THE BACON CURING AND SAUSAGE TRADES.

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Contents.

Introductory.*

The Tables on pages 83 to 87 are based on Returns received from firms in Great Britain and Northern Ireland whose business in 1924 consisted wholly or mainly in curing bacon and hams and in the manufacture of lard, sausages, and kindred products. The number of such separate Returns was 621. About 180 firms to which schedules were sent did not furnish Returns, but these firms for the most part had very small establishments or carried on small scale manufacturing operations in combination with a retail trading business, and they included a number which had ceased operations by the end of the censal year. On the basis of the information available it is estimated that they did not employ more than 750 persons in all in their manufacturing operations and that their total net output was probably about £180,000.

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.

Particulars,	Unit.	1924,	1907.
Value of goods made and work done (Gross output) Cost of materials used	£'000 ,, No. £	24,413 19,833 4,580 13,629 336	10,490 9,431 1,059 7,260 146
Prime movers Electric motors driven by purchased electricity	H.P. "	6,463 8,104	5,140 (not recorded)

These particulars are confined to wholesale manufacturers. Retail dealers making sausages and other goods for their own trade only have been, as far as possible, excluded.

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.

(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 the goods made and work done in the Bacon Curing Trade in that year was returned as $\pm 5,457,000$, and the average number of persons employed as 1.800

* See also the Notes on pp. vii-xiv.

(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 965, or $12 \cdot 3$ per cent. of the number employed by the remaining firms. The proportion of output excluded in this way was much smaller, but it is sufficient to invalidate comparisons and, consequently, the relative information for 1912 is not included in this Report.

(4) Certain bacon-curing firms also entered on their schedules the value of fresh pork sold by them. The sum involved was relatively small and has been deducted from the value of the gross output and from the cost of materials used. The cost of materials is, therefore, understated in each year by the amount of *profits* on the sale of the fresh pork so entered, and the net output is correspondingly exaggerated; the effect on the net output per head is, however, unimportant.

Production.

Detailed information as to the output of the Bacon Curing and Sausage Trades in 1924 will be found in Table II on page 84.

Principal products.—The following statement shows, for 1924 and 1907, the value and, where recorded, the quantity of the principal products of the Bacon Curing and Sausage Trades, including not only those manufactured by firms that made their Returns on schedules for these trades, but also those recorded by firms whose Returns were furnished on schedules for other trades. With regard to the heading *Cooked meats*, *brawn*, *soups*, *etc.*, which was of some importance in 1924, it should be noted that in 1907 these commodities were returned under the same heading as preserved meat in tins on the schedule for the Preserved Meat, etc., Trades (see page 90) and that, consequently, the full value of the output of cooked meats, etc., in that year cannot be stated :—

i goods which are maanly	192	4. 11 2100	1907.		
Kind of goods.	Quantity.	Selling value.	Quantity.	Selling value.	
Bacon and hams	Th. cwts. 2,231	£'000. 13,988	Th. cwts. 2,220	£'000. 7,149	
Lard	671	2,693	624	1,496	
fats (mainly refined) Sausages Cooked meats, brawn, soups, etc		3,274 3,419	ediar inte o	764 383	
Bladders, cases, and sausage skins Tripe, dressed	Roder D.	787	rved <u>ment</u> i	328	
Salt pork, heads, etc		252 599	Robol	218 303	
TOTAL VALUE	···	26,205	Aport. In A	10,641	

Further details of the output in 1924 are given in the following table :----

	Returned on schedules for					
Kind of goods.	The Bacon Sausage		All tra	ades.*		
suri due erit de proprisio	Quantity.	Selling value.	Quantity.	Selling value.		
	Th. cwts.	£'000.	Th. cwts.	£'000.		
Bacon and hams, not smoked	1,533	9.686	1.535	9.694		
Bacon and hams, smoked	696	4,294	696	4.294		
Lard	405	1,688	671	2,693		
Suet, dripping, and other animal			No. of Contractions			
fats (mainly refined)		754	TI, ICO SUCLA	754		
Sausages	mails companie	3,101	Marine Aller	3.274		
Cooked meats, brawn, soups, etc		2,219		3,419		
Bladders, cases, and sausage skins	1.	778	A REAL PROPERTY AND	787		
Tripe, dressed	Dealest States	435	ALL DE COLL	439		
Salt pork	22	120	22	120		
Heads, etc		132		132		
Offals and by-products		599		599		
TOTAL VALUE		23,806		26,205		

* Including the Oil and Tallow Trades, and the Fertiliser, Glue, Sheep Dip and Disinfectant Trades, the Reports on which form part of a separate volume.

