136

#### THE JUTE, HEMP AND LINEN TRADES.

Contents.					Down
General					Page 137
	64		Under the	VLEXON AND	10,
JUTE, HEMP AND LINEN TRADES	OF UNI	ITED H	KINGDO	vī.	
INTRODUCTORY				•••	138
Qualifications affecting comparisons		•••	••••	• •	138
Value of output and cost of materials	• •	•••		•••	139
WAGES IN 1924		••	•••		139
Employment				••	140
MECHANICAL POWER					141
MACHINERY EQUIPMENT					142
JUTE TRADE					
PRODUCTION					144
Jute yarns and manufactures					144
Other products					146
Work done on commission or for the trade	e		•••	•••	146
Value of output of Jute Trade free from d	uplicati	on	••	••	146
Value of output of jute goods			•••	•••	147
Cost of materials and work given out		•••	••	•••	147 148
Net output	••	••	• • 24	••	140
Quantity of jute used Exports and imports	TRE IN	••	19		148
	ootin		evertit	and na	149
Employment in 1924	000.	An Alter	Santas II		150
Mechanical power in 1924	•••		TODAY IS	· · · · · ·	100
LINEN AND HEMP	TRADES				
PRODUCTION				••	150
Yarns	80.000		••		151
Linen manufactures		••	••	••	152
Other products	••	1 · • EW	1993 • • • • • •	•••	155 156
Work done for the trade		rom d		· · ·	150
Value of output of Linen and hemp goods			upiicati		157
Cost of materials and work given out				nd are	158
Net output		- Light	re gandara	000000	158
Raw materials	100.				158
Exports and imports	. 70824 .				159
Employment in 1924		1 tin 1	dgit, has	14.	160
MECHANICAL POWER IN 1924			· · ·	000	162
Gas Mantle	OBLE				
	5.			Sec.	163
PRODUCTION, EXPORTS AND IMPORTS	- Hereiters	4			163
MATERIALS AND NET OUTPUT	an and the second	1 Jun	201 A.T. 40	1.10	163
Employment		1		••	16
MECHANICAL POWER	•••	•••		••	16.
CABLES	H.P.	1.	ng stated	12 72 9	16-
Interpretended       Inter		1			164
Linen and Hemp Trades (Great Britain)	Agrices		-		160
Linen Trade (Northern Ireland)		-	denet. bis		170

#### THE JUTE, HEMP AND LINEN TRADES.

#### General.\*

The Tables on pages 164 to 173 are based on Returns received from firms in Great Britain and Northern Ireland, whose business in 1924 consisted wholly or mainly in the spinning and weaving of jute, hemp and flax, and in the making-up of jute, hemp and linen goods so far as that is done in departments of weaving establishments. The Returns received from manufacturers of incandescent gas mantles (regarded as a product of ramie) are also included. Bleaching and dyeing departments of spinning and weaving establishments were required to make separate Returns of the work done in them, and the particulars so returned are included in the figures for the Textile Finishing Trades in the Tables on pages 208 to 213. Manufacturers of cordage, ropes and twine spinning hemp mainly for their own use made their Returns on the separate schedule for the Rope, Twine and Net Trades, and the information furnished by them is included in the Tables on pages 240 to 243.

As on the occasion of the two previous Censuses, the Linen Trade of Northern Ireland was treated differently from the Jute, Hemp and Linen Trades of Great Britain. The Irish factories are strictly departmentalised and their owners, therefore, desired to make their Returns on this basis, treating the transfers of material from one department to another as sales and purchases respectively. Practically, therefore, three separate sets of Returns were obtained in 1907 and 1912 for spinning departments, weaving departments and making-up departments, and the only change that was made in the form of the Return in 1924 was to separate the thread-making departments (where they existed) from the spinning departments in which they had formerly been included. The schedule for the Jute, Hemp and Linen Trades of Great Britain was not divided in this way, and firms which, in the same establishment, carried on both spinning and weaving or weaving and making-up were required, first, to state their total make of varns or piece-goods, and then, treating their business as a whole, to record the quantity and value of each class of goods sold by them, or added to stock, at that stage at which the goods were so disposed of.

As regards the Jute Trade, there was in 1907 and 1912 a small output of jute yarns and manufactures in England and Wales, but in 1924 the trade was confined to Scotland, with the exception of a relatively small quantity of jute carpets and rugs and jute bags and sacks made in England and Wales, by firms which were otherwise mainly engaged in the production of linen goods. The first section of this Report summarises the particulars relating to the Jute, Hemp and Linen Trades of the United Kingdom as a whole; the second deals with the Jute Trade of Scotland; the third discusses the

\* See also the Notes on pp. vi-xiv.

Linen and Hemp Trades of Great Britain and the Linen Trade of Northern Ireland; and the fourth deals briefly with the Gas Mantle Trade (England and Wales). In the third section, owing to the importance of the Linen Trade of Northern Ireland and the fact that a special form of schedule was issued to Irish Linen manufacturers, the figures for Northern Ireland are for the most part shown separately from those for Great Britain. The Tables annexed to the Report (pages 164–173) have also been compiled to show separately the details for : (1) the Jute Trade (Scotland); (2) the Linen and Hemp Trades (Great Britain); and (3) the Linen Trade (Northern Ireland).

JUTE, HEMP, AND LINEN TRADES OF THE UNITED KINGDOM.

#### Introductory.

The number of separate Returns received in respect of the 1924 Census was 598. About 65 firms to which schedules were sent did not furnish Returns, but these firms for the most part had relatively small establishments and they included a number which ceased operations in the course of the censal year. On the basis of the information available it is estimated that they did not employ more than 450 persons, and that their net output probably lay between  $\pounds 40,000$  and  $\pounds 50,000$ .

The following table shows the main results of the Censuses of 1924, 1912 and 1907 for the Jute, Hemp and Linen Trades of the United Kingdom, comparisons between the results for the three years being subject to the qualifications mentioned in the next paragraph :---

Unit.	1924.	1912.	1907.
ner C. to	and see The	warni l' br	a acceli
£'000			32,101
,,	34,840	23,866	22,349
and the second	670	285	300
,,	16,859	9,828	9,452
No.	135,998	158,394	154,496
£	123	62	61
ΠЪ	157 107	174 663	168,147
11.1.	107,107	174,000	100,147
,,	14,445	3,498	(not recorded).
	£'000 ,,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	£'000 52,369 ,, 670 ,, 16,859 No. 135,998 £ 123 H.P. 157,197 14.445	£'000         52,369         33,979           .,         34,840         23,866           .,         670         285           .,         16,859         9,828           No.         135,998         158,394           £         123         62           H.P.         157,197         174,663           14445         2408

3

Qualifications affecting comparisons.—In considering the above table and the other tables in this Report which show figures for the different 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. (2) The Censuses of 1907 and 1912 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 value of the linen piece-goods (including unions) and house-hold articles made in the Irish Free State in that year was returned as only £154,757.

(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 116 or less than 0.1 per cent. of the number employed by the remaining firms, as shown in the above table.

(4) The scope of the gross figures for 1924 is somewhat greater than that for 1912 and 1907, the making-up of articles of clothing of linen or union being covered by the schedule for these trades to a considerably greater extent than in the earlier years, when the bulk of the output of such goods was grouped with that returned on the schedule for the Clothing Trades. Particulars of the output of made-up goods as returned on schedules for these trades in 1924, 1912 and 1907, are given on page 153.

Value of output and cost of materials.—The figures in the above Table representing the value of goods made and work done are the aggregates of the figures recorded by the firms making Returns, and owing to the duplication involved (see the Notes on pages xi-xiii) they over-state the value of the output of the Jute, Hemp and Linen Trades considered as a whole. The matter is discussed on pages 146–7 and 156–7, and from the estimates there reached it appears that the value, free from duplication, of the output of these trades in 1924 was, in round figures, about £36,000,000. The figures in the table representing the cost of materials used likewise over-state the cost of the materials purchased from sources outside the Jute, Hemp and Linen Trades and worked up into their products. When the necessary deduction on this account has been made, the cost of such materials used in 1924 was, in round figures, about £19,000,000.

#### 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 Jute, Hemp and Linen 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, 101,178 operatives, or 76 per cent. of the total of 132,443 operatives for the trades as a whole, and their net output totalled £13,155,000, or 78 per cent. of the aggregate net output of £16,859,000 for the trades as a whole. The total wage-bill of these firms, as returned to the Ministry of Labour, was £7,337,000, representing about 56 per cent. of their aggregate net output. If it may be assumed that the above group of firms, covering about three-quarters of the Jute, Hemp and Linen Trades, is representative of the remainder also, then, on the basis of the percentages shown, the aggregate wage-bill for these trades as a whole in 1924 may be estimated at approximately £9,500,000.

#### Employment.

The detailed information relating to employment in 1924 is summarised in the tables on pages 165, 168–9 and 172.

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 proportion shown by the data relating to the week ended 18th October. The numbers of administrative, technical, and clerical staff returned for that week have been added to the calculated averages for operatives in order to obtain the numbers shown in the column of *Total employed* for 1924. The table does not include outworkers.

Created on pages 146-7	1924.		1912.		1907.	
Sex and age.	Operative staff.	Total employed.	Wage earners.	Total employed.	Wage earners.	Total employed.
Male : Under 18 years Over 18 years	7,063 27,553	7,435 31,347	11,675 35,378	12,095 38,759	10,942 35,232	11,341 38,206
TOTAL-MALES	34,616	38,782	47,053	50,854	46,174	49,547
Females :	19,534 76,303	19,675 77,541	25,960 81,159	26,018 81,522	21,511 83,115	21,554 83,395
Total—Females	95,837	97,216	107,119	107,540	104,626	104,949
All Persons : Under 18 years Over 18 years	26,597 103,856	27,110 108,888	37,635 116,537	38,113 120,281	32,453 118,347	32,895 121,601
TOTAL	130,453	135,998	154,172	158,394	150,800	154,496

In 1907 the number of half-timers in the Flax, Hemp and Jute Trades (according to the returns made under the Factory and Workshop Act, 1901 [Cd. 4692]) was 4,543, comprising 1,856 males and 2,687 females. In 1912 the number shown in the Returns received in connexion with the Census of Production was 3,552, comprising 1,305 males and 2,247 females. In 1924 the class of half-timers had practically disappeared. In the following comparisons, two half-timers have been reckoned as equivalent to one full-timer.

.

