

### THE SMALL ARMS TRADE (Private firms)

*Note.*—For information regarding the scope of the Census, instructions given to firms for making returns and definitions of the terms used in this report, reference should be made to the Introductory Notes on pages v to xviii.

#### Introductory

This trade comprises private firms that were engaged wholly or mainly in the manufacture of small arms and parts thereof. Production at Government Ordnance Factories is dealt with in a separate volume. Owing to the risk of disclosure of information relating to individual firms, separate particulars for England and Wales and for Scotland cannot be published. The summary table (I) and the tables showing details of power equipment (IV) and coal, coke and electricity used (V) are, therefore, not appended to this report, the whole of this information being available in the report itself.

The following table shows the main results of the Censuses of 1930 and 1924 in respect of firms in Great Britain that employed an average of more than ten persons :—

Particulars	Unit	1930	1924
Value of goods made and work done (Gross output)	£'000	485	624
Cost of materials used ... ..	"	165	240
Paid for work given out to other firms ... ..	"	10	10
Net output ... ..	"	310	374
Average number of persons employed (excluding outworkers)... ..	No.	1,366	2,100
Net output per person employed (excluding outworkers) ... ..	£	227	180
Power available :—			
Prime movers ... ..	H.P.	109	204
Electric motors driven by purchased electricity	"	1,322	2,385
Number of returns ... ..	No.	27	33
Number of establishments ... ..	"	33	*

\* Not available.

**Deficiencies in 1930 aggregates.**—The aggregate number of persons employed in 1930 by firms that stated that they employed not more than ten persons on the average was 483, the corresponding figure for 1924 being 340. The value of the gross output of the small firms in 1924 was £124,000, and particulars of the kinds

of goods made and work done included in this figure are given below :—

	£'000
Sporting guns ... ..	30
Other small arms, complete ... ..	2
Parts and accessories of small arms ... ..	11
Other goods made ... ..	50
Repair work ... ..	19
Work done for the trade ... ..	12
<b>TOTAL ... ..</b>	<b>124</b>

In addition, 16 firms to which schedules were sent at the 1930 Census and about 45 at that of 1924 furnished no information; these firms either had small businesses or had ceased productive operations before the end of the censal year.

**Size of firms.**—In the following table the main particulars recorded at the Census of 1930 are grouped according to the average numbers of persons shown in the returns :—

Size of firm (average numbers employed)	Number of returns	Gross output	Net output	Average number of persons employed (excluding outworkers)	Net output per person employed
11-24 ... ..	No. 14	£'000 52	£'000 34	No. 165	£ 204
25-49 ... ..	5	78	46	172	268
50 and over ... ..	8	355	230	1,029	224
<b>TOTAL ... ..</b>	<b>27</b>	<b>485</b>	<b>310</b>	<b>1,366</b>	<b>227</b>

**Regional distribution.**—In the following table the results recorded at the Censuses of 1930 and 1924 are grouped according to the principal areas\* of Great Britain in which firms in this trade are situated :—

Area	Number of returns	Gross output	Net output	Average number of persons employed (excluding outworkers)	Net output per person employed
5	No. 20	£'000 347	£'000 221	No. 1,007	£ 219
	1924 24	417	266	1,588	168
1, 6 and 10	1930 7	138	89	359	249
	1 and 10 1924 9	207	108	512	211
<b>TOTAL</b>	1930 27	485	310	1,366	227
	1924 33	624	374	2,100	180

\* For particulars see page xviii.

**Northern Ireland.**—No production of small arms was recorded for Northern Ireland at either the 1930 or the 1924 Census.

### Production

**Principal products.**—The following table shows the value and, where available, the quantity of complete small arms and parts and accessories of small arms made by private firms in 1930 and 1924 for sale :—

Kind of goods	1930		1924
	Value	Entries	
Sporting guns ... ..	£'000 178 (11·8)	No. 25	£'000 276 (22·8)
Sporting carbines and rifles ... ..	20† (1·1)	11	
Other small arms, complete* ... ..	154‡	20	194
Tubes, barrels and other parts and accessories of small arms ... ..			
<b>TOTAL—PRINCIPAL PRODUCTS ... ..</b>	<b>352</b>	<b>...</b>	<b>470</b>

\* Including military rifles and carbines, miniature rifles, air guns, revolvers, pistols, swords, bayonets, etc.

† Including £2,000 recorded on a schedule for another trade.

‡ Including £16,000 recorded on five schedules for other trades.

At both Censuses particulars of production were obtained in accordance with the classification of the Import and Export List (see page 192), but owing to the limited number of firms engaged in the manufacture of certain kinds of small arms and parts, the information recorded can only be published in the more general grouping shown above.

**Volume of production in 1930 and 1924.**—From the particulars available from the Census returns regarding the average selling values of the various classes of small arms and parts, it is estimated that the output returned for the year 1924, if re-valued on the basis of the averages recorded for 1930 in respect of similar goods, would amount to approximately £600,000. The volume of production in 1930 may therefore be stated as about 59 per cent. of that returned for 1924.

