factories with their own Engines	11,446,000	38,449	13,148	1,437,000	4,926	2,052
Factories renting their Power	—	—	—	2,000	14	—
Workshops (not using Power)	52,000	241	—	3,000	14	—
TOTAL	11,498,000	38,690	13,148	1,442,000	4,954	2,052
	IRELAND.			UNITED KINGDOM.		
	£		Horse-Power.	£		Horse-Power.
Factories with their own Engines	604,000	3,091	1,165	13,487,000	46,466	16,365
Factories renting their Power	—	—	—	2,000	14	—
Workshops (not using Power)	4,000	51	—	59,000	306	—
TOTAL	608,000	3,142	1,165	13,548,000	46,786	16,365

Printing and Publishing of Newspapers and other
Periodicals—*continued.*

TABLE IV.—CAPACITY OF ENGINES OWNED AND AMOUNT OF
ELECTRICITY PURCHASED—*continued.*

B.—TYPE AND CAPACITY OF ENGINES AND CAPACITY OF DYNAMOS.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
	Horse-Power.	Horse-Power.	Horse-Power.	Horse-Power.
Steam Engines, Reciprocating ...	6,021	885	122	7,028
Steam Turbines ...	10	—	—	10
Internal Combustion Engines ...	7,107	1,166	1,043	9,316
Water Power ...	10	1	—	11
TOTAL ...	13,148	2,052	1,165	16,365
	Kilowatts.	Kilowatts.	Kilowatts.	Kilowatts.
Capacity of Dynamos driven by :—				
Steam Engines, Reciprocating ...	631	166	32	829
Other Power ...	1,301	122	75	1,498
TOTAL ...	1,932	288	107	2,327

C.—AMOUNT OF ELECTRICITY PURCHASED.

NOTE.—The figures in this Table are given to the nearest thousand in each case.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
	Board of Trade Units.	Board of Trade Units.	Board of Trade Units.	Board of Trade Units.
Amount of Electricity Purchased ...	8,377,000	7,885,000	278,000	16,540,000

TYPEFOUNDING, STEREOTYPING, ENGRAVING, AND
DIE-SINKING TRADES.

TABLE I.—OUTPUT.

NOTE.—The figures of quantity in this Table are given to the nearest hundred, and those of value to the nearest thousand in each case. Amounts lower than five hundred for value are not shown.

	England and Wales and Ireland.*	Scotland.	United Kingdom.
	Quantity.		
	Tons. †	Tons. †	Tons. 2,300
	Value.		
	£	£	£
Printing Type ...	†	†	285,000
Printers' Sundries (Leads, Quads, Rules, &c.) ...	†	†	72,000
Stereotyping and Electrotyping ...	†	†	89,000
Engraving of Blocks, Plates, &c. :—			
Steel and Copper Plates (Intaglio Work) ...	†	†	38,000
Wood Blocks (Relief Work) ...	†	†	33,000
Process Blocks (Relief Work) ...	†	†	202,000
TOTAL—Engraving of Blocks, Plates, &c. ...	244,000	29,000	273,000
General Engraving on Gold and Silver Goods, Jewellery, Copper, Zinc, &c., Heraldic, and Other Work.	44,000	7,000	51,000
Engraving on Brass ...	22,000	1,000	23,000
Engraving Rollers for Calico Printers, Wall Paper Manu- facturers, &c.	11,000	—	11,000
Die-sinking ...	34,000	5,000	39,000
Relief-stamping ...	30,000	2,000	32,000
Die-sinking and Relief-stamping, not separately distin- guished.	15,000	—	15,000
Metal Stamps, Marks, and Stencils ...	21,000	1,000	22,000
Rubber Stamps and Accessories ...	19,000	—	19,000
Other Products and Work Done ...	31,000	8,000	39,000
TOTAL VALUE OF GOODS MADE AND WORK DONE.	847,000	123,000	970,000

TABLE II.—COST OF MATERIALS USED, SHOWN IN RELATION TO
VALUE OF OUTPUT.

NOTE.—The figures in this Table are given to the nearest thousand in each case.

	England and Wales and Ireland.*	Scotland.	United Kingdom.
	£	£	£
Cost of Materials Used ... I.	264,000	40,000	304,000
Value of Output ... II.	847,000	123,000	970,000
Value of Output less Cost of Materials Used... III.	583,000	83,000	666,000

* The figures for England and Wales and for Ireland have been combined in order to avoid the possible disclosure of particulars relating to the few firms in Ireland.