It will be seen from the table that in all the three censal years females predominated over males in the total number of persons employed; and the predominance was greater in 1924 than in the earlier years, the proportion of females to the total being over 71 per cent. in 1924 as compared with about 68 per cent. in both 1912 and 1907. Persons under 18 years of age, who formed about 20 per cent. of the total number of persons employed in 1907, increased to over 23 per cent. in 1912 but fell again to 20 per cent. in 1924, the decline being more pronounced in the case of males than in the case of females. The table further shows that while the total number of persons employed declined between 1912 and 1924, the size of the administrative, technical and clerical staff increased, the number in this category being 5,545 in 1924 as compared with 4,222 salaried persons in 1912 and 3,696 in 1907.

In addition to the persons employed inside the establishments of the firms making Returns, *outworkers* working off those premises were employed as under :---

		1924.	1912.	1907.	
		na sa ang ang ang ang ang ang ang ang ang an	0101 - 000	I wenter without	
Males	nero gen	565	763	322	
Females	191 br	4,715	4,173	1,597	
		Kaldanah	recent conner	orb ration	
Total	02 100.	5,280	4,936	1,919	
		a share we have	all the search and the second	nation have a set	

About nine-tenths of the outworkers employed in 1924 were in Northern Ireland.

#### Mechanical Power.

The detailed information relating to mechanical power in 1924 is summarised in the tables on pages 165, 169 and 173. 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.

er soon in the Returns	1924.			1912.	1907.
Power equipment.	Ordinarily in use.	In reserve or idle.	Total.	Total.	Total.
PRIME MOVERS :— Reciprocating steam engines Steam turbines Gas and oil engines Water power	H.P. 111,128 11,825 3,689 3,142	H.P. 19,993 6,089 986 345	H.P. 131,121 17,914 4,675 3,487	H.P. 150,105 11,080 5,395 8,083	H.P. 155,394 897 4,294 7,562
Total	129,784	27,413	157,197	174,663	168,147
ELECTRIC GENERATORS :	Kw.	Kw.	Kw.	Kw.	Kw.
Reciprocating steam engines Steam turbines Gas and oil engines Water power	11,681 6,991 364 519	3,720 4,384 214 10	15,401 11,375 578 529	$\left.\begin{array}{c} 13,715\\ 7,248\\ \end{array}\right\} 957$	9,875 406 517
TOTAL	19,555	8,328	27,883	21,920	10,798

The capacity of *electric motors* installed in 1924 and in 1912 was as shown below :--

	in 1907.	1912.		
Electric motors.	Ordinarily in use.	In reserve or idle.	Total.	Total.
Driven by— Electricity generated in own works Purchased electricity	H.P. 19,155 12,341	H.P. 4,165 2,104	H.P. 23,320 14,445	H.P. 15,088 3,498

The capacity of prime movers installed increased by nearly 4 per cent. between 1907 and 1912 and then decreased by 10 per cent. between 1912 and 1924. The capacity of electric generators installed slightly more than doubled between 1907 and 1912, and increased further by about 27 per cent. between 1912 and 1924. The capacity of electric motors rather more than doubled between 1912 and 1924 ; their capacity was not ascertained in 1907, but so far as motors driven by purchased electricity were concerned their capacity was small, only 416,000 Board of Trade units being purchased in that year for power, lighting, and all other purposes combined.

### Machinery Equipment.

In response to a request for information regarding the kinds and numbers of machines in factories at the end of 1924, the particulars given below were furnished. It cannot, however, be assumed that this information can be applied for the purpose of calculating, by simple arithmetical proportion, all the machinery available, and in use, in each branch of the Jute, Hemp and Linen Trades. The particulars shown were supplied by firms that produced the following output :---

Kind of goods.	Quantity or value.	Proportion of total output of Jute, Hemp and Linen Trades.
	Tons.	Per cent.
Yarns :	的现在,并且你能够的情况了你的。"	CARAGE STREET
Jute	161,520	88.9
Flax line	13,690	82.9
Flax tow	22,120	85.9
Hemp line	2,740	75.1
Hemp tow	2,410	56.7
Finished linen thread	1,450	52.8
Cordage	5,880	78.1*
Piece-goods :	Th. sq. yds.	THE CHIMPE
Jute	303,746	74.5
Linen	169,322	83.0*
	£'000.	TOTAL OUT ABOUT
Made-up jute goods	284	56.5
Made-up linen goods	3,229	56.1
Linen handkerchiefs	1,490	78.3
Household articles of cotton	156	25.8

\* As accurate figures of total make are not available in these two cases, the percentage has been based upon output for sale or for stock.

The kinds and numbers of machines installed at the end of 1924 in the factories of the firms that produced the above output are set out in the following table, the machines in use and those not in use being shown separately. In making their Returns, firms were asked to exclude obsolete machines.

Kinds of machines.	In use,	Not in use.	Total.	Proportion not in use.
and a second sec	Number.	Number.	Number.	Per cent.
Spinning spindles :	000:000	3,815	240,154	1.6
Jute: Ordinary	236,339	889	6,462	13.8
Gill	5,573 737,459	121,336	858,795	14.1
Flax	5,262	1,494	6,756	$22 \cdot 1$
Hemp	51,959	5,713	57,672	9.9
Flax and hemp, not distinguished	. 31,939	0,710	01,012	
Doubling or twisting spindles :	18,621	850	19,471	4.4
Jute Flax	14,325	2,651	16,976	15.6
the second	572	20	592	3.4
Hemp	6,410	1,164	7,574	15.4
Total—Spindles	1,076,520	137,932	1,214,452	11.4
Power looms :	in mart	Dentrito and	i do sasi	Fartic
Tute	8,159	945	9,104	10.4
Hemp	10	20	30	66.7
Jute and hemp, not distinguished	103	38	141	27.0
Linen	25,831	13,342	39,173	34 · 1
Total—Looms	34,103	14,345	48,448	29.6
Semina machinas :	100 M 20 10	CON SAUN	and other	AND THEY IS
Sewing machines :	7,527	2,962	10,489	28.2
Treadle or hand	33	35	68	51.5
TOTAL—SEWING MACHINES	7,560	2,997	10,557	28.4

#### THE JUTE TRADE.\*

#### **Production.**†

Jute yarns and manufactures.—The total make of jute yarn in 1924 was returned as 185,720 tons (including 4,080 tons returned by firms not in the Jute Trade); for 1907 it was estimated as lying between 212,000 tons and 219,000 tons, and in 1912 the total make reported was 218,680 tons.

The quantities of jute yarn available within the country in the three censal years (ascertained by deducting the amount exported from the amount produced in each year and adding the retained imports—see page 148) were about 167,000 tons in 1924, 197,000 tons in 1912, and between 185,000 and 192,000 tons in 1907.

Firms making Returns were required to state not only the weight of their total make of yarn in 1924, but also their total make of piecegoods by weight and square yardage. The total make of piece-goods so returned was as follows :—

Jute piece-goods.	Mill. sq. yds.	Th. tons.
Returned on schedules for :	395.9	113.5
Other Trades	. 11.7	4.5
Total	407.6	118.0

The difference between the 118,000 tons, representing the weight of jute piece-goods made in 1924, and the 167,000 tons, representing the weight of the jute yarn available in that year, is accounted for partly by the use of yarn in the other manufactures of jute (for example, carpets and rugs or cordage) made in the Jute Trade, but mainly by the sale of yarn to firms in other trades.

Particulars of the chief classes of output of jute goods at the three censuses are shown below : they include goods sold or added to stock but not goods used in further manufacture by their makers and cover Returns made on all schedules.

1924.		1912.	1907.			
Kind of goods.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Jute yarn	Th. tons. 125.3 Mill sq. yds.	£'000. 5,694	Th. tons. 132·3	£'000. 3,923	Th.tons. 135.0	£'000. 4,022
Jute piece-goods Jute carpets and rugs	396.1	7,518 419	}	6,288	]	5,79
Jute sacks and bags Other jute products	6,305	297 302				670
TOTAL VALUE		14,230	••	10,211		9,81

In 1912 and 1907 the output of jute piece-goods was returned partly by yardage and partly by weight, and separate particulars in respect of carpets and rugs and of sacks and bags were not obtained. For jute products other than yarn, therefore, the output in 1912 and 1907 can only be stated in one sum, in terms of value. In 1924, as will be seen in the above table, a more detailed classification was adopted, with new units of measurement.

Further particulars regarding the output of jute goods in 1924 are as follows, the goods shown as returned on schedules for other trades being, in fact, produced entirely in the Linen Trade :---

	Returned on schedules for the				periodi la present	
Kind of goods made.	Jute Trade.		Other trades.		Total.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Jute goods :— Yarn	Th. tons. 124.4	£'000. 5,652	Th. tons. 0.9 Mill.sq.yds.	£'000. 42	Th. tons. 125.3 Mill.sq.yds.	£'000. 5,694
Piece-goods Carpets and rugs	Mill.sq.yds. 384.6 5.8 Thousands.	7,233 410	11.5  Thousands.	285 9	$396 \cdot 1$ $5 \cdot 8$ Thousands.	7,518
Sacks and bags Other manufactures Waste (including	6,294 	295 72	11	2 125	6,305	297 197
Waste (including worked jute waste)	eige d. bi	38	tigo troods	67	(), generals	10
TOTAL VALUE		13,700		530		14,23

Comparing the total make of yarn with the amount recorded as made for sale, it appears that about 57,000 tons of yarn spun by firms in the Jute Trade were used by the same firms in the manufacture of jute goods.

The weight of the manufactures shown in the first column of the above table was: for piece-goods, 108,620 tons; for carpets and rugs, 4,030 tons; and for sacks and bags, 4,710 tons.

<sup>\*</sup> The figures shown in this section of the Report are based on the Returns made by those firms in the Jute, Hemp and Linen Trades of Great Britain that were wholly or mainly engaged in the spinning or weaving of jute. Such firms are, for convenience, referred to in the present Report as "firms that made their Returns on schedules for the Jute Trade."

<sup>†</sup> See Tables II A and II B on page 164.

