## COTTON SPINNING

# THE COTTON TRADE.

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### THE COTTON TRADE.

Note.—For information regarding the scope of the Census, instructions given to firms for making returns, and definitions of the terms used in this report, reference should be made to the Introductory Notes on pages v to xviii.

### Introductory.

At the Census for 1930 production in the Cotton Trade was regarded as falling into two distinct divisions, viz. (A) the spinning of yarn, including doubling and the manufacture of sewing cotton, and (B) the weaving trade, which dealt with the subsequent processes up to and including the manufacture of the cloth. Separate forms of inquiry were used for each division and firms engaged both in spinning and in manufacturing were required to complete a return for each department, treating yarn used in their own works as a sale from the spinning department and as a purchase by the weaving department. In respect of the office and management staff, of power equipment and of consumption of electricity, such firms frequently found it impossible to make a reliable estimate of the proportions applicable to each department, and in these cases particulars covering the business as a whole were accepted for these details, on the schedule which covered the most important section of the business. A similar course was followed in 1924, and figures given under the heads in question are therefore, in the main, comparable for the two years in both the spinning and the weaving trades. Bleaching, dyeing and other finishing processes on cotton goods were surveyed separately (see pages 183-208), and manufacturers of cotton goods who maintained finishing departments were required to furnish separate returns for these departments also. A similar method of procedure was followed at the 1924 Census.

Separate reports are accordingly made for the spinning and the weaving sections of the Cotton Trade, but in addition the trade is considered as a self-contained unit for the purpose of some general comparisons between the results for the two years, including an estimate of the value of the output free from duplication.

### COTTON SPINNING.

The following table shows the principal results of the Censuses of 1930 and 1924 in respect of firms in Great Britain that employed more than ten persons on the average :—

Particulars.	1		Unit.	1930.	1924.
Value of goods made and work done (Gros	ss ou	tput)	£'000.	78,624	195,271
Cost of materials used			,,	58,584	147,902
Paid for work given out to other firms			,,	212	456
Net output			,,	19,828	46,913
Average number of persons employed			No.	190,736	252,655
Net output per person employed			£	104 .	186
Mechanical power available :				and the second	ACC - CON
Prime movers			H.P.	948,432	1,090,341
Electric motors driven by purchased ele	etric	itv	,,	198,112	142,920
Number of returns			No.	911	1,114
Number of establishments			,,	1,000	*

#### \* Not available.

In cases where factories were closed in the course of the year, firms were required to furnish returns in respect of that part of the year in which production was carried on. The depression in the cotton spinning trade in the year 1930 is illustrated by the fact that out of 911 returns received for that year no less than 241 related to factories which were open for production for only a portion of the year. These returns recorded a net output of  $\pounds 2,364,000$ , or about 12 per cent. of the aggregate returned by the entire trade.

**Deficiencies in 1930 aggregates.**—The exclusion from the 1930 Census of firms employing not more than ten persons had little effect on the comprehensiveness of the results for the spinning trade. Only 142 persons were employed at the 1924 Census by firms of this class and by the few firms in Northern Ireland, and their gross output amounted to £77,000. For 1930 a somewhat larger number of firms below the prescribed limit appeared to be in existence, the total number of their employees being returned at 601. This larger number comprised many firms that in 1924 employed considerably more than ten persons but closed down in 1930 after a limited period of production.

In addition, 18 firms to which schedules were sent at the 1930 Census, and 13 at that of 1924, furnished no information; these firms either had small businesses or had ceased productive operations before the end of the censal year. Size of firms.—In the following table the main particulars recorded at the Census of 1930 are grouped according to the average numbers of persons shown in the returns :—

Size of fi (averag number employe	ge rs	No. of returns.	Gross output.	Net output.	Average number of persons employed.	Net output per person employed.
	-11.		£'000.	£'000.	Lange and	£
11-24		68	527	133	1,178	113
25-49		106	1,929	496	3,871	128
50-99		179	5,442	1,275	13,228	96
100-199		196	11,454	2,769	28,139	98
200-299		185	18,972	4,343	44,722	97
300-399		67	9,280	2,071	22,866	91
400-499		47	7,842	2,012	20,325	99
500-749		42	9,759	2,698	25,542	106
750-999		13	4,573	1,245	10,628	117
,000 and o	ver	8	8,846	2,786	20,237	138
Тота	L	911	78,624	19,828	190,736	104

The higher ranges contain a number of returns covering more than one factory under the same ownership. It will be seen that about one-half of the total number of persons employed, and the same proportion of the aggregate net output, was recorded by the returns covering 300 or more persons.

**Regional distribution.**—In the following table the results recorded at the Census of 1930 are grouped according to the principal areas\* of Great Britain in which firms in this trade are situated. Corresponding figures for the year 1924 are added for purposes of comparison.

Area.	No. of returns.	Gross output.	Net output.	Average number of persons employed.	. Net output per person employed,
STRUCTURE CONTRACTOR		£'000.	£'000.	TALENALEROD C	£
۲ <b>(</b> 1930	788	67,849	16,403	165,362	99
2 1924	951	173,410	39,337	220,549	178
1930	79	4,281	1,157	9,880	117
3 \ 1924	107	10,672	2,335	13,905	168.
1930	16	4,253	1,668	10,152	164
9 and 10 { 1924	17	7,043	3,723	10,929	341
Other (1930	28	2,241	600	5,342	112
areas 21924	39	4,146	1,518	7,272	209
T	911	78,624	19,828	190,736	104
TOTAL $\begin{cases} 1930\\ 1924 \end{cases}$	1,114	195,271	46,913	252,655	186
		and is a proved of	and the first for the	and the start that the	

Northern Ireland.—Owing to the possible disclosure of information relating to individual firms, no particulars are available for 1930 or for 1924 regarding the small production in Northern Ireland.

\* For particulars see page xviii.

**Sub-divisions of the Spinning Trade.**—In the following table the results of the 1930 Census are grouped according to the chief kind of production carried on by firms in the trade :—

Group.	No. of returns.	Gross output.	Net output.	Average number of persons employed.	Net output per person employed.
inner all the	teres.	£'000.	£'000.	Mill Bill	£
Spinners mainly of :			The Article	The Marthamart	
Waste yarns	97	3,472	1,043	7,161	146
Counts up to 40's	402	44,433	10,363	102,698	101
Counts over 40's and			and they are	12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
up to 80's	183	17,253	4,636	46,842	100
Counts over 80's	42	3,858	1,205	10,860	111
Doublers (including commission doub-	artical and				
ling)	152	8,710	2,353	21,086	112
Other firms	35	898	228	2,089	109
Total	911	78,624	19,828	190,736	104

The figures in this table should not be taken to represent the total value of the output and the numbers employed in the specified processes considered as separate units. Allocation to the group was determined by the class of business in which each firm was principally concerned. A number of firms mainly engaged in spinning yarns up to 40's manufactured in addition the finer counts and *vice versa*, while a large number of spinners also carried out doubling. Details of the principal classes of output recorded as made for sale or on commission by each of these groups are given on page 36.

### Production.

**Total make of single yarn.**—The following table shows the quantity of cotton yarn at the single stage spun in 1930 and 1924.

Single cotton yarn.	193	1924.	
Single cotton yam.	Quantity.	Entries.	Quantity.
Counta anun -	Th. lbs.	No.	Th. lbs.
Counts spun :           Up to 40's              Over 40's and up to 80's	821,600* 185,164	$\begin{array}{c} 634\\ 354\end{array}$	1,021,879 313,707
Over 80's and up to 120's	36,835 3,504	148	55,874
TOTAL—Single yarn spun	1,047,103	61	3,623 1,395,083

\* Including 1,048,000 lbs. returned on 3 schedules for other trades.

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Total production in 1930 was lower than in 1924 by nearly 25 per cent., counts up to 40's showing a fall of about 20 per cent. and counts over 40's one of nearly 40 per cent. In this connection it may be noted that, according to the statistics published by the Liverpool Cotton Association, deliveries of raw cotton to mills declined from about 1,420 million lbs. in 1924 to 1,095 million lbs. in 1930, or by about 23 per cent. The output of the finer counts, over 40's, declined from about 27 per cent, of the total make of all single varn in 1924 to about 22 per cent. in 1930. The proportionately greater importance of the coarser varns in 1930 will have contributed to the decline in the value of net output per head from £186 in 1924 to £104 in 1930, but the main cause of this decline was the fall in prices. Of the counts up to 40's the output returned by waste spinners was 91.7 million lbs., but as waste is understood to be used to some extent by certain spinners of raw cotton, the total quantity of yarn spun from waste may be in excess of this figure.

The average weight of single yarn spun in 1930 per head of the persons employed in this trade was 5,484 lbs., or 32 lbs. less than the corresponding average for 1924. This decrease does not appear to have been due to an increased proportion in 1930 of other goods made. To what extent the decrease may have been due to the greater amount of short time worked in the later year cannot be stated.