† In order to avoid the possible disclosure of particulars relating to certain firms, figures can only be shown for the United Kingdom as a whole.

Typefoundry, Stereotyping, Engraving, and Die-sinking
Trades—continued.

TABLE III.—PERSONS EMPLOYED.

AVERAGE NUMBERS AT WORK ON THE LAST WEDNESDAYS IN JANUARY, APRIL,
JULY, AND OCTOBER.

NOTE.—These figures include (a) the average number of persons at work on the last Wednesdays in January, April, July, and October in establishments where power is used; and (b) the numbers "ordinarily" employed in establishments where no power is used.

	Males.			Females.			Males and Females.		
	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.
ENGLAND AND WALES AND IRELAND* :—									
Wage-earners ...	910	3,156	4,066	327	502	829	1,237	3,658	4,895
Salaried Persons ...	62	688	750	17	61	78	79	749	828
TOTAL ...	972	3,844	4,816	344	563	907	1,316	4,407	5,723
SCOTLAND :—									
Wage-earners ...	87	551	638	11	70	81	98	621	719
Salaried Persons ...	1	60	61	7	9	16	8	69	77
TOTAL ...	88	611	699	18	79	97	106	690	796
UNITED KINGDOM :—									
Wage-earners ...	997	3,707	4,704	338	572	910	1,335	4,279	5,614
Salaried Persons ...	63	748	811	24	70	94	87	818	905
TOTAL ...	1,060	4,455	5,515	362	642	1,004	1,422	5,097	6,519

TABLE IV.—CAPACITY OF ENGINES OWNED AND AMOUNT OF ELECTRICITY PURCHASED.

A.—CAPACITY OF ENGINES OWNED, COMPARED WITH GROSS VALUE OF OUTPUT AND NUMBER OF PERSONS EMPLOYED.

NOTE.—The Gross Value of Output in this Table is given to the nearest thousand pounds.

	ENGLAND AND WALES AND IRELAND.*			SCOTLAND.			UNITED KINGDOM.		
	Gross Value of Output.	Number of Persons Employed.	Total Capacity of Engines.	Gross Value of Output.	Number of Persons Employed.	Total Capacity of Engines.	Gross Value of Output.	Number of Persons Employed.	Total Capacity of Engines.
Factories with their own Engines.	£ 657,000	3,979	Horse-Power. 551	£ 105,000	618	Horse-Power. 129	£ 762,000	4,597	Horse-Power. 680
Factories renting their Power.	1,000	10	—	—	—	—	1,000	10	—
Workshops (not using Power).	189,000	1,734	—	18,000	178	—	207,000	1,912	—
TOTAL ...	847,000	5,723	551	123,000	796	129	970,000	6,519	680

* The figures for England and Wales and for Ireland have been combined in order to avoid the possible disclosure of particulars relating to the few firms in Ireland.

Typefoundry, Stereotyping, Engraving, and Die-sinking
Trades—continued.

TABLE IV.—CAPACITY OF ENGINES OWNED AND AMOUNT OF ELECTRICITY PURCHASED—continued.

B.—TYPE AND CAPACITY OF ENGINES AND CAPACITY OF DYNAMOS.

	England and Wales and Ireland.*	Scotland.	United Kingdom.
Steam Engines, Reciprocating ...	Horse-Power. 64	Horse-Power. 116	Horse-Power. 180
Internal Combustion Engines (gas, oil, &c.) ...	487	13	500
TOTAL ...	551	129	680
Capacity of Dynamos driven by :— Engines other than Steam Engines Power ...	Kilowatts. 33	Kilowatts. —	Kilowatts. 33

C.—AMOUNT OF ELECTRICITY PURCHASED.

NOTE.—The figures in this Table are given to the nearest thousand in each case.

	England and Wales and Ireland.*	Scotland.	United Kingdom.
Amount of Electricity Purchased ...	Board of Trade Units. 670,000	Board of Trade Units. 29,000	Board of Trade Units. 699,000

* The figures for England and Wales and for Ireland have been combined in order to avoid the possible disclosure of particulars relating to the few firms in Ireland.

MANUFACTURED STATIONERY TRADE.

(a) PRIVATE FIRMS AND COMPANIES.

TABLE I.—OUTPUT.

