

THE PRINTING AND PUBLICATION OF NEWSPAPERS AND PERIODICALS.

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Introductory.*

The tables on pages 321 to 324 are based on returns received from firms in Great Britain and Northern Ireland whose business in 1924 consisted wholly or mainly in the printing and publishing of newspapers and periodicals. Newspaper proprietors who did not do their own printing but gave it out to other firms were not required to furnish returns to the Census office. The number of separate returns received was 579. About 30 firms to which schedules were sent did not furnish returns, but these firms for the most part had very small establishments. On the basis of the information available it is estimated that they did not employ more than 140 persons in all and that their total net output probably did not exceed £50,000.

Summary of results.—The following table shows the main results of the censuses of 1924, 1912, and 1907, comparisons between the figures for the three years being subject to the qualifications mentioned in the next paragraph :—

* See also the Notes on pages vii to xv.

Particulars.	Unit.	1924.	1912.	1907.
Value of goods made and work done (Gross output)	£'000	46,095	14,095	13,548
Cost of materials used	"	13,813	4,753	4,494
Paid for work given out to other firms	"	411	113	187
Net output	"	31,871	9,229	8,867
Average number of persons employed	No.	58,783	41,764	46,786
Net output per person employed	£	542	221	190
Mechanical power available:—				
Prime movers	H.P.	9,012	11,110	16,365
Electric motors driven by purchased electricity	"	56,338	29,145	(not recorded).

Qualifications affecting comparisons.—In considering the above table and the other tables in this report which show figures for different censal years, it should be borne in mind that:—

(1) The comparability of figures relating to value or cost is affected by the changes which have taken place in the general purchasing power of money.

(2) The Censuses of 1907 and 1912 covered Great Britain and the whole of Ireland, but that of 1924 applied only to Great Britain and Northern Ireland. According to the Census of Production taken by the Government of the Irish Free State in respect of the year 1926, the total value of newspaper printing work (including sales, subscriptions and advertisements) was £879,000 and of printing of magazines, trade journals, etc., £99,000, these values being exclusive of any paper not supplied by the printer. This output formed part of the total value of £1,787,000 for the Printing, Publishing, Bookbinding and Engraving Trades, in which the average number of persons employed was 5,170. In 1907 there were employed in the Printing and Publishing of Newspapers and Periodicals in the whole of Ireland, 3,142 persons whose gross output amounted to £608,000, or, respectively, 6·7 and 4·5 per cent. of the totals for the United Kingdom.

(3) The Censuses of 1907 and 1924 extended to all firms, however small, but in 1912 firms employing not more than five persons (excluding the proprietors) were merely required to state the average number of persons employed by them in the year. According to the information so furnished, the average number of persons employed in the establishments thus excluded was 351, or 0·8 per cent. of the number employed by the remaining firms, as shown in the above table.

Value of output and cost of materials.—The figures in the above table representing the value of goods made and work done and the cost of materials used, are the aggregates of the figures recorded by the firms that made returns and, for the reasons explained

in paragraphs (i) and (ii) on page xiii, they may overstate the value of the output of, and the cost of materials used by, the trade taken as a whole. The matter is discussed on pages 316 and 317, where it is estimated that in 1924 the value, free from duplication, of the output of the trade was about £46,000,000. The amount of duplication in the figures in the table representing the cost of materials used would be very slight.

Production.

Detailed information relating to the output of firms engaged in the Printing and Publication of Newspapers and Periodicals in 1924 will be found in Table II on page 321.

In addition to the output dealt with in this report printing of newspapers, magazines and other periodicals, valued, on a cost basis, at £53,000, was done in 1924 by His Majesty's Stationery Office.*

Principal output.—The following statement shows, for the three censal years, the value of the total output of newspapers, magazines, reviews, trade journals and similar periodicals returned, the value for each year being inclusive of similar output recorded by printers that made their returns on schedules for the Printing and Bookbinding Trades, but exclusive of the output of His Majesty's Stationery Office. The amounts so included are £5,497,000 for 1924, £3,050,000 for 1912 and £2,401,000 for 1907.

Kind of output.	1924.	1912.	1907.
	£'000	£'000	£'000
Newspapers:			
Daily	26,782	7,881	7,273
Other than daily	11,520	5,376†	4,759
Magazines, reviews, trade journals‡ and similar periodicals	10,218	2,717	1,988
TOTAL	48,520	15,974	14,020

† Includes £383,000 for daily and other newspapers, not separately distinguished.