The total quantities of single yarn produced in 1930 by the principal groups of spinners were as follows :—

Group.	Counts up to 40's.	Counts over 40's and up to 80's.	Counts over 80's.	Total.
	Th. lbs.	Th. lbs.	Th. lbs.	Th. lbs.
Spinners mainly of :			100 IS 325	
Waste yarns	91,916	artis a	and the state of the second	91,916
Other yarns up to 40's	693,687	49,533	2,459	•745,679
Yarns over 40's and up to		and the second se		
80's	34,424	128,753	18,605	181,782
Yarns over 80's	525	6,878	19,275	26,678
Total	820,552	185,164	40,339	1,046,055

Goods made for sale and on commission.—The following table shows the value and, where available, the quantity of cotton yarn, waste and other products made in 1930 and 1924 for sale and on commission.

	quiz de o		19	30.			195	24.
		Retur	ned on	schedules f	for		-	
Kind of goods.	The Co	tton Spin Trade.	ning	A	ll trades.		Tot	al.
nandi dhebhari anna pidiar sa	Quantity.	Value.	En- tries.	Quantity.	Value.	En- tries.	Quantity.	Value.
Goods made for sale. Cotton yarns (single or doubled) in-	Th. lbs.	£'000.	No.	Th. lbs.	£'000.	No.	Th. lbs.	£'000.
cluding sewing cotton Cotton waste, un-	1,158,811	75,574	879	1,167,931	76,264	898	1,528,318	187,947
manufactured	174,000	1,943	796	202,589	2,342	1,485	237,166	5,585
Cotton yarns, reeled, wound, warped, etc	<b>4,636</b> ★	552 48	$\frac{16}{3}$	12,947 *	$1,160 \\ 56$	22 6	7,026 *	732 390
Total value — Goods made for sale		78,117	-		79,822			194,654
Goods made on	1068	Amount received.	002.71	176,6711	Amount received.	-	-	Amount received.
commission. Cotton yarns (single or doubled) in- cluding sewing		Nie In		Long Willia	ao darta is		the second second	
cotton	9,639	248	71	9,639	248	71	9,946	521
Cotton waste, un- manufactured	20	1	5	22	1	6		_
Cotton yarns, reeled, wound, warped, etc	$\left. \begin{array}{c} 6,690 \\ * \end{array} \right $	$63 \\ 4$	$13 \\ 3$	13,618	$\begin{array}{c} 159\\ 30 \end{array}$	$\begin{array}{c} 25\\12\end{array}$	2,623	35 31
TOTAL AMOUNT RE- CEIVED FOR WORK DONE ON COM- MISSION		316		194 	438	2014 2011 		587

### \* Quantity not stated.

Spinners were required to value their output in the form in which the goods were delivered, and the yarn, therefore, was valued at the single stage only in cases where it was sold at that stage. If yarns were both spun and doubled by the same firm the value returned was that of the doubled yarn (which in some cases may have included purchased yarn) or sewing cotton. As already indicated, firms that carried on both spinning and weaving were required to state the value of all yarns spun, including yarns transferred for use in their own weaving departments, and the values given in such cases did not necessarily represent the market values of single yarns. For these reasons, it is not possible to state the value of the total yarn produced, taken as single yarn.

The following table shows, for each group of firms distinguished in the table on page 33, the quantity and value of the goods made in 1930 for sale or on commission :—

Group.	Cotton yarn (single or doubled) including sewing cotton.		Cotton waste. Other products		Amount received for work done on com- mission.	Total value of output.	
	Quantity.	Value	Quantity.	Value.	Value.	Value.	Value.
	Th. lbs.	£'000.	Th. lbs.	£'000.	£'000.	£'000.	£'000.
Spinners mainly of :		an analy		and the second	C. Martin		
Waste yarns	92,625	3,423	9,178	49		and the second	3,472
Other yarns up to 40's	774,463	43,428	104,438	914	84	7	44,433
Yarns over 40's and	and the second						
up to 80's	195,665	16,462	48,548	777	9	5	17,253
Yarns over 80's	28,939	3,648	9,737	177	27	6	3,858
Doublers	64,828	8,372	2,020	25	82*	231	8,710
Other firms	2,291	241	79	1	589	67	898
TOTAL VALUE	1,158,811	75,574	174,000	1,943	791	316	78,624

\* Including some work done on silk and artificial silk goods (see Table IIB, page 00).

It will be seen that in the case of each of the four groups of spinners the weight of the output of yarns as delivered exceeded the total weight of the single yarn spun in the year (see page 34). The excess amounted to under 1 per cent. for waste spinners, to about 4 per cent. for the large group spinning mainly the coarser counts from raw cotton, to nearly 8 per cent. for the group spinning counts over 40's and up to 80's, and to over 8 per cent. for the group mainly concerned with the finest ranges of counts. The progressive percentage difference between the two sets of figures suggests that it was due primarily to doubling, which is more common with the higher than with the lower counts, by spinners who purchased varn for doubling with varn of their own production. The aggregate difference between the output of yarns as delivered by the four groups of spinners and the total weight of single yarn spun by them in the year amounted to nearly 45 million lbs. In 1924 the quantity of purchased yarn used for doubling by firms of this class was estimated at about 50 million lbs. The quantity of doubled yarn made by spinners and on commission was not ascertained. That made by doublers who purchased their whole supplies of yarn amounted to 82,909,000 lbs. in 1924 and 64,470,000 lbs. in 1930.

The table shows that the quantity of waste produced was greater for the finer than for the coarse counts, the figures for the four specified spinning groups being :—

Group.			Quantity of waste produced.	Proportion of waste to yarns.
	and the second	1 and the	Th. lbs.	Per cent.
pinners mainly of :— Waste yarns	.countries.		9,178	9.9
Other yarns up to 40's			104,438	13.5
Yarns over 40's and up to 80's			48,548	24.8
Yarns over 80's			9,737	33.6

**Prices.**—The average selling values of cotton yarns and cotton waste in 1930 and 1924, as calculated from the Census returns, are shown in the following table :—

Kind of goods.	Average	1930 as a	
Kind of goods.	1930.	1924.	percentage of 1924.
Cotton yarns (single or doubled) includ-	Pence per lb.	Pence per lb.	Per cent.
ing sewing cotton	15.7	29.5	$53 \cdot 2$
Cotton waste, unmanufactured	2.7	5.6	$48 \cdot 2$
Cotton yarns reeled, wound, warped, etc.	21.5	$25 \cdot 0$	86.0

In connection with the marked decline between 1924 and 1930. in the average values of cotton varn and cotton waste, it should be noted that the price of raw cotton, both American and Egyptian. was between 50 and 55 per cent. less in 1930 than in 1924. Further, in the course of the year 1930 prices of yarns and of raw cotton fell very substantially. The quotation for American middling at Liverpool, for example, fell from 9.46d. to 5.34d. per lb., and for American 32's twist from 13<sup>1</sup>/<sub>2</sub>d. to 8<sup>3</sup>/<sub>4</sub>d. per lb. It would appear from the returns that, on a constantly falling market, many firms failed to realise on yarns sold a price sufficient to cover the expenses of their production. The average proportion of net output represented by wages was about 71 per cent. in 1930 and 55 per cent. in 1924, for the Cotton Trade as a whole. It seems open to question whether the margin of 29 per cent. in 1930 (possibly less for the Spinning section of the industry) was adequate to meet other overhead expenses on the average.

Volume of production in 1930 and 1924.—The following table compares the volume of production of the principal items of output recorded by the Cotton Spinning Trade in 1930 and 1924 :—

	To	1930			
Wind of goods	1930.	192	1924.		
Kind of goods.	As returned.	As returned.	At 1930 average values.	percentage of 1924.	
Cotton yarns (single or doubled)	£'000.	£'000.	£'000.	Per cent.	
including sewing cotton	76,264	187,947	97,648	78	
Cotton waste, unmanufactured	2,342	5,585	2,609	88	
Cotton yarns, reeled, wound, warped, etc	1,216	1,122	965	126	
TOTAL	79,822 -	194,654	101,222	79	

**Production, exports and imports.**—The following table shows, in relation to production, the quantities of the principal classes of cotton yarn exported from the United Kingdom in 1930 and 1924\*, together with the quantities imported and retained.

Counts of yarns.	Produc- tion.	Exports	Propor- tion of produc- tion exported.	Retained imports.	Available for use in the United Kingdom.	Share of home market held by British products.
	Th. lbs.	Th. lbs.	Per cent.	Th. lbs.	Th. lbs.	Per cent.
TT= += 102 (1930	821,600	65,901	8.02	9,922	765,621	98.7
Up to 40's $\begin{cases} 1930\\ 1924 \end{cases}$	1,021,985	76,181	7.45	6,842	952,646	99.3
Over 40's 1930	185,164	50,679	27.36	1,697	136,182	98.7
and up to $1930$ 80's $1924$	313,710	61,559	$19 \cdot 62$	779	252,930	99.7
Over 80's ] 1930	36,835	17.819	48.37	57	19,073	99.7
and up to 1924 120's 1924	55,874	23,377	41.83	6	32,503	100.0
a ser and a state of the second second	3,504	2,589	73.88	9	924	99.0
Over 120's $\begin{cases} 1930\\ 1924 \end{cases}$	3,623	1,939	53.51	21	1,705	98.8
m (1930	1,047,103	136,988	13.08	11,685	921,800	98.7
TOTAL $\begin{cases} 1930\\ 1924 \end{cases}$	1,395,192	163,056	11.69	7,648	1,239,784	99.4

**Other products.**—In addition to the output shown in the table of principal products on page 35, the following goods were produced in 1930 and 1924 by firms that made their returns on

 $\ast$  The 1924 production figures include the output of small firms and of firms in Northern Ireland.

schedules for the Cotton Spinning Trade. These goods are dealt with in the reports on those trades in which the principal output was recorded.

Kind of mode	1930.	1924.
Kind of goods.	Value.	Value.
Artificial silk yarn (spun, doubled or otherwise	£'000.	£'000.
worked)	110*	٦.
Woollen and worsted yarns Other goods made (mainly of cotton)	8 73	} 335
	191	335

\* Including a small amount in respect of work done (see Table IIB, page 59).

## Employment and Wages.

**Employment.**—The following table shows the average numbers of persons employed in 1930 and 1924 :—

Persong employed	Males.		Females.		Total.	
Persons employed.	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
1930. Operatives (average for the year) Administrative, technical and clerical staff (as at 18th October)	11,675 343	72,042 5,467	22,417 144	112,228 999	34,092 487	184,270
TOTAL	12,018	77,509	22,561	113,227	34,579	190,736
1924. Operatives (average for the year) Administrative, technical and clerical staff (as at 18th October)	18,414 514	99,136 6,456	31,347 121	146,125 938	49,761 635	245,261 7,394
TOTAL	18,928	105,592	31,468	147,063	50,396	252,655
		A State of the Sta	A REAL PROPERTY AND	China and the state	Contraction of the second	A A STORE STORE

Wages.—The available information as to the amount of wages paid in 1930 and 1924 is given on pages 18 and 19.

