

THE COCOA AND SUGAR CONFECTIONERY TRADES.

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Introductory.*

The Tables on pages 70 to 74 are based on Returns received from firms in Great Britain and Northern Ireland whose business in 1924 consisted wholly or mainly in the manufacture of cocoa, chocolate and sugar confectionery. The number of such separate Returns was 926. About 130 firms to which schedules were sent did not furnish Returns, but the majority of these firms had very small establishments, frequently conducted in connection with a retail trading business, and they included a number which had ceased operations by the close of the census year. On the basis of the information available it is estimated that they did not employ more than 650 persons in all and that their total net output probably did not exceed £120,000.

* See also the Notes on pp. vii-xiv.

Summary of results.—The following table shows the main results of the Censuses of 1924 and 1907, comparisons between the figures for the two years being subject to the qualifications mentioned in the next paragraph. Particulars for the year 1912 have been omitted for the reasons stated in that paragraph.

Particulars.	Unit.	1924.	1907.
Value of goods made (Gross output)	£'000	41,352	16,294
Cost of materials used	"	24,180	11,156
Net output	"	17,172	5,138
Average number of persons employed	No.	79,881	61,292
Net output per person employed	£	215	84
Mechanical power available :—			
Prime movers	H.P.	21,105	19,898
Electric motors driven by purchased electricity	"	40,970*	(not recorded.)

* Exclusive of motors driven sometimes by purchased electricity and sometimes by electricity generated in the same works, see Table IV, page 74.

Qualifications affecting comparisons.—In considering the above table and the other tables in this Report which show figures for the two censal years the following qualifications should be borne in mind :—

(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 and in the rates of duty on sugar and other dutiable ingredients used in the manufacture of the products of these trades.

(2) The Census of 1907 covered the whole of Great Britain and Ireland, but that of 1924 applied only to Great Britain and Northern Ireland. The exclusion of Southern Ireland in 1924 does not seriously affect the comparability of the figures since, 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 the goods made in the Sugar Confectionery and Jam Making Trades in that year was returned as only £871,000 (of which £4,000 related to cocoa or chocolate, £109,000 to chocolate confectionery and £411,000 to sugar confectionery) and the average number of persons employed as 2,150.

(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. For the reasons stated on p. 48, it is not possible to state separately the number of persons employed in 1912 by small firms in the Cocoa and Sugar Confectionery Trades but it is thought that the output of these exempted firms was sufficiently large to invalidate comparisons with the other two censal years. Further, in the two earlier years the manufacture of jams, marmalade and other preserved fruits was associated, for

the purpose of the Census Returns, with that of cocoa and sugar confectionery and all but a comparatively small fraction of the output of preserved fruits was, consequently, returned on the schedule for that trade ; for the 1924 Census, fruit preserving as such was combined with other kinds of preserved foods.* For these reasons, comparisons with 1912 have been excluded from this Report.

Value of output and cost of materials.—The figures in the above table representing the total value of goods made and the cost of materials used are the aggregates of the figures recorded by the firms making Returns, and, for the reasons explained in paragraphs (i) and (ii) on page xii, they over-state the value of the output of, and the cost of materials used by, the Cocoa and Sugar Confectionery Trades considered as a whole. The matter is discussed on page 65, where it is estimated that in 1924 the value, free from duplication, of the output of those trades was about £40,250,000 and the cost of the materials purchased from sources outside those trades and worked up into their products was about £23,100,000.

Production.

Detailed information as to the output of the Cocoa and Sugar Confectionery Trades in 1924 will be found in Table II on page 71.

In addition to the output dealt with in this Report, chocolate valued, on a cost basis, at £22,700 was produced in 1924 in Naval Victualling Yards, etc.† : the corresponding figure for 1907 was £25,600.

Principal products.—The following statement shows, for the censal years 1924 and 1907, the value and, where recorded, the quantity of the principal products of the Cocoa and Sugar Confectionery Trades, the figures for both years being inclusive of the output of similar products returned on schedules for other trades.

Kind of goods.	1924.		1907.	
	Quantity.	Selling value.	Quantity.	Selling value.
	Th. cwts.	£'000	Th. cwts.	£'000
Cocoa products (except chocolate confectionery)	1,153	8,284	627	3,079
Sugar and chocolate confectionery	5,544	32,262	3,934	8,445
Bombons, crackers, and other confectioners' sundries .. .. .	..	866	..	217
TOTAL VALUE .. .. .	..	41,412	..	11,741

* See the Report on the Preserved Meat, Fish, etc., Trades, page 88.

