

THE AERATED WATERS, CIDER, VINEGAR, BRITISH WINE,
AND COGNATE TRADES.

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Introductory.*

The Tables on pages 199–202 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 table waters, cider, British wines, vinegar, etc. The number of such separate Returns was 1,425. About 180 firms to which schedules were sent did not furnish Returns, but these firms for the most part had very small establishments. On the basis of the information available it is estimated that they did not employ more than 625 persons in all and that their total net output probably did not exceed £175,000.

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. Particulars relating to the Census of 1912 have been omitted for the reasons stated in that paragraph.

* See also the Notes on pages vii–xiv.

Particulars.	Unit.	1924.	1907.
Value of goods made (Gross output)	£'000	11,052	6,038
Cost of materials used	"	4,953	2,461
Net output	"	6,099	3,577
Average number of persons employed	No.	19,295	28,657
Net output per person employed	£	316	125
Mechanical power available :—			
Prime movers	H.P.	7,154	11,117
Electric motors driven by purchased electricity	"	7,807	(not recorded)

Qualifications affecting comparisons.—In considering the above table and the other tables in this Report which show figures for the two 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 and in excise and customs duties.

(2) The Census of 1907 covered the whole of Great Britain and Ireland, but that of 1924 applied only to Great Britain and Northern Ireland. 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 table waters, vinegar, etc., made in the year was £307,000.

(3) The Censuses of 1907 and 1924 extended to all firms, however small, but in 1912 firms employing not more than five persons (excluding the proprietors) were merely required to state the average number of persons employed by them in the year. According to the information so furnished, the number of persons employed in the establishments thus excluded was 5,348 or 22 per cent. of the number employed by the remaining firms. The proportion of output omitted in this way is sufficiently large to invalidate comparisons, and, consequently, the relative information obtained for 1912 is not dealt with in this Report.

Value of output and cost of materials.—The figures in the above table representing the value of goods made 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 page xii, they over-state the value of the output of, and the cost of materials used by, the Aerated Waters, Cider, etc., Trades considered as a whole. The matter is discussed on page 195, where it is estimated that in 1924 the value, free from duplication, of the output of these trades lay between £10,500,000 and £11,000,000 and the cost of the materials purchased from sources outside those trades and worked up into their products lay between £4,400,000 and £4,900,000.

Production.

Detailed information relating to the output of the Aerated Waters, Cider, etc., Trades in 1924 will be found in Table II on page 199.

Principal products.—The following table shows, for the censal years 1924 and 1907, the value and, where recorded, the quantity of the principal products of the Aerated Waters, Cider, etc., Trades, the totals for each year being inclusive of the output of similar products returned on schedules for other trades.

Kind of goods.	1924.				1907.	
	Returned on schedules for				Total.	
	The Aerated Waters, Cider, etc., Trades.		All trades.			
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Th. galls.	£'000	Th. galls.	£'000	Th. doz. bottles.	£'000
Table waters ..	37,518	5,143	40,062	5,493	102,642	4,544
Cider and perry ..	6,686	671	6,745	677	2,722	154
British-made wine ..	1,776	407	1,997	473	1,029	135
Lime and lemon juice	848	314	919	340	} 2,470	279
Other fruit juices, syrups and cordials	..	128	..	171		
Ginger beer, herb beer, and other non-alcoholic drinks brewed ..	..	394	..	447	9,109	224
Other beverages ..	..	23	..	23	—	—
Vinegar and acetic acid for table use ..	14,613	979	16,108	1,079	16,048	475
TOTAL VALUE ..	..	8,059	..	8,703	..	5,811

Unsweetened table waters were liable to a duty of 8*d.* per gallon throughout 1924, but the duties of 2*d.* per gallon on sweetened table waters and herb-beer were abolished as from 1st August, 1924; the duty on cider and perry was removed in May, 1923. None of these beverages was dutiable in 1907.

A precise comparison of the output of table waters in 1907 and 1924 cannot be made owing to the adoption of different units of measurement in the two years, but it would appear from the value of the output in each year that there was a considerable decline; so far as can be judged from the recorded results there was also some falling-off in the total production of fruit juices, ginger beer and other non-alcoholic beverages. On the other hand, there was a large increase in the manufacture of cider and perry and of British-made wine. The output of vinegar for sale apparently changed but little, but the amounts shown do not include the quantity made by pickle manufacturers and used by them.

