

## THE ELASTIC WEBBING TRADE.

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## THE ELASTIC WEBBING TRADE.

## Introductory.\*

The Tables on pages 251 to 252 are based on Returns received from firms in England and Wales whose business in 1924 consisted wholly or mainly in the manufacture and making-up of elastic webbing. The number of such separate Returns was 41. In the case of four firms to which schedules were sent, no Returns were furnished, but it is estimated that these firms employed only about 20 people and that their net output did not exceed £2,000.

The following table shows the main results of the Censuses of 1924, 1912 and 1907. The figures for the three years are believed to be fully representative and cover substantially the same ground, the trade being confined to England and Wales in all three years, and the number of persons employed by firms exempted in 1912 on the ground of the small number of employees, being only 26. In considering this and the other tables in the Report it should be borne in mind that 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.

Particulars.	Unit.	1924.	1912.	1907.
Value of goods made and work done (Gross output) .. .. .	£'000	1,926	1,127	821
Cost of materials used .. .. .	"	1,017	656	522
Paid for work given out to other firms .. .. .	"	50	23	16
Net output .. .. .	"	859	448	283
Average number of persons employed .. .. .	No.	5,535	6,220	4,170
Net output per person employed .. .. .	£	155	72	68
Mechanical power available :—				
Prime movers .. .. .	H.P.	1,128	1,819	1,501
Electric motors driven by purchased electricity .. .. .	"	1,762	576	(not recorded)

*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 they involve duplication (i.e. double or multiple records of the same articles or processes by different firms concerned in different stages of manufacture) inasmuch as goods made by some of the firms form the materials of other firms in the trade, and are included in the value of the output recorded by both. When this duplication (the amount of which is discussed on page 246) is eliminated, the value of the output in 1924 of the Elastic Webbing Trade as a whole is found to be between £1,886,000 and £1,926,000. Similarly, when the figure representing the cost of materials used in 1924 is adjusted by excluding purchases of the products of other firms in the Elastic Webbing Trade, the cost of the materials purchased from outside that trade and worked up into its products is found to be between £977,000 and £1,017,000.

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

## Production.

*Elastic goods.*—The following statement shows the recorded output in 1924 of the principal products of the Elastic Webbing Trade, whether returned on schedules for that trade or on schedules for other trades, with corresponding aggregates for the years 1912 and 1907, so far as available.

Goods sold or added to stock.	1924.		1912.	1907.
	Quantity.	Value.	Value*	Value*
Elastic cords and braids .. ..	Th. linear yds. 152,452†	£'000. 494†	} 787	} 663
Elastic webs :—				
Up to 2 inches .. ..	49,986	672		
Above 2 inches .. ..	4,453	247		
Manufactures of elastic webs (excluding suspenders, braces, belts, etc.) ..	..	250	86	138
<b>TOTAL VALUE</b> .. ..	..	1,663	873	801

\* Quantity not recorded.

† Includes £4,000 (1,285,000 linear yards) returned on schedules for the Billiard Table and Sports Requisites Trades, the Report on which forms part of a separate volume.

*Other products.*—In addition to the elastic goods shown above, firms making Returns on schedules for the Elastic Webbing Trade reported that they made other goods to the value of £290,000, as detailed in Table II, p. 251. These goods, being of kinds mainly produced by other trades, are dealt with in the Reports on those trades.

*Value of output free from duplication.*—The gross output value of the trade (£1,926,000) involves duplication in so far as the manufactures of elastic webbing comprised therein were made from webbing included as such. The value of the goods made from elastic webbing which were manufactured by firms who did not themselves make webbing aggregated £105,000, and the cost of some or all of the webbing used in producing these manufactures may represent duplication. The cost of this webbing may be estimated at £40,000; and the total value of the output of the trade in 1924, free from duplication\*, was thus between £1,886,000 and £1,926,000. The corresponding estimate for 1907 was between £751,000 and £821,000.

*Cost of materials and work given out.*—The cost of materials used by firms making their Returns on schedules for the Elastic Webbing Trade was returned as £1,017,000 in 1924, a sum which involves a possible duplication of £40,000. The net cost of materials therefore lay between £977,000 and £1,017,000; the corresponding net figure for 1907 lay between £452,000 and £522,000.

The amount paid to other firms for work given out to them was returned as £50,000 in 1924, £23,000 in 1912 and £16,000 in 1907.

\* The amount recorded as received for work done for the trade in 1924 was so small that any duplication arising from the inclusion of the value of such work in the value of the goods made by the firms that paid £50,000 for work given out, is negligible.

*Net output.*—The net output in 1924 of the firms making their Returns on schedules for the Elastic Webbing Trade (whose gross output was valued at £1,926,000) was £859,000, that sum representing, without duplication, the total amount by which the value (at factory) of the aggregate output exceeded the cost (at factory) of the materials used and the amount paid to other firms for work given out to them.

The net output per head of persons employed in the censal year 1924 was £155, as compared with £72 in 1912, and £68 in 1907.