NOTE.—The figures in this Table are given to the nearest thousand in each case. Amounts lower than five hundred are not shown.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
Manufactured Stationery of Paper or Card-board not separately distinguished (including Notepaper, Envelopes, Account Books, Blank Books, Cards, Cardboard Boxes, Paper Bags, &c.).	£ 2,130,000	£ 492,000	£ 65,000	£ 2,687,000
Paper Bags	244,000	24,000	22,000	290,000
Christmas Cards, Picture Postcards, &c. ...	*	*	—	337,000
Pattern Cards	*	*	—	143,000
Paper, Enamelled, Stained, Marbled, Gummed, Waxed, &c.	*	*	—	137,000
Other Articles of Paper	*	*	—	144,000
Albums, Calendars, Almanacs, &c.	*	*	—	99,000
Picture and Photo Mounts and other Articles of Cardboard.	*	*	—	78,000
Luggage Labels, &c.	*	*	—	54,000
Cardboard Boxes	*	*	*	16,000
Articles of Stationery, other than Paper and Cardboard.	60,000	—	—	60,000
Other Products	100,000	—	—	100,000
Ticket and Showcard Writing and Mounting Printing	*	*	*	105,000
Gold Blocking and Stamping	10,000	—	—	135,000
Amount Received for Work Done for the Trade:				10,000
On Stationery	*	*	—	11,000
Other Work	*	*	—	8,000
TOTAL VALUE OF GOODS MADE AND WORK DONE.	3,720,000	601,000	93,000	4,414,000

TABLE II.—COST OF MATERIALS USED AND AMOUNT PAID TO OTHER FIRMS FOR WORK GIVEN OUT TO THEM, SHOWN IN RELATION TO VALUE OF OUTPUT.

NOTE.—The figures in this Table are given to the nearest thousand in each case.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
I.				
Cost of Materials Used	£ 1,956,000	£ 336,000	£ 50,000	£ 2,342,000
Amount Paid to Other Firms for Work Given Out to them.	82,000	12,000	1,000	95,000
TOTAL	2,038,000	348,000	51,000	2,437,000
II.				
Value of Output	3,720,000	601,000	93,000	4,414,000
III.				
Value of Output less Cost of Materials Used and Amount Paid to Other Firms for Work Given Out to them.	1,682,000	253,000	42,000	1,977,000

* In order to avoid the possible disclosure of particulars relating to certain firms, figures can only be shown for the United Kingdom as a whole.

Manufactured Stationery Trade—continued.

(a) PRIVATE FIRMS AND COMPANIES—continued.

TABLE III.—PERSONS EMPLOYED.

A.—AVERAGE NUMBER OF PERSONS (EXCEPT OUTWORKERS) AT WORK ON THE LAST WEDNESDAYS IN JANUARY, APRIL, JULY, AND OCTOBER.

NOTE.—These figures include (a) the average number of persons at work on the last Wednesdays in January, April, July, and October in establishments where power is used; and (b) the numbers "ordinarily" employed in establishments where no power is used.

	Males.			Females.			Males and Females.		
	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.
ENGLAND AND WALES:									
Wage-earners	1,552	5,477	7,029	3,659	7,878	11,537	5,211	13,355	18,566
Salaried Persons	296	1,841	2,137	140	450	590	436	2,291	2,727
TOTAL	1,848	7,318	9,166	3,799	8,328	12,127	5,647	15,646	21,293
SCOTLAND:—									
Wage-earners	124	748	872	946	1,887	2,833	1,070	2,635	3,705
Salaried Persons	16	215	231	16	76	92	32	291	323
TOTAL	140	963	1,103	962	1,963	2,925	1,102	2,926	4,028
IRELAND:—									
Wage-earners	43	154	197	129	469	598	172	623	795
Salaried Persons	12	66	78	6	27	33	18	93	111
TOTAL	55	220	275	135	496	631	190	716	906
UNITED KINGDOM:—									
Wage-earners	1,719	6,379	8,098	4,734	10,234	14,968	6,453	16,613	23,066
Salaried Persons	324	2,122	2,446	162	553	715	486	2,675	3,161
TOTAL	2,043	8,501	10,544	4,896	10,787	15,683	6,939	19,288	26,227

B.—AVERAGE NUMBER OF OUTWORKERS ON 1ST FEBRUARY AND 1ST AUGUST, 1907.

	Males.	Females.	Males and Females.
ENGLAND AND WALES	1	163	164
SCOTLAND	3	12	15
IRELAND	—	5	5
UNITED KINGDOM	4	180	184

Manufactured Stationery Trade—continued.