‡ Trade journals were included with newspapers other than daily in 1912 and 1907.

Proprietors of newspapers and periodicals who did their own printing were instructed to return as the value thereof the total receipts in the year of return including those from sales, subscriptions, and advertisements. If they did not either set up type or print their publications but gave out the work to be done by other firms they were not required to make returns. The work done for firms of the latter class may be to some extent included in the amount of £2,394,000 shown for job and general printing done by publishing firms, but the great bulk of it was probably included by printers

* Such production falls within the scope of the report on Public Utility Services, which forms part of a separate volume.

that made their returns on schedules for the Printing and Book-binding Trades.* There was only an increase of about one-seventh in the value of the output of newspapers and periodicals in 1912 as compared with 1907, but the output in 1924 was about three times the value of the output in 1912. How far this increase in value since 1912 measures an increase in volume of output is difficult to estimate. On the one hand, paper was dearer, imported newsprint having risen in value per ton by 70 per cent., and other imported printing paper by 52 per cent., while wages had risen, and hours of labour had been reduced. On the other hand, the number of persons employed was greater by nearly 40 per cent., the services of news-agencies had been greatly developed, and the capacity of the mechanical power available was 116 per cent. more.

Other output.—In addition to the main output dealt with in the preceding paragraphs, printers and publishers of newspapers and periodicals recorded for each of the censal years the following output which, being of kinds mainly returned by other trades, is dealt with in the reports on those trades.

Kind of output.	1924.	1912.	1907.
	£'000	£'000	£'000
Job and general printing	2,394	818	1,418
Books printed and bound	192	142	320
Lithographic printing and other work	109	21	38
Manufactured stationery, etc.	13	16	22
Waste paper, etc., sold	364	175	131
TOTAL	3,072	1,172	1,929

The value of the job and general printing shown above is the aggregate of the sums charged for such work, including the cost of the paper used when it was supplied by the printer that furnished the return.

Value of output free from duplication.—The aggregate value of the output of the firms engaged in the printing and publishing of newspapers and periodicals, returned at £46,095,000, does not involve much duplication. The sum of £411,000 was returned by the firms making their returns on schedules for this trade as paid by them to other firms for work given out to them, but a large portion of this sum was probably paid to bookbinding firms for binding, stitching, and similar work. About £109,000 was received by firms making returns on schedules for this trade for lithographic and photographic printing, process block-making, typesetting, and electro-typing, and some part of such work would be done for publishers

* See page 303.

other than newspaper proprietors. Most of the £2,394,000 received for job and general printing probably represented work done for private customers, such work being generally associated with newspaper printing in the case of the smaller newspaper printers. On the whole, it appears reasonable to estimate the value of the output of this trade at about £46,000,000, free from duplication.

Cost of materials and work given out.—The cost of the materials used by firms that made their returns on schedules for the Printing and Publication of Newspapers and Periodicals was returned as £13,813,000 in 1924, as compared with £4,753,000 in 1912, and £4,494,000 in 1907. There is possibly some slight duplication in these figures in respect of paper supplied by firms to which work was given out by other firms in the trade.

The amount paid to other firms for work given out to them was returned as £411,000 in 1924, £113,000 in 1912 and £187,000 in 1907.

Net output.—The net output in 1924 of the firms that made their returns on schedules for the Printing and Publication of Newspapers and Periodicals (whose gross output was valued at £46,095,000) was £31,871,000, that sum representing, without duplication, the total amount by which the value of the aggregate output exceeded the cost of the materials used and the amount paid to other firms for work given out to them.

The net output per head of persons employed in the censal year 1924 was £542 as compared with £221 in 1912, and £190 in 1907.

Quantity of paper used.—In response to a request for information as to the quantity of paper used in the year in the production of newspapers and newspaper posters and of magazines, books and other printed matter, firms whose output of newspapers was valued at £20,133,000 and of magazines and other periodicals at £3,968,000, representing 55 per cent. and 61 per cent. respectively of the total value of the output of these products recorded in 1924, furnished the information given below. The corresponding particulars for 1912 and 1907, representing the paper used by firms whose returns included 51 per cent. and 69 per cent. respectively of the total output of newspapers in each year is also shown.

