

THE GLASS TRADE, THE BUILDING MATERIALS AND
MONUMENTAL MASONRY TRADES, AND
THE ROOFING FELTS TRADE.

Contents.

	Page
INTRODUCTORY	233
Summary of results	234
Qualifications affecting comparisons	235
Value of output and cost of materials	235
PRODUCTION	235
Comparison between 1924 and 1907	236
Glass and glassware	236
Production in 1924	236
Value of output free from duplication	237
Cost of materials and work given out	237
Net output	238
Exports and imports	238
Employment in 1924	238
Mechanical power	238
Building materials and monumental masonry	239
Production in 1924	239
Cost of materials and work given out	240
Net output	240
Exports and imports	240
Employment in 1924	241
Mechanical power	241
Roofing felts	241
Production in 1924	241
Cost of materials	242
Net output	242
Exports and imports	242
Employment in 1924	242
Mechanical power	242
WAGES IN 1924	243
EMPLOYMENT	243
MECHANICAL POWER	243
TABLES :	
The Glass Trade	245
The Building Materials and Monumental Masonry Trades	248
The Roofing Felts Trade	252

Introductory.*

The tables on pages 245 to 248, 248 to 251 and 252 to 254 are based on returns received from firms in Great Britain and Northern Ireland

* See also the Notes on pages vii to xv.

whose business in 1924 consisted wholly or mainly in the manufacture of glass; of dressed stone and slate, tar paving and other road materials; and of roofing felts, respectively.

It is convenient to bring together the reports on these trades since they were grouped together in the report on the 1907 Census of Production in order to avoid the risk of disclosing information relating to the business of individual firms.

In the Glass Trade the number of separate returns received in 1924 was 469. About 80 firms to which schedules were sent did not furnish returns, but these firms for the most part had very small establishments and included some that had ceased operations before the end of the censal year. On the basis of the information available it is estimated that they did not employ more than 450 persons in all and that their total net output probably did not exceed £50,000.

In the Building Materials and Monumental Masonry Trades the number of separate returns received in 1924 was 1,928. About 450 firms to which schedules were sent did not furnish returns and on the basis of the information available it is estimated that they did not employ more than 2,000 persons in all and that their total net output probably did not exceed £250,000.

In the Roofing Felts Trade the number of separate returns received for 1924 was 27.

Summary of results.—The following table shows the main results of the Censuses of 1924 and 1907, comparisons between the figures for the two years being subject to the qualifications mentioned in the next paragraph. The information received in connexion with the Census of 1912, when details of output were not required from firms employing five persons or less, was not sufficiently complete to warrant its use for purposes of comparison.

Particulars.	Unit.	1924.				1907.
		Glass Trade.	Building Materials etc., Trades.	Roofing Felts Trade.	Total.	Total.
Value of goods made and work done (Gross output)	£'000	13,279	11,377	940	25,596	7,623
Cost of materials used	"	5,044	4,571	550	10,165	2,873
Paid for work given out to other firms	"	35	57	—	92	51
Net output	"	8,200	6,749	390	15,339	4,699
Average number of persons employed	No.	37,781	25,545	1,142	64,468	50,375
Net output per person employed	£	217	264	342	238	93
Mechanical power available						
Prime movers	H.P.	*	*	*	48,403	33,521
Electric motors driven by purchased electricity ..	"	*	*	*	42,362	(not recorded)

* Not available.

Qualifications affecting comparisons.—In considering the above table and the other tables in this report which show figures for 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 Census of 1907 covered Great Britain and the whole of Ireland, but that of 1924 applied only to Great Britain and Northern Ireland. The gross output of these trades returned at the Census of 1907 for the whole of Ireland was £320,000 and the number of persons employed was 1,818. Further, according to the Census of Production taken by the Government of the Irish Free State in respect of the year 1926, the total value of the output of monumental and architectural stones in that year was returned as £53,000: separate figures were not shown for roofing felts and there was no record of any output of glass.

(3) At the 1924 Census, in order to avoid duplication of output, firms that purchased monuments and erected them but did not work on them other than the cutting of inscriptions, were instructed to state only the value of the work done, i.e. the amount actually charged less the cost of the purchased stone; a similar provision was not made at the 1907 Census and it is therefore probable that the figures returned for that year in respect of *stone and slate dressed* contain duplication to the extent of the value of the monuments and gravestones purchased in a finished state and merely inscribed and erected by the purchasing firms.

Value of output and cost of materials.—The figures in the above table representing the value of goods made and work done and the cost of materials used are the aggregates of the figures recorded by the firms that made returns, and, for the reasons explained in paragraphs (i) and (ii) on pages xii and xiii, they may overstate the value of the output of, and the cost of the materials used by, these trades considered as a whole. As regards the Glass Trade, the matter is discussed on page 237, but the amount of such duplication cannot be determined. It is not thought that any substantial duplication is involved in the output of the Building Materials and Monumental Masonry Trades or the Roofing Felts Trade.

Production.

Detailed information relating to the output in 1924 of the Glass Trade will be found in Table II on pages 245 to 246; of the Building Materials, etc., Trades, in Table II on page 249; and of the Roofing Felts Trade, in Table II on page 252.