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

More detailed particulars regarding production in 1924 are given in the following table :—

Kind of goods.	Returned on schedules for			
	The Cocoa and Sugar Confectionery Trades.		All trades.	
	Quantity.	Selling value.	Quantity.	Selling value.
Cocoa products (except chocolate confectionery) :—	Th. cwts.	£'000.	Th. cwts.	£'000.
Cocoa or chocolate manufactured	978	7,739	981	7,758
Cocoa butter*	78	487	80	504
Cocoa husks and shells	92	22	92	22
TOTAL	1,148	8,248	1,153	8,284
Confectionery :—				
Chocolate confectionery	1,474	12,613	1,713	14,752
Sugar confectionery†	3,752	17,154	3,831	17,510
TOTAL	5,226	29,767	5,544	32,262
Confectioners' sundries :—				
Bonbons and crackers .. .. .	..	398	..	537
Novelties and sundries .. .. .	..	329	..	329
TOTAL .. .. .	..	727	..	866
TOTAL VALUE .. .. .	..	38,742	..	41,412

* Not including such cocoa butter as may have been used during the censal year in the establishments in which it was made.

† Includes a small amount of *cocoa products* not shown separately (see Table II., p. 71).

Alternative classification of cocoa products.—After publication of the Preliminary Report, representations were made to the Board of Trade that a classification of the output of firms engaged in the manufacture of cocoa products was desirable on different lines from that shown above and a special enquiry resulted in the obtaining of the information set out in the following table, which covers 80 per cent. of the value of the output of those products as originally returned on the schedules for the Cocoa and Sugar Confectionery Trades :—

Output as originally classified.			Output as re-classified.		
Kind of goods.	Quantity.	Value.	Kind of goods.	Quantity.	Value.
Chocolate confectionery	Th. cwts.	£'000.	Chocolate confectionery*	Th. cwts.	£'000.
Other manufactured cocoa or chocolate	997·3	9,028	Moulded chocolate (bars or blocks) † ..	842·1	7,826
	897·7	7,267	Other manufactured cocoa or chocolate‡	776·5	6,482
				276·4	1,987
TOTAL	1895·0	16,295	TOTAL	1895·0	16,295

* All confectionery, other than bars or blocks, with a cover or coating of chocolate

† All bars or blocks with or without other substances embodied therein.

‡ Preparations of cocoa or chocolate in powder form for beverages

The firms that responded to the second enquiry covered nearly 68 per cent. by weight and nearly 72 per cent. by value of the total output of *chocolate confectionery* and about 92 per cent. by weight and 94 per cent. by value of the total output of *other manufactured cocoa or chocolate*, returned on schedules for the Cocoa and Sugar Confectionery Trades.

Scrutiny of the individual Returns and comparison of values suggests that a complete reclassification of the output of cocoa products and chocolate confectionery would yield results differing in relatively minor degree from those shown in the following table :—

Kind of goods.	Returned on schedules for					
	The Cocoa and Sugar Confectionery Trades.		Other trades.		All trades.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Th. cwts.	£'000.	Th. cwts.	£'000.	Th. cwts.	£'000.
Cocoa powder	363	2,513	3	19	366	2,532
Moulded chocolate	777	6,482	14	159	791	6,641
Chocolate confectionery	1,312	11,357	225	1,980	1,537	13,337
Cocoa butter	78	487	2	17	80	504
Cocoa husks and shells ..	92	22	—	—	92	22
TOTAL	2,622	20,861	244	2,175	2,866	23,036

Other products.—Firms making their Returns on schedules for the Cocoa and Sugar Confectionery Trades also showed an output in 1924 of other goods valued at £2,610,000, as set out below. These goods, being of kinds mainly produced by other trades, are dealt with in the Reports on those trades.*

	Value.
	£'000
Marmalade, jams, and fruit jellies	1,272
	(376,000 cwts.)
Preserved fruit	242
Prepared almonds and other nuts	126
Coffee extracts	298
Powders and essences for food and drink ..	171
Other foods, not specified above	283
Other goods, not foods	218
TOTAL	2,610

Value of output free from duplication.—Taking together the output of cocoa products, including chocolate confectionery, of sugar confectionery, of confectioners' sundries and of the other products shown above, the total value of the output of the establishments in respect of which Returns were made on the schedules for the Cocoa and

* See particularly the Report on the Preserved Meat, Fish, Fruit, etc., Trades (pages 88 to 102), with which trades the production of marmalade, jams, and fruit jellies, etc., was associated in 1924 instead of with the Cocoa and Sugar Confectionery Trades as at the 1907 Census.