**Exports and imports.**—The following table shows the exports and retained imports of the various classes of small arms and parts thereof in 1930 and 1924 :—

Kind of goods	Exports		Retained imports	
	Quantity	Value	Quantity	Value
	Number	£'000	Number	£'000
Small arms, complete :—				
Sporting guns ... ..	1930 12,936	118	22,894	30
	1924 28,777	180	22,808	39
Sporting carbines and rifles ... ..	1930 2,013	25	1,875	3
	1924 5,694	53	1,776	5
Military rifles and carbines	1930 3,127	19	8	*
	1924 40,781	145	52	*
Miniature and cadet rifles and carbines ... ..	1930 332	1	153	1
	1924 726	2	997	1
Air guns and rifles of all sorts ... ..	1930 4,588	11	54,433	14
	1924 4,380	11	38,594	10
Revolvers and pistols ...	1930 5,254	14	3,671	2
	1924 5,681	16	1,355	2
Swords, cutlasses, bayonets and arms of other sorts, not firearms	1930 3,128	6	1,801	2
	1924 19,657	14	2,253	1
Total value—Small arms, complete ... ..	1930 ...	194	...	52
	1924 ...	421	...	58
Parts of small arms :—				
Tubes to be made into barrels of firearms ...	1930 —	—	17,185	2
	1924 212	*	2,064	*
Barrels without actions fitted ... ..	1930 16,890	29	— 191†	*
	1924 9,364	15	53,991	7
Barrels with actions fitted	1930 190	*	—	—
	1924 2,303	6	485	*
Actions for small arms, not fitted to barrels ...	1930 6	*	34	*
	1924 12,867	3	— 12,120†	— 1†
		Cwts.	Cwts.	
Other parts of small arms	1930 391	23	478	2
	1924 872	33	300	4
Total value—Parts of small arms ... ..	1930 ...	52	...	4
	1924 ...	57	...	10

\* Less than £500.

† Re-exports in excess of imports.

As already explained, particulars of production cannot be published in the above detail. The table shows that the number of sporting guns and of sporting rifles and carbines exported was in excess of the number shown on page 191 as manufactured in the year. The deficiencies in the production particulars may affect comparisons to some extent, but the main reason for the differences is that the export figures probably include guns, rifles, etc. that were made in earlier years and were sold second-hand after re-conditioning. The export figures may also include some military rifles, revolvers, etc. made at Government factories and sold to Dominion or Colonial Governments: as already mentioned, the particulars of production given in the present report are exclusive of small arms manufactured in Government factories.

**Repair work and work done for the trade.**—The total amount recorded as received for repair work in 1930 was £30,000, and a similar amount was recorded for 1924. In addition £4,000 was returned for 1930 as received for work done for the trade.

**Other products.**—In addition to the output shown in the table of principal products on page 191, the following goods were produced in 1930 and 1924 by firms that made their returns on schedules for the Small Arms Trade. These goods are dealt with in the reports on those trades in which the principal output was recorded.

Kind of goods	1930	1924
	Value	Value
Small arms ammunition (loaded cartridges) ... ..	£'000 45	£'000 106*
	(5,679)	
Other goods made... ..	72	30
TOTAL ... ..	117	136

\* Including some shot.

### Employment and Wages

**Employment.**—The following table shows the average numbers of persons employed in 1930 and 1924 :—

Persons employed	Males		Females		Total	
	Under 18	All ages	Under 18	All ages	Under 18	All ages
1930						
Operatives (average for the year)	134	995	44	181	178	1,176
Administrative, technical and clerical staff (as at 18th October) ... ..	13	125	17	65	30	190
TOTAL ... ..	147	1,120	61	246	208	1,366
1924						
Operatives (average for the year)	267	1,716	60	132	327	1,848
Administrative, technical and clerical staff (as at 18th October) ... ..	19	174	20	78	39	252
TOTAL ... ..	286	1,890	80	210	366	2,100
Average number of out-workers :—						
1930 ... ..	259	3			262	
1924 ... ..	191	3			194	

**Wages.**—The available information as to the amount of wages paid in 1930 and 1924 is given on pages 18 and 19.

## Power

The following table shows the capacity of prime movers, electric generators and electric motors ordinarily in use and in reserve or idle in 1930 and 1924 :—