Other products.—In addition, the firms whose main occupation was the spinning and weaving of jute had an output of the following classes of goods which are mainly produced by other trades and are dealt with in the appropriate Reports :—

Kind o	f goods.	Quantity.	Value.
Linen piece-goods Cordage Other goods		 5.3 mill. sq. yds. 3,190 tons	£'000. 202 165 131
TOTAL VALUE		 TURFILINET	498

Work done on commission or for the trade.—Firms that made their Returns on schedules for the Jute Trade included in their output  $f_{2,000}$  as received for work done for other firms. Firms that made their Returns on schedules for the Textile Finishing Trades stated that they received  $f_{195,000}$  for bleaching and dyeing jute yarns and manufactures; and a further  $f_{15,000}$  was shown on other schedules for similar work. The total amount recorded for work done on jute goods was thus £218,000 in 1924. The value of this work, in so far as it was done for firms which made their Returns on schedules for the Jute Trade, was included in the value of the goods produced by those firms; and such firms reported that in 1924 they paid £51,000for work given out by them to other firms. The difference of  $f_{167,000}$ between this sum and the total of £218,000 received for work done on jute goods thus represents work done for merchants and other firms outside the Jute Trade. The figure is a minimum one which would be increased if and so far as any of the work given out by firms in the Jute Trade was given to firms whose work is not included in the above-mentioned total of  $f_{218,000}$ . The data available do not show to what extent the jute goods on which work was done for merchants, etc., as set forth above, were produced by firms in this country or were imported; nor whether the work in question includes any part of the work valued at  $f_{8,000}$  done by firms in the Jute Trade, or alternatively was done entirely by firms in the Textile Finishing and other trades.

Value of output of Jute Trade free from duplication.—The value of the gross output of the Jute Trade in 1924 ( $f_{14}$ ,206,000) may involve duplication : (1) in respect of yarns sold by spinners to weavers or other manufacturers in the trade, and (2) in respect of piece-goods sold to firms in the trade for use in the production of sacks, bags and other manufactures. Taking the second point first, it would appear that the sacks, bags and other manufactures shown in the Returns were made by weaving firms from cloth woven in their works, this material not being recorded as cloth in their Returns of output. There is thus no duplication on this account. As regards the first point, the weight of piece-goods and other manufactures returned as made for sale was about 117,000 tons; and the quantity of yarn used, in the works where it was spun, for the production of such goods was about 57,000 tons. Allowing for waste and loss of weight in weaving, the value of the yarn duplicated in the remaining goods (i.e., that portion of the 117,000 tons of goods which was made from purchased yarn) may be estimated at about  $f_{23}^{4}$  millions. This sum, as the expression of duplication, will be reduced by anything up to  $f_{110,000}$  if the weavers used imported yarn, or yarn spun by firms in other trades. The  $f_{8,000}$  received for work done for the trade may also have been partly or wholly duplicated. The value, free from duplication, of the output of the Jute Trade in 1924 may, therefore, be estimated as being in the neighbourhood of  $f_{113}^{4}$  millions.

Value of output of jute goods .- In order to arrive at the value of all jute goods produced in 1924, as finished for sale and free from duplication, it is necessary to deduct from the total output value of the Jute Trade free from duplication (as estimated in the preceding paragraph) the value ( $f_{498,000}$ ) of the products not of jute included in that total, and to take into account, as possible additions to the total, the value of the jute goods returned on schedules other than those for the Jute Trade, together with the value of the finishing and other work done on jute goods for merchants or other firms outside the Jute Trade. The value of the jute goods returned by firms outside the Jute Trade in 1924 was £530,000, but this sum may include the value of products made from (or used in the making of) jute goods returned by firms in the Jute Trade, and to this extent it would not constitute an addition to the output value of that trade, as estimated above. The value of the work done on jute goods for merchants and other firms outside the Jute Trade was estimated on page 146 as being not less than £167,000, but this sum may include some work on imported goods and some work on the jute goods valued at £530,000 (returned by firms outside the Tute Trade) account of which has already been taken. It may also cover the value of some work already included in the output value of the Jute Trade as estimated above (e.g. part of the finishing work done on jute varns for which the amount of nearly f100,000 was received in 1924. On the other hand, the sum of  $f_{167,000}$  may, as explained on page 146, understate the value of the work done on goods produced by firms in the Jute Trade. On the whole, therefore, the total value of all jute goods produced in 1924, as finished for sale and free from duplication, does not appear to be widely different from the value, free from duplication, of the output of the Jute Trade, estimated in the previous paragraph at  $f_{11\frac{1}{2}}$ millions.

Cost of materials and work given out.—The cost of materials purchased and used in the production of the output of firms engaged mainly in the spinning and weaving of jute was returned as  $\pounds 9,765,000$  in 1924, a sum which, by the exclusion of purchases of the products of other firms in the trade, as estimated above, would be reduced to a net figure in the neighbourhood of  $\pounds 7,000,000$ .

(38487)

146

F

The amount paid to other firms for work given out to them was  $\pm 51,000$ .

Net output.—The net output in 1924 of the firms making their Returns on schedules for the Jute Trade (whose gross output was valued at  $\pounds$ 14,206,000) was  $\pounds$ 4,390,000, that sum representing, without duplication, the total amount by which the value (at works) of the aggregate output of those establishments exceeded the cost (at works) 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 1924 was £128. Separate particulars regarding net output in the Jute Trade in 1907 and 1912 were not extracted.

Quantity of jute used.—Spinning firms were asked to state the quantity of raw jute used by them, and firms which produced 159,364 tons of jute yarn or 87.7 per cent. of the total output of jute yarn stated that they used 152,022 tons of raw jute and 3,698 tons of jute waste in 1924.

*Exports and imports.*—The relation between production, exports and imports of jute goods was as follows in 1924 :—

Class of goods.		Unit.	Production.	British exports.	Net imports.	Available for home consumption.
Jute yarns		Th. tons	185.7	19.9	1.4	167.2
Jute piece-goods :		Th. tons	118.0	45.2	20.1	92.9
By yardage Jute carpets and rugs :		Mill. sq. yds.	407.6	166 • 1	68.2	309.7
By weight By yardage	••	Th. tons Mill. sq. yds.	$4 \cdot 0 \\ 5 \cdot 8$	0.6 0.8	1.3 1.7	4.7

Similar particulars (so far as available) regarding jute sacks and bags and cordage are dealt with in the Report on the Canvas Goods and Sack Trades (which forms part of a separate volume) and the Report on the Rope, Twine and Net Trades (page 236).

British exports of jute yarns in 1907 were 30,100 tons, or about 14 per cent. of the production ; in 1912 they were 23,900 tons, or about 10.9 per cent. of the production ; in 1924 they were 19,900 tons, or 10.7 per cent. of the production. The net imports of jute yarns were 2,700 tons in 1907 and 2,000 tons in 1912, so that the home market in yarns for all three years was commanded by British spinners. In 1924 about 38.3 per cent. of the tonnage and about 40.8 per cent. of the square yardage of the jute piece-goods made in the United Kingdom were exported, while 78.4 per cent. of the tonnage and 78.0 per cent. of the square yardage of the goods available for the home market (including the making of sacks and bags and other goods for export) were of British manufacture. British exports of piece-goods were 179.4 million linear yards in 1907 and 161.8 million linear yards in 1912, but the production in those years cannot be stated. Net imports of jute carpets and rugs in 1924 were equivalent to rather less than one-third of the British production, and exports of British-made goods were about one-seventh of the total output. Exports to the Irish Free State in 1924 amounted to 360 tons of jute yarns, 150 tons of jute piecegoods, and 30 tons of carpets and rugs. The inclusion of these amounts in the export figures for 1924 does not materially affect comparisons with earlier years.

#### Employment in 1924.\*

The number of persons employed by the firms making their Returns on schedules for the Jute Trade in the week ended 18th October, 1924, was returned as 34,602, viz., 33,725 returned as operative staff and 877 returned as administrative, technical and clerical staff. The distribution of these by sex and age was as follows :—

Sex and age. Week ended 18th October, 1924.	Operative staff.	Administrative, technical and clerical staff.	Total.
Males :		*	
Under 18 years	2,515	106	2,621
Over 18 years	8,280	609	8,889
Total-Males	10,795	715	11,510
Females :	int out destrict	Contro Internation	n 111 1254
Under 18 years	3,836	21	3,857
Over 18 years	19,094	141	19,235
TOTAL-FEMALES	22,930	162	23,092
All persons :			
Under 18 years	6,351	127	6,478
Over 18 years	27,374	750	28,124
Total	33,725	877	34,602

The variation in the total number of operatives employed in the course of the year is shown by the following total numbers employed in a week in each month of the censal year :---

Week ended. Number of operatives. Per cent. of average.		Week ended.	Number of operatives.	Per cent. of average.		
12th January		32,973	98.4	19th July	33,798	100.8
16th February		33,412	99.7	16th August	33,773	100.7
15th March		33,203	99.0	13th September	33,457	99.8
12th April		33,147	98.9	18th October	33,725	100.6
17th May		33,405	99.7	15th November	33,835	100.9
21st June		33,622	100.3	13th December	33,950	101.3

The average for the 12 weeks was 33,525 of whom 10,756 were males and 22,769 were females. The tendency of employment was upwards throughout the year, with slight fluctuations, and nearly 3 per cent. more operatives were reported as at work in December than in January.

\* See Tables III A and III B on page 165.

(38487)

F 2

#### Mechanical Power in 1924.\*

The engines installed in the establishments of those firms that made their Returns on schedules for the Jute Trade were of the descriptions shown in the following statement, in which engines that were ordinarily in use in the censal year are distinguished from those in reserve or idle in that year. The kilowatt capacity of electric generators which were driven by engines of the several classes are shown for convenience in the same table :—

Kind of engine.		movers of engine).	Electric generators (by kind of motive power).		
	Ordinarily in use.	In reserve or idle.	Ordinarily in use.	In reserve or idle.	
	H.P.	H.P.	Kw.	Kw. 399	
Claure de ultimos	. 38,998 . 5,890	3,018 3,900	1,843 3,784	2,750	
Can and ail anginon	332	183	27		
TT-t	. 180		19		
Total	. 45,400	7,101	5,673	3,149	

In addition to the mechanical power shown in the above table under the heading *prime movers* there were also installed *electric motors*, driven by purchased electricity, the total capacity of such motors ordinarily in use in the censal year being 7,161 horse-power and the capacity of motors in reserve or idle being 99 horse-power. Electric motors driven, or intended to be driven, by electric current obtained from the generators, particulars of which are given in the above table, were also installed, the capacity of such motors ordinarily in use in the censal year being 6,384 horse-power and that of motors in reserve or idle 1.346 horse-power.

#### THE LINEN AND HEMP TRADES.<sup>†</sup>

#### **Production.**<sup>‡</sup>

As already stated, particulars of these trades were furnished on separate schedules for the Jute, Hemp and Linen Trades of Great Britain and for the Linen Trades of Northern Ireland. The schedule for Great Britain covered all sections of each trade, but there were separate schedules for the spinning, thread-making, weaving and making-up departments of the establishments in Northern Ireland.

<sup>±</sup> See Tables II A and II B on pp. 166-7 and 170-1.