(a) PRIVATE FIRMS AND COMPANIES—continued.

TABLE IV.—CAPACITY OF ENGINES OWNED AND AMOUNT OF ELECTRICITY PURCHASED.

A.—CAPACITY OF ENGINES OWNED, COMPARED WITH GROSS VALUE OF OUTPUT AND NUMBER OF PERSONS EMPLOYED.

NOTE.—The Gross Value of Output in this Table is given to the nearest thousand pounds.

	ENGLAND AND WALES.			SCOTLAND.		
	£	Number of Persons Employed.	Total Capacity of Engines.	£	Number of Persons Employed	Total Capacity of Engines.
Factories with their own Engines ...	3,318,000	17,950	2,998	532,000	3,454	544
Factories renting their Power ...	47,000	436	—	—	—	—
Workshops (not using Power) ...	355,000	2,907	—	69,000	574	—
TOTAL	3,720,000	21,293	2,998	601,000	4,028	544
IRELAND.						
	£	Number of Persons Employed.	Total Capacity of Engines.	£	Number of Persons Employed	Total Capacity of Engines.
	£	Number of Persons Employed.	Total Capacity of Engines.	£	Number of Persons Employed	Total Capacity of Engines.
Factories with their own Engines ...	84,000	825	78	3,934,000	22,229	3,620
Factories renting their Power ...	—	—	—	47,000	436	—
Workshops (not using Power) ...	9,000	81	—	433,000	3,562	—
TOTAL	93,000	906	78	4,414,000	26,227	3,620

B.—TYPE AND CAPACITY OF ENGINES AND CAPACITY OF DYNAMOS.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
Steam Engines, Reciprocating ...	Horse-Power. 704	Horse-Power. 407	Horse-Power. —	Horse-Power. 1,111
Internal Combustion Engines (gas, oil, &c.)	2,195	127	78	2,400
Water Power	99	10	—	109
TOTAL	2,998	544	78	3,620
Capacity of Dynamoes driven by :—				
Steam Engines, Reciprocating ...	Kilowatts. 101	Kilowatts. —	Kilowatts. —	Kilowatts. 101
Other Power	263	—	—	263
TOTAL	364	—	—	364

C.—AMOUNT OF ELECTRICITY PURCHASED.

NOTE.—The figures in this Table are given to the nearest thousand in each case.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
Amount of Electricity Purchased ...	Board of Trade Units. 672,000	Board of Trade Units. 160,000	Board of Trade Units. 5,000	Board of Trade Units. 837,000

Manufactured Stationery Trade—continued.

(b) GENERAL POST OFFICE, SAVINGS BANK DEPARTMENT.

TABLE I.—OUTPUT.

		England.
Envelopes	£	2,144
Waste Paper	11	
TOTAL VALUE		2,155

TABLE II.—COST OF MATERIALS USED, SHOWN IN RELATION TO VALUE OF OUTPUT.

		England.
Cost of Materials Used I.	£	1,431
Value of Output II.		2,155
Value of Output less Cost of Materials Used III.		724

$\frac{124}{6} = 20.5$

TABLE III.—PERSONS EMPLOYED.

AVERAGE NUMBERS AT WORK ON THE LAST WEDNESDAYS IN APRIL, JULY, AND OCTOBER, 1907, AND JANUARY, 1908.

	Males.		
	Under 18 years of age.	Over 18 years of age.	Total.
ENGLAND :—			
Wage-earners	4	2	6

TABLE IV.—AMOUNT OF ELECTRICITY PURCHASED.

		England.
Amount of Electricity Purchased		Board of Trade Units. 4,000

CARDBOARD BOX TRADE.

TABLE I.—OUTPUT.

NOTE.—The figures in this Table are given to the nearest thousand in each case. Amounts lower than five hundred are not shown.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
Plain and Fancy Cardboard Boxes :—	£	£	£	£
Rigid	*	*	*	1,189,000
Folding	*	*	*	271,000
Not separately distinguished	*	*	*	607,000
TOTAL—Cardboard Boxes	1,893,000	103,000	71,000	2,067,000
Boxes of Cardboard and Wood	11,000	—	—	11,000
Other Articles of Cardboard	19,000	—	—	19,000
Manufactured Stationery and Printing	16,000	1,000	3,000	20,000
Other Products	8,000	1,000	1,000	10,000
TOTAL VALUE OF GOODS MADE	1,947,000	105,000	75,000	2,127,000
Amount Received for Work Done for the Trade.	2,000	—	—	2,000
TOTAL VALUE OF GOODS MADE AND WORK DONE.	1,949,000	105,000	75,000	2,129,000

TABLE II.—COST OF MATERIALS USED AND AMOUNT PAID TO OTHER FIRMS FOR WORK GIVEN OUT TO THEM, SHOWN IN RELATION TO VALUE OF OUTPUT.

