

THE WOODEN CRATES, CASES, BOXES AND TRUNKS
TRADES.

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Introductory.*

The tables on pages 129 to 132 are based on returns received from firms in Great Britain and Northern Ireland whose business in 1924 consisted wholly or mainly in the manufacture of wooden crates, cases and boxes for packing merchandise and of chests, travelling trunks and other wood boxes. The number of such separate returns was 484. About 80 firms to which schedules were sent did not furnish returns, but these firms for the most part had very small establishments and they included some which 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 360 persons in all and that their total net output probably did not exceed £50,000.

Summary of results.—The following table shows the main results of the Censuses of 1924, 1912 and 1907, comparisons between the figures for the three years being subject to the qualifications mentioned in the next paragraph.

* See also the Notes on pp. vii to xv.

Particulars.	Unit.	1924.	1912.	1907.
Value of goods made and work done (Gross output)	£'000	6,388	3,568	3,011
Cost of materials used	"	3,622	2,249	1,840
Paid for work given out to other firms	"	16	9	3
Net output	"	2,750	1,310	1,168
Average number of persons employed (excluding outworkers)	No.	14,726	15,328	12,773
Net output per person employed (excluding outworkers)	£	187	85	91
Mechanical power available :—				
Prime movers	H.P.	24,220	11,468	10,203
Electric motors driven by purchased electricity	"	15,862	5,640	(not recorded)

Qualifications affecting comparisons.—In considering the above table and the other tables in this report which show figures for different censal years, it should be borne in mind that :—

(1) The comparability of figures relating to value or cost is affected by the changes which have taken place in the general purchasing power of money.

(2) The Censuses of 1907 and 1912 covered Great Britain and the whole of Ireland, but that of 1924 applied only to Great Britain and Northern Ireland. The exclusion of Southern Ireland in 1924 does not seriously affect the comparability of the figures since, according to the Census of Production taken by the Government of the Irish Free State in respect of the year 1926, the total value of the wooden crates, cases, boxes and trunks made in that year for sale amounted to £106,600.

(3) The Censuses of 1907 and 1924 extended to all firms, however small, but in 1912 firms employing not more than five persons (excluding the proprietors) were required to state only the average number of persons employed by them in the year. According to the information so furnished, the average number of persons employed in the establishments thus excluded was 748, or nearly 5 per cent. of the number employed by the remaining firms, as shown in the above table. Moreover, correspondence on defective returns for 1912 had not been completed when the war compelled suspension of this work. In these circumstances detailed information for 1912 is not given in the remainder of this report. The resulting defects in the aggregate figures given above are, however, not important.

Production.

Detailed information relating to the output in 1924 of the Wooden Crates, etc. Trades is summarised in Table II on page 129.

In addition to the output dealt with in this report, wooden cases, etc. valued, on a cost basis, at £90,000, were made in 1924 by Government Ordnance Factories.*

* See pages 411 and 419.

Principal products.—The following statement shows, for the years 1924 and 1907, the value of the wooden crates, cases, boxes and trunks returned, the figures for each year being inclusive of the output of similar products recorded on schedules for other trades. Particulars of quantities were not required in either year.

Kind of goods.	1924.		1907.
	Returned on schedules for		Total.
	The Wooden Crates, etc., Trades.	All trades.	
	Selling value.	Selling value.	Selling value.
	£'000.	£'000.	£'000.
Crates, cases and boxes for packing merchandise (including rolling boards for cloth pieces) ..	5,599	6,665	3,604
Chests, travelling trunks and other wood boxes ..	173	411	378
TOTAL VALUE	5,772	7,076	3,982

Crates, cases, boxes, etc., made by manufacturing and merchanting firms for packing their own goods are not included in this statement of output, except in the case of a few large firms which furnished separate returns in respect of their packing-case departments. The aggregate value of the output in 1924 was 77·7 per cent. greater than the value of the output in 1907, but considering the increase in the prices of timber it is doubtful whether there was much, if any, increase in the volume of output in 1924 compared with 1907.

No comparison can be made of production with exports and imports, as wooden crates, boxes, etc., are not separately recorded in the export and import statistics.