Yarns.—Firms were required to state their total make of yarns, whether sold or added to stock as such or used by spinners in their own works. Particulars for 1924 are as follows :—

	Great Britain.	Northern Ireland.	United Kingdom.	
Kind of yarns.	Retur	ned on schedu	Total.	
	Linen and Hemp Trades.	Linen Trades.	Other trades.	
Flax line yarns           Flax tow yarns           Flax yarns not separately distinguished	Tons. 5,250 8,300	Tons. 11,270 17,450	Tons. 330 350 480	Tons. 16,850 26,100 480
Total—Flax yarns	13,550	28,720	1,160	43,430
Hemp yarns *	5,830	2,070	59,010	66,910 21

It will be seen that the main output of hemp yarn was in other trades, predominantly the Rope, Twine and Net Trades, and reference should be made to the Report on those trades for fuller discussion of this product (see pages 232–3).

In 1907, particulars of output were not obtained in the same detail, only estimates of the aggregate make being available. These estimates are shown below with the quantities recorded for 1912 :----

Great Britain.		I	reland.	Total.		
	1912.	1907.	1912.	1907.	. 1912.	1907.
Flax yarns Hemp yarns	Tons. 31,060 78,330*	Tons. 36,690† (not recorded)	Tons. 36,010 540	Tons. 33,620 (not recorded)	Tons. 67,070 78,870	Tons. 70,310 (not recorded)

\* Includes 47,130 tons recorded on schedules for other trades.

† Includes 7,350 tons recorded on schedules for other trades.

As shown on page 160, the total quantities of flax yarns available for consumption in the United Kingdom in the three censal years were 46,810 tons in 1924, 76,750 tons in 1912, and about 72,190 tons (estimated) in 1907. Similar information regarding hemp yarns is not available as the exports and imports of such yarns were not separately recorded in 1907 and 1912.

The particulars furnished on schedules for the Linen and Hemp Trades and for other trades regarding the deliveries of yarns, etc.,

<sup>\*</sup> See Table IV on page 165.

<sup>&</sup>lt;sup>†</sup> The figures for Great Britain shown in this section of the Report are based on the Returns made by those firms in the Jute, Hemp and Linen Trades that were wholly or mainly engaged in the spinning or weaving of flax or hemp. Such firms are, for convenience, referred to in the present Report as "firms that made their Returns on Schedules for the Linen and Hemp Trades."

#### LINEN AND HEMP.

### TEXTILE TRADES.

		and the second second	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	and the second second	have been the the the	and a stand of the stand of the
			Great Britain.	Ireland.§	United Kingdom.	
Kind of yarn, etc.		Retur	Total.			
			Linen and Hemp Trades.	Linen Trades.	Other trades.	
Flax yarns :	1924	{ tons	8,780	28,030	1,100	37,910
OPR OC	1912	$\begin{array}{c} \ddots \\ f'000 \\ fons \\ f'000 \end{array}$	1,320 - <i>16,560</i> 1,172	7,924 <i>32,910</i> 4,701	176 - 590, 40	9,420 50,060 5,913
(884- 	1907	$\cdots \begin{cases} tons \\ f'000 \end{cases}$	23,540 1,829	33,620 5,494	740 47	57,900† 7,370†
Flax and he	mp. dressed	( tons	1.700	7.920	T. XA.T-	9,620
and tow:	1924	(£'000	244	1,237	1000000	1,481
	1912	$\cdots \begin{cases} tons \\ f'000 \end{cases}$	2,760 158	2,800 245		5,560 403
	1007	tons	*	*		*
and in the	1907	···{£'000	90	111	atta ta per	201

either for sale or (in Ireland) to other departments of the same firms are shown below :---

\* Not recorded. † Including linen thread. § 1924 figures refer to Northern Ireland only.

More detailed particulars for the year 1924 are set out below :----

atte being evolution in cao	Great Britain.	Northern Ireland.	United Kingdom.	tiered tres dino
Kind of goods	Retur	ned on schedule	es for	Total.
	Linen and Hemp Trades.	Linen Trades.	Other trades.	
Flax line yarns $\cdots$ $tons f'000$ Flax tow yarns $\cdots$ $tons f'000$ Flax yarns, not separately $tons f'000$ Flax and hemp dressed $\cdots$ $tons f'000$ Flax and hemp dressed $\cdots$ $tons f'000$	2,760 556 6,020 764 — 700 162	10,720 4,284 17,310 3,640 	290 56 330 58 480 62 —	$\begin{array}{c} 13,770\\ 4,896\\ 23,660\\ 4,462\\ 480\\ 62\\ 3,950\\ 926\\ 5,000\\ \end{array}$
Flax and hemp tow $\cdots$ $\begin{cases} tons \\ f'000 \\ \vdots \\ f'000 \end{cases}$ Waste $\cdots$ $f'000 \\ f'000 \end{bmatrix}$	1,000 82 —	4,670 473 71		5,670 555 71
TOTAL VALUE £'000	1,564	9,232	176	10,972

Linen manufactures.—The following statement summarises the output of linen thread and linen piece-goods returned on all schedules in the three censal years. The figures relate to goods produced for sale or (in Ireland) for transfer to other departments of the same firms. Particulars relating to made-up goods are also included, but these represent the output returned on schedules for the Linen and Hemp Trades only and for a statement of the total output of goods of this class, reference should be made to the Report on the Clothing Trades, which forms part of a separate volume.

Kind of goods.	Great I	Britain.	Ireland.*		United Kingdom.	
	Quantity.	Value.	Quantity.	Value,	Quantity.	Value.
<b>1924</b> . Linen thread	Tons. 685 Mill. sq.	£'000. 604	Tons. 2,060 Mill. sq.	£'000. 1,083	Tons. 2,745 Mill. sq.	£'000. 1,687
Linen and union piece- goods Made-up goods	yds. 43·3	3,773 1,364	yds. 160·5	9,913 6,560	yds. 203·8 	13,686 7,924
TOTAL VALUE	••	5,741		17,556		23,297
1912. Linen thread Linen and union piece- goods Made-up goods	Tons. 1,911 Mill. lin. yds. 137 · 2 	539 4,514 662	Tons. 2,442 Mill. lin. yds. 233.9 	436 6,307 2,656	Tons. 4,353 Mill. lin. yds. 371 · 1	975 10,821 3,318
Total value		5,715		9,399		15,114
1907. Linen thread† Linen and union piece- goods Made-up goods	Mill. lin. yds. 133·5 	 3,793 1,038	Mill. lin. yds. 229•7	 6,204 1,345	Mill. lin. yds. 363 · 2 	 9,997 2,383
TOTAL VALUE		4,831		7,549		12,380

\* 1924 figures refer to Northern Ireland only.

† Included with linen yarns.

Detailed comparison between the quantities of the various kinds of linen piece-goods produced in the three censal years is rendered difficult by changes in classification, and in the case of Great Britain, by an alteration in the unit of measurement from linear to square yards. The following table shows the particulars available for making such comparison, the quantities stated for Great Britain representing piece-goods made for sale and excluding any piece-goods used, in the works where they were woven, in the production of made-up goods. The quantities shown in the table are those returned

152

8706

on schedules for the Jute, Hemp and Linen Trades and do not include any linen piece-goods produced in other trades.

Linen piece-goods.	1924.	1912.	1907.	
Northern Ireland :	Mill. lin. yds. 141·2	Mill. lin. yds. 175·4‡	Mill. lin. yds. 168·7‡	
Other kinds† Great Britain :—	27·3	58.6‡	61.0‡	
Plain	$\begin{array}{ l l l l l l l l l l l l l l l l l l l$	92.7	98.9	
Checked, printed or dyed, and damask or diaper Sailcloth or canvas	$4 \cdot 7$ $16 \cdot 8$	$17 \cdot 2$ $27 \cdot 3$	9·1 23·4	

\* In 1924, firms in Northern Ireland were instructed to return their output of linen piece-goods in the unbleached condition, but in the two previous years the returns included plain piece-goods partly in the bleached and partly in the unbleached condition.

+ Returned in 1924 under the three headings shown in the Table on p. 171, and in 1912 and 1907 as checked, striped, coloured, damask, diaper or other kinds of cloth not included under " plain."

‡ Including the small output in Southern Ireland.

The figures show clearly that in Northern Ireland the quantities of linen piece-goods produced in 1924 were substantially smaller than those produced in the two pre-war years. In Great Britain the reduction appears to have been still greater, though the figures given in the table are not directly comparable, owing to the change in measurement from linear to square yardage. Some information as to the relation between the linear and square yardage of linen piecegoods produced in Great Britain in 1924 was obtained as the result of a voluntary question in the Census schedule. The particulars furnished in response to this question are shown in the following statement :---

Linen piece-goods, unbleached.	Linear yards.	Square yards.
Plain	11,020,354	10,054,396
Damask and/or Jacquard-woven fabrics Diapers, drills, huckabacks, etc. (heddle-woven)	131,170 1,001,082	180,757 1,188,211
Sailcloth or heavy canvas	3,469,313	3,135,848
Total	15,621,919	14,559,212

It will be clear that, if the foregoing particulars are in any way representative of the total production of the various classes of linen piece-goods, the number of linear yards of plain piece-goods and of sailcloth or canvas produced in Great Britain in 1924 would be greater than the number of square yards shown in the main table above, so that, when the production in the three years is reckoned in the same unit of measurement, the amount of the decline in 1924 as compared with 1912 and 1907 appears to have been somewhat less than that shown by the unadjusted figures in the table. Even so, however, the decline in 1924 as compared with 1912 would still be serious, particularly in the case of plain goods. On a like basis of reasoning, the decline in the case of the remaining category (piece-goods checked, printed or dyed, etc.) would be even greater than that shown by the unadjusted figures given in the table.

Further particulars regarding linen manufactures in 1924 are given below :--

en traditation and an interaction	Great	Britain.	Northern Ireland.	
Kind of goods.	Quantity.	Value.	Quantity.	Value.
Linen thread	Tons. 685	£'000 604	Tons. 2,060	£'000. 1,083
Linen piece-goods :— Plain, unbleached , bleached Damask or diaper *Diapers, drills, etc. (heddle-woven) *Damask and/or Jacquard-woven fabrics Checked, printed or dyed Sailcloth or canvas	Mill. sq. yds. 18·2 3·6 2·6 — 2·1 16·8	978 374 318 — 199 1,904	$ \begin{array}{c} \mbox{Mill. sq.} \\ \mbox{yds.} \\ 129 \cdot 4 \\ \hline 9 \cdot 4 \\ \hline 3 \cdot 6 \\ 18 \cdot 1 \\ \hline - \\ \dagger \end{array} $	7,395 793 284 1,441 
TOTAL-WOVEN GOODS	43.3	3,773‡	160.5	9,913
Articles of linen or union cloth :         Handkerchiefs         Plain          Printed          Household articles §          Shirts, collars and cuffs          Other articles of clothing	::	 679 420	·· ·· ··	1,093 809 3,449 970 239
Made-up canvas goods		265		6,560
TOTAL VALUE		5,741‡		17,556

\* Alternative headings for damask or diaper on the Irish schedules : not all firms so classified their goods.