NOTE.—The figures in this Table are given to the nearest thousand in each case. Amounts lower than five hundred are not shown.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
I.	£	£	£	£
Cost of Materials Used	915,000	50,000	37,000	1,002,000
Amount Paid to Other Firms for Work Given Out to them.	12,000	1,000	—	13,000
TOTAL	927,000	51,000	37,000	1,015,000
II.				
Value of Output :—				
Goods Made for Sale	1,947,000	105,000	75,000	2,127,000
Work Done for the Trade	2,000	—	—	2,000
TOTAL	1,949,000	105,000	75,000	2,129,000
III.				
Value of Output less Cost of Materials Used and Amount Paid to Other Firms for Work Given Out to them.	1,022,000	54,000	38,000	1,114,000

* In order to avoid the possible disclosure of particulars relating to certain firms, figures can only be shown for the United Kingdom as a whole.

Cardboard Box Trade—continued.

TABLE III.—PERSONS EMPLOYED.

A.—AVERAGE NUMBER OF PERSONS (EXCEPT OUTWORKERS) AT WORK ON THE LAST WEDNESDAYS IN JANUARY, APRIL, JULY, AND OCTOBER.

NOTE.—These figures include (a) the average number of persons at work on the last Wednesdays in January, April, July, and October in establishments where power is used; and (b) the numbers "ordinarily" employed in establishments where no power is used.

	Males.			Females.			Males and Females.		
	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.
ENGLAND AND WALES :—									
Wage-earners	859	2,603	3,462	4,539	9,846	14,385	5,398	12,449	17,847
Salaried Persons	114	813	927	132	315	447	246	1,128	1,374
TOTAL	973	3,416	4,389	4,671	10,161	14,832	5,644	13,577	19,221
SCOTLAND :—									
Wage-earners	35	146	181	273	664	937	308	810	1,118
Salaried Persons	1	50	51	6	31	37	7	81	88
TOTAL	36	196	232	279	695	974	315	891	1,206
IRELAND :—									
Wage-earners	42	130	172	176	531	707	218	661	879
Salaried Persons	3	37	40	7	15	22	10	52	62
TOTAL	45	167	212	183	546	729	228	713	941
UNITED KINGDOM :—									
Wage-earners	936	2,879	3,815	4,988	11,041	16,029	5,924	13,920	19,844
Salaried Persons	118	900	1,018	145	361	506	263	1,261	1,524
TOTAL	1,054	3,779	4,833	5,133	11,402	16,535	6,187	15,181	21,368

B.—AVERAGE NUMBER OF OUTWORKERS ON 1ST FEBRUARY AND 1ST AUGUST, 1907.

	Males.	Females.	Males and Females.
ENGLAND AND WALES	2	1,402	1,404
SCOTLAND	1	3	4
IRELAND	—	—	—
UNITED KINGDOM	3	1,405	1,408

Cardboard Box Trade—continued.

TABLE IV.—CAPACITY OF ENGINES OWNED AND AMOUNT OF ELECTRICITY PURCHASED.

A.—CAPACITY OF ENGINES OWNED, COMPARED WITH GROSS VALUE OF OUTPUT AND NUMBER OF PERSONS EMPLOYED.

NOTE.—The Gross Value of Output in this Table is given to the nearest thousand pounds.

	ENGLAND AND WALES.			SCOTLAND.		
	£		Horse-Power.	£		Horse-Power.
Factories with their own Engines ...	1,645,000	15,741	2,038	71,000	739	145
Factories renting their Power ...	26,000	259	—	—	—	—
Workshops (not using Power) ...	278,000	3,221	—	34,000	467	—
TOTAL	1,949,000	19,221	2,038	105,000	1,206	145
IRELAND.						
UNITED KINGDOM.						
	£		Horse-Power.	£		Horse-Power.
Factories with their own Engines ...	70,000	862	105	1,786,000	17,342	2,288
Factories renting their Power ...	—	—	—	26,000	259	—
Workshops (not using Power) ...	5,000	79	—	317,000	3,767	—
TOTAL	75,000	941	105	2,129,000	21,368	2,288