Other products.—The firms that made returns on schedules for the Wooden Crates, Cases, Boxes and Trunks Trades also produced, in addition to their main output, a variety of goods, and did classes of work for customers, of kinds that form the main output of other trades and are dealt with in the reports on those trades. The chief particulars are given below :—

Kind of goods.	1924.	1907.
	Selling value.	Selling value.
	£'000.	£'000.
Deals and other saw-mill products	128	82
Other manufactures of wood	305	77
Boxes of cardboard or of wood and cardboard	101	8
Metal boxes and other goods	47	3
TOTAL VALUE	581	170
Amount received for sawing and other work done on commission	35	14
TOTAL VALUE	616	184

The £35,000 may have included some part of the £16,000 paid to other firms for work given out to them; the major part of that sum was, however, probably paid to firms in other trades.

Cost of materials and work given out.—The cost of materials used by firms that made their returns on schedules for the Wooden Crates, Cases, Boxes and Trunks Trades was returned as £3,622,000 in 1924; the corresponding figure for 1907 was £1,840,000.

The amount paid to other firms for work given out to them was returned as £16,000 in 1924, and £3,000 in 1907.

Net output.—The net output in 1924 of the firms that made their returns on schedules for the Wooden Crates, Cases, Boxes and Trunks Trades (whose gross output was valued at £6,388,000) was £2,750,000, 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 £187, as compared with £91 in 1907.

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 Wooden Crates, Cases, Boxes and Trunks 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, 8,550 operatives, or 61 per cent. of the total of 14,010 operatives for the trades as a whole, and their net output totalled £1,644,000, or 60 per cent. of the aggregate net output of £2,750,000 for the trades as a whole. The total wage-bill of these firms, as returned to the Ministry of Labour, was £961,000, representing about 59 per cent. of their aggregate net output.

Employment.

The detailed information relating to employment in 1924 is summarised in Table III on pages 130 and 131. The following table sets out certain particulars for that year together with those relating to the 1907 Census. For the purpose of this comparison, the average numbers of operatives of each sex returned for 1924 have been divided between the two age-groups in the proportions shown by the data relating to the week ended 18th October.

Average number (excluding outworkers).	Males.		Females.		Males and females.	
	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
1924.						
Operatives	3,176	12,093	331	1,280	3,507	13,373
Administrative, etc. ..	68	1,119	34	234	102	1,353
TOTAL	3,244	13,212	365	1,514	3,609	14,726
1907.						
Wage earners	2,297	10,749	291	1,244	2,588	11,993
Salaried	58	713	8	67	66	780
TOTAL	2,355	11,462	299	1,311	2,654	12,773
Average number of outworkers :—						
1924	—	—	—	—	—	—
1907	2	—	379	—	381	—

The numbers of operatives recorded month by month in 1924, ranged from 886 below the average, in February, to 946 above the average, in November (see Table IIIB, page 131). The numbers increased in each intervening month except August.

Mechanical Power.

The detailed information relating to mechanical power in 1924 is summarised in Table IV on page 132. The following table sets out the particulars for 1924 and 1907 relating to the capacity and kinds of *prime movers* and the capacity of *electric generators* installed.

Power equipment.	1924.			1907.
	Ordinarily in use.	In reserve or idle.	Total.	Total.
PRIME MOVERS :—				
Reciprocating steam engines ..	H.P. 16,421	H.P. 814	H.P. 17,235	H.P. 5,743
Gas engines	6,049	568	6,617	4,377
Petrol and light oil engines ..	93	—	93	
Heavy oil engines	147	—	147	83
Water power	128	—	128	
TOTAL	22,838	1,382	24,220	10,203
ELECTRIC GENERATORS :—				
Driven by—	Kw.	Kw.	Kw.	Kw.
Reciprocating steam engines ..	1,081	436	1,517	115
Gas engines	116	—	116	
Petrol and light oil engines ..	—	—	—	15
Heavy oil engines	—	—	—	
Water power	—	—	—	
TOTAL	1,197	436	1,633	130

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	1,558	103	1,661
Purchased electricity	13,823	2,039	15,862

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 1,115,000.