† Included with *plain unbleached piece-goods*; the quantity is very small. ‡ Includes  $\pounds 202,000$  returned by the Jute Trade, of which  $\pounds 185,000$  (5·1 million sq. yds.) represents plain unbleached piece-goods.

§ Including hemmed, hemstitched, scalloped or embroidered doylies, tray-cloths, table-cloths, bed-spreads, pillow-cases, towels, whether made from plain cloth or from damask or other fancy texture, and other like articles.

Including rick covers, tarpaulins, tents and awnings, buckets, etc., and hose-pipe and machinery belting of linen.

Other products.—Other goods, detailed in the following table, were also included as part of their output in 1924 by firms which made their Returns on schedules for the Linen and Hemp Trades.

Great Britain.	Northern Ireland.			
Kind of goods.	Value.	Kind of goods.	Value	
Cordage of hemp or like materials Other hempgoods (including yarns) Jute yarns and manufactures Cotton piece-goods Household articles of cotton Other manufactures of cotton Incandescent gas mantles Upholstery webs Other products	$\begin{array}{c} \pounds'000.\\ 408\\ 441\\ 530\\ 118\\ 194\\ 125\\ 574\\ 111\\ 29\\ \end{array}$	Cordage of hemp or like materials Other hemp goods (yarns) Cotton and other piece-goods Household articles of cotton Cotton handkerchiefs Other textile products Other products	£'000. 57 192 152 411 364 72 13	
TOTAL	2,530	TOTAL	1,261	

Further particulars regarding incandescent gas mantles are given below (p. 163). The other goods shown in the table are dealt with in the Reports on the trades where they are mainly produced.

Work done for the trade.—Firms in Great Britain that made their Returns on schedules for the Linen and Hemp Trades also included in their output the sum of  $\pounds 95,000$  as received for work done for the trade, and firms in Northern Ireland making their returns on schedules for the Linen Trade stated that they received the sum of  $\pounds 386,000$  for work done for the trade, the work consisting, in both cases, chiefly of making-up work.

Value of output of Linen and Hemp Trades free from duplication.— The output of 1924 may be summarised as follows :—

	Great Britain.	Northern Ireland.	United Kingdom.			
Classes of goods and work done.	Return	Returned on schedules for				
	Linen and Hemp Trades.	Linen Trade.	Other trades.			
	£'000.	£'000.	£'000.	£'000.		
Flax and hemp, dressed and tow	244	1,237		1,481		
Flax yarns	1,320	7,924	176	9,420		
Linen thread	604	1,083		1,687		
Woven linen goods	3,571	9,913	202	13,686		
Made-up linen goods, etc	1,364	6,560	daes no - actil 1	7,924		
Incandescent gas mantles	574	and a - test	Sala - ne m	574		
Cordage	408	57	165	630		
Other textile products	1,519	1,191	104	2,814		
Other products	29	13	10	52		
Waste	n lleren the	71		71		
Work done for the trade	95	386	e an <del>te s</del> ector	481		
Total	9,728	28,435	657	38,820		

In the totals shown above there is a considerable amount of duplication, especially between yarns and thread, yarns and piece-goods, and piece-goods and made-up goods. This duplication is inherent in the departmentalised form of Return made by firms in Northern Ireland, but it is also found in Great Britain in cases where weaving firms do not spin or making-up firms do not weave. The information available is not sufficient to enable the probable extent of this duplication to be calculated within narrow limits, but examination of the individual Returns suggests (1) that the duplication between the value of yarns spun and the values of flax dressed, thread made, and piece-goods woven, was probably not less than  $\xi 8,000,000$  and may have been as much as  $\xi 9,000,000$ ; and (2) that there was a further duplication of between  $\xi 4,500,000$  and  $\xi 5,000,000$  between piece-goods and made-up goods. The amount,  $\xi 481,000$ , received for work done for the trade may also be duplicated in the

value of the finished goods. The gross value of goods made and work done returned on schedules for the Linen and Hemp Trades was £38,163,000, and the value free from duplication may be estimated at about £24,500,000, a figure which may be in excess or defect by as much as £1,000,000.

Value of output of linen and hemp goods .- In order to arrive at the value of all linen and hemp goods (other than cordage) produced in 1924, as finished for sale and free from duplication, it is necessary to deduct from the output value of the Linen and Hemp Trades, free from duplication (as estimated in the preceding paragraph), the value (£3,158,000) of the goods, except other hemp goods (including varns), shown in the paragraph entitled Other products above, and to take into account, as possible additions to the total, the value of linen and hemp goods (except cordage) returned on schedules for other trades, together with the value of the work done on linen and hemp goods for merchants or other firms outside the Linen and Hemp Trades. The value of the linen and hemp goods (except cordage) made by firms outside the Linen and Hemp Trades in 1924 was £492,000, but this sum may include the value of products made from (or used in the making of) linen and hemp goods returned by firms in the Linen and Hemp Trades, and to this extent it would not constitute an addition to the output value of the Linen and Hemp Trades, as estimated above. As stated on page 156, the sum of £481,000 was received by firms in the Linen and Hemp Trades for work done for the trade in 1924; and firms that made their Returns on schedules for the Textile Finishing Trades stated that they received £486,000 for treatment of linen yarns and £1,518,000 for treatment of linen piece-goods. The value of the packing work done on linen goods was not separately recorded, but it is estimated at between £50,000 and £75,000. Assuming that the work done by firms in the Linen and Hemp Trades was done on linen and hemp goods, the total amount recorded for work done on such goods was thus, in round figures, about  $f_{2,500,000}$ . The value of this work is included in the value of the linen and hemp goods as returned to the Census of Production in so far as the work was done for firms that made Returns. The firms which made their Returns on schedules for the Linen and Hemp Trades reported that they paid £619,000 for work given out by them to other firms. The difference between this sum and the total amount stated above as received for work done on linen and hemp goods thus represents work done for merchants and other firms outside the Linen and Hemp Trades. This amount may to a small extent represent work done on imported goods, and it may be partly duplicated in the value (£492,000) of linen and hemp goods returned on other schedules, account of which has already been taken. Some of the work done on linen yarns and piece-goods may also be duplicated in the value of the piecegoods and made-up goods already included in the calculation. On

#### LINEN AND HEMP.

#### TEXTILE TRADES.

the other hand, the amount in question may understate the value of the work done on goods produced by firms in the Linen and Hemp Trades in so far as any of the work given out by such firms was given to firms whose work is not included in the above-mentioned total of  $f_{2,500,000.*}$  On the whole, therefore, the total value of linen and hemp goods (other than cordage) produced in 1924, as finished for sale and free from duplication may be estimated at approximately  $f_{23,500,000, a}$  figure which may be in excess or defect by at least as much as  $f_{1,000,000}$ .

Cost of materials and work given out.—The cost of materials used by firms making their Returns on schedules for the Linen and Hemp Trades was returned as  $\pounds 25,075,000$  in 1924, of which, as already stated, from  $\pounds 12,500,000$  to  $\pounds 14,000,000$  represents the value of materials passing in successive stages through the hands of several firms, or, as in the Returns for Northern Ireland, through different departments of the same firm. The cost of materials purchased from outside these trades was, therefore, in round figures, between  $\pounds 11,000,000$  and  $\pounds 12,500,000$ .

The amount paid to other firms for work given out to them was returned as  $\pm 619,000$  in 1924.

Weaving firms with making-up departments in Northern Ireland were asked to state voluntarily the amounts paid by them for such work as "Swiss embroidery, Japanese thread-drawing," etc., done outside the United Kingdom for them, either in their own or in other establishments. Firms with an output in 1924 of made-up goods valued at  $\pm 3,393,000$  or nearly 44 per cent. of the total output of the making-up departments of weaving firms in Northern Ireland, stated that they paid  $\pm 31,000$  for such work.

Net output.—The net output in 1924 of the firms making their Returns on schedules for the Linen and Hemp Trades (whose gross output was valued at £38,163,000) was £12,469,000, that sum representing, without duplication, the total amount by which the value (at works) of the aggregate output exceeded the cost (at works) 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 (excluding outworkers) in the censal year 1924 was  $\pounds 122$ .

Separate particulars regarding net output in the Linen and Hemp Trades in 1907 and 1912 were not extracted.

Raw materials.—Spinning firms were asked to furnish voluntarily particulars regarding the quantities of leading raw materials used by them, and such information was furnished by firms that produced 73.9 per cent. of the total output of flax line yarns and 74.1 per cent. of that of flax tow yarns (or, in sum, 31,790 tons of flax yarns), together with 5,370 tons (68 per cent.) of the 7,900 tons of hemp yarns recorded on schedules for the Linen and Hemp Trades. The kinds and quantities of materials used by these firms was as follows :—

	Tons.		Tons.
Flax, undressed	29,400	Hemp, dressed	480
Flax, dressed	3,220	Hemp, tow	270
Flax, tow	9,440	Flax, hemp and tow, not	
Hemp, undressed	4,430	separately distinguished	6,320
I,		Cotton, coir, ramie, etc.	270

*Exports and imports.*—The relation between production, exports and imports of the chief classes of linen and hemp goods in 1924 is shown in the following table :—

Kind of goods.	Production.	Exports.	Net imports.	Available for consumption in the United Kingdom.
Flax line yarns Flax tow yarns	Tons. 16,850 26,100	Tons. 2,390 1,710	Tons. 3,060 4,420	Tons. 17,520 28,810
Flax yarns, not separately distinguishedseparately Hemp yarnsLinen thread	480 66,910 2,745	680 1,186	4,330 356	480 70,560 1,915
	Mill. sq. yds.	Mill. sq. yds.	Mill. sq. yds.	Mill. sq.yds.
Linen piece-goods : Plain, unbleached Plain, bleached	147·6 3·6	$\begin{array}{c} 24 \cdot 4 \\ 39 \cdot 0 \end{array}$	$\begin{array}{c} 6\cdot 1 \\ 1\cdot 0 \end{array}$	94.1
Checked, dyed, etc., and damask or diaper Sailcloth or canvas	$\begin{array}{c} 35\cdot 8\\ 16\cdot 8\end{array}$	$\begin{array}{c} 37 \cdot 0 \\ 10 \cdot 4 \end{array}$	$\begin{array}{c} 0\cdot 4\\ 3\cdot 6\end{array}$	10.0
Total	203.8	110.8	11.1	104 · 1

The table clearly shows that large quantities of piece-goods returned to the Census by weaving firms as in the unbleached state, were bleached, dyed or otherwise finished before exportation.