Comparison between 1924 and 1907.—The following table shows, for 1924 and 1907, the principal classes of output of these trades so far as they can be set out for purposes of comparison, the figures for each year being inclusive of the value of similar products or work done returned on schedules for other trades :—

Kind of goods made and work done.	1924.	1907.
	Selling value.	Selling value.
Glass bottles and jars	£'000 5,336	£'000 2,021
Other glass and manufactures thereof, including leaded lights	8,005	2,957
Bevelling, silvering, polishing, grinding and other work done for the Glass Trade, including repair work	70*	97*
TOTAL VALUE—GLASS AND GLASSWARE	13,411	5,075
Stone and slate, dressed†	3,220	1,668
Artificial stone (including concrete blocks, slabs, etc.)	1,566	301
Mortar	116	46
Plaster (including plaster partitions)	165	97
Slabbed tile work (hearth surrounds, etc.)	138	†
Tar paving and other road materials	4,823	†
Contract and jobbing work	2,590*	528*
Other work done	347*	12*
TOTAL VALUE—BUILDING MATERIALS, ETC.	12,965	2,652
Roofing felts—		
Tarred flax felts	166	120
Paper felts	598	76
Hair felts	48	12
Roofing felts and damp-courses, not separately distinguished	85	13
TOTAL VALUE—ROOFING FELTS, ETC.	897	221
TOTAL VALUE—PRINCIPAL PRODUCTS AND WORK DONE	27,273	7,948

* Amount received for work done.

† See qualification (3) on page 235.

‡ Not separately recorded. Tar paving, valued at £60,000, was shown in the report on Limestone Quarries and Lime Kilns in 1907 (see page 67).

In addition to the above, an output of goods of kinds mainly produced in other trades was recorded on schedules for the trades under consideration valued at £163,000 in 1924 and at £249,000 in 1907.

More detailed particulars of production in 1924 will be found in the sections which follow.

Glass and Glassware.

Production in 1924.—The following table shows the value and (where recorded) the quantity of the output of glass and glassware in 1924 as returned on schedules for the Glass Trade and on schedules for all trades.

Glass and glassware.	Returned on schedules for				
	The Glass Trade.				All trades.
	By quantity and value.	By value only.	Total value.	Total value.	
	Thous.	£'000	£'000	£'000	£'000
Glass bottles and jars :—					
Ground stoppered	3,596	68	—	68	68
Other kinds—	Th. gross				
Narrow neck	3,483	3,059	209	3,268	3,268
Wide neck	1,096	851	108	959	980
Not distinguished	1,298	898	122	1,020	1,020
TOTAL VALUE—Bottles and jars .. .. .	..	4,876	439	5,315	5,336
Domestic and fancy glassware	Th. cwt.				
Illuminating glassware	152	700	206	906	915
Machinery glassware	—	—	414	414	414
Glass tubing and rod	16·6	125	89	89	89
Scientific glassware (other than tubing and rod)	—	—	23	148	148
Plate and sheet glass, bevelled, decorated and silvered glass, and leaded lights (plain and ornamental)*	—	—	6,075	6,075	6,218
Other kinds	—	—	61	61	61
TOTAL VALUE—GLASS AND GLASSWARE .. .. .	..	5,701	7,465	13,166	13,341

* Separate details of the different kinds of glass included in this heading cannot be given, because of the possible disclosure of information relating to individual firms.

In addition to the output shown above, firms that made their returns on schedules for the Glass Trade recorded an output, valued at £45,000, of *other products*, which, being of kinds mainly produced in other trades, are dealt with in the reports on those trades.

The sum of £68,000 was also recorded on schedules for the Glass Trade as received for bevelling, silvering, polishing, grinding, cutting, drilling and other work done for the trade, including repair and jobbing work. An amount of £2,000 was also recorded on schedules for other trades as received for similar work, making a total of £70,000 in all.

Value of output free from duplication.—The aggregate gross output of the firms that made their returns on schedules for the Glass Trade, valued at £13,279,000, may contain duplication arising from the purchase of glass for silvering, bevelling, decorating, etc., and the inclusion of its value both in the returns of the manufacturers of the glass and, in a more finished state, in the returns of the firms that carried out these finishing processes. The amount of such duplication cannot, however, be determined. In these circumstances the consideration of minor elements of duplication can serve no useful purpose. These minor elements include payments for work given out to other firms in the trade, representing, in the main, payments to other firms for bevelling, silvering, cutting, etc.

Cost of materials and work given out.—The cost of materials used by firms that made their returns on schedules for the Glass Trade was returned as £5,044,000 in 1924.

The amount recorded as paid for work given out to other firms was £35,000 in 1924.

Net output.—The net output in 1924 of the firms that made their returns on schedules for the Glass Trade (whose gross output was valued at £13,279,000) was £8,200,000, that sum representing, without duplication, the total amount by which the value, as delivered, of the aggregate output exceeded the cost, as purchased, of the materials used 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 £217.

Exports and imports.—The value of the exports of glass and glassware of all kinds in 1924 amounted to £2,500,000 and that of the retained imports to £4,477,000. The value of the production of the principal kinds is, so far as possible, compared with the value of the exports and retained imports of similarly described goods in the following table:—

Glass and glassware.	Production.	Exports.	Net imports.
	Value at factory.	Value f.o.b.	Value c.i.f.
	£'000	£'000	£'000
Glass bottles and jars	5,336	375	886
Domestic and fancy glassware	915	285	1,482
Illuminating glassware	414	59	397
Machinery glassware	89	30	2
Glass tubing and rod	148	18	17
Scientific glassware (other than tubing and rod)	160	70	58
Plate and sheet glass	*	1,609	1,581
Other kinds of glassware	61	54	54

* See footnote to table on page 237.

Employment in 1924.—Detailed information relating to employment in the Glass Trade in 1924 will be found in Table III on pages 247 and 248. The following table sets out certain particulars with regard to the numbers of persons employed in that year; for this purpose the average numbers of operatives of each sex returned have been divided between the two age-groups in the proportions shown by the data relating to the week ended 18th October. Comparable figures for 1907 are not available for the Glass Trade alone, but information regarding the numbers employed in that year in the Glass Trade, the Building Materials, etc., Trades, and the Roofing Felts Trade combined are given in the table on page 243.