Bacon curing firms were required to state the quantity and value of bacon cured separately from the quantity and value of hams cured, but out of the aggregate of 2,229,000 cwts. returned on schedules for the Bacon Curing and Sausage Trades, firms returning 298,000 cwts., or 13 · 4 per cent. of the total, were not able to separate bacon from hams. Of the remainder there were 1,044,000 cwts. of bacon, not smoked, 515,000 cwts. of smoked bacon, 313,000 cwts. of hams, not smoked, and 59,000 cwts. of smoked hams. The 696,000 cwts. of smoked bacon and hams were purchased in the "green" state and smoked or "processed" by the purchasing firms.

Other products.—In addition to the principal products shown in the preceding tables, the firms that made their Returns on schedules for the Bacon Curing and Sausage Trades recorded, for 1924 and 1907, the following amounts in respect of goods which are mainly produced in other trades and which are dealt with in the Reports on those trades :—

Kind of goods.	1924.	1907.
Arma of Books.	Value.	Value.
Grease and tallow (unrefined) Preserved meat in tins and glasses Compound lard 'Other goods	£'000. 15 (7,000 cwts.) 300 221 53	$\pounds'000.$ 38
Total	589	59

Work done on commission or for the trade.—Firms that made their Returns on schedules for the Bacon Curing and Sausage Trades stated that in 1924 they received the sum of $f_{2}18,000$ for bacon drying and smoking. No work done for the trade was recorded in 1907.

Value of output free from duplication.—Taking together the total of £23,806,000, representing the value of the principal products of the Bacon Curing and Sausage Trades, the other products valued at £589,000 and the amount of £18,000 returned as received for work done for the trade, the gross value of the output of the firms that made their Returns on schedules for the Bacon Curing and Sausage Trades amounted to £24,413,000 in 1924. There is reason to believe that the great bulk of the bacon and hams purchased for smoking was imported and it is probable that the amount of £18,000 received for work done for the trade was received mainly in respect of the smoking of imported bacon for merchants.

The output of sausages, cooked meats, etc. and tripe relates only to the wholesale trade in these commodities. There may be some duplication between the output of sausage-casings as returned to the Census and that of sausages, in so far as the former were purchased by wholesale sausage-makers, but its extent is not known. The total value of all products and work done, as returned on schedules for the Bacon Curing and Sausage Trades, namely $\pounds 24,413,000$, may, therefore, be taken to be free from substantial duplication.

The amount of duplication involved in the gross output figure of $\pounds 10,490,000$ for the Bacon Curing and Sausage Trades in 1907 was similarly believed to be small, and the value, free from duplication, of the output in that year was estimated to be between $\pounds 10\frac{1}{4}$ and $\pounds 10\frac{1}{2}$ millions.

Cost of materials.—The cost of materials used by firms making their Returns on schedules for the Bacon Curing and Sausage Trades was returned as f_{19} ,833,000 in 1924, a sum which, as already stated, is to a slight degree understated on account of the deduction, both from the value of output and from the cost of materials, of the value of fresh pork sold.

Net output.—The net output in 1924 of the firms making their Returns on schedules for the Bacon Curing and Sausage Trades (whose gross output was valued at $\pounds 24,413,000$) was $\pounds 4,580,000$, 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.

The net output per head of persons employed in the censal year 1924 was $\pounds 336$ as compared with $\pounds 146$ in 1907.

Number and weight of pigs used.—In response to a request for information as to the number and weight of pigs used in 1924 in the

production of bacon, etc., firms whose aggregate output was valued at \pounds 11,386,000, or 46.6 per cent. of the total for the trade, furnished the following particulars :---

Pigs killed—		Number.	Approximate weight. cwts.
Of firms' own rearing	· · ·	4,420	6,500
Purchased		988,620	1,431,580
Total pigs killed		993,040	1,438,080
Pigs purchased already killed		253,330	409,900
Total pigs used		1,246,370	1,847,980

The total quantity of bacon, not smoked, and hams produced by the firms furnishing the above particulars amounted to 1,037,000 cwts., or nearly 68 per cent. of the aggregate weight returned by all firms in the trade in respect of bacon and hams, not smoked. The value of the output of these firms was made up as follows :—