The quantities of piece-goods shown under *Production* in the above table and in the following table are exclusive of such piece-goods as were made in Great Britain and used in the works where they were woven in the production of made-up goods.

The figures for the three censal years are given below as far as available. The export figures shown for 1924 are inclusive of 680 tons

<sup>\*</sup> Work to a value of at least  $\pm 31,000$  was given out to firms outside the United Kingdom.

of flax yarns and 1,402,000 square yards of linen piece-goods exported to the Irish Free State, and allowance for these amounts should be made in comparisons with the export figures for the earlier years.

Kind of goods.	Year.	Production.	Exports.	Net imports.	Available for consumption in the United Kingdom.
Flax yarns	 1924 1912 1907	Tons. 43,430 67,070 70,310*	Tons. 4,100 7,900 7,340	Tons. 7,480 17,580 9,220	Tons. 46,810 76,750 72,190*
Linen piece-goods	1924 1912 1907	Mill.sq.yds. 203 · 8 Mill. lin. yds. 371 · 1 363 · 2	Mill.sq.yds. 110.8 Mill. lin. yds. 213.1 185.0	Mill.sq.yds. 11 · 1 Mill. lin, yds. 14 · 5 †	Mill.sq.yds. 104 · 1 Mill. lin.yds. 173 · 5 

\* Estimated.

† Not separately recorded.

British exports of flax yarns were 10.4 per cent. of the production in 1907, 11.8 per cent. in 1912, and 9.4 per cent. in 1924; between 1907 and 1924 they decreased by 44.1 per cent. British spun yarns provided 87.2 per cent. of the home supply in 1907, 77.1 per cent. in 1912 (when imports were exceptionally large), and 84 per cent. in 1924. If, for better comparison with earlier years, the exports of yarns in 1924 be taken exclusive of shipments to the Irish Free State, the ratio of exports to production would be reduced to under 8 per cent., and the decline in the quantity exported in 1924 as compared with 1907 would be over 50 per cent.

The change of measurement from linear yards in 1907 and 1912 to square yards in 1924 prevents any close comparison being made of the three years in respect of production, exports and imports of linen piece-goods. Net imports, however, were of small importance in any of these years. British exports were about 51 per cent. in 1907, and about 57 per cent. in 1912 of the linear yardage produced, and about 54 per cent. in 1924 of the square yardage produced in that year.

#### Employment in 1924.\*

The number of persons (excluding outworkers) employed in the week ended 18th October, 1924, by the firms making their Returns on schedules for the Linen and Hemp Trades, was 103,386, viz., 98,718 returned as operative staff and 4,668 returned as

\* See Tables III A, III B and III C on pp. 168-9 and 172.

administrative, technical and clerical staff. The distribution of these by sex and age was as follows :---

Sex and age.	Operative staff.		techni	strative, cal and ll staff.	Total.		
Week ended 18th October, 1924.	Great Britain.	Northern Ireland.	Great Britain.	Northern Ireland.	Great Britain.	Northern Ireland.	
Males :— Under 18 years Over 18 years	1,049 5,096	3,538 14,333	89 1,036	177 2,149	1,138 6,132	3,715 16,482	
TOTAL-MALES	6,145	17,871	1,125	2,326	7,270	20,197	
Females : Under 18 years Over 18 years	4,918 14,281	$     11,141 \\     44,362 $	39 331	81 766	4,957 14,612	11,222 45,128	
TOTAL-FEMALES	19,199	55,503	370	847	19,569	56,350	
All persons : Under 18 years Over 18 years	5,967 19,377	14,679 58,695	128 1,367	258 2,915	6,095 20,744	14,937 61,610	
Total	25,344	73,374	1,495	3,173	26,839	76,547	

The variation in the total numbers of operatives employed in the course of the year is shown by the following total numbers employed in a week in each month of the censal year :---

			Great B	ritain.	Northern Ireland.		
Week	ended.		18. · 1) 10 - 21	Number of operatives.	Per cent. of average.	Number of operatives.	Per cent. of averagc.
12th January	21. 01			24.931	98.4	67,489	94.3
16th February				25,102	99.0	69,079	. 96.5
15th March				25,486	100.6	70,693	98.8
12th April	6 C	994.05	10.00	25.131	99.2	71,942	100.5
17th May	1999 - CA			25,442	100.4	72,576	101.4
21st June				25,465	100.5	72,150	100.8
19th July	and the	10 43		25,377	100.1	68,919	96.3
16th August	NO NO TH		STAN -	25.387	100.2	72,331	101.0
13th September				25.711	101.5	72,845	101.8
18th October	1.1.1.1			25,344	100.0	73,374	102.5
15th November	r signi		120.021	25,380	100.1	73,925	103.3
13th December	100000	1000	STATE !	25,360	100.1	73,694	102.9

The average for the 12 weeks was 25,343 employed in Great Britain, of whom 6,178 were males and 19,165 were females; the average for Northern Ireland was 71,585, of whom 17,682 were males and 53,903 were females.

The average number of outworkers returned in 1924 was 509 (all females) in Great Britain and 4,771 (566 males and 4,205 females) in Northern Ireland.

#### Mechanical Power in 1924.\*

The prime movers installed in the factories of those firms that made their Returns on schedules for the Linen and Hemp Trades were of the descriptions shown in the following statement, in which engines that were ordinarily in use in the censal year are distinguished from those in reserve or idle in that year. The kilowatt capacity of electric generators which were driven by engines of the several classes are shown, for convenience, in the same table.

Kind of engine.		e movers of engine)	Electric generators (by kind of motive power).		
ATTAL TRACT MAN	Ordinarily in use.	In reserve or idle.	Ordinarily in use	In reserv or idle.	
Reciprocating steam engines Steam turbines Gas and oil engines Water power	H.P. 72,130 5,935 3,357 2,962	H.P. 16,975 2,189 803 345	H.P. 9,838 3,207 337 500	H.P. 3,321 1,634 214 10	
Total	84,384	20,312	13,882	5,179	

About  $31 \cdot 5$  per cent. of the prime movers installed in factories and about  $19 \cdot 4$  per cent. of the electric generators (measured in both cases by capacity) were in factories in Great Britain. Of the capacity of prime movers installed in Great Britain about 75 per cent. was ordinarily in use in 1924; the corresponding figure for Northern Ireland was  $83 \cdot 2$  per cent. About  $70 \cdot 5$  per cent. of the capacity of electric generators installed in Great Britain, and about  $73 \cdot 4$  per cent. of that in Northern Ireland were ordinarily in use in 1924.

In addition to the mechanical power shown in the above table under the heading prime movers there were installed electric motors, driven by purchased electricity, of an aggregate capacity of 7,185 horse-power (1,994 horse-power in Northern Ireland). Of that total, 5,180 horse-power was the capacity of motors ordinarily in use in the censal year and 2,005 horse-power represented the capacity of those in reserve or idle. Electric motors driven, or intended to be driven, from the generators, particulars of which are given in the above table, were also installed to a total capacity of 15,590 horsepower (12,461 horse-power in Northern Ireland), of which 12,771 horse-power were ordinarily in use and 2,819 horse-power in reserve or idle in the censal year. Of the electric motors in Great Britain, 34.6 per cent. of those actuated by purchased electricity and 30.6per cent. of those driven from generators in the works, were in reserve or idle. The corresponding percentages for Northern Ireland were much lower, being 10.5 and 14.9 respectively.

\* See Table IV on pp. 169 and 173.

#### GAS MANTLES.\*

Production, exports and imports.—Firms engaged in the manufacture of incandescent gas mantles returned a total output for 1924 of 305,000 gross, valued at  $\pounds$ 574,000. In 1912 the output was returned by value only at a figure of  $\pounds$ 224,000. For 1907 the output was not recorded separately but formed part of the unclassified products (valued at  $\pounds$ 74,000) of the Heating, Lighting, Ventilating and Sanitary Engineering Trades. The exports of mantles for incandescent lighting, whether collodionised or not, in 1924 were 23,105 gross, valued at  $\pounds$ 48,508; and 164,672 gross, valued at  $\pounds$ 159,440, were imported and retained in this country. The quantity available for consumption in the country was, therefore, about 446,567 gross (over 64 millions), of which about 63 per cent. were of British manufacture. Exports and imports of incandescent mantles were recorded in 1912 by value only, the figures being  $\pounds$ 40,728 for exports and  $\pounds$ 319,357 for retained imports.

Materials and net output.—The total cost of materials purchased and used by the firms engaged in the manufacture of gas mantles was returned as  $\pounds 219,000$  in 1924, and the total net output was thus  $\pounds 355,000$ . The net output per person employed was  $\pounds 162$ .

*Employment.*—The average number of operatives employed by these firms in 1924 was returned as 1,932, of whom 172 were males and 1,760 females; and the number of administrative, technical and clerical staff was 269. There were, therefore, 2,201 persons in all employed in 1924 in the production of gas mantles.

Mechanical power.—The power equipment of these firms in 1924 consisted of prime movers of a total capacity of 390 horse-power, of which 250 horse-power were shown as in use and 140 horse-power as in reserve or idle. In addition, these firms had electric motors of a total capacity of 286 horse-power, driven by purchased electricity; of these motors the capacity in use was 251 horse-power and that in reserve was 35 horse-power. Electric generators of a capacity of 179 kilowatts were also shown, of which the capacity in use was 105 kilowatts and that in reserve was 74 kilowatts. The capacity of electric motors driven from these generators was 221 horse-power, of which 180 horse-power was in use and 41 horse-power in reserve.

\* The particulars of production, employment and power given for 1924 in this section have already been included in the figures relating to the Linen and Hemp Trades.

# TABLES.

# JUTE TRADE (SCOTLAND).

# I.—Summary of results.

Particulars.	Unit.	Scotland.				
Value of goods made and work done (G	TOSS C	output)			£,'000	14,206
Cost of materials used					~ ,,	9,765
Paid for work given out to other firms					"	51
Net output	•••	••			""	4,390
Average number of persons employed			1		No.	34,402
Net output per person employed Mechanical power available :	11: ···			10.1	£	128
Prime movers	1.1	01.16	Sectors,	ine not	H.P.	52,501
Electric motors driven by purchased	electr	icity				7,260

## II.—Production.

A.—TOTAL MAKE OF JUTE YARNS AND JUTE PIECE-GOODS.

altread gas mantles	Kind of goods.	Scotland.
Jute yarns Jute piece-goods		Tons. 181,640 Th. sq. yds. 395,863 (113,460 tons).