Average number.	Males.		Females.		Males and females.	
	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
1924.						
Operatives	4,972	29,309	1,403	4,870	6,375	34,179
Administrative, etc. .. .	248	2,660	159	942	407	3,602
TOTAL	5,220	31,969	1,562	5,812	6,782	37,781

Mechanical power.—Separate particulars of the power equipment of the Glass Trade are not available for either 1924 or 1907. Information regarding the prime movers, etc., installed in these years in

the Glass Trade, the Building Materials, etc., Trades, and the Roofing Felts Trades combined, will be found in the table on page 244 and, in greater detail for 1924, in Table IV on page 254.

Building Materials and Monumental Masonry.

Production in 1924.—The following table shows the value and (where recorded) the quantity of the output of building materials and monumental masonry in 1924 as returned on schedules for the Building Materials, etc., Trades and on schedules for all trades.

In addition to the output dealt with in this report, road-making materials, etc., valued, on a cost basis, at £289,000 were recorded for 1924 by Railway Companies and Local Authorities.*

Building materials and monumental masonry.	Returned on schedules for				
	The Building Materials, etc., Trades.				All trades.
	By quantity and value.		By value only.		Total value.
	Th. tons	£'000	£'000	£'000	£'000
Stone and slate, dressed:—					
Granite setts and pavement curbs	3.4	15	17	32	32†
Monumental and architectural granite	21.4	588	113	701	702†
Other dressed stone and slate ..	67.1	793	236	1,029	1,101
Marble work	2.3	73	290	363	382
Monumental and dressed stone and marble, not separately distinguished	4.1	114	618	732	784
Slate goods (mantels, chimney-pieces, etc.)	3.1	63	132	195	219
TOTAL VALUE—Stone and slate, dressed .. .. .	..	1,646	1,406	3,052	3,220
Artificial stone, including concrete blocks, slabs, etc.	—	—	1,394	1,394	1,566
Mortar	—	—	78	78	116
Plaster (including plaster partitions)	—	—	156	156	165
Slabbed tile work (hearth surrounds, etc.)	—	—	79	79	138
Tar paving and similar road materials:					
Tarred macadam (slag, stones, etc.)	—	—	2,213	2,213	2,552
Crushed slag and dry slag, including some unbroken slag ..	—	—	590	590	1,106
Crushed, broken, etc., stone ..	—	—	53	53	64
Asphalt and bitumen	—	—	717	717	851
Other bituminous and similar solutions (coal tar products) ..	—	—	58	58	129
Paving materials, not separately distinguished	—	—	11	11	121
TOTAL VALUE—Tar paving and similar road materials	—	—	3,642	3,642	4,823
TOTAL VALUE—BUILDING MATERIALS, ETC. .. .. .	..	1,646	6,755	8,401	10,028

† Not including the output returned on schedules for Non-metalliferous (except Slate) Quarries, page 65.

* See pages 374 and 399.

In addition to the output shown above, firms that made their returns on schedules for the Building Materials and Monumental Masonry Trades recorded an output, valued at £56,000, of *other products*, which, being of kinds mainly produced in other trades, are dealt with in the reports on those trades.

A sum of £2,920,000 was also reported by firms that made their returns on schedules for the Building Materials and Monumental Masonry Trades as received in 1924 for contract and jobbing work (including the cost of any materials made and used by the firms carrying out the work) and for work done for the trade. Particulars of this work (including £17,000 recorded on schedules for other trades) are shown below :—

Kind of work done.	Amount received.
	£'000
Contract and jobbing work :—	
On roads	1,649
On buildings	660
Not distinguished	281
Work done on monuments not made by the firm (erection, cutting inscriptions, etc.)	276*
Sawing, turning, etc., stone	71†
TOTAL AMOUNT RECEIVED	2,937

* Including £5,000 returned on schedules for other trades.

† Including £12,000 returned on schedules for other trades.

The gross output of the Building Materials and Monumental Masonry Trades, as detailed above, is believed to be free from material duplication.

Cost of materials and work given out.—The cost of materials used by firms that made their returns on schedules for the Building Materials and Monumental Masonry Trades was returned as £4,571,000 in 1924.

The amount recorded as paid for work given out to other firms was £57,000 in 1924.

Net output.—The net output in 1924 of the firms that made their returns on schedules for the Building Materials and Monumental Masonry Trades (whose gross output was valued at £11,377,000) was £6,749,000, that sum representing the total amount by which the value, as delivered, of the aggregate output exceeded the cost, as purchased, 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 £264.

Exports and imports.—The following statement shows the exports and retained imports in 1924 of those classes of building materials, etc., for which comparable figures are available.

Kind of goods.	Exports.		Net imports.	
	Quantity.	Value f.o.b.	Quantity.	Value c.i.f.
Granite setts and pavement curbs	0·2	£'000 1	233·0	£'000 613
Monumental and architectural granite	3·3	89	3·7	82
Asphalt and bitumen	—	—	264·6	1,370

Employment in 1924.—Detailed information relating to employment in the Building Materials and Monumental Masonry Trades in 1924 will be found in Table III on pages 250 and 251. The following table sets out certain particulars with regard to the numbers of persons employed in that year; for this purpose the average numbers of operatives of each sex returned have been divided between the two age-groups in the proportions shown by the data relating to the week ended 18th October. Comparable figures for 1907 are not available for the Building Materials and Monumental Masonry Trades alone, but information regarding the numbers employed in that year in the Glass Trade, the Building Materials, etc., Trades, and the Roofing Felts Trade combined, are given in the table on page 243.