Kind of goods.		Selling value.	Proportion of total output of the trade.
and the state of the second second second		£'000.	Per cent.
Bacon and hams, not smoked		6,535	67.5
", " smoked	- Hensell	212	4.9
Sausages		2,226	71.8
Lard		461	27.3
Cooked meats, brawn, soups, etc.	i nons	1,394	62.8
Other goods	w Cur	558	16.3
TOTAL VALUE	Mame	11,386	46.6

Exports and imports.-Taking the primary production of bacon and hams in the United Kingdom as 1,535,000 cwts. (i.e., assuming that the bacon and hams returned as smoked were imported produce smoked in this country, an assumption that is believed to be justified), deducting exports, 45,000 cwts. and adding retained imports, 8,924,000 cwts., the quantity available for consumption in the United Kingdom in 1924 was 10,414,000 cwts. of which only 14.3 per cent. was of home origin. Of the imported bacon and hams, 607,000 cwts. were consigned from the Irish Free State. With regard to lard. United Kingdom production was 671,000 cwts., British exports over 10,000 cwts. and retained imports 2,475,000 cwts. ; out of the 3,136,000 cwts. available for consumption in the United Kingdom in 1924, 21.1 per cent. was of home origin. As no distinction was made in 1907 between bacon and hams smoked and not smoked, a similar calculation cannot be made as to the production and consumption in the United Kingdom in that year, but exports were then 123,000 cwts. and retained imports 6,348,000 cwts. The quantity of lard produced in 1907 may be estimated at about 590,000 cwts.; exports were under 10,000 cwts. and retained imports about 1.800.000 cwts.

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 Bacon Curing and Sausage 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, 6,123 operatives, or 54 per cent. of the total of 11,321 operatives for the trades as a whole, and their net output totalled $f_{2,415,000}$, or 53 per cent. of the aggregate net output of $f_{4,580,000}$ for the trades as a whole. The total wage-bill of these firms, as returned to the Ministry of Labour, was £715,000, representing about 30 per cent. of their aggregate net output.

Employment.

The detailed information relating to employment in 1924 is summarised in Table III on pages 85–86. The following table sets out the particulars for that year together with those obtained in 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 proportion shown by the data relating to the week ended 18th October :—

	1999 - 1997 -	Ma	les.	Fem	ales.	Males and	Males and females.	
Average number.	-	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.	
1924.		point inte						
Operatives Administrative, etc.	.: .:	691 138	8,083 1,988	545 86	2,900 658	1,236 224	10,983 2,646	
TOTAL		829	10,071	631	3,558	1,460	13,629	
1907. Wage earners Salaried	101. I	287 70	4,975 942	83 15	1,234 109	370 85	6,209 1,051	
TOTAL	961-	357	5,917	98	1,343	455	7,260	

The numbers of operatives recorded month by month in 1924 ranged from 571 above the average, in December, to 235 below the average, in July. The numbers increased notably in the last three months of the year (see Table III B, p. 86). The above table shows that the proportion of females to males in these trades was significantly greater in 1924 than in 1907.

Mechanical Power.

The detailed information relating to mechanical power in 1924 is summarised in Table IV on page 87. 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.

the Vinited Wrighton in 192.	ai suiod	1924.		1907.
Power equipment.	Ordinarily in use.	In reserve or idle.	Total.	Total.
PRIME MOVERS : Reciprocating steam engines Steam turbines Gas engines Petrol and light oil engines Heavy oil engines Water power Other	H.P. 2,381 9 1,312 162 669 39 —	H.P. 1,359 507 	H.P. 3,740 9 1,819 162 694 39 —	$\left.\begin{array}{c} \text{H.P.} \\ 3,662 \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ $
Total	4,572	1,891	6,463	5,140
ELECTRIC GENERATORS : Driven by	Kw.	Kw.	Kw.	Kw.
Reciprocating steam engines Gas engines	781 336 4	788 77	1,569 413 4	748
Heavy oil engines Water-power Other prime movers	119 5 —		119 5 —	
Total	1,245	865	2,110	1,035

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

	1924.			
Electric motors.	Ordinarily in use.	In reserve or idle.	Total.	
Driven by—	H.P.	H.P.	H.P.	
Electricity generated in own works Purchased electricity	1,539 6,927	328 1,177	1, 867 8,104	

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 499,000.

TABLES.

I.—Summary of results.