Paper used for—	1924.	1912.	1907.
	Tons	Tons	Tons
Newspapers and newspaper posters	295,710	179,460	189,000
Magazines, books and other printed matter	39,850	4,660	7,480

Wages in 1924.

Under the Census of Production Act, 1906, the powers of the Board of Trade to require information do not extend to particulars of the amount of wages paid, and, consequently, no information

on this head was secured in connexion with the Census of 1924. As a result, however, of the voluntary enquiry undertaken by the Ministry of Labour into wages and hours in the United Kingdom in 1924, information was obtained as to the total wage-bill of a group of firms engaged in the Printing and Publication of Newspapers and Periodicals that made returns both to the Ministry of Labour and to the Census of Production office. According to the Census records this group of firms employed, in the week ended 18th October, 1924, 27,107 operatives, or 65 per cent. of the total of 41,854 operatives for the trade as a whole, and their net output totalled £20,573,000, or 65 per cent. of the aggregate net output of £31,871,000 for the trade as a whole. The total wage-bill of these firms, as returned to the Ministry of Labour, was £6,257,000, representing about 30 per cent. of their aggregate net output.

Employment.

The detailed information relating to employment in 1924 is summarised in Table III on pages 322 and 323. The following table sets out certain particulars for that year together with those relating to the two previous censal years. For the purpose of this comparison the average numbers of operatives of each sex returned for 1924 have been divided between the two age-groups in the proportions shown by the data relating to the week ended 18th October.

Average number.	Males.		Females.		Males and females.	
	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
1924.						
Operatives	2,895	37,288	726	3,498	3,621	40,786
Administrative, etc ..	1,500	14,002	525	3,995	2,025	17,997
TOTAL	4,395	51,290	1,251	7,493	5,646	58,783
1912.						
Wage earners	2,950	27,748	561	2,211	3,511	29,959
Salaried	1,125	10,567	196	1,238	1,321	11,805
TOTAL	4,075	38,315	757	3,449	4,832	41,764
1907.						
Wage earners	4,857	31,326	892	2,884	5,749	34,210
Salaried	1,216	11,539	157	1,037	1,373	12,576
TOTAL	6,073	42,865	1,049	3,921	7,122	46,786

The numbers of operatives recorded month by month in 1924 ranged from 1,068 above the average, in October, to 1,014 below the average, in February (see Table IIIB on page 323). These were, however, exceptional deviations from the average, the mean of such deviations being 448 only.

Mechanical Power.

The detailed information relating to mechanical power in 1924 is summarised in Table IV on page 324. The following table sets out the particulars for the three censal years relating to the capacity and kinds of *prime movers* and the capacity of *electric generators* installed.

Power equipment.	1924.			1912.	1907.
	Ordinarily in use.	In reserve or idle.	Total.	Total.	Total.
	H.P.	H.P.	H.P.	H.P.	H.P.
PRIME MOVERS :—					
Reciprocating steam engines ..	903	1,203	2,106	3,647	7,028
Steam turbines	—	—	—	—	10
Gas engines	3,092	1,672	4,764	6,381	9,316
Petrol and light oil engines ..	316	599	915	1,070	
Heavy oil engines	490	737	1,227		
Water power	—	—	—	12	11
TOTAL	4,801	4,211	9,012	11,110	16,365
ELECTRIC GENERATORS :—	Kw.	Kw.	Kw.	Kw.	Kw.
Driven by—					
Reciprocating steam engines	298	659	957	1,169	829
Gas engines	281	1,487	1,768	2,133	1,498
Petrol and light oil engines ..	1	263	264		
Heavy oil engines	429	972	1,401		
Water power	—	—	—	—	—
TOTAL	1,009	3,381	4,390	3,302	2,327

The capacity of *electric motors* recorded in 1924 and in 1912 was as shown below :—

Electric motors.	1924.			1912.
	Ordinarily in use.	In reserve or idle.	Total.	Total.
Driven by—	H. P.	H.P.	H.P.	H.P.
Electricity generated in own works	1,703	111	1,814	2,652
Purchased electricity	52,996	3,342	56,338	29,145

Corresponding information was not required for 1907. The total number of Board of Trade units of electricity purchased for power and lighting purposes in that year was returned as 16,540,000.

Machinery equipment.

In response to a request for information as to the kinds and numbers of type-casting and printing machines at works at the end of 1924, firms whose gross output was £30,814,000, or 67 per cent. of the gross output of the trade, furnished the information given in the following table, which covers 64 per cent. of the total output

of newspapers and 79 per cent. of the output of magazines and other periodicals and of the job and general printing done, as returned by firms in this trade in the year.