Other products.—In addition to the products dealt with in the preceding section, firms that made their Returns on schedules for the Aerated Waters, Cider, etc., Trades in 1924 recorded an output of other goods, as shown below. These goods, being of kinds mainly produced in other trades, are dealt with in the Reports on those trades. The corresponding figures for 1907 are also shown. It will be seen that a large increase is shown in the bottling work done by firms in these trades in 1924 as compared with 1907.

Kind of goods.	1924.	1907.
	Value.	Value.
	£'000	£'000
Beer and ale purchased and bottled	2,319	185
Other liquors purchased and bottled	444	24
Powders, flavours and essences	114	} 270
Pickles, sauces and condiments	49	
Miscellaneous food stuffs	47	
Other goods made	20	
TOTAL VALUE	2,993	479

Value of output free from duplication.—The gross value of the output recorded by firms that made their Returns on schedules for the Aerated Waters, Cider, etc., Trades in 1924 was £11,052,000, but scrutiny of the individual Returns reveals the possibility of duplication in respect of fruit juices to the value of £190,000, part of which may have been sold by the makers to other firms in these trades. The *other liquors purchased and bottled* (£444,000) consisted chiefly of cider, but they may have included imported cider and perry, of which 1,114,000 gallons, valued at £50,000, were retained in 1924, and they may also have included all or part of the 59,000 gallons of cider and perry, valued at £6,000, returned on schedules for other trades. Another source of duplication may be found in the output of *powders, flavours and essences*, valued at £114,000. Making allowance for these items the value, free from duplication, of the output in 1924 may be estimated at a sum lying between £10,500,000 and £11,000,000. Estimated on the same basis the value of the output, free from duplication, in 1907 lay between £5,898,000 and £6,038,000.

Cost of materials.—The cost of materials used by firms that made their Returns on schedules for the Aerated Waters, Cider, etc., Trades was returned as £4,953,000 in 1924, a sum which, by the exclusion of purchases of the products of other firms in the same trades, is reduced to a figure lying between £4,400,000 and £4,900,000; the corresponding figure for 1907 was between £2,321,000 and £2,461,000.

Net output.—The net output in 1924 of the firms that made their Returns on schedules for the Aerated Waters, Cider, etc., Trades (whose gross output was valued at £11,052,000) was £6,099,000, that sum representing, without duplication, the total amount by which the value (at works) of the aggregate output exceeded the cost (at works) of the materials used.

The net output per head of persons employed in the censal year 1924 was £316 as compared with £125 in 1907.

Exports and imports.—The following table, relating to the year 1924, shows the production for sale of certain of the main products of the Aerated Waters, Cider, etc., Trades in relation to the exports and imports of similarly described goods.

Kind of products.	Production for sale.	Exports.	Net imports.	Available for consumption in the United Kingdom.
	Th. galls.	Th. galls.	Th. galls.	Th. galls.
Table waters	40,062	434	878	40,506
Cider and perry	6,745	124	1,114	7,735
Vinegar	16,108	606	276	15,778

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 Aerated Waters, Cider, etc., Trades which made Returns both to the Ministry of Labour and to the Census of Production office. According to the Census records this group of firms employed, in the week ended 18th October, 1924, 7,522 operatives, or 51 per cent. of the total of 14,867 operatives for the trades as a whole, and their net output totalled £3,192,000, or 52 per cent. of the aggregate net output of £6,099,000 for the trades as a whole. The total wage-bill of these firms, as returned to the Ministry of Labour, was £821,000, representing about 26 per cent. of their aggregate net output.

Employment.

The detailed information relating to employment in 1924 is summarised in Table III on pages 200-201. The following table sets out certain particulars for that year together with those obtained at 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.	Males.		Females.		Males and females.	
	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
1924.						
Operatives	1,060	10,085	708	4,996	1,768	15,081
Administrative, etc. ..	138	3,441	86	773	224	4,214
TOTAL	1,198	13,526	794	5,769	1,992	19,295
1907.						
Wage earners	3,063	19,417	449	5,253	3,512	24,670
Salaried	261	3,660	30	327	291	3,987
TOTAL	3,324	23,077	479	5,580	3,803	28,657

The numbers of operatives recorded month by month in 1924 ranged from 2,805 above the average, in July, to 1,478 below the average, in February (see Table IIIB, page 201). The number employed in June, July and August were notably in excess of those recorded for the other months of the year.