## Power.

The following table shows the capacity of prime movers, electric generators and electric motors ordinarily in use and in reserve or idle in 1930 and 1924:—

Power		<sup>'</sup> 1930.			1924.	· A
equipment.	Ordinarily in use.	In reserve or idle.	Total.	Ordinarily in use.	In reserve or idle.	Total.
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
PRIME MOVERS. Reciprocating steam engines Steam turbines Internal combustion	813,977 78,502	35,524 8,834	849,501 87,336	965,283 56,282	56,924 4,234	1,022,207 60,516
engines :— Gas Petrol, kerosene	1,024	923	1,947	2,026	704	2,730
or other light oils Heavy oils Water engines Other prime movers	$\begin{array}{r} 33 \\ 1,220 \\ 5,416 \\ 2,172 \end{array}$	$13 \\ 125 \\ 622 \\ 47$	46 1,345 6,038 2,219	 180 4,101	7 600	7 180 4,701
TOTAL	902,344	46,088	948,432	1,027,872	62,469	1,090,341
ELECTRIC GENERATORS. Driven by	Kw.	Kw.	Kw.	Kw.	Kw.	Kw.
Reciprocating steam engines Steam turbines Internal combus-	44,197 51,048	3,278 12,309	47,475 63,357	37,366 33,099	4,488 801	41,854 33,900
engines :— Gas Heavy oils Water engines Other prime movers	$212 \\ 350 \\ 1,690 \\ 45$	242 75 204	454 425 1,894 45	390 75 2,392 —	162 	552 75 2,392 —
TOTAL	97,542	16,108	113,650	73,322	5,451	78,773
ELECTRIC MOTORS. Driven by	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
Electricity gener- ated in same works Electricity gener- ated in other	90,668	6,227	96,895	75,550	2,411	77,961
works under same ownership Purchased electricity	1,581 177,769	79 20,343	1,660 198,112	 134,386	 8,534	 142,920
Total	270,018	26,649	296,667	209,936	10,945	220,881

# Consumption of fuel.

The following table shows the quantities of coal, coke and electricity recorded as used in 1930 :---

Kind of fuel used.	For power (driving engines).	For other purposes (so far as recorded).	For power and other purposes not separately distinguished.
Coal Coke	Tons. 1,425,899 63	Tons. 271,647* 1,484*	Tons. 17,975 6
Electricity used for all purposes :			B.T.U. (Kwhrs.) '000. 124,534
Generated in other works under s Purchased		··· ··· ···	944 283,993
Тотал	Electricity .		409,471

\* These figures were recorded by firms representing  $83 \cdot 6$  per cent. of the net output of the whole trade.

## COTTON WEAVING.

The following table shows the aggregate figures for 1930 and 1924 returned by firms in Great Britain that employed an average of more than ten persons and made their returns on schedules for the Cotton Weaving Trade :---

Particulars.	Unit.	1930.	1924.
Value of goods made and work done (Gross output) Cost of materials used Paid for work given out to other firms Net output Average number of persons employed Net output per person employed Mechanical power available :—	£'000. " " No. £	79,631 55,774 346 23,511 198,653 118	$172,026 \\ 134,988 \\ 363 \\ 36,675 \\ 275,122 \\ 133$
Prime movers Electric motors driven by purchased electricity Number of returns Number of establishments	H.P. ,, No. ,,	297,391 56,543 1,182 1,291	328,355 37,796 1,456 *

\* Not available.

The total of 1,182 returns received for 1930 includes 196 that related to factories which were open for production for only a portion of the year. These returns recorded a net output of  $\pounds 2,345,000$ , or about 10 per cent. of the aggregate shown for the trade as a whole.

**Deficiencies in 1930 aggregates.**—The aggregate number of persons employed in 1930 by firms that stated that they employed not more than 10 persons on the average was 712, the corresponding figure for 1924 being 393\*. As in the spinning trade, the number so reporting for 1930 included many firms that recorded a considerably higher number of employees at the 1924 Census. The value of the gross output of the small firms in 1924 was £171,000\*, and particulars of the classes of goods included in this figure are given below :—

A State of the state of the	Made f	or sale.	Made on commission.		
Kind of goods.	Quantity.	Quantity. Value.		Amount received.	
		£'000.		£'000.	
Cotton piece-goods :	150 4	2	105		
$\int Th. lin. yds.$	453		125	a support state	
Unbleached, grey $\begin{cases} Th. sq. yds. \\ Th. cwts. \dots \end{cases}$	633 1	$\left.\right\} 26 \left\{$	125 †		
(Th. lin. yds.	513	h c	104	1	
Coloured cottons $\langle Th. sq. yds. \rangle$	449	> 17 \	104	1 1	
Th. cwts	1 8 1 8	I de sice	1 mart + call	1 441	
Yarns reeled and wound	and	22	7	For States	
Other cotton manufactures	a the set of a	77	12	7	
Other goods made and work done		20	Jagar ar	1. 7 · di	
Total		162	A	9	
	A STREET STREET		a hand of the same	1 The second second	

† Less than 500 cwts.

In addition, 37 firms to which schedules were sent at the 1930 Census and 50 at that of 1924 furnished no information; these firms either had small businesses or had ceased productive operations before the end of the censal year.

**Size of firms.**—In the following table the main particulars recorded at the Census of 1930 are grouped according to the average numbers of persons shown in the returns.

\* These figures include the numbers employed by and the output of the few firms in Northern Ireland.

### COTTON WEAVING

(averag number			No. of Gross returns, output.		Average number of persons employed.	Net output per person employed.
			£'000.	£'000.		£
11-24		87	701	213	1,580	135
25-49		143	2,083	658	5,185	127
50-99		293	8,614	2,632	21,450	123
100-199		337	19,170	5,571	47,989	116
200-299		165	16,183	4,729	39,715	119
300-399		76	10,340	3,076	26,401	117
400-499		32 .	5,533	1,706	14,248	120
500-749		25	5,552	1,714	14,355	119
750-999		11	3,240	963	9,418	102
1,000–1,499		8	3,865	988	9,928	100
1,500 and ov	er	5	4,350	1,261	8,384	150
TOTAL		1,182	79,631	23,511	198,653	118

**Regional distribution.**—In the following table the results recorded at the Census of 1930 are grouped according to the principal areas\* of Great Britain in which firms in this trade are situated. Corresponding figures for 1924 are added for comparison.

Area.	No. of returns.	Gross output.	Net output.	Average number of persons employed.	Net output per person employed.
		£'000.	£'000.	19.33	£
$\int 1930$	1,038	72,259	20,905	180,849	116
<sup>4</sup> ··· ···	1,203	154,138	32,247	245,928	131
$\int 1930$	70	3,433	1,052	5,955	177
3 ··· ··· <i>1924</i>	166	12,799	2,756	17,411	158
9 and 10 $\int \frac{1930}{1000}$	34	1,432	591	3,911	151
1924 January 1924	36	1,770	600	4,805	125
Other areas $\dots \begin{cases} 1930 \\ 1024 \end{cases}$	40	2,507	963	7,938	121
1924 United areas	51	3,319	1,072	6,978	154
TOTAL \$ 1930	1,182	79,631	23,511	198,653	118
101AL \ 1924	1,456	172,026	36,675	275,122	133

Northern Ireland.—Owing to the possible disclosure of information relating to individual firms, no particulars are available for 1930 or for 1924 regarding the small production in Northern Ireland.

\* For particulars see page xviii.

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## Production.

**Piece-goods.**—The following table shows the quantity and value of cotton piece-goods produced in 1930 and 1924 :—

		Re	eturned on s	chedules	for all trade	s.
Piece-goods of cotton or of cotton mixed with	Unit.	a alleger Lav	1930.		19	)24.
other materials.		Quantity.	Value.	Entries.	Quantity.	Value.
Goods made for sale :			£'000.	No.		£'000.
Unbleached, grey* {	Th. lin. yds. Th. sq. yds. Th. cwts.	2,812,840 3,054,585 5,895	} 53,515	906 {	5,074,475 5,534,567 9,331	} 145,112
Coloured cottons† {	Th. lin. yds. Th. sq. yds. Th. cwts.	289,833 272,836 643	9,092	299	468,457 442,759 900	} 18,019
Woven from bleached yarn	Th. lin. yds. Th. sq. yds. Th. cwts.	$16,299 \\ 17,520 \\ 68$	610	25	Not re separa	
Pile fabrics	Th. lin. yds. Th. sq. yds. Th. cwts.	35,378 28,771 121	} 1,547	60	Not re- separa	
TOTAL—Cotton piece- goods made for sale	Th. lin. yds. Th. sq. yds. Th. cwts.	3,154,350 3,373,712 6,727	<b>}</b> 64,764	{	5,542,932 5,977,326 10,231	} 163,131
Goods made on com- mission :			Amount received.			Amount received.
Unbleached, grey* {	Th. lin. yds. Th. sq. yds. Th. cwts.	6,823 6,720 16	} 55	35 {	12,765 13,058 33	} 129
Coloured cottons† {	Th. lin. yds. Th. sq. yds. Th. cwts.	18,148 18,317 47	} 127	59 {	33,111 35,676 80	287
Total—Cotton piece- goods made on commission	Th. lin. yds. Th. sq. yds. Th. cwts.	24,971 25,037 63	} 182	{	45,876 48,734 113	} 416

\* Defined in 1930 as "Unbleached grey (including bordered grey dhooties in which the proportion of coloured threads did not exceed 5 per cent. of the total)" and in 1924 as "Unbleached grey (including unbleached dhooties)."

† Manufactured wholly or in part of dyed yarn and commonly known as " coloured cottons."

The above totals include the following amounts returned for 1930 on schedules for trades other than the Cotton Weaving Trade.

Piece goods of cotton or of	1930.						
cotton mixed with other materials.	Sector C	Quantity.	Value.	Entries.			
Goods made for sale :— Unbleached, grey Coloured cottons Woven from bleached yarn Pile fabrics	Th. lin. yds. 7,953 597 236 240	Th. sq. yds. 8,050 680 230 195	Th. cwts. 29 2 2 2 1	£'000. 532 80 15 30	No. 68 10 9 3		
TOTAL—Cotton piece-goods made for sale	9,026	9,155	34	657			
Goods made on commission :—	No.		-	Amount received.	e frank i		
Unbleached, grey Coloured cottons	1,285 202	1,414 275	32	10 2	7		
TOTAL—Cotton piece-goods made on commission	1,487	1,689	5	12			

**Output of piece-goods (quantities).**—Piece-goods made on commission were in most cases woven to the order of merchants and were not, therefore, in general, duplicated in the output of firms that made goods for sale. Adding together the quantities recorded as made for sale and made on commission, the total output in the two years may be stated as follows, with only a trifling margin of error :—

		1930.	1924.
Thousand	linear yards	 3,179,321	5,588,808
Thousand	square yards	 3,398,749	6,026,060
Thousand	cwts	 6,790	10,344

Measured by both square yardage and linear yardage, the output in 1930 was smaller by about 43 per cent. than in 1924. The comparison is affected, though not materially, by the separate specification in the 1930 schedule of tissues of artificial silk mixed with cotton, which were probably recorded under the heading of cotton piece-goods at the 1924 Census (see "Other products," pages 49-50).