Average number.	Males.		Females.		Males and females.	
	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
1924.						
Operatives	1,578	21,535	60	257	1,638	21,792
Administrative, etc.	191	3,334	47	419	238	3,753
TOTAL	1,769	24,869	107	676	1,876	25,545

Mechanical power.—Separate particulars of the power equipment of the Building Materials and Monumental Masonry Trades are not available for either 1924 or 1907. Information regarding the prime movers, etc., installed in these years in the Glass Trade, the Building Materials, etc., Trades, and the Roofing Felts Trade combined, will be found in the table on page 244 and, in greater detail for 1924, in Table IV on page 254.

Roofing Felts.

Production in 1924.—The following table shows the quantity and value of the output of roofing felts and damp courses in 1924 as returned on schedules for the Roofing Felts Trade.

Roofing felts, etc.	Quantity.	Selling value.
	Th. sq. yds.	£'000
Roofing felts (including all felts used for sacking and sheathing) :—		
Tarred flax felts	9,464·4	166
Paper felts—		
Bituminous self-finished felts	18,944·2	480
Tarred and sanded or similar finish felts	5,785·7	118
Hair felts	700·0	48
Roofing felts and damp courses, not separately distinguished	..	85*
TOTAL VALUE—ROOFING FELTS, ETC. .. .. .	..	897

* Including £19,000 returned on schedules for other trades.

In addition to the output shown above, firms that made their returns on schedules for the Roofing Felts Trade recorded an output, valued at £62,000, of *other products*, which, being of kinds mainly produced in other trades, are dealt with in the reports on those trades.

The gross output of this trade may be taken as free from material duplication.

Cost of materials.—The cost of materials used by firms that made their returns on schedules for the Roofing Felts Trade was returned as £550,000 in 1924.

Net output.—The net output in 1924 of the firms that made their returns on schedules for the Roofing Felts Trade (whose gross output was valued at £940,000) was £390,000, that sum representing the total amount by which the value, as delivered, of the aggregate output exceeded the cost, as purchased, of the materials used.

The net output per head of persons employed in the censal year 1924 was £342.

Exports and imports.—The exports of roofing felts in 1924 amounted to 110,056 cwts., valued at £137,200 f.o.b. and retained imports to 20,126 cwts., valued at £23,600 c.i.f. In addition, roofing paper, tarred and other, amounting to 770 cwts., valued at £1,250 f.o.b., was exported, while 23,300 cwts., valued at £19,500 c.i.f., were imported and retained.

Employment in 1924.—Detailed information relating to employment in the Roofing Felts Trade in 1924 will be found in Table III on page 253. The following table sets out certain particulars with regard to the numbers of persons employed in that year; for this purpose the average numbers of operatives of each sex returned have been divided between the two age-groups in the proportions shown by the data relating to the week ended 18th October. Comparable figures for 1907 are not available for the Roofing Felts Trade alone, but information regarding the numbers employed in that year in the Glass Trade, the Building Materials, etc., Trades, and the Roofing Felts Trade combined, are given in the table on page 243.

Average number.	Males.		Females.		ales and females.	
	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
1924.						
Operatives	69	775	4	119	73	894
Administrative, etc. ..	12	192	6	56	18	248
TOTAL	81	967	10	175	91	1,142

Mechanical power.—Separate particulars of the power equipment of the Roofing Felts Trade are not available for either 1924 or 1907. Information regarding the prime movers, etc., installed in these years in the Glass Trade, the Building Materials, etc., Trades, and the Roofing Felts Trade combined, will be found in the table on page 244 and, in greater detail for 1924, in Table IV on page 254.

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 Glass, Building Materials, etc., and Roofing Felts Trades that made returns both to the Ministry of Labour and to the Census of Production office. According to the Census records this group of firms employed, in the week ended 18th October, 1924, 31,363 operatives, or 55 per cent. of the total of 57,157 operatives for the trades as a whole, and their net output totalled £8,394,000, or 55 per cent. of the aggregate net output of £15,339,000 for the trades as a whole. The total wage-bill of these firms, as returned to the Ministry of Labour, was £4,231,000, representing about 51 per cent. of their aggregate net output.

Employment.

The following table sets out, for the Glass, Building Materials, etc., and Roofing Felts Trades combined, certain particulars relating to the Censuses of 1924 and 1907. For the purpose of this comparison, the average numbers of operatives of each sex returned for 1924 have been divided between the two age-groups in the proportions shown by the data relating to the week ended 18th October.

Average number.	Males.		Females.		Males and females.	
	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
1924.						
Operatives	6,619	51,619	1,467	5,246	8,086	56,865
Administrative, etc. ..	451	6,186	212	1,417	663	7,603
TOTAL	7,070	57,805	1,679	6,663	8,749	64,468
1907.						
Wage earners	8,352	43,508	803	3,153	9,155	46,661
Salaried	318	3,449	46	265	364	3,714
TOTAL	8,670	46,957	849	3,418	9,519	50,375

The numbers of operatives recorded month by month in 1924 ranged from 2,646 above the average, in December, to 3,343 below the average, in October (see Table IIIB, pages 248, 251 and 253).

Mechanical Power.

The detailed information relating to mechanical power in 1924 is summarised, for the Glass, Building Materials, etc., and Roofing Felts Trades combined, in Table IV on page 254. The following

table compares the particulars relating to the capacity and kinds of *prime movers* and the capacity of *electric generators* installed in 1924 and 1907.