Machinery Equipment.

In response to a request for voluntary information as to the kinds and numbers of machines in factories at the end of 1924, firms with an output of £4,680,000, or about 73 per cent. of the gross output of the whole trade, furnished the following information :—

Kind of machines.	In use.	Idle.	Total.	Proportion idle.
	Number.	Number.	Number.	Per cent.
Log and deal frames	32	10	42	24·8
Horizontal and vertical log band saws ..	14	2	16	12·5
Other saws :—				
Circular	1,874	171	2,045	8·3
Band	83	9	92	9·8
Horizontal	18	2	20	10·0
Veneer knives :—				
Flat	19	2	21	9·5
Circular	14	2	16	12·5
Planing and moulding machines ..	396	40	436	9·2
Turning lathes	46	11	57	19·3
Box-nailing machines	478	61	539	11·3
Other sorts	2	—	2	—

TABLES.

I.—Summary of results.

Particulars.	Unit.	England and Wales.	Scotland.	Great Britain.	Northern Ireland.
Value of goods made and work done (Gross output)	£'000	4,862	1,425	6,287	101
Cost of materials used	„	2,662	905	3,567	55
Paid for work given out to other firms	„	16	*	16	—
Net output	„	2,184	520	2,704	46
Average number of persons employed	No.	11,843	2,651	14,494	232
Net output per person employed ..	£	184	196	187	199
Mechanical power available :—					
Prime movers	H.P.	19,867	3,855	23,722	498
Electric motors driven by purchased electricity	„	14,239	1,562	15,801	61

* Less than £500.

II.—Production.

Goods sold or added to stock and work done.	England and Wales.	Scotland.	Great Britain.	Northern Ireland.
	Selling value.	Selling value.	Selling value.	Selling value.
	£'000.	£'000.	£'000.	£'000.
Crates, cases and boxes for packing merchandise, including rolling boards for cloth pieces	4,300	1,198	5,498	101
Chests, travelling trunks and other wood boxes	130	43	173	—
Deals and other saw-mill products	78	50	128	—
Casks and barrels	9	24	33	—
Other manufactures of wood	154	71	225	—
Firewood, sawdust, etc.	38	9	47	—
Boxes of cardboard or of wood and cardboard	101	—	101	—
Metal boxes and other goods	25	22	47	—
TOTAL VALUE OF GOODS MADE ..	4,835	1,417	6,252	101
Work done, on commission or "on hire", on timber supplied :—				
Sawing and planing timber, deals, etc. ..	16*	4*	20*	—
Other work	11*	4*	15*	—
TOTAL VALUE OF WORK DONE ..	27*	8*	35*	—
TOTAL VALUE OF GOODS MADE AND WORK DONE (GROSS OUTPUT) ..	4,862	1,425	6,287	101

* 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	2,480	10,065	265	1,122	2,745	11,187
Administrative, etc.*..	54	948	22	175	76	1,123
TOTAL	2,534	11,013	287	1,297	2,821	12,310
<i>Scotland</i> :—						
Operatives	822	2,408	79	205	901	2,613
Administrative, etc.*..	14	147	11	55	25	202
TOTAL	836	2,555	90	260	926	2,815
<i>Great Britain</i> :—						
Operatives	3,302	12,473	344	1,327	3,646	13,800
Administrative, etc.*..	68	1,095	33	230	101	1,325
TOTAL	3,370	13,568	377	1,557	3,747	15,125
<i>Northern Ireland</i> :—						
Operatives	30	209	—	1	30	210
Administrative, etc.*..	—	24	1	4	1	28
TOTAL	30	233	1	5	31	238
<i>United Kingdom</i> :—						
TOTAL	3,400	13,801	378	1,562	3,778	15,363

* Administrative, technical and clerical staff.

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

England and Wales. (Annual average : Males, 9,642 ; Females, 1,078 ; Total, 10,720.)