Sugar Confectionery Trades amounted in 1924 to £41,352,000. A scrutiny of the Returns made on the schedules for these trades suggests that firms with an output of 470,000 cwts. of chocolate confectionery, valued at £3,531,000, bought the chocolate wrapping from manufacturers of moulded chocolate who also made their Returns on schedules for the Cocoa and Sugar Confectionery Trades. There is no precise information as to the proportion of the cost of the materials for such confectionery which was represented by chocolate, and it should be noted that the average value of the 470,000 cwts. of confectionery referred to above was not only substantially below the average value of the chocolate confectionery, particulars of which were obtained at the second enquiry, but was also below the average value shown for all moulded chocolate distinguished at that enquiry. Various Returns from makers of chocolate and sugar confectionery who bought chocolate or raw cocoa for use as covering appear to indicate that such confectionery may have contained on the average about one-fifth of its weight of chocolate, the actual proportion varying somewhat widely. Taking all circumstances into consideration, it is probable that the amount of duplication in the aggregate value of cocoa powder, moulded chocolate and chocolate confectionery returned on schedules for the Cocoa and Sugar Confectionery Trades was about £750,000.

The cocoa butter recorded as part of the output of certain firms was, except in so far as it was exported, partially used by makers of chocolate, and to this extent its value was, accordingly, duplicated in the totals shown for moulded chocolate or for chocolate confectionery. The value thus duplicated in the Returns made on schedules for the Cocoa and Sugar Confectionery Trades may be estimated at about £340,000 to £350,000, since the value of cocoa butter exported and declared as of United Kingdom manufacture was £160,460 f.o.b., and the amount available from the recorded production in other trades was small.

The output of sugar confectionery and other products does not appear to involve any substantial duplication. The value, free from duplication, of the output returned on schedules for the Cocoa and Sugar Confectionery Trades may, therefore, be taken as being about £40,250,000.

The amount of duplication occurring similarly in 1907 was not estimated, but was believed to be small.

Cost of materials.—The cost of the materials used by firms making their Returns on schedules for the Cocoa and Sugar Confectionery Trades was returned as £24,180,000 in 1924, a sum which, by the exclusion of purchases of the products of other firms in the same trades, is reduced to about £23,100,000. A comparable figure for 1907 is not available.

Net output.—The net output in 1924 of the firms making their Returns on schedules for the Cocoa and Sugar Confectionery Trades (whose gross output was valued at £41,352,000) was £17,172,000, that

sum representing, without duplication, the total amount by which the value, as delivered, of the aggregate output exceeded the cost, as purchased, of the materials used.

The net output per head of persons employed in the censal year 1924 was £215, as compared with £84 in 1907.

Quantities of raw materials used.—Firms making their Returns on schedules for the Cocoa and Sugar Confectionery Trades were invited to state the quantities of certain leading raw materials used by them, and firms whose gross output was valued at £26,337,000, or 63·7 per cent. of the output of the trades as a whole, and the cost of whose materials was £14,923,000, or 61·7 per cent. of the total cost of materials reported by all firms in these trades, stated that they used 2,054,000 cwts. of sugar, 757,000 cwts. of cocoa, and 92,000 cwts. of fruit; about 35,000 cwts. returned as cocoa may, however, have been incorrectly shown as raw cocoa, instead of as chocolate covering purchased from other firms. The firms whose output and cost of materials were as stated above were responsible for 73·4 per cent. by weight of the chocolate confectionery recorded for the Cocoa and Sugar Confectionery Trades, 83·9 per cent. by weight of the other prepared cocoa and 50·0 per cent. by weight of the sugar confectionery. The quantity of raw cocoa imported into the United Kingdom in 1924 and retained was nearly 843,000 cwts. and bonded stocks were reduced in the course of the year by 163,000 cwts.