The average width of cotton piece-goods showed little change, being 38.5 inches in 1930 and 38.8 inches in 1924, but the figures indicate that a substantial increase took place in the average weight of the goods, i.e., from 5.20 square yards to the lb. in 1924 to 4.47 square yards to the lb. in 1930, or by about 16 per cent. In respect of the piece-goods retained for consumption in this country, the average weight in 1930 was about 39 per cent. greater than in 1924, but, as indicated on page 194, any change in weight resulting from the finishing processes would have a marked effect on this figure. It is clear, however, that a substantial increase took place between 1924 and 1930 in the average weight of the piecegoods retained for use in this country. The available information

is not sufficient to show how far this increase may reflect a general decline in the use of the finer counts of yarn resulting from the substitution of cotton fabrics by those containing artificial silk, or may be due to a relatively greater output of the heavier classes of goods, such as tyre fabrics, etc. It is probable, however, that goods of the latter classes formed a considerably greater proportion of the aggregate retained for use in this country in 1930 than in the earlier year, this aggregate, measured by square yard-age, being about one third less in 1930 than in 1924.

The quantities of cotton piece-goods bleached, printed or dyed in 1930 are shown below (see report on the Textile Finishing Trade, page 188).

	Th. sq. yds.	Th. lin. yds.
Cotton piece-goods :		
Bleached, but not dyed or		
printed	1,107,144	1,053,899
Dyed, but not printed	733,835	724,470
Printed whether dyed or		
not	593,942	603,008
	and the second second	and the state of the
Total	2,434,921	2,381,377
	the second s	and the second s

Without making allowance for any increase or decrease in the square vardage as the result of the finishing processes, the quantity of piece-goods bleached, dyed or printed in 1930 formed about 72 per cent. of the total quantity manufactured in that year. If exports of grey piece-goods and coloured cottons-674,358,000 square yards-be added to the quantity finished, a total of about 3,109,300,000 square yards is obtained, which falls short of the total output by about 289,000,000 square yards. The latter amount, with the addition of the vardage of any fabrics which, being partly or wholly woven of dved varn and subsequently bleached, may be included both in the total of goods bleached and in the exports of coloured cottons, expresses the quantity of grey goods and unbleached coloured cottons available for consumption or further manufacture in this country and represents about 9 per cent. of the year's output of piece-goods. For 1924 the corresponding proportion was 10 per cent.

**Output of piece-goods (value).**—The aggregate value recorded for piece-goods made for sale in 1930 ( $\pounds 64,764,000$ ) should be increased by an amount representing the value of the piece-goods made on commission, which formed, in terms of square yardage, under 1 per cent. of the total. Valued at the same average value as that recorded for goods of the same description made for sale, the selling value of goods made by commission firms may be estimated at about  $\pounds 725,000$ , yielding a total, in round figures, of  $\pounds 65,500,000$  as the value of all cotton piece-goods made in 1930. The corresponding estimate for the year 1924 was  $\pounds 165,000,000$ .

#### COTTON WEAVING

Bleaching, dveing, printing and other finishing processes carried out on cotton piece-goods in 1930 were valued at a total figure of  $\pm 16,100,000$  (see page 188), and if this sum be added to the factory value of the goods at the unbleached stage, there results a total of £81,600,000. In this aggregate no allowance is made for the cost of packing and making-up or for the handling expenses of merchants to whose order the goods were finished and the figure does not, therefore, fully express the value of all cotton piece-goods as sold for home consumption or for export. The estimate for 1924 corresponding to the figure of £81,600,000 was £191,500,000, indicating for 1930 a decline in money value of about 57 per cent. The effect of the absence from the 1930 figures of the output of the smaller firms and of the output in Northern Ireland may be neglected, but the comparison may be affected to some extent by the inclusion in the 1924 figures of certain piece-goods of artificial silk mixed with cotton, to which reference has already been made.

**Other cotton manufactures.**—The following table gives particulars of the value and, where available, the quantity of cotton goods, other than piece-goods, produced in 1930 and 1924 by firms mainly engaged in the cotton manufacturing trade.

			19	30.			1924	1.
Kind of		Return	ned on	schedules f	or		- Total.	
goods.		The Cotton Weaving Trade. All trades.				Total.		
	Quantity.	Value.	En- tries.	Quantity.	Value.	En- tries.	Quantity.	Value
	Th. cwts.	£'000.	No.	Th. cwts.	£'000.	No.	Th. cwts.	£'000.
Machinery belting :- Of cotton Of woven hair Of cotton and	$\begin{array}{c} 10 \cdot 9 \\ 18 \cdot 0 \end{array}$	$\begin{array}{c} 127\\ 317\end{array}$	$\frac{12}{8}$ .	$15 \cdot 2$ $18 \cdot 0$	170 317	19 8		
Of cotton and woven hair not separately dis- tinguished		21	1		50	2		855
Total— Machinery belt- ing	÷	465			537			855
Cotton smallwares (including ribbons,				10.2			-	
trimmings, tapes, webbings, etc.) lowels, quilts, blankets and		1,560	68		1,719	93		1,934
counterpanes, not in the piece		1,110	15		1,117	18		3,379
wadding Ianufactured clean-	Th. lbs.	518	18	Th. lbs.	518	19	Th. lbs.	397
ing waste	29,877	404	34	29,877	404	34	55,197	841
urgical bandages and dressings ther cotton manu-		904	16	•	904	16	]	1,121
factures		997	23		1,301	50	)	
TOTAL VALUE		5,958			6,500			8,527

**Prices.**—The average selling values of piece-goods and certain other cotton manufactures in 1930 and 1924, as calculated from the Census returns, are shown in the following table. It should be borne in mind, however, that these comparisons do not take account of any changes that may have occurred since the earlier year in the quality, type or weight of goods included under the specified descriptions. The average charges for weaving on commission are also included in the table.

Wind of goods	Unit.	Average v	alue.	1930 as a percentage
Kind of goods.	Ume.	1930.	1924.	of 1924.
sent by the factation in	2 - 1990 A.		iner tres	Per cent.
Made for sale :— Cotton piece-goods :—	a la strapp-of	ant annani		A ALCO AN
1	d. per lin. yd.	4.57	6.86	66.6
Unbleached grey	d. per sq. yd.	$4 \cdot 20$	6.29	66.8
topog topog a signal	£ per cwt.	9.08	15.55	58.5
	d. per lin. yd.	7.53	9.23	81.6
Coloured cottons <	d. per sq. yd.	8.00	9.77	81.9
.1924	£ per cwt.	14.14	20.02	70.6
	d. per lin. yd.	4.93	7.06	69.8
All piece-goods	d. per sq. yd.	4.61	6.55	70.4
An prece-goods	£ per cwt.	9.63	15.94	60.4
Machinery belting :				
Of cotton Of woven hair	$\left. \right\} \begin{array}{c} \pounds \text{ per} \\ \text{cwt.} \end{array} \left\{ \right.$	$11 \cdot 18 \\ 17 \cdot 61 $ $14 \cdot 67$	17.89	82.0
Manufactured cleaning waste	d. per lb.	$3 \cdot 25$	3.66	88.8
	0.22 · 8	Average ch	arge.	- akai more
Made on commission :— Cotton piece-goods :—				a tink and
	d. per lin. yd.	1.94	$2 \cdot 43$	79.8
Unbleached, grey	d. per sq. yd.	1.97	$2 \cdot 37$	83.1
	£ per cwt.	$3 \cdot 45$	$3 \cdot 91$	83.1
	d. per lin. yd.	1.68	2.08	80.8
Coloured cottons	d. per sq. yd.	1.66	1.93	86.0
	f f per cwt.	2.71	3.59	76.3

Volume of production in 1930 and 1924.—The following table compares the volume of production of piece-goods and other manufactures of cotton in 1930 and 1924 :—

inne - soor	То	tal productio	on.	C. Maria
Wind of seals	1930. 19		24.	1930 as a
Kind of goods.	As returned.	As returned.	At 1930 average values.	of 1924.
	contres rends	nedbo genus	na Niesten 20	Locoldan.
Made for sale : Cotton piece-goods :	£'000.	£'000.	£'000.	Per cent.
Unbleached grey	53,515	145,112	96,934*	55
Coloured cottons	9,092	18,019	14,747*	62
Manufacture of bleached yarn	610	<u> </u>		
Pile fabrics	1,547	and the second		
Machinery belting of cotton and		0.55		and course
woven hair	537	855	701	77 133
Cotton smallwares Towels, quilts, blankets and	1,719	1,934	1,292†	100
counterpanes	1,117	3,379	2,3791	47
Cotton wool and wadding	518	397	268§	193
Manufactured cleaning waste	404	841	747	54
Other cotton manufactures	2,205	1,121	770	286
TOTAL—Made for sale	71,264	171,658	117,838	60
Made on commission : Cotton piece-goods :	1995		in manufacture	Although te a
Unbleached grey	55	129	107*	51
Coloured cottons	127	287	249*	51
TOTAL-Made on commission	182	416	356	51
TOTAL	71,446	172,074	118,194	60

\* Based on square yardage.

+ Based on average value of unbleached grey piece-goods.

‡ Based on average value of all piece-goods.

§ Based on average import value of cotton linters.

|| Based on average revaluation of other principal products shown.

Other products.—In addition to the output shown in the tables of principal products on pages 44 and 47, the following goods were produced in 1930 and 1924 by firms that made their returns on schedules for the Cotton Weaving Trade. These goods are dealt with in the reports on those trades in which the principal output was recorded.