Power equipment	1930			1924		
	Ordinarily in use	In reserve or idle	Total	Ordinarily in use	In reserve or idle	Total
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
<b>PRIME MOVERS</b>						
Internal combustion engines :—						
Gas ... ..	24	—	24	134	—	134
Heavy oils ... ..	35	50	85	30	40	70
<b>TOTAL ... ..</b>	<b>59</b>	<b>50</b>	<b>109</b>	<b>164</b>	<b>40</b>	<b>204</b>
<b>ELECTRIC GENERATORS</b>	<b>Kw.</b>	<b>Kw.</b>	<b>Kw.</b>	<b>Kw.</b>	<b>Kw.</b>	<b>Kw.</b>
Driven by Heavy oil engines...	30	40	70	—	—	—
<b>TOTAL ... ..</b>	<b>30</b>	<b>40</b>	<b>70</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>ELECTRIC MOTORS</b>	<b>H.P.</b>	<b>H.P.</b>	<b>H.P.</b>	<b>H.P.</b>	<b>H.P.</b>	<b>H.P.</b>
Driven by Electricity generated in same works ...	97	20	117	—	—	—
Purchased electricity	1,180	142	1,322	1,525	860	2,385
<b>TOTAL ... ..</b>	<b>1,277</b>	<b>162</b>	<b>1,439</b>	<b>1,525</b>	<b>860</b>	<b>2,385</b>

## Consumption of fuel

The following table shows the quantities of coal, coke and electricity recorded as used in 1930 :—

Kind of fuel used	Quantity
Coal* ... ..	Tons 790
Coke* ... ..	341
	B.T.U. (Kw.-hrs.) '000
Electricity used for all purposes :—	
Generated in same works ... ..	62
Purchased ... ..	1,091
<b>TOTAL—Electricity ... ..</b>	<b>1,153</b>

\* The whole of the coal and coke shown was recorded as having been used for purposes other than for driving engines.

## TABLES

Note.—Owing to the possible disclosure of information relating to individual firms, separate particulars for England and Wales and for Scotland cannot be given.

## I. Summary of results (see page 189)

## II. Production

Goods sold or added to stock and work done	Quantity	Value
	Thousands	£'000
Sporting guns ... ..	11·8	178
Sporting carbines and rifles ... ..	1·0	18
Other small arms, complete, including military rifles and carbines, miniature rifles, airguns, revolvers and pistols, swords, cutlasses, etc. ... ..	...	138
Tubes, barrels and other parts and accessories of small arms ... ..	...	...
Small arms ammunition (loaded cartridges) ... ..	5,679	45
Other goods made ... ..	...	72
<b>TOTAL VALUE OF GOODS MADE ... ..</b>	<b>...</b>	<b>451</b>
		Amount received
Repair work ... ..	...	30
Work done on commission or for the trade ... ..	...	4
<b>TOTAL VALUE OF WORK DONE ... ..</b>	<b>...</b>	<b>34</b>
<b>TOTAL VALUE OF GOODS MADE AND WORK DONE (GROSS OUTPUT) ... ..</b>	<b>...</b>	<b>485</b>

## III. Employment

A.—NUMBERS EMPLOYED IN WEEK ENDED 18TH OCTOBER, 1930  
(EXCLUDING OUTWORKERS)

Persons employed (excluding outworkers)	Males		Females		Males and females	
	Under 18	All ages	Under 18	All ages	Under 18	All ages
Operatives ... ..	135	998	44	182	179	1,180
Administrative, technical and clerical staff ... ..	13	125	17	65	30	190
<b>TOTAL ... ..</b>	<b>148</b>	<b>1,123</b>	<b>61</b>	<b>247</b>	<b>209</b>	<b>1,370</b>

B.—OPERATIVES (EXCLUDING OUTWORKERS) EMPLOYED IN ONE WEEK IN EACH MONTH OF 1930

Week ended		Males and females	Week ended		Males and females
January 18	...	1,248	July 19	...	1,136
February 15	...	1,264	August 16	...	1,059
March 15	...	1,218	September 13	...	1,147
April 12	...	1,223	October 18	...	1,180
May 17	...	1,181	November 15	...	1,143
June 21	...	1,157	December 13	...	1,150
AVERAGE FOR THE 12 MONTHS					1,176

C.—NUMBERS OF OUTWORKERS AT TWO SPECIFIED PERIODS IN 1930

January			July		
Males	Females	Total	Males	Females	Total
251	3	254	267	3	270

IV. Power (see page 194)

V. Consumption of fuel (see page 194)

A.—NUMBERS EMPLOYED IN IRON AND STEEL TRADES (EXCLUDING OUTWORKERS)

Month	Males		Females		Total
	All	Operatives	All	Operatives	
January	1,248	1,248	3	3	1,251
February	1,264	1,264	3	3	1,267
March	1,218	1,218	3	3	1,221
April	1,223	1,223	3	3	1,226
May	1,181	1,181	3	3	1,184
June	1,157	1,157	3	3	1,160
July	1,136	1,136	3	3	1,139
August	1,059	1,059	3	3	1,062
September	1,147	1,147	3	3	1,150
October	1,180	1,180	3	3	1,183
November	1,143	1,143	3	3	1,146
December	1,150	1,150	3	3	1,153
Total	13,808	13,808	36	36	13,844