Mechanical Power.

The detailed information relating to mechanical power in 1924 is summarised in Table IV on page 202. The following table sets out the particulars for that year and for 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.
	H.P.	H.P.	H.P.	H.P.
PRIME MOVERS :—				
Reciprocating steam engines ..	1,833	447	2,280	5,812
Steam turbines	55	—	55	55
Gas engines	3,459	369	3,828	} 5,178
Petrol and light oil engines ..	685	56	741	
Heavy oil engines	133	25	158	
Water power	20	—	20	
Other	36	36	72	72
TOTAL	6,221	933	7,154	11,117
ELECTRIC GENERATORS :—	Kw.	Kw.	Kw.	Kw.
Driven by—				
Reciprocating steam engines	140	1	141	} 146
Steam turbines	8	—	8	
Gas engines	60	—	60	} 72
Petrol and light oil engines ..	28	—	28	
Heavy oil engines	3	—	3	
Water power	—	—	—	
TOTAL	239	1	240	218

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	221	9	230
Purchased electricity	7,127	680	7,807

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 706,000.

TABLES.

I.—Summary of results.

Particulars.	Unit.	England and Wales.	Scotland.	Great Britain.	Northern Ireland.
Value of goods made (Gross output)	£'000	9,556	1,036	10,592	460
Cost of materials used	"	4,219	499	4,718	235
Net output	"	5,337	537	5,874	225
Average number of persons employed	No.	16,251	2,143	18,394	901
Net output per person employed	£	328	251	319	249
Mechanical power available:—					
Prime movers	H.P.	6,130	669	6,799	355
Electric motors driven by purchased electricity	"	6,755	885	7,640	167

II.—Production.

Goods sold or added to stock.	Unit.	England and Wales.	Scotland.	Great Britain.	Northern Ireland.
Table waters	<i>Th. galls.</i>	30,625	5,489	36,114	1,404
	£'000	4,126	736	4,862	281
Cider and perry	<i>Th. galls.</i>	6,644	9	6,653	33
	£'000	665	2	667	4
British-made wine	<i>Th. galls.</i>	*	*	1,775	1
	£'000	*	*	407	†
Fruit juices :—					
Lime and lemon juice	<i>Th. galls.</i>	843	4	847	1
	£'000	313	1	314	†
Other fruit juices, syrups and cordials and non-alcoholic beverages made therefrom					
{ Quantity stated	<i>Th. galls.</i>	122	4	126	5
{	£'000	51	1	52	2
{ Quantity not stated	£'000	73	1	74	—
Non-alcoholic drinks brewed (ginger beer, herb beer, etc)	£'000	379	14	393	1
Other beverages	"	23	—	23	—
Vinegar and acetic acid for table use	<i>Th. galls.</i>	*	*	14,613	—
	£'000	*	*	979	—
Beer and ale purchased and bottled	£'000	1,954	204	2,158	161
Other liquors purchased and bottled	"	416	17	433	11
Powders, flavours and essences	"	114	—	114	—
Pickles, sauces and condiments	"	49	—	49	—
Miscellaneous foodstuffs	"	25	22	47	—
Other goods made	"	20	—	20	—
TOTAL VALUE OF GOODS MADE (GROSS OUTPUT)	£'000	9,556	1,036	10,592	460

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

† Less than £500.

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	839	8,463	552	4,010	1,391	12,473
Administrative, etc.*	130	3,004	67	605	197	3,609
TOTAL	969	11,467	619	4,615	1,588	16,082
<i>Scotland</i> :—						
Operatives	117	1,100	93	626	210	1,726
Administrative, etc.*	3	279	16	120	19	399
TOTAL	120	1,379	109	746	229	2,125
<i>Great Britain</i> :—						
Operatives	956	9,563	645	4,636	1,601	14,199
Administrative, etc.*	133	3,283	83	725	216	4,008
TOTAL	1,089	12,846	728	5,361	1,817	18,207
<i>Northern Ireland</i> :—						
Operatives	110	580	24	88	134	668
Administrative, etc.*	5	158	3	48	8	206
TOTAL	115	738	27	136	142	874
<i>United Kingdom</i> :—						
TOTAL	1,204	13,584	755	5,497	1,959	19,081

* Administrative, technical and clerical staff.

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

England & Wales. (Annual average : Males, 8,384 ; Females, 4,258 ; Total, 12,642.)