Power equipment.	1924.			1907.
	Ordinarily in use.	In reserve or idle.	Total.	Total.
	H.P.	H.P.	H.P.	H.P.
PRIME MOVERS :—				
Reciprocating steam engines ..	9,793	2,006	11,799	14,857
Steam turbines	15,510	6,108	21,618	5,000
Gas engines	9,944	1,550	11,494	} 13,473
Petrol and light oil engines ..	923	73	996	
Heavy oil engines	2,008	300	2,308	
Oil engines, not distinguished ..	87	—	87	
Water power	101	—	101		171
Other	—	—	—	20
TOTAL	38,366	10,037	48,403	33,521
ELECTRIC GENERATORS :—				
Driven by—	Kw.	Kw.	Kw.	Kw.
Reciprocating steam engines	1,142	318	1,460	1,557
Steam turbines	11,457	4,461	15,918	3,150
Gas engines	377	403	780	} 384
Petrol and light oil engines ..	59	—	59	
Heavy oil engines	121	200	321	
Water power	—	—	—	
Other prime movers	—	—	—	
TOTAL	13,156	5,382	18,538	5,091

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

Electric motors.	1924.		
	Ordinarily in use.	In reserve or idle.	Total.
	H.P.	H.P.	H.P.
Driven by—			
Electricity generated in own works	32,272	3,845	36,117
Purchased electricity	36,882	5,480	42,362

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 1,500,000.

TABLES.

THE GLASS TRADE.

I.—Summary of results.

Particulars.	Unit.	England and Wales.	Scotland.	Great Britain.	Northern Ireland.
Value of goods made and work done (Gross output)	£'000	12,317	944	13,261	18
Cost of materials used .. .. .	..	4,633	401	5,034	10
Paid for work given out to other firms ..	..	26	9	35	—
Net output .. .. .	..	7,658	534	8,192	8
Average number of persons employed ..	No.	35,193	2,546	37,739	42
Net output per person employed	£	218	210	217	187
Mechanical power available :—					
Prime movers	H.P.	*	*	*	*
Electric motors driven by purchased electricity .. .. .	..	*	*	*	*

* Not available : See Table IV on page 254.

II.—Production.

Goods sold or added to stock.	England and Wales.		Scotland.		United Kingdom.*	
	Quantity.	Selling value.	Quantity.	Selling value.	Quantity.	Selling value.
Glass bottles and jars :—	Thous.	£'000	Thous.	£'000	Thous.	£'000
Ground stoppered	†	†	†	†	3,596	68
Other descriptions—	gross	gross	gross	gross	gross	gross
Narrow neck { Number stated ..	3,036	2,562	447	497	3,483	3,059
{ Number not stated ..	..	209	—	—	..	209
Wide neck { Number stated ..	†	†	†	†	1,096	851
{ Number not stated ..	..	108	—	—	..	108
Glass bottles and jars, not separately distinguished—						
{ Number stated ..	1,298	898	—	—	1,298	898
{ Number not stated ..	..	118	..	4	..	122
TOTAL VALUE—Glass bottles and jars .. .. .	..	†	..	†	..	5,315
Domestic and fancy glassware—	Th.cwt.		Th.cwt.		Th.cwt.	
{ Weight stated ..	151	667	1	33	152	700
{ Weight not stated ..	..	192	..	14	..	206
Illuminating glassware :—						
Globes and shades (other than oil lamp chimneys)—						
{ Number stated ..	1,441	108	—	—	1,441	108
{ Number not stated ..	..	60	—	—	..	60
Pressed lenses, prisms, and the like (not optical)—	Th.cwts.				Th.cwts.	
{ Weight stated ..	4.6	19	—	—	4.6	19
{ Weight not stated ..	..	†	..	†	..	6
Other descriptions (including electric lamp bulbs, oil lamp chimneys and miner's lamp glasses) .. .. .	..	†	..	†	..	221
TOTAL VALUE—Illuminating glassware .. .. .	..	†	..	†	..	414

II.—Production—continued.

Goods sold or added to stock.	England and Wales.		Scotland.		United Kingdom.*	
	Quantity.	Selling value.	Quantity.	Selling value.	Quantity.	Selling value.
	Thous.	£'000	Thous.	£'000	Thous.	£'000
Machinery glassware:—						
Gauge { <i>Weight stated</i> ..	†	†	†	†	17.6	62
glasses { <i>Weight not stated</i> ..	..	14	—	—	..	14
Lubricators, oil cups, yarn guides, and other sorts ..	..	†	..	†	..	13
TOTAL VALUE—Machinery glassware .. .. .	..	†	..	†	..	89
Glass tubing or rod for all purposes, sold or added to stock as such— { <i>Weight stated</i> ..	16.6	125	—	—	16.6	125
{ <i>Weight not stated</i> ..	..	†	..	†	..	23
Scientific glassware (except tubing and rod)—						
{ <i>Weight stated</i> ..	4.5	59	—	—	4.5	59
{ <i>Weight not stated</i> ..	..	†	..	†	..	99
Plate and sheet glass, bevelled, decorated and silvered glass and leaded lights, plain and ornamental .. .. .	..	†	..	†	..	6,075
Other glass (optical glass, glass stoppers, etc.) .. .. .	..	61	—	—	..	61
Other products .. .. .	..	44	—	—	..	45
Repairs and jobbing work ..	..	2†	—	—	..	2†
Bevelling, silvering, polishing, grinding, cutting and other work done for the trade ..	..	63†	..	3†	..	66†
TOTAL VALUE OF GOODS MADE AND WORK DONE (GROSS OUTPUT) .. .. .	..	12,317	..	944	..	13,279

* The output for Northern Ireland has, for convenience, been included in this column. This output consisted of £17,000 in respect of *Bevelled, decorated and silvered glass and leaded lights* and £1,000 in respect of *other products*.

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

‡ Amount received for work done.

III.—Employment.