Particulars.	Unit.	England and Wales.	Scotland.	Great Britain.	Northern Ireland.
Value of goods made and work done (Gross output) Cost of materials used Net output Average number of persons employed Net output per person employed	£'000 " No. £	$20,241 \\16,382 \\3,859 \\11,255 \\343$	2,569 2,001 568 1,888 301	22,810 18,383 4,427 13,143 337	$1,603 \\ 1,450 \\ 153 \\ 486 \\ 316$
Mechanical power available — Prime movers	H.P.	5,233	696	5,929	534
Electric motors driven by purchased electricity	,,	6,756	1,243	7,999	105

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Output sold or added to stock and work done.	Unit.	England and Wales.	Scotland.	Great Britain.	Northern Ireland.
Bacon {	Th. cwts.	785	109	894	150
	£'000	4,771	739	5,510	906
,, , smoked {	Th. cwts.	*	*	515	—
<i>", , , , , , , , , , </i>	£'000	Non State State State		3,312	
Hams {	Th. cwts.	$173 \\ 1,226$	81	254	59
}	f'000 Th. cwts.	1,220	516	$\begin{array}{r}1,742\\59\end{array}$	448
,, , smoked {	£'000	*	*	315	
Bacon and hams, not separately	Th. cwts.	168	2	170	6
distinguished	£'000	1,029	14	1.043	37
Bacon and hams, smoked, not	Th. cwts.	122		122	_
separately distinguished	£'000	667		667	
	~				
TOTAL—BACON AND HAMS {	Th. cwts.	1,795	219	2,014	215
TOTAL BACON AND HAMS	£'000	11,162	1,427	12,589	1,391
Dark calted (other then been (The sector	10	7	70	
Pork, salted (other than bacon { and ham)	Th. cwts. $f'_{,000}$	18 108	1 4	<i>19</i> 112	3 8
	Th. cwts.	371	4	377	28
Lard {	£'000	1,546	24	1,570	118
Suet, dripping and other animal	£ 000	1,040	27	1,070	110
fats, mainly refined	£'000	655†	99	754†	+
Heads	,,	76	8	84	21
Sausages	,,	2,581	505	3,086	15
Cooked meats, brawn, soups, pies,					
puddings, etc	,,	1,937†	282	2,219†	+
Bladders, cases and sausage skins	"	672†	106	778†	the market
Tripe, dressed	,,	435	and the state of the second	435	1 6U
Pork butchers' products, not	ST HE	-		STRUTTERS.	ton - y The
separately distinguished	,,	24	3	27	and the
Offals and by-products	,,	319	8	327	19
Bones	,,	32	16	48	18
Gut	· · ·	156	31	187	
Grease and tallow, unrefined	Th. cwts.	7		7	
Decomendation in time and alconed	£'000	15		15	
Preserved meats in tins and glasses	£'000	251	49	$300 \\ (221)$	in the second
Compound lard	د ر			50	-3
Other goods made	"	282*	7*	30	3
the trade (bacon drying and		202*	7*)	
1. , ,				181	The second
$smoking) \dots \dots \dots \dots$,,)		(101	
TOTAL VALUE OF GOODS MADE AND		ener in en en en en e	and the second second second	a series and series and	
WORK DONE (GROSS OUTPUT)	£'000	20,241	2,569	22,810	1,603

* In order to avoid the possible disclosure of information relating to individual firms, figures can only be given for Great Britain as a whole. † In order to avoid the possible disclosure of information relating to individual firms in Northern Ireland, the small Irish output has been included with that for England and Wales and for Great Britain. ‡ Amount received for work done.

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III.—Employment.

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

Makes Frequence Fortest	Male	es.	Fema	les.	Males and	females.
Kind of staff.	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
England and Wales :	572 130	6,888 1,694	434 62	2,552 485	1,006 192	9,440 2,179
Total	702	8,582	496	3,037	1,198	11,619
Scotland : Operatives Administrative, etc.*	125 1	1,021 214	139 23	485 158	264 24	1,506 372
Total	126	1,235	162	643	288	1,878
Great Britain : Operatives Administrative, etc.*	697 131	7,909 1,908	573 85	3,037 643	1,270 216	10,946 2,551
TOTAL	828	9,817	658	3,680	1,486	13,497
Northern Ireland :	10 7	362 80	1	13 15	11 8	375 95
Total	17	442	2	28	19	470
United Kingdom :	845	10,259	660	3,708	1,505	13,96

* Administrative, technical and clerical staff.

(39410)

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B.—Operatives employed in one week in each month of 1924.

England and Wales. (Annual average : Males, 6,690 ; Females, 2,386 ; Total, 9,076.)