19518

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#### TEXTILE TRADES

				a grand and	1930.	1924.
Kind of goods.			Value.	Value.		
					£'000.	£'000.
oods made for sale :						AN ALARAS
Cotton yarns (single or		l) includ	ling ;	yarns	Enter Regioner	In the state
reeled, wound, etc					1,035	219
Woollen and worsted man	ufacture	es :—				
Tissues	····				163	46
Other sorts	1000				13	23
Silk manufactures					324	*
Artificial silk manufacture		than aj	ppare	l:		
Wholly of artificial silk	:					
Piece-goods					2,237	56
Other sorts					160	345
Of artificial silk mixed v	vith othe	er mater	ials :-			And the second
Tissues					4,102	1 +
Other sorts (including	smallw	ares)			473	15
Other textile manufacture					203	217
Other goods made		A second second			. 184	73
					Places in Place	20 10.2.11
	TOTAL	VALUE			8,894	979
						A STATE AND A STATE OF A
				1000		T
				Alter and all	Amount	Amount
					received.	received
				State of the	£'000.	£'000.
oods made on commission :-						2000.
Woollen and worsted tissu					18	1
Artificial silk manufacture					95	55
Other textile manufacture			••••		2	00
other textile manufacture	·s				2	2
TOTAL AMOUN	DECET	VED			115	55

\* Not recorded separately.

† Mainly included with cotton piece-goods.

With a few minor exceptions, the output of goods not of cotton produced by the Cotton Weaving Trade increased substantially in 1930. A change in classification precludes comparison between the output of "tissues of artificial silk mixed with other materials" in 1930, when firms were instructed to return such goods under this specific description, and in 1924, when mixtures of artificial silk and cotton were generally shown under the headings for cotton piece-goods. Taking the figures as they stand, the value of manufactures of silk and artificial silk, including mixtures, returned for 1930 formed 9 per cent. of the gross output of the Cotton Weaving Trade.

Waste products sold.—The following sales of manufacturers' waste were recorded by firms in the Cotton Weaving Trade in 1930 and 1924. The figures for 1924 are probably somewhat understated

51

2530

3399

916

owing to the absence of specific provision for these goods in the Census schedule.

Kind of goods.			1930.	1924.
Cotton waste (other waste)	than manuf	actured cleaning  (Th. lbs.)	£'000. 384 (27,383)	£'000. 548 (19,219)
Artificial silk waste		(Th. lbs.)	<b>3</b> (183)	} *
	TOTAL	interest in the second	387	548

### \* Not recorded separately.

### Production, exports and imports.

Quantities of piece-goods.—The total quantity of cotton piecegoods produced in 1930 and 1924, including those made on commission, was as follows :—

		1930.	1924.	
Million linear yards	adi	3,179	5,590	
Million square yards	1	3,399	6,027	
Thousand cwts	The section	6,790	10,348	

The exclusion from the 1930 figures of the production of firms in Northern Ireland and of small firms in Great Britain has no appreciable effect on the comparability of the figures for the two years.

For the purpose of comparison with exports, the different classes of piece-goods must be added together, since a large proportion recorded by the manufacturers against the headings "unbleached, grey" and "manufactured of bleached yarn", are bleached, printed, dyed or otherwise finished before exportation and appear in the trade returns as "dyed", "printed", etc.

The total quantities of cotton piece-goods exported in the years 1930 and 1924 are shown below, together with the corresponding quantities imported and retained. Flags, handkerchiefs, and shawls, not in the piece, are included in the figures shown.

Exports :		1930.	1924.
Million linear yards	 19	2,530	4,649
Million square yards	 1	2,433	4,485
Thousand cwts	 30	4,196	7,371
Retained imports :			
Million linear yards	 	70	31
Million square yards	 	79	36
Thousand cwts	 	285	150

The following table, based on the figures given above, shows the quantities of piece-goods available for consumption in the United 19518 C 3

Kingdom, the proportion which exports formed of the output in each year and the proportion of the home market that was supplied from domestic sources :—

Cotton piece-goods.	Available for consumption in the United Kingdom.		amption Proporti a the product		home- hel	Share of home-market held by British products.	
	1930.	1924.	1930.	1924.	1930.	1924.	
By linear yardage	Mill. lin. yds. 719	Mill. lin. yds. 972	$\begin{array}{c} \operatorname{Per} \\ \operatorname{cent.} \\ 79 \cdot 6 \end{array}$	$\begin{array}{c} \operatorname{Per} \\ \operatorname{cent.} \\ 83 \cdot 2 \end{array}$	$\begin{array}{c} \operatorname{Per} \\ \operatorname{cent.} \\ 90 \cdot 3 \end{array}$	Per cent. 96.8	
By square yardage	Mill. sq. yds.	Mill. sq. yds.	71.6	74.4	92.4	97.7	
by square yardage	1,045 Th. cwts.	1,578 Th. cwts.	11.0		92.4	91.1	
By weight	2,879	3,127	61.8	$71 \cdot 2$	90.1	$95 \cdot 2$	

An important feature of the above table is the wide divergence between the percentages of the total production formed by the exports, as measured by the three different units of quantity in use. As between the figures of linear yardage and square yardage it is known that cotton piece-goods are frequently split before export, and for such part of the exports as was split the linear vardage would be doubled or in some cases trebled in the export record, the square yardage remaining the same. Further some increase in linear yardage may be expected as a result of the finishing processes. While it is impossible to estimate the effect of these factors upon the export aggregates for either year, information supplied by trade organisations suggests that the increase in the linear vardage which took place as the result of splitting may have been some 150 million in 1930; with this addition, the proportion of piece-goods exported would be reduced from 79.6 per cent., as stated in the table, to about 76 per cent. This estimate is, however, based on a number of uncertain factors.

Measured by weight, the proportion exported in 1930 was lower by 9.8 per cent. than when measured by square yardage, whereas in 1924 the percentage by weight was only 3.2 per cent. less than when calculated by square yardage. The average weight of exported piece-goods, although slightly greater in 1930 than in 1924, was very substantially lower in both years than the average of the balance remaining for home use or for manufacture for export as apparel, etc.

1.06 - 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	1930.	1924.
	Sq. yds.	Sq. yds.
Cotton piece-goods.	per lb.	per lb.
Exported	5.18	5.43
Retained for consumption or further		
manufacture in the United		
Kingdom	3.32	4.63

#### COTTON WEAVING

The increase in the average weight was about 39 per cent. in the case of goods retained for use in this country and somewhat less than 5 per cent. for goods exported. The finishing processes may be expected, on the whole, to increase rather than to decrease the average weight of the goods as returned in the grey condition. An increase of about 10 per cent. in average weight resulting from the finishing processes would reduce the increase in the average weight of piece-goods retained for use in this country from 39 per cent. to 30 per cent.

The average widths of piece-goods in the two years were as follows :---

Cotton piece-goods.	1930. Width in	1924. inches.
Total production	38.5	38.8
Exports	34.6	34.7
Retained for use in the United		
Kingdom	53.5	59.0

These figures suggest that in both years the piece-goods retained for use in this country were considerably wider than those sent to overseas markets. How far the widths shown for the home market would be affected by splitting cannot be stated precisely, but using the estimate of an additional 150 million yards resulting from splitting, the average width of the piece-goods retained in 1930 would be about  $43\frac{1}{2}$  inches. The corresponding figure for 1924, resulting from a similar estimate, was nearly 45 inches.

Values of piece-goods.—The following table shows the estimated value of piece-goods made in 1930 and 1924 (inclusive of the costs of dyeing, printing and finishing) in relation to the declared values of exported goods :—

Cotton piece-			1930.	1924.
goods.			In mi	llion £.
Production, ex factory			81.6	191.5
			62.3	155.6
Exports expressed as a perc	enta	ge of		
production			76.3	81.3

In the above table the charges for packing and making-up and the handling expenses and profits of the owners of the goods are not included for either year, so that the figures do not represent actually the proportion exported, but they serve to indicate the relative reduction in the proportion of piece-goods exported to piece-goods made.

Other cotton manufactures.—The following table shows, in relation to production, the exports and retained imports of certain cotton manufactures other than piece-goods in 1930 and 1924. As regards the 1930 figures of production, the deficiencies referred to on page 31 of this report should be borne in mind; the figures for 19518 C 4

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1924 include the recorded output of firms in Northern Ireland and, in addition, the output of small firms.

Kind of goods.	Produc- tion.	Exports.	Propor- tion of produc- tion exported.	Retained imports.	Available for use in the United Kingdom.	Share of home market held by British products.
Machinery belting of cotton and woven hair	$\begin{array}{c} \text{Th.}\\ \text{cwts.}\\ 36{\cdot}6^*\\ 48{\cdot}0 \end{array}$	$\begin{array}{c} \text{Th.}\\ \text{cwts.}\\ 29 \cdot 9\\ 49 \cdot 2 \end{array}$	Per cent. 81.7 	$\begin{array}{c} \text{Th.}\\ \text{cwts.}\\ 0\cdot 1\\ 0\cdot 4 \end{array}$	Th. cwts. 6·8 	Per cent. 98.5 
hair	$266 \cdot 8^{'} \\ 514 \cdot 7^{'}$	$139 \cdot 0$ $193 \cdot 5$	$52 \cdot 1$ $37 \cdot 6$	$4 \cdot 9$ $4 \cdot 6$	$132 \cdot 7 \\ 325 \cdot 8$	96·3 98·6
Cotton smallwares $\dots \begin{cases} 1930\\ 1924 \end{cases}$	£'000. 1,719 <i>1,948</i>	£'000. 245 448	} † {	£'000. 701 1,409	} †	10401 <b>†</b>

\* Including an estimate in respect of belting returned by value only.

<sup>†</sup>These particulars are not inserted owing to the different bases of valuation used for production, exports and retained imports.