Exports and imports.—The following table, relating to the year 1924, shows the total production of the main classes of cocoa products and sugar confectionery in relation to the exports and imports of similarly described goods:—

Kind of goods.	Pro- duction.	Exports.	Percentage of British- made products exported.	Net imports.	Available for con- sumption in the United Kingdom.	Share of home market held by British- made products.
	Quantity.	Quantity.		Quantity.		
	Th. cwts.	Th. cwts.	Per cent.	Th. cwts.	Th. cwts.	Per cent.
Cocoa powder	366	76*	20·8	24*	314	92·4
Moulded chocolate (bars, blocks, etc.)	791	24	3·0	107	874	87·8
Chocolate confectionery	1,537	58	3·8	28§	1,507	98·1
Cocoa butter	80†	28	..	33	..	..
Cocoa husks and shells..	92	3	3·3	20	109	81·7
Sugar confectionery ..	3,831||	193†	5·0	71	3,709	98·1
					Exports. Th. cwts.	Net imports. Th. cwts.
* i.e. Cocoa preparations, other than bars and blocks and confectionery, containing sugar					3	3
Cocoa preparations, not containing sugar					73	21
					76	24

† Excluding licorice. ‡ Production for sale only.

|| See footnote to first table on p. 64.

§ Including 6,000 cwts. of cocoa preparations containing spirit and sugar.

It has already been pointed out that the output of cocoa and chocolate goods returned to the Census was in a classification materially different from that shown in the above table, and that the reclassification is, as regards rather more than one-fourth of the output (by value), to some extent a matter of estimate. It is quite clear, however, that the home market for cocoa, chocolate and chocolate confectionery in 1924 was almost entirely in the hands of the manufacturers in the United Kingdom.

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 in the Cocoa and Sugar Confectionery Trades which 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, 58,086 operatives, or 78 per cent. of the total of 74,115 operatives for the trades as a whole, and their net output totalled £13,757,000, or 80 per cent. of the aggregate net output of £17,172,000 for the trades as a whole. The total wage-bill of these firms, as returned to the Ministry of Labour, was £5,080,000, representing about 37 per cent. of their aggregate net output.

Employment.

The detailed information relating to employment in 1924 is summarised in Table III on pages 72-73. The following table sets out certain particulars for that year together with those obtained in the 1907 Census. 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 proportion 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	2,513	19,412	19,490	49,382	22,003	68,794
Administrative, etc. ..	355	7,038	631	4,049	986	11,087
TOTAL	2,868	26,450	20,121	53,431	22,989	79,881
1907.						
Wage earners	2,676	16,352	11,377	38,277	14,053	54,629
Salaried	482	5,364	226	1,299	708	6,663
TOTAL	3,158	21,716	11,603	39,576	14,761	61,292

The numbers of operatives recorded month by month in 1924 ranged from 5,657 above the average, in November, to 5,200 below the average, in April (see Table III B, page 73). The variation was markedly greater in the number of females than in that of males, the latter varying between 18,537 (April) and 20,712 (October), and the former between 45,057 (April) and 53,986 (November).

Mechanical Power.

The detailed information relating to mechanical power in 1924 is summarised in Table IV on page 74. The following table sets out the particulars for 1924 and 1907 relating to the capacity and kinds of *prime movers* and the capacity of *electric generators* installed.

Power equipment.	1924.			1907.
	Ordinarily in use.	In reserve or idle.	Total.	Total.
PRIME MOVERS :—	H.P.	H.P.	H.P.	H.P.
Reciprocating steam engines ..	11,452	5,565	17,017	15,966
Steam turbines	120	174	294	45
Gas engines	2,949	616	3,565	} 3,835
Petrol and light oil engines ..	63	66	129	
Heavy oil engines	80	—	80	
Water power	10	10	20	
Other	—	—	—	45
TOTAL	14,674	6,431	21,105	19,898
ELECTRIC GENERATORS :—	Kw.	Kw.	Kw.	Kw.
Driven by—				
Reciprocating steam engines ..	4,464	3,238	7,702	4,569
Steam turbines	75	150	225	30
Gas engines	1,184	356	1,540	} 1,412
Petrol and light oil engines ..	1	33	34	
Heavy oil engines	23	—	23	
Water power	2	—	2	
Other prime movers	—	—	—	—
TOTAL	5,749	3,777	9,526	6,011

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

Electric motors.	1924.		
	Ordinarily in use.	In reserve or idle.	Total.
Driven by—	H.P.	H.P.	H.P.
Electricity generated in own works	7,231	621	7,852
Purchased electricity	38,324	2,646	40,970
Electricity from both sources, not separately distinguished	5,482	692	6,174

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 2,058,000.

TABLES.

I.—Summary of results.

Particulars.	Unit.	England and Wales.	Scotland.	Great Britain.	Northern Ireland.
Value of goods made (Gross output)	£'000	37,266	4,011	41,277	75
Cost of materials used	"	21,607	2,518	24,125	55
Net output	"	15,659	1,493	17,152	20
Average number of persons employed	No.	71,216	8,530	79,746	135
Net output per person employed ..	£	220	175	215	142
Mechanical power available :—					
Prime movers	H.P.	19,539*	1,566	21,105*	*
Electric motors driven by purchased electricity	"	36,513†	4,393	40,906†	64

* In order to avoid the possible disclosure of information relating to individual firms, the particulars relating to Northern Ireland have been combined with those for England and Wales and for Great Britain.