Week ended.	Males.	Females.	Total.	Week ended.	Males.	Females.	Total.
Jan. 12th	6,639	2,366	9,005	July 19th	6,582	2,252	8,834
Feb. 16th	6,619	2,386	9,005	Aug. 16th	6,585	2,267	8,852
March 15th	6,559	2,379	8,938	Sept. 13th	6,640	2,399	9,039
April 12th	6,551	2,306	8,857	Oct. 18th	6,888	2,552	9,440
May 17th	6,550	$2,328 \\ 2,282$	8,878	Nov. 15th	6,992	2,583	9,575
June 21st	6,557		8,839	Dec. 13th	7.113	2,536	9,649

Jan. 12th	 1,003	511	1.514	July 19th	1.019	518 1	1,537
Feb. 16th	000	494	1.486	Aug. 16th	1.031	509	1,540
March 15th	1.007	509	1.516	Sept. 13th	1,026	467	1,493
April 12th	999	509	1,508	Oct. 18th	1,021	485	1,506
May 17th	1.024	524	1,548	Nov. 15th	1,008	487	1,495
June 21st	 1,033	533	1,566	Dec. 13th	1,012	475	1,487

Great Britain. (Annual average : Males, 7,704; Females, 2,888; Total, 10,592.)

Jan. 12th	7,642	2,877	10,519	July 19th	7,601	2,770	10,371
	7,611	2,880	10,491	Aug. 16th	7,616	2,776	10,392
	7,566	2,888	10,454	Sept. 13th	7,666	2,866	10,532
	7,550		10,365	Oct. 18th	7,909	3,037	10,946
	7,574	ALL AND A DESCRIPTION OF A DESCRIPTION OF A		Nov. 15th	8,000	3,070	11,070
	7,590			Dec. 13th	8,125	3,011	11,136

Northern Ireland. (Annual average : Males, 379 ; Females, 12 : Total, 391.)

Jan. 12th		405	12	417	July 19th	367	10	377
Feb. 16th		417	11		Aug. 16th	359	10	369
March 15th	12	411	13		Sept. 13th	358	12	370
April 12th	- and a second	386	12		Oct. 18th	362	13	375
May 17th		325	12	337	Nov. 15th	391	13	404
June 21st		358	12	370	Dec. 13th	401	17	418

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.
MORES, TRADESK	H.P.	H.P.	H.P.	H.P.
PRIME MOVERS :	0.004	107	0.001	180
Reciprocating steam engines $\ldots \begin{cases} a \\ b \end{cases}$	2,064 1,144	137 155	2,201 1,299	180 60
Steam turbines $\ldots \ldots \ldots (a)$	9		9	
Gas engines $\dots $ $\{ a \}$	791	244	1,035	277
Petrol and light oil engines $\dots (a)$	424 119	83 26	507 145	17
(a)	618	51	669	signal <u>a s</u> igna
Heavy oil engines $\dots \begin{pmatrix} a \\ b \end{pmatrix}$	25	est	25	an deare
Water power (a)	39	ters and the set	39	
$ \int (a) $	3,640	458	4,098	474
Total $\dots \dots \begin{cases} a \\ b \end{cases}$	1,593	238	1,831	60
TOTAL OF PRIME MOVERS INSTALLED	5,233	696	5,929	534
ELECTRIC GENERATORS :	Kw.	Kw.	Kw.	Kw.
Driven by— $\int (a)$	755	· · · · · ·	755	26
Reciprocating steam engines $\begin{cases} a \\ b \end{cases}$	664	124	788	
Gas engines $\ldots \qquad \ldots \qquad \vdots \qquad $	108	80	188	148
((0)	77		77	
Petrol and light oil engines (a) Heavy oil engines (a)	119		119	
Water power \dots \dots (a)	5	- A	5	-
(14)	991	80	1.071	174
Total $\ldots \ldots \begin{pmatrix} a \\ b \end{pmatrix}$	741	124	865	
TOTAL OF ELECTRIC GENERATORS	1 500	004	1.020	174
INSTALLED	1,732	204	1,936	1/4
	H.P.	H.P.	H.P.	H.P.
ELECTRIC MOTORS :		LUTE AND		
Driven by— Electricity generated in $\operatorname{own} \int (a)$	1,347	120	1.467	72
works (b)	316	120	328	_
Purchased electricity \ldots	5,765	1,059	6,824	103
Purchased electricity $\cdots \qquad (b)$	991	184	1,175	2