Week ended	Males.	Females.	Total.	Week ended	Males.	Females.	Total.
Jan. 12th ..	7,830	3,514	11,344	July 19th ..	9,139	6,007	15,146
Feb. 16th ..	7,793	3,524	11,317	Aug. 16th ..	8,953	4,877	13,830
March 15th ..	7,780	3,588	11,368	Sept. 13th ..	8,591	4,095	12,686
April 12th ..	7,999	4,027	12,026	Oct. 18th ..	8,463	4,010	12,473
May 17th ..	8,425	4,677	13,102	Nov. 15th ..	8,484	3,845	12,329
June 21st ..	8,806	5,040	13,846	Dec. 13th ..	8,347	3,889	12,236

Scotland. (Annual average : Males, 1,096 ; Females, 648 ; Total, 1,744.)

Jan. 12th ..	1,059	600	1,659	July 19th ..	1,151	790	1,941
Feb. 16th ..	1,051	588	1,639	Aug. 16th ..	1,149	739	1,888
March 15th ..	1,049	583	1,632	Sept. 13th ..	1,131	662	1,793
April 12th ..	1,066	609	1,675	Oct. 18th ..	1,100	626	1,726
May 17th ..	1,094	644	1,738	Nov. 15th ..	1,090	598	1,688
June 21st ..	1,118	712	1,830	Dec. 13th ..	1,096	624	1,720

Great Britain. (Annual average : Males, 9,480 ; Females, 4,906 ; Total, 14,386.)

Jan. 12th ..	8,889	4,114	13,003	July 19th ..	10,290	6,797	17,087
Feb. 16th ..	8,844	4,112	12,956	Aug. 16th ..	10,102	5,616	15,718
Mar. 15th ..	8,829	4,171	13,000	Sept. 13th ..	9,722	4,757	14,479
April 12th ..	9,065	4,636	13,701	Oct. 18th ..	9,563	4,636	14,199
May 17th ..	9,519	5,321	14,840	Nov. 15th ..	9,574	4,443	14,017
June 21st ..	9,924	5,752	15,676	Dec. 13th ..	9,443	4,513	13,956

Northern Ireland. (Annual average : Males, 605 ; Females, 90 ; Total, 695.)

Jan. 12th ..	578	74	652	July 19th ..	684	115	799
Feb. 16th ..	566	81	647	Aug. 16th ..	655	101	756
March 15th ..	568	81	649	Sept. 13th ..	609	88	697
April 12th ..	594	83	677	Oct. 18th ..	580	88	668
May 17th ..	616	86	702	Nov. 15th ..	577	91	668
June 21st ..	652	93	745	Dec. 13th ..	583	94	677

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) 1,552	193	1,745	88
	{ (b) 424	8	432	15
Steam turbines	{ (a) 55	—	55	—
Gas engines	{ (a) 2,850	387	3,237	222
	{ (b) 321	44	365	4
Petrol and light oil engines ..	{ (a) 654	31	685	—
	{ (b) 40	3	43	13
Heavy oil engines	{ (a) 120	—	120	13
	{ (b) 25	—	25	—
Water power	{ (a) 17	3	20	—
	{ (b) 36	—	36	—
Other	{ (a) 36	—	36	—
	{ (b) 36	—	36	—
TOTAL	{ (a) 5,284	614	5,898	323
	{ (b) 846	55	901	32
TOTAL OF PRIME MOVERS INSTALLED				
	6,130	669	6,799	355
ELECTRIC GENERATORS :—				
Driven by—	Kw.	Kw.	Kw.	Kw.
Reciprocating steam engines	{ (a) 129	11	140	—
	{ (b) 1	—	1	—
Steam turbines	{ (a) 8	—	8	—
Gas engines	{ (a) 60	—	60	—
Petrol and light oil engines	{ (a) 28	—	28	—
Heavy oil engines	{ (a) 3	—	3	—
TOTAL	{ (a) 228	11	239	—
	{ (b) 1	—	1	—
TOTAL OF ELECTRIC GENERATORS INSTALLED				
	229	11	240	—
ELECTRIC MOTORS :—				
Driven by—	H.P.	H.P.	H.P.	H.P.
Electricity generated in own works	{ (a) 206	15	221	—
	{ (b) 9	—	9	—
Purchased electricity ..	{ (a) 6,187	786	6,973	154
	{ (b) 568	99	667	13