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

Kind of staff.	Males.		Females.		Males and females.	
	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
<i>England and Wales</i> :—						
Operatives	4,428	26,026	1,334	4,638	5,762	30,664
Administrative, etc.* ..	237	2,518	147	867	384	3,385
TOTAL	4,665	28,544	1,481	5,505	6,146	34,049
<i>Scotland</i> :—						
Operatives	346	2,113	40	129	386	2,242
Administrative, etc.* ..	11	137	12	72	23	209
TOTAL	357	2,250	52	201	409	2,451
<i>Great Britain</i> :—						
Operatives	4,774	28,139	1,374	4,767	6,148	32,906
Administrative, etc.* ..	248	2,655	159	939	407	3,594
TOTAL	5,022	30,794	1,533	5,706	6,555	36,500
<i>Northern Ireland</i> :—						
Operatives	5	32	1	3	6	35
Administrative, etc.* ..	—	5	—	3	—	8
TOTAL	5	37	1	6	6	43
<i>United Kingdom</i> :—						
TOTAL	5,027	30,831	1,534	5,712	6,561	36,543

* Administrative, technical and clerical staff.

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

England and Wales. (Annual average : Males, 27,072 ; Females, 4,736 ; Total, 31,808.)

Week ended.	Males.	Females.	Total.	Week ended.	Males.	Females.	Total.
Jan. 12th ..	26,309	4,541	30,850	July 19th ..	27,891	4,863	32,754
Feb. 16th ..	26,417	4,557	30,974	Aug. 16th ..	27,144	4,826	31,970
Mar. 15th ..	26,663	4,641	31,304	Sept. 13th ..	26,560	4,615	31,175
April 12th ..	27,273	4,704	31,977	Oct. 18th ..	26,026	4,638	30,664
May 17th ..	27,774	4,785	32,559	Nov. 15th ..	26,812	4,861	31,673
June 21st ..	28,052	4,834	32,886	Dec. 13th ..	27,945	4,962	32,907

Scotland. (Annual average : Males, 2,206 ; Females, 131 ; Total, 2,337.)

Jan. 12th ..	2,342	139	2,481	July 19th ..	2,041	126	2,167
Feb. 16th ..	2,470	139	2,609	Aug. 16th ..	2,074	128	2,202
Mar. 15th ..	2,527	139	2,666	Sept. 13th ..	2,088	131	2,219
April 12th ..	2,269	126	2,395	Oct. 18th ..	2,113	129	2,242
May 17th ..	2,145	127	2,272	Nov. 15th ..	2,147	134	2,281
June 21st ..	2,058	126	2,184	Dec. 13th ..	2,192	136	2,328

Great Britain. (Annual average : Males, 29,278 ; Females, 4,867 ; Total, 34,145.)

Jan. 12th ..	28,651	4,680	33,331	July 19th ..	29,932	4,989	34,921
Feb. 16th ..	28,887	4,696	33,583	Aug. 16th ..	29,218	4,954	34,172
Mar. 15th ..	29,190	4,780	33,970	Sept. 13th ..	28,648	4,746	33,394
April 12th ..	29,542	4,830	34,372	Oct. 18th ..	28,139	4,767	32,906
May 17th ..	29,919	4,912	34,831	Nov. 15th ..	28,959	4,995	33,954
June 21st ..	30,110	4,960	35,070	Dec. 13th ..	30,137	5,098	35,235

Northern Ireland. (Annual average : Males, 31 ; Females, 3 ; Total, 34.)

Jan. 12th ..	32	3	35	July 19th ..	32	3	35
Feb. 16th ..	33	3	36	Aug. 16th ..	30	3	33
Mar. 15th ..	32	3	35	Sept. 13th ..	31	3	34
April 12th ..	32	3	35	Oct. 18th ..	32	3	35
May 17th ..	32	3	35	Nov. 15th ..	30	3	33
June 21st ..	32	3	35	Dec. 13th ..	29	3	32

Mechanical Power.

Detailed information regarding mechanical power is not available for the Glass Trade. Particulars of the power equipment of the Glass, Building Materials, etc. and Roofing Felts Trades combined are given in Table IV on page 254.

THE BUILDING MATERIALS AND MONUMENTAL MASONRY TRADES.

I.—Summary of results.

Particulars.	Unit.	England and Wales.	Scotland.	Great Britain.	Northern Ireland.
Value of goods made and work done (Gross output)	£'000	10,356	934	11,290	87
Cost of materials used	"	4,217	325	4,542	29
Paid for work given out to other firms ..	"	43	10	53	4
Net output	"	6,096	599	6,695	54
Average number of persons employed ..	No.	22,425	2,885	25,310	235
Net output per person employed ..	£	272	208	265	229
Mechanical power available :—					
Prime movers	H.P.	*	*	*	*
Electric motors driven by purchased electricity	"	*	*	*	*

* Not available : see Table IV on page 254.

II.—Production.