B.—OUTPUT SOLD OR ADDED TO STOCK AND WORK DONE.

	Scotlar	nd.
Kind of goods.	Quantity.	Value.
manual deposit that burns said but as stands steer grants	Tons.	£'000.
Jute yarns	124,400	5,652
Jute manufactures :	100.000	= 000
Piece-goods	108,620	7,233
( <i>Th. sq. yds.</i> ) Carpets and rugs	(384,571) 4,030	410
Carpets and rugs	and the second se	410
Made-up jute goods-	(0,100)	179 22
Sacks and bags, new	4,710	295
(Thousands)	(6,294)	Service.
Other sorts		72
Linen manufactures, including manufactures of linen mixed	771 1	and the sea
with other materials, if known as "linens ":	Th. sq. yds.	185
Piece-goods, plain, unbleached	5,113 229	103
", " otner	Tons.	
Cordage, cables, ropes and twine of hemp or like materials	3,190	165
Waste (including worked jute waste)		38
Other products		131
Work done for the trade		8*
7		
TOTAL VALUE OF "GOODS MADE AND WORK DONE (GROSS OUTPUT)		14,206

\* Amount received for work done.

# JUTE.

# III.—Employment.

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

1014A	Ma	des.	Fema	des.	Males and females.	
Kind of staff.	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
Scotland :— Operatives Administrative, technical and clerical staff	2,515 106	10,795 715	3,836 21	22,930 162	6,351 127	33,725 877
TOTAL	2,621	11,510	3,857	23,092	6,478	34,602

### B.—Operatives employed in one week in each month of 1924.

Scotland. (Annual average. Males, 10,756; Females, 22,769; Total, 33,525).

Week ended.	Males.	Females.	Total.	Week ended.	Males.	Females.	Total.
Jan. 12th Feb. 16th March 15th April 12th May 17th June 21st	10,673 10,749 10,687 10,726 10,737 10,860	22,300 22,663 22,516 22,421 22,668 22,762	32,973 33,412 33,203 33,147 33,405 33,622	Aug. 16th Sept. 13th Oct. 18th	10,747 10,752 10,635 10,795 10,811 10,897	23,051 23,021 22,822 22,930 23,024 23,053	33,798 33,773 33,457 33,725 33,835 33,950

## IV.—Mechanical Power.

## PARTICULARS OF PRIME MOVERS, ELECTRIC GENERATORS, AND ELECTRIC MOTORS.

Terror	and the second se		1	Scotl	and.
Power equipm	ent.			Ordinarily in use.	In reserve or idle.
PRIME MOVERS : Reciprocating steam engines Steam turbines Gas engines Petrol and light oil engines Water power TOTAL		··· ··· ···	· · · · · · · · · · · · · · · · · · ·	H.P. 38,998 5,890 306 26 180 45,400	H.P. 3,018 3,900 183 — — 7,101
Total of prime move	ERS INSTA	LLED			501
ELECTRIC GENERATORS : Driven by Reciprocating steam engine Steam turbines Gas engines Petrol and light oil engines Water power		··· ·· ··	•	Kw. 1,843 3,784 13 14 19	Kw. 399 2,750 — — — 2,140
Total Total of electric g	ENERATOR	 S INSTA	 LLED	5,673	3,149
ELECTRIC MOTORS :— Driven by— Electricity generated in ow Purchased electricity	n works	edu.		H.P. 6,384 7,161	H.P. 1,346 99

### LINEN AND HEMP (GREAT BRITAIN).

B.—OUTPUT SOLD OR ADDED TO STOCK AND WORK DONE—continued.

Kind of goods.	Unit.	England and Wales.	Scotland.	Great Britain.
Linen manufactures, including manufac- tures of linen mixed with other				
materials, if known as "linens" :	Press of Press			
Piece-goods-	Th. sq. yds.	471	12,596	13,067
Plain, unbleached	£'000	44	749	793
Plain, bleached {	Th. sq. yds. £'000	417 117	2,994 240	3,411 357
Damask or diaper {	Th. sq. yds. $f'000$	*	*	2,615 318
Checked, printed or dyed {	Th. sq. yds. £'000	449 64	<i>1,624</i> 135	2,073 199
Sailcloth or canvas {	Th. sq. yds. £'000	4,375 440	12,416 1,464	16,791 1,904
Finished thread	<i>Cwts.</i> £'000	*	*	13,700 604
Articles made from linen and union cloth :	110			
spreads, pillow-cases, towels, whether made from plain cloth or damask or	201			
other fancy texture, and other like	-	151	528	679
Made-up canvas goods, viz. : rick covers,		151	520	079
tarpaulins, tents and awnings, buckets,	inter mailines	maria a a		
etc., and including hose - pipe and		A STAR		
machinery belting of linen	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	66	199	265
Shirts, collars and cuffs	"	420	-	420
Ramie manufactures :	Th more	205	1711	305
Incandescent gas mantles	Th. gross £'000	305 574		574
Jute manufactures :	Th. sq. yds.		11,483	11,483
Piece-goods	Tons	-	4,490	4,490
1 lece-goods	£'000	in the second second second	285	285
	Tons	*	*	1,960
Other manufactures	£'000	*	*	136
Jute tow and worked jute waste (in- cluding oakum and waste sold)	£'000	*	*	67
Cordage, cables, ropes and twine of hemp or like materials :	2,000	780 6 6		Tel setal
Under $\frac{1}{4}$ inch diameter—	122.1 1 88.1	. 7:87 G		The Lorente
	Tons	1,780	340	2,120
Of hemp	£'000	175	64	239
Of other materials	Tons	*	*	310
Of other materials	£'000	*	*	76
Of $\frac{1}{4}$ inch diameter and over $\dots$	Tons	1,480		1,480
	£'000	93	-	93
Other manufactures of hemp	£'000	*	*	249
Upholstery webs	£'000	*	*	111
Cotton manufactures :	A DE THE REAL			
Piece-goods of cotton or of cotton mixed		*		110
with other materials			*	118
Household articles of cotton	"	54	140	194
Other cotton manufactures	,,	28	97	125
Other products	11	29		29
Work done for the trade		53	<u>† 42†</u>	95†
Total value of goods made and work done (Gross output)	£'000	2,893	6,835	9,728
WORK DORE (GROSS OUTPOT)	2000	1 2,000	1 0,000	1 0,140

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

† Amount received for work done.

LINEN AND HEMP TRADES (GREAT BRITAIN).

# I.—Summary of results.

Particulars.	Unit.	England and Wales.	Scotland.	Great Britain.
Value of goods made and work done (Gross output)	£,000	2,893 1,641 8 1,244	6,835 4,433 118 2,284	9,728 6,074 126 3,528
Average number of persons employed (excluding outworkers)          Net output per person employed (excluding outworkers)	No.	8,560 145	18,278 125	26,838 131
Mechanical power available :	t.P.	6,714	26,267	32,981
Electric motors driven by purchased electricity	"	857	4,334	5,191

### II.—Production.

A.—TOTAL MAKE OF FLAX AND HEMP YARNS.

Kind of yarns.	England and Wales.	Scotland.	Great Britain.
Flax line yarnsFlax tow yarnsHemp line yarnsHemp tow yarns	Tons.	Tons.	Tons.
	230	5,020	5,250
	290	8,010	8,300
	2,390	650	3,040
	1,830	960	2,790

B.—OUTPUT SOLD OR ADDED TO STOCK AND WORK DONE.

Kind of goods.	Unit.	England and Wales.	Scotland.	Great Britain.
Flax and hemp dressed, etc. :	1 100 1 2 10 10	a strand	and the series of	
Flax and hemp dressed (line)	[ Tons	*	*	700
Flax and hemp dressed (line)	£'000	*	*	162
Flax and hemp tow	Tons	*	*	1,000
Flax and nemp tow	£'000	*	*	82
Yarns :—			annganasa	
	Tons	*	*	2,760
Flax line yarns	£'000	*	*	556
	Tons	*	*	6.020
Flax tow yarns	£'000	*	*	764
80.4	Tons	70	190	260
Hemp line yarns	£'000	10	33	43
Second and the second se	Tons	1.290	400	1.690
Hemp tow yarns	£'000	102	47	149
	Tons		910	910
Jute yarns	£'000		42	42

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

# LINEN AND HEMP (GREAT BRITAIN).

# III.—Employment.

A.—Numbers employed in week ended 18th October, 1924 (excluding outworkers).

		Ma	Males.		Females.		Males and females.	
Kind of staff.		Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.	
England and Wales : Operatives Administrative, etc.*		210 18	1,760 459	1,414 18	6,169 196	1,624 36	7,929 655	
Total		228	2,219	•1,432	6,365	1,660	8,584	
Scotland :— Operatives Administrative, etc.*		839 71	4,385 666	3,504 21	13,030 174	4,343 92	17,415 840	
Total	•••	910	5,051	3,525	13,204	4,435	18,255	
Great Britain :— Operatives Administrative, etc.*	•••	1,049 89	6,145 1,125	4,918 39	19,199 370	5,967 128	25,344 1,495	
TOTAL		1,138	7,270	4,957	19,569	6,095	26,839	

\* Administrative, technical and clerical staff.