B.—TYPE AND CAPACITY OF ENGINES AND CAPACITY OF DYNAMOS.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
Steam Engines, Reciprocating ...	Horse-Power. 366	Horse-Power. 88	Horse-Power. 26	Horse-Power. 480
Internal Combustion Engines (gas, oil, &c.) ...	1,666	57	72	1,795
Water Power	—	—	7	7
Other Power	6	—	—	6
TOTAL	2,038	145	105	2,288
Capacity of Dynamos driven by :—	Kilowatts.	Kilowatts.	Kilowatts.	Kilowatts.
Steam Engines, Reciprocating ...	148	—	10	158
Other Power	330	—	4	334
TOTAL	478	—	14	492

C.—AMOUNT OF ELECTRICITY PURCHASED.

NOTE.—The figures in this Table are given to the nearest thousand in each case.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
Amount of Electricity Purchased ...	Board of Trade Units. 477,000	Board of Trade Units. 33,000	Board of Trade Units. 33,000	Board of Trade Units. 543,000

PEN, PENCIL, AND ARTISTS' MATERIALS TRADES.

The Factories and Workshops covered by the following Tables are all situated in England.

TABLE I.—OUTPUT.

NOTE.—The figures in this Table are given to the nearest thousand in each case.

	England.
Gold Pens	£ 13,000
Pen-nibs of Metals other than Gold, and Holders, Tips, &c., for use therewith.	414,000
Reservoir Pens and Stylographs, and parts thereof (including Repair Work).	54,000
Pencils, Pencil Leads, and Crayons	53,000
Artists' Materials (other than Pencils and Crayons) ...	150,000
Artists' Cabinet-work (including Easels and Wooden Paint Boxes).	14,000
Small Steel Wares	29,000
Other Products	5,000
TOTAL VALUE OF GOODS MADE AND REPAIR WORK	732,000
Amount Received for Work Done for the Trade ..	2,000
TOTAL VALUE OF GOODS MADE AND WORK DONE	734,000

TABLE II.—COST OF MATERIALS USED AND AMOUNT PAID TO OTHER FIRMS FOR WORK GIVEN OUT TO THEM, SHOWN IN RELATION TO VALUE OF OUTPUT.

NOTE.—The figures in this Table are given to the nearest thousand in each case.

	England.
I.	£
Cost of Materials Used	234,000
Amount Paid to Other Firms for Work Given Out to them.	10,000
TOTAL	244,000
II.	
Value of Output :—	
Goods Made for Sale and Repair Work	732,000
Work Done for the Trade	2,000
TOTAL	734,000
III.	
Value of Output less Cost of Materials Used and Amount Paid to Other Firms for Work Given Out to them.	490,000

TABLE III.—PERSONS EMPLOYED.

A.—AVERAGE NUMBER OF PERSONS (EXCEPT OUTWORKERS) AT WORK ON THE LAST WEDNESDAYS IN JANUARY, APRIL, JULY, AND OCTOBER.

NOTE.—These figures include (a) the average number of persons at work on the last Wednesdays in January, April, July, and October in establishments where power is used; and (b) the numbers "ordinarily" employed in establishments where no power is used.

	Males.			Females.			Males and Females.		
	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.
ENGLAND :—									
Wage-earners... ..	348	1,306	1,654	897	3,474	4,371	1,245	4,780	6,025
Salaried Persons	31	245	276	11	56	67	42	301	343
TOTAL	379	1,551	1,930	908	3,530	4,438	1,287	5,081	6,368

Pen, Pencil, and Artists' Materials Trades—*continued.*TABLE III.—PERSONS EMPLOYED—*continued.*

B.—AVERAGE NUMBER OF OUTWORKERS ON 1ST FEBRUARY AND 1ST AUGUST, 1907.

	Males.	Females.	Males and Females.
ENGLAND	2	21	23

TABLE IV.—CAPACITY OF ENGINES OWNED AND AMOUNT OF ELECTRICITY PURCHASED.

A.—CAPACITY OF ENGINES OWNED, COMPARED WITH GROSS VALUE OF OUTPUT AND NUMBER OF PERSONS EMPLOYED.