# Employment and Wages.

**Employment.**—The following table shows the average numbers of persons employed in 1930 and 1924 :—

D	Ma	les.	Fen	nales.	Total.	
Persons employed.	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
1930. Operatives (average for the year) Administrative, technical and	5,633	60,602	18,902	130,977	24,535	191,579
clerical staff (as at 18th October)	379	5,749	210	1,325	589	7,074
Total	6,012	66,351	19,112	132,302	25,124	198,653
1924. Operatives (average for the year)	9,092	84,511	23,928	182,376	33,020	266,887
October)	550	6,984	210	1,251	760	8,235
Total	9,642	91,495	24,138	183,627	33,780	275,122

Wages.—The available information as to the amount of wages paid in 1930 and 1924 is given on pages 18 and 19.

## Power.

The following table shows the capacity of prime movers, electric generators and electric motors ordinarily in use and in reserve or idle in 1930 and 1924 :---

Power	di companyo s	1930.		1924.			
equipment.	Ordinarily in use.	In reserve or idle.	Total.	Ordinarily in use.	In reserve or idle.	Total.	
PRIME MOVERS.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	
Reciprocating steam engines	004 007	11.000	050 500	077 040	90.100	010 071	
engines Steam turbines	264,807 11,561	11,989 2,000	276,796 13,561	277,942 8,130	32,129 2,550	310,071	
Internal combustion engines :—	11,001	2,000	19,001	0,150	2,550	10,080	
Gas Petrol, kerosene, or	2,074	113	2,187	3,428	639	4,067	
other light oils	106	24	130	66	35	101	
Heavy oils	1,631	30	1,661	104	23	127	
Water engines	2,472	297	2,769	3,098	211	3,309	
Other prime movers	272	15	287	COLLER TO CO	2014 <u></u> 2312	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	
TOTAL	282,923	14,468	297,391	292,768	35,587	328,355	
ELECTRIC GENERATORS.	Kw.	Kw.	Kw.	Kw.	Kw.	Kw.	
Driven by Reciprocating steam	(8542759 <sup>1</sup> )		्त्र जम	ante stat		appen a	
engines	17,404	1,227	18,631	10,780	2,539	13,319	
Steam turbines	6,994	1,500	8,494	4,398	1,532	5,930	
Internal combustion engines :—	f box j	Building B Adda a bar			etereise etereise	din n sin	
Gas Petrol, kerosene, or other light	194	31	225	323	8	33]	
oils	32		32	8		8	
Heavy oils	212		212	17		17	
Water engines	1,039	40	1,079	565		565	
Other prime movers	12		13	1775 775	Trott	-	
TOTAL	25,887	2,799	28,686	16,091	4,079	20,170	
ELECTRIC MOTORS. Driven by	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	
Electricity generated in same works	19,184	1,359	20,543	13,982	484	14,466	
Electricity generated in other works under same owner-	, Beat			o bi bea izo alea		0	
ship	80	15	95	· · · · ·	Sic da		
Purchased electricity	50,751	5,792	56,543	33,992	3,804	37,796	
Тотац	70,015	7,166	77,181	47,974	4,288	52,262	

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#### COTTON SPINNING AND WEAVING

#### TEXTILE TRADES

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### Consumption of fuel.

The following table shows the quantities of coal, coke and electricity recorded as used in 1930:---

Kin	Kind of fuel used.		For power (driving engines).	For oth purposes ( as record	so far	For power and other purposes, not separately distinguished.
Coal Coke			- Louist		Tons. 12,877 30	
Electrici	ity used for	all pur	00868 :	8.1 19 19 19 19 19	12 - 20 422 - 901	B.T.U. (Kwhrs.) '000.
Gen	nerated in sa	ame wor	ks			24,408
		ther wor	ks under same own	ership		89
Pur	chased	111.0		"Room"		53,176
			L-Electricity			77.673

\* These figures were recorded by firms representing 77.9 per cent. of the net output of the whole trade.

### COTTON SPINNING AND WEAVING.

In the following paragraphs the Cotton Trade is treated as a whole and some general comparisons are made between the results of chief importance shown by the two Censuses.

### Value of output of cotton goods free from duplication.

The method used below of estimating the total value of all cotton manufactures with which the Spinning and Weaving Trades are principally concerned (i.e., except cotton lace, cotton hosiery, elastic webbing, cotton ropes and cotton gloves) follows that adopted in the report on the 1924 Census. The figures for 1924 are added for purposes of comparison.

	1930. In Mil		
Cotton yarn exported, value at mill, about Cotton piece-goods made (grey, white,	13.7	26.9	
dyed, printed) Other cotton manufactures made	81.6 12.2	$193.8 \\ 17.2$	
Estimated value of cotton yarns and waste used in other trades	10.0	16.0	
Cotton waste exported, value at mill, about	0.5	2.1	
Total	118.0	256.0	

These totals include the value of the work done on piece-goods by firms in the Textile Finishing Trade, and in 1924 charges made by packing warehouses for packing and making-up, which in that year were estimated at about  $\pounds 2$  million. The total for 1930 may be in excess or defect by  $\pounds 1,000,000$  to  $\pounds 2,000,000$ .

Deducting the charges made for the finishing processes (£16.1 million), the total for 1930 is reduced to £101.9 million. This sum includes a total of £1.7 million in respect of goods of cotton which were returned on schedules for trades other than Cotton Spinning and Weaving, but there is excluded the value of goods not of cotton which were produced by the Cotton Trade amounting to £8.1 million. Making adjustment for these figures, the value free from duplication of the total output of the firms making returns on schedules for the Cotton Spinning and Weaving trades appears to have been about £108 million, which may be compared with the corresponding figure of £225 million for 1924.

# Value of total production in relation to exports and imports.

In the previous section the total value of the production in 1930 of yarns, piece-goods and other manufactures of cotton falling within the scope of the Cotton Spinning and Weaving trades has been estimated at about £118 million free from duplication, to which should be added a sum of possibly £1 million for packing charges. The total value of the exports of goods of the same descriptions in that year amounted to £87,505,000 f.o.b., and the factory value of these goods may be estimated to have been between £78 million and £81 million. From these figures it would appear that the value of the exports represented between 66 per cent. and 69 per cent. of the total value of the production of these goods. For 1924 the corresponding percentage range was estimated to have been between 70 per cent. and 72 per cent.

The total value of retained imports of goods of these classes in 1930 was £10,130,000, or about one twelfth of the estimated value of similar goods manufactured in this country. This proportion compares with the estimate of one thirtieth made in connection with the 1924 Census.

#### Summary.

The following table shows the principal figures for the trade as a whole in 1930 and 1924:-

Particulars.	Unit.	1930.	1924.
Estimated value of output free from duplication Estimated proportion of produc-	£'000	108,000	225,000
tion exported	Per cent.	66-69	70-72
Net output	£'000	43,339	83,588
Wages as a proportion of net			00,000
output (approximate)	Per cent.	71	55
Average number of persons	an a	1.4.000	00
employed	No.	389,389	527.777
Net output per person employed	£	111	158
Total power in use*	Th. H.P.	1,350	1,451
Power in use* per operative	CONCEPT OF TRANSIC	1,000	1,401
employed	H.P.	3.59	2.83

\* See page 24.

## TABLES.

# COTTON SPINNING.

# I.—Summary of results.

Unit.	England and Wales.	Scotland.	Great Britain.
<u>17. AZI 1883</u>	Constants	Det Sugary	and here w
£'000.	74,371	4,253	78,624
,, M	56,023	2,561	58,584
a golde	188	24	212
	18,160	1,668	19,828
No.	180,584	10,152	190,736
£	101	164	104
H.P.	927,879	20,553	948,432
,,	197,121	991	198,112
	£'000. ,, ,, No. £ H.P.	Unit. and Wales. £'000. 74,371 ,, 56,023 ,, 188 ,, 18,160 No. 180,584 £ 101 H.P. 927,879	Unit.         and Wales.         Scotland.           £'000.         74,371         4,253           ,,         56,023         2,561           ,,         188         24           ,,         18,160         1,668           No.         180,584         10,152           £         101         164           H.P.         927,879         20,553

# II.—Production.

A.—TOTAL MAKE OF SINGLE COTTON YARN IN 1930, AS RETURNED ON SCHEDULES FOR THE COTTON SPINNING TRADE.

Single cotton yarn.	England and Wales.	Scotland.	Great Britain.
Counts :	Th. lbs.	Th. lbs.	Th. lbs.
Up to 40's <th< td=""><td></td><td>11,744*</td><td><math display="block">\begin{array}{r} 820,552\\ 185,164\\ 36,835\\ 3,504\end{array}</math></td></th<>		11,744*	$\begin{array}{r} 820,552\\ 185,164\\ 36,835\\ 3,504\end{array}$
TOTAL	. 1,034,311	11,744	1,046,055

\* Owing to the possible disclosure of information relating to individual firms, detailed information for England and Wales and for Scotland cannot be given.

BOutput	SOLD	OR	ADDED	то	STOCK.	
				-		

Kind of goods made and work done.	Unit.	England and Wales.	Scotland.	Great Britain.
Condo mada fan ante	10		in all	Denes Si
Goods made for sale :	Th. lbs.	ntity and no		
including sewing cotton	£'000.	1,135,797 71,425	23,014 4,149	1,158,811 75,574
5	Th. lbs.	170,421	3.579	174.000
Cotton waste, unmanufactured {	£'000.	1,882	61	1.943
Cotton warna) Quantity stated	Th. lbs.	*	*	4,636
Cotton yarns, Quantity stated { reeled, wound, {Quantity not	£'000.	*	*	552
warped, etc. Stated	£'000.	48		48
Artificial silk yarn (spun, doubled (	Th. lbs.	2,410		2,410
or otherwise worked)	£'000.	107		107
2	Th. lbs.	*	*	84
Woollen and worsted yarns	£'000.	*	*	8
Other goods made (mainly of cotton)	£'000.	51	22	73
TOTAL VALUE OF GOODS MADE FOR	18 J	1	1	ter 22
SALE	£'000.	74,052	4,253	78,305
				the second second
Work done on commission :	10			7.6
Work uone on commission :	(Quan	tity and an		red for
Cotton yarns (single or doubled)	Th. lbs.	work 9,639	aone).	0 6 2 0
including sewing cotton	£'000.	248		9,639 248
The second	Th. lbs.	248		240
Cotton waste, unmanufactured	£'000.	1		20
Cotton varns.) Quantity stated	Th. lbs.	6.690		6,690
Cotton yarns, Quantity stated { reeled, wound, Quantity not	£'000.	63		63
warped, etc. stated	£'000.	4		4
Artificial silk yarn (spun, doubled	NUT	-		-
or otherwise worked)	£'000.	3	HEVI DE ME	3
			1	
TOTAL AMOUNT RECEIVED FOR	1			
WORK DONE	£'000.	319		319
TOTAL VALUE OF GOODS MADE AND			and and	2003
WORK DONE (GROSS OUTPUT)	£'000.	74,371	4,253	78,624
	2000.	14,011	4,203	18,024

\* Owing to the possible disclosure of information relating to individual firms, separate particulars for England and Wales and for Scotland cannot be given.