Kind of machine.	In use.	Idle.	Total.	Proportion idle.
	Number	Number	Number	Per cent.
Type-casting (linotype, monotype, etc.)	2,792	47	2,839	1.7
Letterpress printing :—				
Platen	934	27	961	2.8
Cylinder, of quad crown and over	633	22	655	3.3
Cylinder, under quad crown ..	820	12	832	1.4
Rotary	550	31	581	5.3
Lithograph printing :—				
Flat bed, of quad crown and over	19	—	19	—
Flat bed, under quad crown ..	36	3	39	7.7
Rotary, of quad crown and over	15	3	18	16.7
Rotary, under quad crown ..	15	—	15	—

TABLES.

I.—Summary of results.

Particulars.	Unit.	England and Wales.	Scotland.	Great Britain.	Northern Ireland.
Value of products and work done (Gross output)	£'000	41,557	3,960	45,517	578
Cost of materials used	"	12,486	1,167	13,653	160
Paid for work given out to other firms	"	402	8	410	1
Net output	"	28,669	2,785	31,454	417
Average number of persons employed	No.	52,541	4,925	57,466	1,317
Net output per person employed ..	£	546	566	547	317
Mechanical power available :—					
Prime movers	H.P.	7,369	1,178	8,547	465
Electric motors driven by purchased electricity	"	49,767	5,420	55,187	1,151

II.—Production.

Kind of output.	England and Wales.	Scotland.	Great Britain.	Northern Ireland.
	Net value.	Net value.	Net value.	Net value.
	£'000	£'000	£'000	£'000
Newspapers :—				
Daily	23,453	2,742	26,195	350
Other than daily	9,144	750	9,894	90
TOTAL—NEWSPAPERS.. ..	32,597	3,492	36,089	440
Magazines, reviews, trade journals and similar periodicals	*	*	6,494	*
Books printed and bound	*	*	192	*
Job and general printing	2,102	158	2,260	134
Stereotyping and electrotyping ..	12	—	12	—
Lithographic and photographic printing	66	†	66	—
Process block making	17	1	18	—
Typesetting	13	—	13	—
Manufactured stationery	13	—	13	—
Waste paper and other waste products sold	343	20	363	1
TOTAL VALUE OF PRODUCTS AND WORK DONE (GROSS OUTPUT)	41,557	3,960	45,517	578

* In order to avoid the possible disclosure of information relating to individual firms, figures are given (in the column headed Great Britain) only for the United Kingdom as a whole.

† Less than £500.

III.—Employment.

A.—NUMBERS EMPLOYED IN WEEK ENDED 18TH OCTOBER, 1924.

Kind of staff.	Males.		Females.		Males and females.	
	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
<i>England and Wales :—</i>						
Operatives	2,654	34,532	627	3,260	3,281	37,792
Administrative, etc.* ..	1,332	12,265	433	3,290	1,765	15,555
TOTAL	3,986	46,797	1,060	6,550	5,046	53,347
<i>Scotland :—</i>						
Operatives	173	2,813	119	330	292	3,143
Administrative, etc.* ..	131	1,446	75	604	206	2,050
TOTAL	304	4,259	194	934	498	5,193
<i>Great Britain :—</i>						
Operatives	2,827	37,345	746	3,590	3,573	40,935
Administrative, etc.* ..	1,463	13,711	508	3,894	1,971	17,605
TOTAL	4,290	51,056	1,254	7,484	5,544	58,540
<i>Northern Ireland :—</i>						
Operatives	134	799	24	120	158	919
Administrative, etc.* ..	37	291	17	101	54	392
TOTAL	171	1,090	41	221	212	1,311
<i>United Kingdom :—</i>						
TOTAL	4,461	52,146	1,295	7,705	5,756	59,851

* Administrative, technical and clerical staff.

B.—OPERATIVES EMPLOYED IN ONE WEEK IN EACH MONTH OF 1924.

England and Wales. (Annual average : Males, 33,885 ; Females, 3,101 ; Total 36,986.)