NOTE.—*The Gross Value of Output in this Table is given to the nearest thousand pounds.*

	Gross Value of Output.	Number of Persons Employed.	Total Capacity of Engines.
ENGLAND.			
Factories with their own Engines	£ 716,000	6,283	Horse-Power. 1,450
Workshops (not using Power)	18,000	85	—
TOTAL	734,000	6,368	1,450

B.—TYPE AND CAPACITY OF ENGINES AND CAPACITY OF DYNAMOS.

	England.
Horse-Power.	
Steam Engines, Reciprocating	936
Internal Combustion Engines (gas, oil, &c.)	469
Water Power	45
TOTAL	1,450
Kilowatts.	
Capacity of Dynamos driven by :—	
Steam Engines, Reciprocating	108
Other Power	2
TOTAL	110

C.—AMOUNT OF ELECTRICITY PURCHASED.

NOTE.—*The figure in this Table is given to the nearest thousand.*

	England.
Board of Trade Units.	
Amount of Electricity Purchased	54,000

INK, GUM, AND SEALING WAX TRADES.

TABLE I.—OUTPUT.

NOTE.—*The figures in this Table are given to the nearest thousand in each case.*

	United Kingdom.*
	£
Printers' Ink	453,000
Printers' Rollers, &c.	34,000
Inks, other than Printers' Ink, (<i>i.e.</i> , Writing, Marking, Endorsing, &c., and Ink Powders).	231,000
Gum-Mucilage, Paste, &c.	50,000
Sealing Wax	34,000
Typing and Copying Accessories and Supplies	23,000
Varnish (including Litho and Letterpress Varnishes)	18,000
Other Products	45,000
TOTAL VALUE	888,000
TOTAL VALUE FOR ENGLAND, WALES, AND FOR IRELAND.*	778,000
TOTAL VALUE FOR SCOTLAND	110,000

TABLE II.—COST OF MATERIALS USED, SHOWN IN RELATION TO VALUE OF OUTPUT.

NOTE.—*The figures in this Table are given to the nearest thousand in each case.*

	England and Wales and Ireland.*	Scotland.	United Kingdom.
	£	£	£
Cost of Materials Used	361,000	64,000	425,000
Value of Output	778,000	110,000	888,000
Value of Output less Cost of Materials Used	417,000	46,000	463,000

TABLE III.—PERSONS EMPLOYED.

AVERAGE NUMBERS AT WORK ON THE LAST WEDNESDAYS IN JANUARY, APRIL, JULY, AND OCTOBER.

NOTE.—*These figures include (a) the average number of persons at work on the last Wednesdays in January, April, July, and October in establishments where power is used; and (b) the number "ordinarily" employed in establishments where no power is used.*

	Males.			Females.			Males and Females.		
	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.
ENGLAND AND WALES AND IRELAND* :—									
Wage-earners... ..	64	782	846	79	113	192	143	895	1,038
Salaried Persons	22	341	363	3	36	39	25	377	402
TOTAL	86	1,123	1,209	82	149	231	168	1,272	1,440
SCOTLAND :—									
Wage-earners... ..	7	114	121	17	25	42	24	139	163
Salaried Persons	1	44	45	1	6	7	2	50	52
TOTAL	8	158	166	18	31	49	26	189	215
UNITED KINGDOM :—									
Wage-earners... ..	71	896	967	96	138	234	167	1,034	1,201
Salaried Persons	23	385	408	4	42	46	27	427	454
TOTAL	94	1,281	1,375	100	180	280	194	1,461	1,655

* In order to avoid the possible disclosure of particulars relating to certain firms, figures as to the several classes of output can only be given for the United Kingdom as a whole. Separate totals are, however, shown for Scotland and for the rest of the United Kingdom, the figures relating to Ireland being combined with those for England and Wales in order to prevent the possible disclosure of particulars relating to the very few Irish firms.

Ink, Gum and Sealing Wax Trades—continued.

TABLE IV.—CAPACITY OF ENGINES OWNED AND AMOUNT OF ELECTRICITY PURCHASED.

A.—CAPACITY OF ENGINES OWNED, COMPARED WITH GROSS VALUE OF OUTPUT AND NUMBER OF PERSONS EMPLOYED.

NOTE.—The Gross Value of Output in this Table is given to the nearest thousand pounds.