Week ended.	Males.	Females.	Total.	Week ended.	Males.	Females.	Total.
Jan. 12th ..	9,213	1,016	10,229	July 19th ..	9,849	1,113	10,962
Feb. 16th ..	9,030	1,015	10,045	Aug. 16th ..	9,651	1,046	10,697
March 15th ..	9,280	1,038	10,318	Sept. 13th ..	9,852	1,101	10,953
April 12th ..	9,402	1,037	10,439	Oct. 18th ..	10,065	1,122	11,187
May 17th ..	9,411	1,028	10,439	Nov. 15th ..	10,239	1,180	11,419
June 21st ..	9,531	1,081	10,612	Dec. 13th ..	10,179	1,156	11,335

Scotland. (Annual average : Males, 2,248 ; Females, 201 ; Total, 2,449.)

Jan. 12th ..	2,095	169	2,264	July 19th ..	2,273	210	2,483
Feb. 16th ..	2,047	191	2,238	Aug. 16th ..	2,276	215	2,491
March 15th ..	2,029	177	2,206	Sept. 13th ..	2,309	215	2,524
April 12th ..	2,031	187	2,218	Oct. 18th ..	2,408	205	2,613
May 17th ..	2,216	207	2,423	Nov. 15th ..	2,481	213	2,694
June 21st ..	2,270	209	2,479	Dec. 13th ..	2,533	221	2,754

Great Britain. (Annual average : Males, 11,890 ; Females, 1,279 ; Total, 13,169.)

Jan. 12th ..	11,308	1,185	12,493	July 19th ..	12,122	1,323	13,445
Feb. 16th ..	11,077	1,206	12,283	Aug. 16th ..	11,927	1,261	13,188
March 15th ..	11,309	1,215	12,524	Sept. 13th ..	12,161	1,316	13,477
April 12th ..	11,433	1,224	12,657	Oct. 18th ..	12,473	1,327	13,800
May 17th ..	11,627	1,235	12,862	Nov. 15th ..	12,720	1,393	14,113
June 21st ..	11,801	1,290	13,091	Dec. 13th ..	12,712	1,377	14,089

Northern Ireland. (Annual average : Males, 203 ; Females, 1 ; Total, 204.)

Jan. 12th ..	191	1	192	July 19th ..	195	1	196
Feb. 16th ..	203	1	204	Aug. 16th ..	205	1	206
March 15th ..	197	1	198	Sept. 13th ..	213	1	214
April 12th ..	202	1	203	Oct. 18th ..	209	1	210
May 17th ..	204	1	205	Nov. 15th ..	205	1	206
June 21st ..	205	1	206	Dec. 13th ..	209	1	210

IV.—Mechanical Power.

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

(a) Ordinarily in use. (b) In reserve or idle.	England and Wales.	Scotland.	Great Britain.	Northern Ireland.
PRIME MOVERS :—	H.P.	H.P.	H.P.	H.P.
Reciprocating steam engines .. { (a)	13,930	2,220	16,150	271
.. (b)	271	543	814	—
Gas engines (a)	4,913	1,079	5,992	57
.. (b)	465	13	478	90
Petrol and light oil engines .. (a)	73	—	73	20
Heavy oil engines (a)	147	—	147	—
Water power (a)	68	—	68	60
TOTAL (a)	19,131	3,299	22,430	408
.. (b)	736	556	1,292	90
TOTAL OF PRIME MOVERS INSTALLED	19,867	3,855	23,722	498
ELECTRIC GENERATORS :—	Kw.	Kw.	Kw.	Kw.
Driven by—				
Reciprocating steam engines { (a)	365	566	931	150
.. (b)	—	436	436	—
Gas engines (a)	11	105	116	—
TOTAL (a)	376	671	1,047	150
.. (b)	—	436	436	—
TOTAL OF ELECTRIC GENE- RATORS INSTALLED	376	1,107	1,483	150
ELECTRIC MOTORS :—	H.P.	H.P.	H.P.	H.P.
Driven by—				
Electricity generated in own { (a)	467	841	1,308	250
works (b)	—	103	103	—
Purchased electricity (a)	12,442	1,320	13,762	61
.. (b)	1,797	242	2,039	—