### COTTON SPINNING

## IV.-Power.

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

England Scotland. Great Britain. and Wales. Power equipment. Ordinarily In Ordinarily In Ordinarily In in reserve in reserve in reserve or idle. use. use. or idle. or idle. use. PRIME MOVERS. H.P. H.P. H.P. H.P. H.P. H.P. Reciprocating steam engines ... 808,882 33,724 5.095 1,800 813,977 ... 35,524 Steam turbines ... 71,152 4,434 7,350 4,400 78,502 8,834 Internal combustion engines :---Gas 1,024 873 ... ... \_\_\_\_ 50 1,024 923 Petrol, kerosene or other light oils ... 33 13 33 13 Heavy oils 378 842 25 100 ... 1,220 125 Water engines 100 ... 4,136 522 1,280 5,416 622 Other... ... 2,172 ... 47 2,172 47 ------TOTAL CARGE COM 888,241 39,638 14,103 6,450 902,344 46,088 TOTAL OF PRIME MOVERS INSTALLED 927,879 20,553 948,432 ELECTRIC GENERATORS Kw. Kw. Kw. Kw. Kw. Kw. Driven by Reciprocating steam engines ... 43,585 3,278 612 44.197 3,278 Steam turbines ... 35,348 4,309 15,700 8,000 51,048 12,309 Internal combustion engines :---Gas ... ... 212 242 212 242 S. March Heavy oils 100 250 •••• 75 350 \_\_\_\_\_ 75 Water engines ... 71 1,030 660 133 1,690 204 Other prime movers 45 45 -----TOTAL 80,320 7,900 ... 17,222 8,208 97,542 16.108 TOTAL OF ELECTRIC GENERATORS IN-STALLED ... 88,220 25,430 ... 113,650 ELECTRIC MOTORS. H.P. H.P. H.P. H.P. H.P. H.P. Driven by Electricity generated in same works 66,675 6,177 23,993 50 90,668 6,227 Electricity generated in other works under same ownership ... 1,581 79 ... 1,581 79 ---------Purchased electricity ... 177,345 19,776 ... 424 567 177,769 20,343 TOTAL ... 245,601 26,032 24,417 617 270,018 26,649 TOTAL OF ELECTRIC MOTORS INSTALLED 271,633 25,034 296,667

### TEXTILE TRADES

## III.—Employment.

A.—NUMBERS EMPLOYED IN WEEK ENDED 18TH OCTOBER, 1930.

Damona amalarad	Mal	Males.		ales.	Males and females.		
Persons employed.	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.	
England and Wales :— Operatives Administrative, etc.*	11,367 $329$	69,260 5,159	20,049 136	101,260 873	31,416 465	170,520 6,032	
Total	11,696	74,419	20,185	102,133	31,881	176,552	
Scotland :— Operatives Administrative, etc.* TOTAL	52 14 66	1,201 308 1,509	1,876 8 1,884	8,504 126 8,630	1,928 22 1,950	9,705 434 10,139	
Great Britain :— Operatives Administrative, etc.*	11,419 343	70,461 5,467	21,925 144	109,764 999	<b>33,344</b> 487	$180,225 \\ 6,466$	
TOTAL	11,762	75,928	22,069	110,763	33,831	186,691	

\* Administrative, technical and clerical staff.

B.—Operatives employed in one week in each month of 1930.

	Males and females.				Males and females.			
Week ended	England and Wales.	Scotland.	Great Britain.	Week ended	England and Wales.	Scotland.	Great Britain.	
Jan. 18th Feb. 15th Mar. 15th Apl. 12th May 17th June 21st	$193,891 \\186,173 \\185,674 \\190,936 \\177,262 \\156,644$	9,784 9,787 9,737 9,757 9,719 9,721	203,675 195,960 195,411 200,693 186,981 166,365	July 19th Aug. 16th Sept. 13th Oct. 18th Nov. 15th Dec. 13th	162,998 158,871 162,379 170,520 176,405 172,871	9,732 9,739 9,728 9,705 9,639 9,568	$172,730 \\ 168,610 \\ 172,107 \\ 180,225 \\ 186,044 \\ 182,439 \\ 182,439 \\ 182,439 \\ 182,100 \\ 100 $	
Aver	AGE FOR !	гне 12 мо	 NTHS		174,552	9,718	184,270	

a s

## COTTON WEAVING

## II.—Production.

Goods sold or added to stock and work done.	Unit.	England and Wales.	Scotland.	Great Britain.
Goods made for sale.	BOUL - HALL	(Quantit	ties and net	selling
Piece-goods (of cotton or cotton			values).	
mixed with other materials) in- cluding flags, handkerchiefs and shawls in the piece :—	•	auso alternatio	Lotane	Weathers
Unbleached grey (including bordered grey dhooties in	Th. lin. yds.	2,791,467	13,420	2,804,887
which the proportion of >	Th. sq. yds. Th. cwts.	3,029,976 5,829	16,559 37	3,046,535 5,866
coloured threads did not ex- ceed 5 per cent. of the total).	£'000.	52,571	412	52,983
Manufactured wholly or in part	Th. lin. yds.	283,595	5,641	289,236
of dyed yarn and commonly {	Th. sq. yds.	265,678	6,478	272,156 641
known as coloured cottons.	$\begin{array}{c c} Th. \ cwts.\\ \pounds'000. \end{array}$	628 8,568	13 444	9,012
the surple strange of the second	Th. lin. yds.	*	*	16,063
Manufactured of bleached yarn	Th. sq. yds.	* *	*	17,290
a 1 1 a	Th. cwts.	*	*	; 66
<pre></pre>	£'000.	*	• •	595
	Th. lin. yds.	*	*	35,138
Pile fabrics of cotton	Th. sq. yds.	*	*	28,576 120
and the second second	<i>Th. cwts.</i> £'000.	*	*	1,517
(	Th. lin. yds.	3,125,241	20,083	3,145,324
TOTAL—Cotton piece-goods	Th. sq. yds.	3,340,696	23,861	3,364,557
TOTAL—Cotton piece-goods	Th. cwts.	6,640	53	6,693
man francisco de series	£'000.	63,195	- 912	64,107
Machinery belting :			attente sta	10
Of cotton {	<i>Th. cwts.</i> £'000.	*	*	$\begin{array}{c} 10 \cdot 9 \\ 127 \end{array}$
or 1 ·	Th. cwts.	18.0	to instant	18.0
Of woven hair {	£'000.	317	1999 - 1997 - 198	317
Of cotton and woven hair, not separately distinguished	£'000.	21	20000000	21
Cotton smallwares (including rib-			active and a series	
bons, trimmings, tapes, webbings, etc.)	C. A. She	1,435	125	1,560
Towels, quilts, blankets and counter-	"	. 1,400	120	1,000
panes (not in the piece)	"	1,110	falses	1,110
Cotton wool and wadding Surgical bandages and dressings	>>	518 904	dinasan oli	518 904
Cotton yarns (single or doubled) in-	Th. lbs.	* *	*	15,337
cluding yarns reeled, wound, etc. ∫	£'000.	*	*	1,035
Other cotton manufactures Cotton waste :—	£'000.	929	68	997
Manufactured cleaning waste {	Th. lbs.	28,210	1,667	29,877
I TOP SPOREER CARDON HE ENTED.	£'000. Th. lbs.	380 27,099	$\begin{array}{c c} 24\\ 284 \end{array}$	404 27,383
Other waste {	£'000.	381	3	384
TOTAL VALUE-COTTON MANU-				
FACTURES	£'000.	*	*	71,484
				1

\* Owing to the possible disclosure of information relating to individual firms, separate particulars for England and Wales and for Scotland cannot be given.

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## Consumption of fuel.

TEXTILE TRADES

Kind of fuel used.	England and Wales.	Scotland.	Great Britain.
Coal used for power* Coke used for power*	Tons. 1,415,753 63	Tons. 10,146 —	Tons. 1,425,899 63
	B.T.U. (Kwhrs.) '000.	B.T.U. (Kwhrs.) '000.	B.T.U. (Kwhrs.) '000.
Electricity used for all purposes :	98,096	26,438	124,534
ownership Purchased	944 283,504		944 283,993
TOTAL—Electricity	382,544	26,927	409,471

\* In addition, 17,975 tons of coal and 6 tons of coke (all in England and Wales) were recorded as used for power and for other purposes, not separately distinguished.