† Exclusive of motors driven sometimes by purchased electricity and sometimes by electricity generated in the same works, see Table IV, page 74.

II.—Production.

Output sold or added to stock.	Unit.	England and Wales and Northern Ireland.†	Scotland.	United Kingdom.
Cocoa products (except chocolate confectionery) :—				
Cocoa or chocolate manufactured (except chocolate confectionery) ..	Th. cwt. £'000	968 7,668	10 71	978 7,739
Cocoa butter	Th. cwt. £'000	* *	* *	78 487
Cocoa husks and shells	Th. cwt. £'000	91 22	1 §	92 22
TOTAL—COCOA PRODUCTS (except chocolate confectionery) ..	Th. cwt. £'000	* *	* *	1,148 8,248
Chocolate confectionery	Th. cwt. £'000	1,311 11,169	163 1,444	1,474 12,613
Sugar confectionery	Th. cwt. £'000	3,292 15,109	408 1,736	3,700 16,845
Cocoa products and sugar confectionery, not separately distinguished	Th. cwt. £'000	45 268	7 41	52 309
TOTAL—CONFECTIONERY	Th. cwt. £'000	4,648 26,546	578 3,221	5,226 29,767
Bonbons and crackers	£'000	398	—	398
Confectioners' novelties and sundries ..	"	329	—	329
Marmalade, jams and fruit jellies ..	Th. cwt. £'000	252 864	124 408	376 1,272
Cakes and biscuits	£'000	31	51	82
Pickles, sauces and condiments	"	72	—	72
Fruit, tinned or bottled	Th. cwt. £'000	5 15	—	5 15
Other preserved fruits	£'000	212	15	227
Prepared almonds and other nuts	"	*	*	126
Fruit juices and syrups	Th. cwt. £'000	3 15	—	3 15
Sugar, ground, and glucose	Th. galls. £'000	10 3	—	10 3
Coffee extracts	£'000	53	3	56
Powders and essences for food and drink	"	69	229	298
Miscellaneous foods and sundries	"	171	—	171
Other goods, not foods	"	46	9	55
	"	218	—	218
TOTAL VALUE OF GOODS MADE (GROSS OUTPUT)	£'000	37,341	4,011	41,352

* In order to avoid the possible disclosure of information relating to individual firms, figures can only be given for the United Kingdom as a whole.

† In order to avoid the possible disclosure of information relating to individual firms, the figures for Northern Ireland have been combined with those for England and Wales.

§ 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	2,499	19,370	18,399	46,884	20,898	66,254
Administrative, etc.*	339	6,420	554	3,611	893	10,031
TOTAL	2,838	25,790	18,953	50,495	21,791	76,285
<i>Scotland</i> :—						
Operatives	166	1,289	2,654	6,441	2,820	7,730
Administrative, etc.*	15	605	72	427	87	1,032
TOTAL	181	1,894	2,726	6,868	2,907	8,762
<i>Great Britain</i> :—						
Operatives	2,665	20,659	21,053	53,325	23,718	73,984
Administrative, etc.*	354	7,025	626	4,038	980	11,063
TOTAL	3,019	27,684	21,679	57,363	24,698	85,047
<i>Northern Ireland</i> :—						
Operatives	17	53	25	78	42	131
Administrative, etc.	1	13	5	11	6	24
TOTAL	18	66	30	89	48	155
<i>United Kingdom</i> :—						
TOTAL	3,037	27,750	21,709	57,452	24,746	85,202

* Administrative, technical and clerical staff.

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

England & Wales. (Annual average : Males, 18,070 ; Females, 43,115 ; Total, 61,185.)

Week ended.	Males.	Females.	Total.	Week ended.	Males.	Females.	Total.
Jan. 12th ..	17,763	41,555	59,318	July 19th ..	17,814	42,754	60,568
Feb. 16th ..	17,625	41,093	58,718	Aug. 16th ..	17,664	42,714	60,378
March 15th ..	17,437	40,078	57,515	Sept. 13th ..	18,513	45,623	64,136
April 12th ..	17,214	39,411	56,625	Oct. 18th ..	19,370	46,884	66,254
May 17th ..	17,614	41,320	58,934	Nov. 15th ..	19,117	47,326	66,443
June 21st ..	17,744	42,235	59,979	Dec. 13th ..	18,960	46,388	65,348

Scotland. (Annual average : Males, 1,290 ; Females, 6,208 ; Total, 7,498.)