*Kind of materials used.*—Voluntary information as to the quantities of the principal kinds of materials used in 1924 was furnished by all but a few of the firms in the Elastic Webbing Trade. The particulars are as follows :—

Kind of materials.	lb.
Cotton yarns .. ..	2,623,700
Rubber .. ..	539,600
Silk .. ..	23,400
Artificial silk .. ..	359,700
Woollen and worsted yarns	12,900

The total output of the firms furnishing the above particulars was valued at £1,762,000 or 91·5 per cent. of the total output of the trade, and consisted of the following :—

Products.	Output of firms furnishing particulars of materials used.	Proportion of total output of trade.
	Th. linear yds.	Per cent.
Elastic cords and braids .. ..	133,259	88·2
Elastic webs :—		
Up to 2 inches .. ..	46,265	97·4
Above 2 inches .. ..	4,178	93·8
Manufactures of elastic webs ..	£275,000	84·6
Other products .. ..	£197,000	91·6

Information corresponding to the above was not obtained for the years 1912 and 1907.

*Exports and imports.*—No comparison can be made between the production and the exports and imports of manufactures of elastic webs, owing to the absence of separate particulars of exports and imports of the miscellaneous goods covered by this description.

## 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 Elastic Webbing Trade 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, 3,634 operatives or 69 per cent. of the total of 5,251 operatives for the trade as a whole, and their net output totalled £598,000 or 70 per cent. of the aggregate net output of £859,000 for the trade as a whole. The total wage-bill of these firms, as returned to the Ministry of Labour, was £323,000, representing about 54 per cent. of their aggregate net output.

### Employment.

The detailed information relating to employment in 1924 is summarised in Table III on pages 251-2. 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.

Average number.	Males.		Females.		Males and females.	
	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
	<b>1924.</b>					
Operatives .. .. .	291	1,592	943	3,499	1,234	5,091
Administrative, etc. .. .. .	13	298	14	146	27	444
<b>TOTAL .. .. .</b>	<b>304</b>	<b>1,890</b>	<b>957</b>	<b>3,645</b>	<b>1,261</b>	<b>5,535</b>
<b>1912.</b>						
Wage earners .. .. .	261	1,668	1,399	4,259	1,660	5,927
Salaried .. .. .	20	239	8	54	28	293
<b>TOTAL .. .. .</b>	<b>281</b>	<b>1,907</b>	<b>1,407</b>	<b>4,313</b>	<b>1,688</b>	<b>6,220</b>
<b>1907.</b>						
Wage earners .. .. .	227	1,351	789	2,572	1,016	3,923
Salaried .. .. .	16	212	3	35	19	247
<b>TOTAL .. .. .</b>	<b>243</b>	<b>1,563</b>	<b>792</b>	<b>2,607</b>	<b>1,035</b>	<b>4,170</b>

The numbers of operatives recorded month by month in 1924 ranged from 167 above the average, in September, to 336 below the average, in January (see Table IIIB, page 252).

### Mechanical Power.

The detailed information relating to mechanical power in 1924 is summarised in Table IV, page 252. The following table sets out the particulars for the three censal years relating to the capacity and kinds of *prime movers*, and the capacity of *electric generators* installed.

Power equipment.	1924.			1912.	1907.
	Ordinarily in use.	In reserve or idle.	Total.	Total.	Total.
<b>PRIME MOVERS:—</b>					
Reciprocating steam engines	H.P. 490	H.P. 174	H.P. 664	H.P. 967	H.P. 1,298
Gas engines .. .. .	412	52	464	821	} 152
Petrol and light oil engines ..	—	—	—	—	
Heavy oil engines .. .. .	—	—	—	31	
Water power .. .. .	—	—	—	—	—
<b>TOTAL .. .. .</b>	<b>902</b>	<b>226</b>	<b>1,128</b>	<b>1,819</b>	<b>1,501</b>
<b>ELECTRIC GENERATORS:—</b>					
Driven by—	Kw.	Kw.	Kw.	Kw.	Kw.
Reciprocating steam engines	122	50	172	248	228
Gas engines .. .. .	78	13	91	} 131	—
Water power .. .. .	—	—	—		—
<b>TOTAL .. .. .</b>	<b>200</b>	<b>63</b>	<b>263</b>	<b>379</b>	<b>228</b>

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

Electric motors.	1924.			1912.
	Ordinarily in use.	In reserve or idle.	Total.	Total.
	<b>Driven by—</b>			
Electricity generated in own works ..	H.P. 142	H.P. 93	H.P. 235	H.P. 207
Purchased electricity .. .. .	1,311	451	1,762	576

Corresponding information was not required for 1907. The total number of Board of Trade units of electricity purchased for power and lighting purposes in that year was returned as 74,000.