# COTTON WEAVING.

# I.—Summary of results.

Particulars.	Unit.	England and Wales.	Scotland.	Great Britain.
man and the real property of the same by	00.0 T 1	COLUMN TO		
Value of goods made and work done	and a second second	-	and the second second	
(Gross output)	£'000.	78,199	1,432	79,631
Cost of materials used	,,	54,961	813	55,774
Paid for work given out to other firms	,,	318	28	346
Net output	,,	22,920	591	23,511
Average number of persons employed	No.	194,742	3,911	198,653
Net output per person employed	£	118	151	118
Mechanical power available :		A State Pro-	18498 TH	M TT MARK
Prime movers	H.P.	293,928	3,463	297,391
Electric motors driven by purchased			BAR PAR	
electricity	,,	55,428	1,115	56,543
	and the second		Factoria antica	THE SECTION

## II.—Production—continued.

Goods sold or added to stock and work done.	Unit.	England and Wales.	Scotland.	Great Britain.	
		•	the second se	tities and	
Woollen and worsted manufactur	es:—	62000		lling values	
Tissues Other manufactures	••••	£'000.	77	86	163 13
Silk manufactures :		"	10	tern Lenat	10
Piece goods :		10 500 22 30	a desta desta	2017 1993	
Of silk or of silk mixed v	vith	0000 113	Part and A DEP HE	and the second	
other materials, if known	i as		asing disa su a	loss applies	
" silks " :—		and the second second	Man to The	a manifest	
Dillar I.	ſ	Th. sq. yds.	2,829	i one <del>, l</del> av,	2,829
Pile fabrics	1	Th. lbs.	403	84060 e <del>n -</del> 62969	403
	5	£'000.	230	*	230
Other sorts		Th. sq. yds. Th. lbs.	*	*	793 130
other sorts	Ĵ	£'000.	*	*	130
Ribbons	C	£'000.	6		6
Smallwares		,,	*	*	12
Artificial silk manufactures of	ther	,,,	The second second		
than apparel :		entransiti provin	STREET, SAME SHARE		
Wholly of artificial silk :		120 10 1 1 1 1 1 1		NO 20 89815 2	
Piece-goods :					
	ſ	Th. sq. yds.	*	*	4,682
Pile fabrics	4	Th. lbs.	*	*	747
	Ļ	£'000.	*	*	377
Other tirrens		Th. sq. yds.	23,386	168	23,554
Other tissues	1	Th. lbs. £'000.	3,485	28	3,513
	5	Th. sq. yds.	1,835 2,153	25	1,860 2,153
Other sorts	J	Th. lbs.	395	e : printed	2,105
		£'000.	160		160
Of artificial silk mixed w	vith		100		100
other materials :	374			TIM a	
	ſ	Th. sq. yds.	86,054	976	87,030
Tissues	4	Th. lbs.	14,939	169	15,108
	Ľ	£'000.	4,017	85	4,102
Smallwares		£'000.	*	*	47
Other sorts	Ş	Th. lbs.	*	*	1,420
	ļ	£'000.	*	*	426
Waste sold	2	Th. lbs.	183	1 1165 19 100	183
)ther textile manufactures	Ľ	£'000. £'000.	3 196	7	3
ther products	•••	the the second	196	an repairing	203 184
		"	104	19(1)[2][2] 207	184
TOTAL VALUE OF GOODS MAD	E	£'000.	77,954	1,392	79,346
			,001	1,002	10,040

\* Owing to the possible disclosure of information relating to individual firms, separate particulars for England and Wales and for Scotland cannot be given.

# COTTON WEAVING

## **II.**—**Production**—continued.

Goods sold or added to stock and work done.	Unit.	England and Wales.	Scotland.	Great Britain.
Goods made and work done on commission. Piece-goods (of cotton or of cotton	Frater A 18, 848		ities and an d for work	
mixed with other materials) in- cluding flags, handkerchiefs and shawls in the piece :—			enter of the	
Unbleached grey (including )	Th. lin. yds.	*	* *	5,538
bordered grey dhooties in	Th. sq. yds.	*	*	5,306
which the proportion of }	Th. cwts.	*	*	13
coloured threads did not ex- ceed 5 per cent. of the total).	£'000.	*	*	45
Manufactured wholly or in	Th. lin. yds.	*	*	17,946
part of dyed yarn and com-	Th. sq. yds.	*	*	18,042
monly known as coloured	Th. cwts.	*	*	45
cottons.	£'000.	* -	*	125
	Th. lin. yds.	21,378	2.106	23,484
Tomas Cotton mises mode	Th. sq. yds.	20,916	2,432	23,348
TOTAL—Cotton piece-goods {	Th. cwts.	52	6	58
in a second assessed assessed in the second	£'000.	143	27	170
Woollen and worsted tissues	£'000.	5	13	18
Artificial silk manufactures other	1079 N		a la sere a sere	1 10 100
than apparel :	COLLECTED COLLEGE	and a constraint		
Wholly of artificial silk :				
Piece-goods :	The age and a	611		611
Pile fabrics	Th. sq. yds. Th. lbs.	96		
	£'000.	8	_	8
}	Th. sq. yds.	1,580		1,580
Other tissues	Th. lbs.	277	19 1 <u></u>	277
	£'000.	18		18
Of artificial silk mixed with other materials :	11	uites and e	and the	and the second
other materials.—	Th. sq. yds.	6,305		6,305
Tissues	Th. lbs.	1,091	and the second second	1,091
dama areabook bus	£'000.	65	ALCON CO.	65
	Th. sq. yds.	333	- and the second	333
Other sorts {	Th. lbs.	62	-	62
	£'000.	4	Charles Torres 10	4
Other textile manufactures	£'000.	2	at the state	2
TOTAL AMOUNT RECEIVED FOR	and a stand	1212.13	294. 398	AND ALLEY
WORK DONE	£'000.	245	40	288
TOTAL VALUE OF GOODS MADE	1. 1. N. 1. 1. M.	786.8	181.188	alf asour
AND WORK DONE (GROSS				
OUTPUT)	£'000.	78,199	1,432	79,631

\* Owing to the possible disclosure of information relating to individual firms, separate particulars for England and Wales and for Scotland cannot be given.

# III.—Employment.

A.-NUMBERS EMPLOYED IN WEEK ENDED 18TH OCTOBER, 1930.

Alle Contract Britans. The Astronomic Contract Britans.	Ma	Males.		Females.		Males and females.	
Persons employed.	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.	
England and Wales :         Operatives         Administrative, etc.*	000	54,363 5,596	16,678 195	116,640 1,239	21,722 $564$	171,003 6,835	
Total	5,413	59,959	16,873	117,879	22,286	177,838	
Scotland :— Operatives Administrative, etc.*	1 10	818 153	533 15	2,620 86	618 25	3,438 239	
Total	. 95	971	548	2,706	643	3,677	
Great Britain : Operatives Administrative, etc.*	000	55,181 5,749	17,211 210	119,260 1,325	22,340 589	174,441 7,074	
TOTAL	. 5,508	60,930	17,421	120,585	22,929	181,515	
	1000			The second second		Carl Carlos	

\* Administrative, technical and clerical staff.

B.—Operatives employed in one week in each month of 1930.

W	Male	es and fema	ales.	Week	Males and females.		
Week ended	England and Wales.	Scotland.	Great Britain.	ended	England and Wales.	Scotland.	Great Britain
Jan. 18th	214,046	4,171	218,217	July 19th	172,655	3,557	176,212
Feb. 15th	208,316	4,084	212,400	Aug. 16th	166,113	3,600	169,713
Mar. 15th	208,552	3,921	212,473	Sept. 13th	164,055	3,515	167,570
April 12th	211,357	3,834	215,191	Oct. 18th	171,003	3,438	174,441
May 17th	202,470	3,507	205,977	Nov. 15th	174,716	3,532	178,248
June 21st	181,721	3,397	185,118	Dec. 13th	179,879	3,504	183,383
	Avera	GE FOR THI	E 12 MONT	HS	187,907	3,672	191,579

# IV.—Power.

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

Power		England and Wales.		ind.	Great Britain.	
agninment	Ordinarily in use.	In reserve or idle.	Ordinarily in use.	In reserve or idle.	Ordinarily in use	In reserve or idle.
Martine Pariste	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
PRIME MOVERS. Reciprocating steam engines Steam turbines Internal combustion engines :—	$262,458\\11,561$	$11,909 \\ 2,000$	2,349	80	264,807 11,561	11,989 2,000
Gas Petrol, kerosene or other light	1,930	113	144		2,074	113
or other light oils Heavy oils Water engines Other	106 1,521 1,792 172	24 30 297 15	110 680 100		$     \begin{array}{r}       106 \\       1,631 \\       2,472 \\       272     \end{array} $	24 30 297 15
Total	279,540	14,388	3,383	80	282,923	14,468
TOTAL OF PRIME MOVERS IN- STALLED	293,928		3,463		297,391	
ELECTRIC GENERATORS. Driven by	Kw.	Kw.	Kw.	Kw.	Kw.	Kw.
Reciprocating steam engines Steam turbines Internal combus- engines :—	16,956 6,994	1,227 1,500	448		17,404 6,994	1,227 1,500
Gas Petrol, kero- sene or other	182	31	12	_	194	31
light oils	32		1 108		32	
Heavy oils	137		75	E MORE THE	212	TOTION
Water engines Other prime movers	437 12	1	602	40	1,039 12	40
TOTAL	24,750	2,759	1,137	40	25,887	2,799
TOTAL OF ELEC- TRIC GENERA- TORS INSTALLEI	and a state of the second second	7,509	1,	177	28,	686

Power	Englan Wa		Scotl	and.	Great Britain.		
equipment.	Ordinarily in use.	In reserve or idle.	Ordinarily in use.	In reserve or idle.	Ordinarily in use.	In reserve or idle.	
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	
ELECTRIC MOTORS. Driven by Electricity gener- ated in same	al riem Gi. 30						
works Electricity gener- ated in other works under same	18,518	1,359	666	- 90 (R) - 100	19,184	1,359	
ownership	80	15	0.0.0-	-	80	15	
Purchased electri- city	49,733	5,695	1,018	97	50,751	5,792	
Тотац	68,331	7,069	1,684	97	70,015	7,166	
TOTAL OF ELEC- TRIC MOTORS INSTALLED	75,	,400	1,7	/81	77,	.181	

## IV.—Power—continued.

# Consumption of fuel.

Kind of fuel used.	England and Wales.	Scotland.	Great Britain.
Coal used for power* Coke used for power*	Tons. 571,576 522	Tons. 11,416 1,178	Tons. 582,992 1,700
	B.T.U. (Kwhrs.) '000.	B.T.U. (Kwhrs.) '000.	B.T.U. (Kwhrs.) '000.
Electricity used for all purposes :		TRUDO XO	Haden -
Generated in same works	23,751	657	24,408
Generated in other works under same	THE SHALL	100 P. 18200	NAMES OF TAXABLE PARTY.
ownership	- 89	<u></u> 8843	89
Purchased	52,562	614	53,176
TOTAL—Electricity	76,402	1,271	77,673

\* In addition to the quantities shown, 12,877 tons of coal (10,773 tons in England and Wales and 2,104 tons in Scotland) and 30 tons of coke (all in England and Wales) were recorded as used for power and other purposes, not separately distinguished.