Week ended.	Males.	Females.	Total.	Week ended.	Males.	Females.	Total.
Jan. 12th ..	33,092	3,054	36,146	July 19th ..	34,048	3,033	37,081
Feb. 16th ..	33,104	3,017	36,121	Aug. 16th ..	33,861	2,981	36,842
March 15th ..	33,354	3,111	36,465	Sept. 13th ..	34,099	3,109	37,208
April 12th ..	33,896	3,092	36,988	Oct. 18th ..	34,532	3,260	37,792
May 17th ..	33,988	3,076	37,064	Nov. 15th ..	34,457	3,214	37,671
June 21st ..	34,233	3,100	37,333	Dec. 13th ..	33,961	3,164	37,125

Scotland. (Annual average : Males, 2,600 ; Females, 275 ; Total, 2,875.)

Jan. 12th ..	2,748	294	3,042	July 19th ..	2,833	291	3,124
Feb. 16th ..	2,475	252	2,727	Aug. 16th ..	2,545	268	2,813
March 15th ..	2,469	246	2,715	Sept. 13th ..	2,548	290	2,838
April 12th ..	2,755	277	3,032	Oct. 18th ..	2,813	330	3,143
May 17th ..	2,479	243	2,722	Nov. 15th ..	2,505	279	2,784
June 21st ..	2,522	242	2,764	Dec. 13th ..	2,510	293	2,803

Great Britain. (Annual average : Males, 36,485 ; Females, 3,376 ; Total, 39,861.)

Jan. 12th ..	35,840	3,348	39,188	July 19th ..	36,881	3,324	40,205
Feb. 16th ..	35,579	3,269	38,848	Aug. 16th ..	36,406	3,249	39,655
March 15th ..	35,823	3,357	39,180	Sept. 13th ..	36,647	3,399	40,046
April 12th ..	36,651	3,369	40,020	Oct. 18th ..	37,345	3,590	40,935
May 17th ..	36,467	3,319	39,786	Nov. 15th ..	36,962	3,493	40,455
June 21st ..	36,755	3,342	40,097	Dec. 13th ..	36,471	3,457	39,928

Northern Ireland. (Annual average : Males, 803 ; Females, 122 ; Total, 925.)

Jan. 12th ..	801	125	926	July 19th ..	808	123	931
Feb. 16th ..	798	126	924	Aug. 16th ..	805	124	929
March 15th ..	797	124	921	Sept. 13th ..	800	122	922
April 12th ..	797	117	914	Oct. 18th ..	799	120	919
May 17th ..	803	119	922	Nov. 15th ..	810	123	933
June 21st ..	797	119	916	Dec. 13th ..	818	125	943

IV.—Mechanical Power.

PARTICULARS OF PRIME MOVERS, ELECTRIC GENERATORS AND ELECTRIC MOTORS.

(a) Ordinarily in use. (b) In reserve or idle.	England and Wales.	Scotland.	Great Britain.	Northern Ireland.
	H.P.	H.P.	H.P.	H.P.
PRIME MOVERS :—				
Reciprocating steam engines { (a)	903	—	903	—
{ (b)	1,131	72	1,203	—
Gas engines { (a)	2,308	620	2,928	164
{ (b)	1,501	155	1,656	16
Petrol and light oil engines { (a)	235	21	256	60
{ (b)	384	—	384	215
Heavy oil engines { (a)	370	110	480	10
{ (b)	537	200	737	—
TOTAL { (a)	3,816	751	4,567	234
{ (b)	3,553	427	3,980	231
TOTAL OF PRIME MOVERS INSTALLED	7,369	1,178	8,547	465
ELECTRIC GENERATORS :—	Kw.	Kw.	Kw.	Kw.
Driven by—				
Reciprocating steam en- { (a)	298	—	298	—
gines { (b)	606	53	659	—
Gas engines { (a)	120	155	275	6
{ (b)	1,347	140	1,487	—
Petrol and light oil en- { (a)	1	—	1	—
gines { (b)	167	—	167	96
Heavy oil engines { (a)	400	27	427	2
{ (b)	842	130	972	—
TOTAL { (a)	819	182	1,001	8
{ (b)	2,962	323	3,285	96
TOTAL OF ELECTRIC GENERATORS INSTALLED	3,781	505	4,286	104
ELECTRIC MOTORS :—	H.P.	H.P.	H.P.	H.P.
Driven by—				
Electricity generated in { (a)	1,656	47	1,703	—
own works { (b)	46	—	46	65
Purchased electricity .. { (a)	46,950	4,895	51,845	1,151
{ (b)	2,817	525	3,342	—