### Machinery Equipment.

In response to a request for voluntary information as to the kinds and numbers of machines at factories, particulars were furnished by firms that produced the following output:—

Products.	Output of firms furnishing particulars of machinery.	
	Quantity.	Proportion of total output of the trade.
Elastic cords and braids .. .. .	Th. linear yds. 133,259	Per cent. 88.2
Elastic webs:—		
Up to 2 inches .. .. .	46,316	97.5
Above 2 inches .. .. .	4,178	93.8
Non-elastic tapes and braids (of material other than wool) .. .. .	10,490	97.9
Manufactures of elastic webs .. .. .	£275,000	84.6
Other products .. .. .	£173,000	92.5

The value of the products shown in the above statement was £1,396,000, and other goods valued at £369,000 were also returned, the total value of the output of these firms being £1,765,000 or 91.6 per cent. of that of the gross output of the trade.

The kinds and numbers of machines at the works of these firms at the end of 1924 were as follows :—

Kind of machines.	In use.	Idle.	Total.	Percentage idle.
	Number.	Number.	Number.	Per cent.
Winding machines :—				
Spindles .. .. .	9,906	2,839	12,745	22.3
Looms :—				
Shuttles making webs of over 2 inches	4,189	2,175	6,364	34.2
Shuttles making webs of 2 inches and under .. .. .	33,309	16,700	50,009	33.4
Braiding machines .. .. .	17,988	8,910	26,898	33.1
Finishing machines .. .. .	54	12	66	18.2
Sewing machines :—				
Power .. .. .	347	147	494	29.8
Hand .. .. .	21	—	21	—

## TABLES.

Note.—No production was recorded in Scotland or Northern Ireland.

## I.—Summary of Results.

Particulars.	Unit.	England and Wales.
Value of goods made and work done (Gross output) ..	£'000	1,926
Cost of materials used .. .. .	"	1,017
Paid for work given out to other firms .. .. .	"	50
Net output .. .. .	"	859
Average number of persons employed .. .. .	No.	5,535
Net output per person employed .. .. .	£	155
Mechanical power available :—		
Prime movers .. .. .	H.P.	1,128
Electric motors driven by purchased electricity ..	"	1,762

## II.—Production.

Goods sold or added to stock.	England and Wales.	
	Quantity.	Selling value.
	Th. linear yds.	£'000.
Elastic cords and braids .. .. .	151,167	490
Elastic webs :—		
Up to 2 inches .. .. .	47,513	649
Above 2 inches .. .. .	4,453	247
Manufactures of elastic webs :—		
Suspenders, braces, belts, etc. .. .. .	..	75
Other manufactures .. .. .	..	250
Non-elastic webbing :—		
Quantity stated .. .. .	6,477	40
Quantity not stated .. .. .	..	31
Non-elastic tapes and braids (of material other than wool) .. .. .	10,721	28
Woollen braids and smallwares .. .. .	..	16
Cordage and twine (under ½ inch diameter) ..	7,266	11
Other textile manufactures and work done ..	..	89
TOTAL VALUE OF GOODS MADE AND WORK DONE (GROSS OUTPUT) .. .. .	..	1,926

## III.—Employment.

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

Kind of staff.	Males.		Females.		Males and females.	
	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
England and Wales :—						
Operatives .. .. .	298	1,629	976	3,622	1,274	5,251
Administrative, technical and clerical staff .. .. .	13	298	14	146	27	444
TOTAL .. .. .	311	1,927	990	3,768	1,301	5,695

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

England and Wales. (Annual average : Males, 1,592 ; Females, 3,499 ; Total, 5,091).

Week ended	Males.	Females.	Total.	Week ended	Males.	Females.	Total.
Jan. 12th ..	1,520	3,235	4,755	July 19th ..	1,612	3,605	5,217
Feb. 16th ..	1,549	3,281	4,830	Aug. 16th ..	1,605	3,594	5,199
Mar. 15th ..	1,554	3,384	4,938	Sept. 13th ..	1,629	3,629	5,258
April 12th ..	1,577	3,468	5,045	Oct. 18th ..	1,629	3,622	5,251
May 17th ..	1,602	3,572	5,174	Nov. 15th ..	1,627	3,540	5,167
June 21st ..	1,603	3,547	5,150	Dec. 13th ..	1,603	3,503	5,106

## IV.—Mechanical Power.

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

Power equipment.	England and Wales.	
	Ordinarily in use.	In reserve or idle.
<b>PRIME MOVERS:—</b>	H.P.	H.P.
Reciprocating steam engines .. .. .	490	174
Gas engines .. .. .	412	52
<b>TOTAL .. .. .</b>	<b>902</b>	<b>226</b>
<b>TOTAL OF PRIME MOVERS INSTALLED ..</b>	<b>1,128</b>	
<b>ELECTRIC GENERATORS:—</b>	Kw.	Kw.
Driven by—		
Reciprocating steam engines .. .. .	122	50
Gas engines .. .. .	78	13
<b>TOTAL .. .. .</b>	<b>200</b>	<b>63</b>
<b>TOTAL OF ELECTRIC GENERATORS INSTALLED</b>	<b>263</b>	
<b>ELECTRIC MOTORS:—</b>	H.P.	H.P.
Driven by—		
Electricity generated in own works .. ..	142	93
Purchased electricity .. .. .	1,311	451