# B.—Operatives employed in one week in each month of 1924 (excluding outworkers).

Week ended.	Males.	Females.	Total.	Week ended.	Males.	Females.	Total.
Jan. 12th Feb. 16th March 15th April 12th May 17th	1,767 1,780 1,764 1,787 1,786 1,780	$\begin{array}{c} 6,180\\ 6,204\\ 6,208\\ 6,136\\ 6,104\\ 6,058\end{array}$	7,947 7,984 7,972 7,923 7,980 7,838	July 19th Aug. 16th Sept. 13th Oct. 18th Nov. 15th Dec. 13th	1,773 1,771 1,793 1,760 1,812 1,811	$\begin{array}{r} 6,004\\ 5,884\\ 6,128\\ 6,169\\ 6,236\\ 6,160\end{array}$	7,777 7,655 7,921 7,929 8,048 7,971

Scotland.	(Annual à	verage : .	Males, 4,	.396 ; Females, 1	3,042 ; 2	Total, 17,	438.)
Jan. 12th .	4.348	12,636	16,984	July 19th	4,393	13,207	17,600
Feb. 16th .	1 1 001	12,797	17,118	Aug. 16th	4,428	13,304	17,732
March 15th .	1 171	13,043	17,514	Sept. 13th	4,448	13,342	17,790
April 12th .	4,365	12,843	17,208	Oct. 18th	4,385	13,030	17,415
May 17th .	4,402	13,150	17,552	Nov. 15th	4,393	12,939	17,332
June 21st .	1 1 100	13,225	17,627	Dec. 13th	4,397	12,992	17,389
Great Britain.	(Annual	average :	Males,	6,178 ; Females,	19,165	; Total,	25,343.)
Jan. 12th .	6.115	18,816	24,931	July 19th	6,166	19,211	25,377
Feb. 16th .	6,101	19,001	25,102	Aug. 16th	6,199	19,188	25,387
March 15th .	6 095	19,251	25,486	Sept. 13th	6.241	19,470	25,711
	0,400	10,401	20,100	Dept. 10011	Charles and a state of the stat		and appropriate states and a second
April 12th .	0 150	18,979	25,131	Oct. 18th	6,145	19,199	25,344
April 12th . May 17th .	6,152	A CONTRACTOR OF CONTRACTOR OF CONTRACTOR	the second s			19,199 19,175 19,152	and appropriate states and a second

C.-NUMBER OF OUTWORKERS AT TWO SPECIFIED PERIODS IN 1924.

Compten		January.		July.		
Country.	Males.	Females.	Total.	Males.	Females.	Total.
England and Wales Scotland		482 7	482 7		521 7	521 7
Great Britain	and a star	489	489	-	528	528

### IV.—Mechanical Power.

# PARTICULARS OF PRIME MOVERS, ELECTRIC GENERATORS AND ELECTRIC MOTORS.

And a second second second		nd and iles.	Scot	land.	Great 1	Britain.
Power equipment.	Ordinarily in use.	In reserve or idle.	Ordinarily in use.	In reserve or idle.	Ordinarily in use.	In reserve or idle.
Name and a state of the state	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
PRIME MOVERS :	,245,23	Contractor of	. 1. 2			
Reciprocating steam	3,489	931	18,531	6,778	22,020	7,709
engines Steam turbines	415	60	10,001		415	60
Gas engines	973	305	343	99	1,316	404
Petrol and light oil			and a strategy and the strategy of		and the second second	- commences
engines	23	7		4	23	1
Heavy oil engines	75			1 · · · · · · · · · · · · · · · · · · ·	75	
Water power	426	10	467	45	893	5
TOTAL	5,401	1,313	19,341	6,926	24,742	8,23
	1					
TOTAL OF PRIME MOVERS INSTALLED	6,714		26,267		32,981	
ELECTRIC GENERATORS :	Kw.	Kw.	Kw.	Kw.	Kw.	Kw.
Reciprocating steam						
engines	293	• 20	1,972	938	2,265	95
Steam turbines			. 40	- 10 h	40	13
Gas engines	146	134	54	11	200	13
Petrol and light oil	1	Constant State	and topological	and the second state	. 1	
engines				A CONTRACTOR	7	and the
Heavy oil engines Water power	20		75		95	
water power						
TOTAL	467	154	2,141	938	2,608	1,09
TOTAL OF ELECTRIC					Line .	
GENERATORS IN-	A CONTRACT		1		The second	
STALLED	6	521	3	,079	3	,700
ELECTRIC MOTORS :	H.P.	H.P.	H.P.	H.P.	H.P.	H.P
Driven by—		an-respected-i	past tonic	a antiditaria	(Chiefelde	a presidents
Electricity generated	- Carlos	A State of the	1	21-122	The set of the	100 200
in own works	318	64	1,854	893	2,172	95
Purchased electricity	797	60	2,598	1,736	3,395	1,79

# LINEN TRADE (NORTHERN IRELAND).

# I.—Summary of results.

Particulars.	Unit.	Northern Ireland.		
157 188 - 288 23	Department.	£'000.		
Value of goods made and work done (Gross output) :—	Spinning Thread-making Weaving Making-up	9,480 1,153 10,068 7,734	}£'000	28,435
Cost of materials used :	Spinning Thread-making Weaving Making-up	5,551 672 7,499 5,279	} "	19,001
Paid for work given out to other firms. Net output	", No. £	493 8,941 74,758 120		
Prime movers Electric motors driven by purchased	d electricity .	• ••	H.P.	71,715 1,994

## II.—**Production.**

A.—TOTAL MAKE OF FLAX AND HEMP YARNS.

99 7,913 194	Kind of yarns.			
Flax tow yarns	··· ··	······································	Tons. 11,270 17,450 610 1,460	

B.—Goods made and sold or added to stock or transferred to other departments of the same firms, and work done on commission.

	Northern	Ireland.
Kind of goods.	Quantity.	Value.
Spinning department.	Tons.	£'000.
Flax line yarns	10,720	4.284
Flax tow yarns	17,310	3,640
Hemp line yarns	240	48
Hemp tow yarns	960	144
Cordage, cables, ropes and twine of hemp or like materials	430	57
Flax dressed (line)	3,200	760
Hemp dressed (line)	50	4
Flax tow	4,640	470
Hemp tow	30	3
Waste for paper-making	6,580	63
Spinning waste for purposes other than paper-making		5
Other textile products	an provision	2
1. 1 458		11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
TOTAL VALUE OF GOODS MADE IN SPINNING DEPARTMENT	· · ·	9,480

## B.—Goods made and sold or added to stock or transferred to other departments of the same firms, and work done on commission—continued.

Kind of goods.	Northern Ireland.		
And of Scotter	Quantity.	Value.	
Thread-making department.	Tons.	£'000.	
Finished linen thread	2,060	1,083	
Other textile manufactures	••	70	
TOTAL VALUE OF GOODS MADE IN THREAD-MAKING DEPARTMENT	••	1,153	
Weaving department. Linen piece-goods, unbleached :	141.010	_	
Plain* $\cdots \cdots \cdots$	141,213 129,437	} 7,395	
Damask or diaper $\dots \dots \dots \dots \prod_{i=1}^{Th. lin. yds.}$	7,526 9,434	} 793	
†Diapers, drills, huckabacks, etc. (heddle- ) Th. lin. yds	4,910 3,606	\$ 284	
woven). The sq. yds. The line yds.	14,873	\$ 1,441	
$ \text{†Damask and/or Jacquard-woven fabrics} \begin{cases} Th. lin. yds. \\ Th. sq. yds. \\ Th. lin. yds. \end{cases} $	18,127 2,417	3	
Other piece-goods (mainly cotton) $\cdots \begin{cases} Th. sq. yds. \\ Th. sq. yds. \end{cases}$	2,878	$\left.\right\}$ 152	
Waste	••	3	
TOTAL VALUE OF GOODS MADE IN WEAVING DEPARTMENT	••	10,068	
Making-up department.	1.	£'000	
Articles manufactured from linen or union cloth :		ALEM ZEASE	
Plain (including checked or corded, unhemmed or hem- stitched)		1,093	
Printed (including revered or with open-work, em-	17. 57 P.	809	
broidered or initialled) Household articles (including hemmed, hemstitched,		000	
scalloped or embroidered doylies, table-cloths, tray- cloths, bedspreads, pillow-cases, towels, whether made	SI2. Y . I	1916 211×1	
from plain cloth or damask or other fancy texture, and		3,449	
other like articles)	o qu'inn	0,440	
Outer clothing (including aprons, blouses, skirts, robes, and other like articles, plain or embroidered)	THE R.	221	
Shirts, collars and cuffs	The second	970	
Underclothing, plain or embroidered	12.1	18	
Manufactures of cotton :	August	364	
Household articles		411	
Other products		13 386:	
TOTAL VALUE OF GOODS MADE AND WORK DONE IN MAKING-UP DEPARTMENT	••	7,734	
Total value of goods made and work done (Gross output)		28,435	

\* Includes a very small quantity of sailcloth or heavy canvas.

· •

† Alternative headings to damask or diaper.

‡ Amount received for work done.

# III.—Employment.

A.—NUMBERS EMPLOYED IN WEEK ENDED 18TH OCTOBER, 1924 (EXCLUDING OUTWORKERS).

THE REAL PROPERTY OF	Ma	iles.	Females.		Males and females.	
Kind of staff.	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
Northern Ireland :	3,538	17,871	11,141	55,503	14,679	73,374
clerical staff	177	2,326	81	847	258	3,173
Total	3,715	20,197	11,222	56,350	14,937	76,547

# B.—Operatives employed in one week in each month of 1924 (excluding outworkers).

Northern Ireland. (Annual average: Males, 17,682; Females, 53,903; Total, 71,585.)

Week ended.	Males.	Females.	Total.	Week ended.	Males.	Females.	Total.
Feb. 16th            March 15th            April 12th            May 17th	16,856 17,292 17,673 17,890 18,145 17,925	51,787 53,020 54,052 54,431	67,489 69,079 70,693 71,942 72,576 72,150	Sept. 13th Oct. 18th	17,871 17,971	51,957 54,635 54,981 55,503 55,954 55,653	68,919 72,331 72,845 73,374 73,925 73,694

C.—Number of outworkers at two specified periods in 1924.

Country.	Stratus	January.		July.		
	Males.	Females.	Total.	Males.	Females.	Total.
Northern Ireland	564	4,163	4,727	567	4,248	4,815

# IV.-Mechanical Power.

PARTICULARS OF PRIME MOVERS, ELECTRIC GENERATORS AND ELECTRIC MOTORS.

				Northern	Ireland.
. Power equipment.				Ordinarily in use.	In reserve or idle.
		that the second		H.P.	H.P.
PRIME MOVERS :				50 110	9,266
Reciprocating steam engines	••	••	••	50,110 5,520	2,129
Steam turbines	••	11950		1,785	358
Gas engines	••			93	30
Petrol and light oil engines	•••	••		65	
Heavy oil engines			••	2,069	290
TOTAL				59,642	12,073
	71,715				
TOTAL OF PRIME MOVERS INST	CALLEI	···	••	/1,.	
	1. 14	la mari		Kw.	Kw.
ELECTRIC GENERATORS :				1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Net Carlon
Driven by—				L'anna al a transition	0.000
Reciprocating steam engines				7,573	2,363
Steam turbines				3,167	1,634
Gas engines				124	80
Petrol and light oil engines	••		••	5	10
Water power	••	••	••	405	10
Total				11,274	4,087
TOTAL OF ELECTRIC GENERAL	ORS II	NSTALL	ED	. 15,	361
				H.P.	H.P.
ELECTRIC MOTORS :					
Driven by-					
Electricity generated in own wo	rks	·	• ••	10,599	1,862
Purchased electricity				1,785	209