	ENGLAND AND WALES AND IRELAND.*			SCOTLAND.			UNITED KINGDOM.		
	£	Number of Persons Employed.	Total Capacity of Engines.	£	Number of Persons Employed.	Total Capacity of Engines.	£	Number of Persons Employed.	Total Capacity of Engines.
Factories with their own Engines.	701,000	1,150	1,339	105,000	190	786	806,000	1,340	2,125
Factories renting their Power.	1,000	4	—	—	—	—	1,000	4	—
Workshops (not using Power).	76,000	286	—	5,000	25	—	81,000	311	—
TOTAL ...	778,000	1,440	1,339	110,000	215	786	888,000	1,655	2,125

B.—TYPE AND CAPACITY OF ENGINES AND CAPACITY OF DYNAMOS.

	England and Wales and Ireland.*	Scotland.	United Kingdom.
	Horse-Power.	Horse-Power.	Horse-Power.
Steam Engines, Reciprocating ...	683	751	1,434
Internal Combustion Engines (gas, oil, &c.) ...	656	35	691
TOTAL ...	1,339	786	2,125
	Kilowatts.	Kilowatts.	Kilowatts.
Capacity of Dynamos driven by :— Steam Engines, Reciprocating ...	35	4	39

C.—AMOUNT OF ELECTRICITY PURCHASED.

NOTE.—The figures in this Table are given to the nearest thousand in each case.

	England and Wales and Ireland.*	Scotland.	United Kingdom.
	Board of Trade Units.	Board of Trade Units.	Board of Trade Units.
Amount of Electricity Purchased ...	566,000	3,000	569,000

* The figures for England and Wales and for Ireland have been combined in order to avoid the possible disclosure of particulars relating to the few firms in Ireland.

TRADE PHOTOGRAPHY.

TABLE I.—OUTPUT.

NOTE.—The figures in this Table are given to the nearest thousand in each case.

	Great Britain.*
Photographic Work of all kinds (including Developing, Printing, Enlarging, &c.)...	£ 197,000
Other Products ...	12,000
TOTAL VALUE OF GOODS MADE AND WORK DONE ...	209,000

TABLE II.—COST OF MATERIALS USED, SHOWN IN RELATION TO THE VALUE OF OUTPUT.

NOTE.—The figures in this Table are given to the nearest thousand in each case.

	Great Britain.*
Cost of Materials Used ...	I. £ 90,000
Value of Output :— Goods Made for Sale and Work done ...	II. 209,000
Value of Output less Cost of Materials Used ...	III. 119,000

TABLE III.—PERSONS EMPLOYED.

AVERAGE NUMBERS AT WORK ON THE LAST WEDNESDAYS IN JANUARY, APRIL, JULY, AND OCTOBER.

NOTE.—These figures include (a) the average number of persons at work on the last Wednesdays in January, April, July, and October in establishments where power is used; and (b) the numbers "ordinarily" employed in establishments where no power is used.

	Males.			Females.			Males and Females.		
	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.	Under 18 years of age.	Over 18 years of age.	Total.
GREAT BRITAIN* :—									
Wage-earners ..	88	372	460	49	263	312	137	635	772
Salaried Persons ...	9	170	179	6	54	60	15	224	239
TOTAL ...	97	542	639	55	317	372	152	859	1,011

* In order to avoid the possible disclosure of particulars relating to certain firms, figures can only be shown for Great Britain as a whole.

Trade Photography—*continued.*

TABLE IV.—CAPACITY OF ENGINES OWNED AND AMOUNT OF ELECTRICITY PURCHASED.

A.—CAPACITY OF ENGINES OWNED, COMPARED WITH GROSS VALUE OF OUTPUT AND NUMBER OF PERSONS EMPLOYED.

NOTE.—*The Gross Value of Output in this Table is given to the nearest thousand pounds.*

	Gross Value of Output.	Number of Persons Employed.	Total Capacity of Engines.
	GREAT BRITAIN.*		
	£		Horse-Power.
Factories with their own Engines	96,000	393	210
Workshops (not using Power)	113,000	618	—
TOTAL	209,000	1,011	210

B.—TYPE AND CAPACITY OF ENGINES AND CAPACITY OF DYNAMOS.

	Great Britain.*
	Horse-Power.
Internal Combustion Engines (gas, oil, &c.)	110
Water Power	100
TOTAL	210
Capacity of Dynamos driven by :— Engines other than Steam Engines	Kilowatts. 117

C.—AMOUNT OF ELECTRICITY PURCHASED.

NOTE.—*The figure in this Table is given to the nearest thousand.*

	Great Britain.*
	Board of Trade Units.
Amount of Electricity Purchased	88,000

* In order to avoid the possible disclosure of particulars relating to certain firms, figures can only be shown for Great Britain as a whole.