Goods sold or added to stock and work done.	Unit.	England and Wales.	Scotland.	Great Britain.	Northern Ireland.
Quantity and selling value					
Stone and slate, dressed :—					
Granite setts and pavement curbs					
{ Quantity stated	Th. tons	*	*	3.4†	†
{ Quantity not stated	£'000	*	*	15†	†
Monumental and architectural granite					
{ Quantity stated	Th. tons	17	—	17	—
{ Quantity not stated	£'000	—	—	—	—
Other dressed stone and slate					
{ Quantity stated	Th. tons	7.6	13.5	21.1	0.3
{ Quantity not stated	£'000	145	438	583	5
Marble work					
{ Quantity stated	Th. tons	55	53	108	5
{ Quantity not stated	£'000	—	—	—	—
Monumental and dressed stone and marble, not separately distinguished					
{ Quantity stated	Th. tons	66.9†	0.2	67.1†	†
{ Quantity not stated	£'000	790	3	793†	†
Slate goods (mantels, chimney pieces, etc.)					
{ Quantity stated	Th. tons	188	48	236	—
{ Quantity not stated	£'000	—	—	—	—
TOTAL VALUE—Stone and slate, dressed	£'000	270	20	290	—
Mortar	Th. tons	4.0	0.1	4.1	†
Plaster (including plaster partitions) ..	£'000	108	5	113	1
Artificial stone (including concrete blocks, slabs, etc.)	£'000	560	47	607	11
Slabbed tile work (hearth surrounds, etc.)					
{ Quantity stated	Th. tons	3.1	—	3.1	—
{ Quantity not stated	£'000	63	—	63	—
Tar paving and similar road materials :—	£'000	132	—	132	—
Crushed slag and dry slag (including some unbroken slag)					
{ Quantity stated	£'000	*	*	3,011	41
{ Quantity not stated	£'000	—	—	—	—
Crushed, broken, etc., stone	£'000	77	—	77	1
Tarred macadam (slag, stones, etc.) ..	"	*	*	154	2
Asphalt and bitumen	"	1,328	66	1,394	—
Other bituminous and similar solutions (coal tar products)	"	*	*	79	—
Paving materials, not separately distinguished	"	11	—	11	—
TOTAL VALUE—Tar paving, etc.	£'000	3,541	101	3,642	—
Other products	£'000	56	—	56	—
TOTAL VALUE OF GOODS MADE	£'000	*	*	8,413	44
Amount received					
Contract and jobbing work :—					
On roads	£'000	*	*	1,649†	†
On buildings	"	600†	60	660†	†
Not distinguished	"	272	9	281	—
Work done on monuments not made by the firm (erection, cutting inscriptions, etc.)	"	237	28	265	6
Sawing, turning, etc., stone	"	54	5	59	—
TOTAL VALUE OF WORK DONE	£'000	*	*	2,877	43
TOTAL VALUE OF GOODS MADE AND WORK DONE (GROSS OUTPUT)	£'000	10,356	934	11,290	87

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

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

‡ Less than 50 tons.

III.—Employment.

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

Kind of staff.	Males.		Females.		Males and females.	
	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
<i>England and Wales :—</i>						
Operatives	1,420	20,157	63	257	1,483	20,414
Administrative, etc.* ..	184	3,021	41	355	225	3,376
TOTAL	1,604	23,178	104	612	1,708	23,790
<i>Scotland :—</i>						
Operatives	250	2,576	—	2	250	2,578
Administrative, etc.* ..	5	278	6	60	11	338
TOTAL	255	2,854	6	62	261	2,916
<i>Great Britain :—</i>						
Operatives	1,670	22,733	63	259	1,733	22,992
Administrative, etc.* ..	189	3,299	47	415	236	3,714
TOTAL	1,859	26,032	110	674	1,969	26,706
<i>Northern Ireland :—</i>						
Operatives	14	249	—	1	14	250
Administrative, etc.* ..	2	35	—	4	2	39
TOTAL	16	284	—	5	16	289
<i>United Kingdom :—</i>						
TOTAL	1,875	26,316	110	679	1,985	26,995

* Administrative, technical and clerical staff.

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

England and Wales. (Annual average : Males, 18,795 ; Females, 254 ; Total, 19,049.)

Week ended.	Males.	Females.	Total.	Week ended.	Males.	Females.	Total.
Jan. 12th ..	16,884	239	17,123	July 19th ..	17,698	275	17,973
Feb. 16th ..	17,563	251	17,814	Aug. 16th ..	17,179	267	17,446
Mar. 15th ..	18,402	250	18,652	Sept. 13th ..	19,940	269	20,209
April 12th ..	18,779	259	19,038	Oct. 18th ..	20,157	257	20,414
May 17th ..	19,608	246	19,854	Nov. 15th ..	19,821	245	20,066
June 21st ..	19,884	251	20,135	Dec. 13th ..	19,620	242	19,862

Scotland. (Annual average : Males, 2,545 ; Females, 2 ; Total, 2,547.)

Jan. 12th ..	2,453	2	2,455	July 19th ..	2,510	2	2,512
Feb. 16th ..	2,516	2	2,518	Aug. 16th ..	2,585	2	2,587
Mar. 15th ..	2,505	2	2,507	Sept. 13th ..	2,555	3	2,558
April 12th ..	2,570	2	2,572	Oct. 18th ..	2,576	2	2,578
May 17th ..	2,605	2	2,607	Nov. 15th ..	2,531	2	2,533
June 21st ..	2,617	2	2,619	Dec. 13th ..	2,519	2	2,521

Great Britain. (Annual average : Males, 21,340 ; Females, 256 ; Total, 21,596.)

Jan. 12th ..	19,337	241	19,578	July 19th ..	20,208	277	20,485
Feb. 16th ..	20,079	253	20,332	Aug. 16th ..	19,764	269	20,033
Mar. 15th ..	20,907	252	21,159	Sept. 13th ..	22,495	272	22,767
April 12th ..	21,349	261	21,610	Oct. 18th ..	22,733	259	22,992
May 17th ..	22,213	248	22,461	Nov. 15th ..	22,352	247	22,599
June 21st ..	22,501	253	22,754	Dec. 13th ..	22,139	244	22,383

Northern Ireland. (Annual average : Males, 195 ; Females, 1 ; Total, 196.)

Jan. 12th ..	178	1	179	July 19th ..	169	1	170
Feb. 16th ..	176	1	177	Aug. 16th ..	226	1	227
Mar. 15th ..	161	1	162	Sept. 13th ..	252	1	253
April 12th ..	157	1	158	Oct. 18th ..	249	1	250
May 17th ..	155	1	156	Nov. 15th ..	247	1	248
June 21st ..	173	1	174	Dec. 13th ..	200	1	201

Mechanical Power.

Detailed information regarding mechanical power is not available for the Building Materials and Monumental Masonry Trades. Particulars of the power equipment of the Glass, Building Materials, etc. and Roofing Felts Trades combined are given in Table IV on page 254.

THE ROOFING FELTS TRADE.

I.—Summary of results.