Jan. 12th ..	1,273	5,893	7,166	July 19th ..	1,305	6,260	7,565
Feb. 16th ..	1,301	6,180	7,481	Aug. 16th ..	1,307	6,482	7,789
March 15th ..	1,294	6,031	7,325	Sept. 13th ..	1,285	6,412	7,697
April 12th ..	1,275	5,607	6,882	Oct. 18th ..	1,289	6,441	7,730
May 17th ..	1,275	5,817	7,092	Nov. 15th ..	1,293	6,595	7,888
June 21st ..	1,290	6,115	7,405	Dec. 13th ..	1,293	6,658	7,951

Great Britain. (Annual average : Males, 19,360 ; Females, 49,323 ; Total, 68,683.)

Jan. 12th ..	19,036	47,448	66,484	July 19th ..	19,119	49,014	68,133
Feb. 16th ..	18,926	47,273	66,199	Aug. 16th ..	18,971	49,196	68,167
March 15th ..	18,731	46,109	64,840	Sept. 13th ..	19,798	52,035	71,833
April 12th ..	18,489	45,018	63,507	Oct. 18th ..	20,659	53,325	73,984
May 17th ..	18,889	47,137	66,026	Nov. 15th ..	20,410	53,921	74,331
June 21st ..	19,034	48,350	67,384	Dec. 13th ..	20,253	53,046	73,299

Northern Ireland. (Annual average : Males, 52 ; Females, 59 ; Total, 111.)

Jan. 12th ..	58	88	146	July 19th ..	42	30	72
Feb. 16th ..	48	34	82	Aug. 16th ..	57	74	131
March 15th ..	57	80	137	Sept. 13th ..	51	53	104
April 12th ..	48	39	87	Oct. 18th ..	53	78	131
May 17th ..	56	71	127	Nov. 15th ..	55	65	120
June 21st ..	46	36	82	Dec. 13th ..	57	63	120

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.
PRIME MOVERS :—				
	H.P.	H.P.	H.P.	H.P.
Reciprocating steam engines ..	{ (a) 10,435*	1,017	11,452*	*
	{ (b) 5,187	378	5,565	—
Steam turbines	{ (a) 120	—	120	—
	{ (b) 174	—	174	—
Gas engines	{ (a) 2,830	119	2,949	—
	{ (b) 601	15	616	—
Petrol and light oil engines ..	{ (a) 56	7	63	—
	{ (b) 46	20	66	—
Heavy oil engines	{ (a) 80	—	80	—
	{ (b) 10	—	10	—
Water power	{ (a) —	10	10	—
	{ (b) —	—	—	—
TOTAL	{ (a) 13,531*	1,143	14,674*	*
	{ (b) 6,008	423	6,431	—
TOTAL OF PRIME MOVERS INSTALLED ..	19,539*	1,566	21,105*	*
ELECTRIC GENERATORS :—				
Driven by—				
	Kw.	Kw.	Kw.	Kw.
Reciprocating steam engines ..	{ (a) 4,323*	141	4,464*	*
	{ (b) 3,180	58	3,238	—
Steam turbines	{ (a) 75	—	75	—
	{ (b) 150	—	150	—
Gas engines	{ (a) 1,184	—	1,184	—
	{ (b) 356	—	356	—
Petrol and light oil engines ..	{ (a) 1	—	1	—
	{ (b) 33	—	33	—
Heavy oil engines	{ (a) 23	—	23	—
	{ (b) —	2	2	—
Water power	{ (a) —	2	2	—
	{ (b) —	—	—	—
TOTAL	{ (a) 5,606*	143	5,749*	*
	{ (b) 3,719	58	3,777	—
TOTAL OF ELECTRIC GENERATORS INSTALLED	9,325*	201	9,526*	*
ELECTRIC MOTORS :—				
Driven by—				
	H.P.	H.P.	H.P.	H.P.
Electricity generated in own works	{ (a) 6,703	502	7,205	26
	{ (b) 611	—	611	10
Purchased electricity	{ (a) 34,274	3,986	38,260	64
	{ (b) 2,239	407	2,646	—
Electricity from both sources, not separately distinguished	{ (a) 5,482	—	5,482	—
	{ (b) 692	—	692	—

* See footnote (*) to Table I.