Particulars.	Unit.	Great Britain.*	Northern Ireland.
Value of goods made and work done (Gross output)	£'000	720	220
Cost of materials used	"	432	118
Net output	"	288	102
Average number of persons employed	No.	832	310
Net output per person employed	£	347	328
Mechanical power available :—			
Prime movers	H.P.	†	†
Electric motors driven by purchased electricity	"	†	†

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

† Not available; see Table IV on page 254.

II.—Production.

Goods sold or added to stock.	Great Britain.*		Northern Ireland.	
	Quantity.	Selling value.	Quantity.	Selling value.
	Th.sq.yds.	£'000	Th.sq.yds.	£'000
Roofing felts (including all felts used for sacking and sheathing) :—				
Tarred flax felts	9,464.4†	166†	†	†
Paper felts :—				
Bituminous self-finished	18,944.2†	480†	†	†
Tarred and sanded or similar finish	5,010.2	98	775.5	20
Hair felts	428.8	27	271.2	21
TOTAL—Roofing felts	34,894.3†	812†	†	†
Damp courses and similar fabrics .. .. .	..	66†	..	†
Other products (bituminous compounds, paints, preservatives, etc.) .. .. .	..	50	..	12
TOTAL VALUE OF GOODS MADE (GROSS OUTPUT) .. .. .	..	720	..	220

* See footnote to Table I.

† In order to avoid the possible disclosure of information relating to individual firms, the figures for Northern Ireland have been included with those for Great Britain.

III.—Employment.

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

Kind of staff.	Males.		Females.		Males and females.	
	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
<i>Great Britain</i> :—†						
Operatives	67	616	1	58	68	674
Administrative, etc.*	12	173	3	49	15	222
TOTAL	79	789	4	107	83	896
<i>Northern Ireland</i> :—						
Operatives	8	224	3	76	11	300
Administrative, etc.*	—	19	3	7	3	26
TOTAL	8	243	6	83	14	326
<i>United Kingdom</i> :—						
TOTAL	87	1,032	10	190	97	1,222

* Administrative, technical and clerical staff.

† See footnote to Table I.

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

*Great Britain.** (Annual average : Males, 559 ; Females, 51 ; Total, 610.)

Week ended.	Males.	Females.	Total.	Week ended.	Males.	Females.	Total.
Jan. 12th ..	520	47	567	July 19th ..	566	84	614
Feb. 16th ..	501	48	549	Aug. 16th ..	559	49	608
Mar. 15th ..	521	44	565	Sept. 13th ..	575	49	624
April 12th ..	520	46	566	Oct. 18th ..	616	58	674
May 17th ..	538	46	584	Nov. 15th ..	630	60	690
June 21st ..	540	43	583	Dec. 13th ..	624	68	692

Northern Ireland. (Annual average : Males, 216 ; Females, 68 ; Total, 284.)

Jan. 12th ..	203	70	273	July 19th ..	191	40	231
Feb. 16th ..	205	70	275	Aug. 16th ..	238	75	313
Mar. 15th ..	211	71	282	Sept. 13th ..	239	67	306
April 12th ..	209	73	282	Oct. 18th ..	224	76	300
May 17th ..	208	72	280	Nov. 15th ..	226	65	291
June 21st ..	201	66	267	Dec. 13th ..	236	74	310

* See footnote to Table I.

Mechanical Power.

Detailed information regarding mechanical power is not available for the Roofing Felts Trade. Particulars of the power equipment of the Glass, Building Materials, etc., and Roofing Felts Trades combined, are given in Table IV, overleaf.

THE GLASS TRADE, THE BUILDING MATERIALS AND MONUMENTAL
MASONRY TRADES AND THE ROOFING FELTS TRADE.

IV.—Mechanical Power.

PARTICULARS OF PRIME MOVERS, ELECTRIC GENERATORS AND
ELECTRIC MOTORS.

(a) Ordinarily in use. (b) In reserve or idle.	England and Wales.	Scotland.	Great Britain.	Northern Ireland.
	H.P.	H.P.	H.P.	H.P.
PRIME MOVERS :—				
Reciprocating steam engines	{ (a) 7,678 (b) 1,541	1,609 415	9,297 1,956	506 50
Steam turbines	{ (a) 15,500 (b) 6,000	10 108	15,510 6,108	—
Gas engines	{ (a) 7,549 (b) 1,335	2,194 215	9,743 1,550	201
Petrol and light oil engines	{ (a) 873 (b) 71	50 2	923 73	—
Heavy oil engines	{ (a) 1,868 (b) 300	140 —	2,008 300	—
Oil engines, not distinguished	(a) 87	—	87	—
Water power	(a) 95	6	101	—
TOTAL	{ (a) 33,650 (b) 9,247	4,009 740	37,659 9,987	707 50
TOTAL OF PRIME MOVERS INSTALLED	42,897	4,749	47,546	757
ELECTRIC GENERATORS :—				
Driven by—				
Reciprocating steam engines	{ (a) 733 (b) 198	284 30	1,017 228	125 90
Steam turbines	{ (a) 11,450 (b) 4,450	7 11	11,457 4,461	—
Gas engines	{ (a) 364 (b) 403	13 —	377 403	—
Petrol and light oil engines	(a) 59	—	59	—
Heavy oil engines	{ (a) 121 (b) 200	—	121 200	—
TOTAL	{ (a) 12,727 (b) 5,251	304 41	13,031 5,292	125 90
TOTAL OF ELECTRIC GENERATORS INSTALLED	17,978	345	18,323	215
ELECTRIC MOTORS :—				
Driven by—				
Electricity generated in own works	{ (a) 31,903 (b) 3,492	299 333	32,202 3,825	70 20
Purchased electricity	{ (a) 33,050 (b) 4,911	3,647 559	36,497 5,432	185 10