

THE CARRIAGE, CART AND WAGON TRADE

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 firms that were engaged wholly or mainly in the manufacture of vehicles (other than those mechanically driven) and parts thereof. 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	2,349	3,733
Cost of materials used	"	1,216	1,736
Paid for work given out to other firms	"	7	*
Net output	"	1,126	1,997
Average number of persons employed	No.	6,760	10,593
Net output per person employed	£	167	189
Power available :—			
Prime movers	H.P.	1,491	2,956
Electric motors driven by purchased electricity	"	4,589	3,900
Number of returns	No.	152	297
Number of establishments	"	176	†

* Not ascertained.

† 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 11,524, the corresponding figure for 1924 being 8,926. Though the number employed in 1930 by the small firms was about 63 per cent. of the total number recorded by *all* firms, the deficiency in the gross and net output is unlikely to have been so great. In 1924 the number employed by the small firms represented 46 per cent. of the total, but the gross output of these firms was only 35 per cent. of the total. It should be noted that 280 firms to which schedules were sent at the Census of 1930 and 1,750 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. Assuming that the firms that furnished no information had the same average number of employees in each year as the small firms that stated the number of their employees, the total number

employed by the small firms in 1930 would be some 13 per cent. less than in 1924. The decline in the numbers employed by the larger firms was 36 per cent., and it would therefore appear that the small firms were relatively more important in the later than in the earlier year.

The value of the gross output of the small firms in 1924 was £2,006,000. Particulars of the kinds of goods made and work done included in this figure are given below:—

Kind of output	Value
	£'000
Carts, carriages, etc., for animal traction	126
Other vehicles (not mechanically propelled), complete ...	74
Parts of vehicles	41
Motor car bodies	65
Repair and jobbing work on vehicles... ..	1,502
Other jobbing work	104
Other goods made	94
TOTAL	2,006

Of the total value of the output of all firms in this trade in 1924, firms employing not more than ten persons recorded about 61 per cent. of the value of repair and jobbing work done but only about 13 per cent. of the value of vehicles and other goods made.

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	Net output per person employed
	No.	£'000	£'000	No.	£
11-24	85	408	234	1,412	166
25-49	36	468	242	1,311	184
50-99	16	375	178	1,105	161
100-199	9	446	213	1,132	189
200 and over	6	652	259	1,800	144
TOTAL	152	2,349	1,126	6,760	167

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:—

* For particulars see page xviii.

Area	Number of returns	Gross output	Net output	Average number of persons employed	Net output per person employed
	No.	£'000	£'000	No.	£
1	1930 42	783	364	2,104	173
	1924 72	989	536	2,775	193
2	1930 16	110	64	415	154
	1924 41	308	179	1,043	172
3	1930 12	219	111	655	170
	1924 23	326	174	898	194
5	1930 29	813	362	2,145	170
	1924 46	1,150	583	2,693	216
6	1930 31	282	141	1,002	141
	1924 65	655	352	2,100	168
9	1930 10	82	48	223	215
	1924 17	102	50	306	163
10	1930 7	32	17	121	140
	1924 18	124	78	432	181
Other areas	1930 5	28	19	95	203
	1924 15	79	45	346	130
TOTAL {	1930 152	2,349	1,126	6,760	167
	1924 297	3,733	1,997	10,593	189

Northern Ireland.—The following table summarises the particulars recorded at the Census of Production taken by the Government of Northern Ireland for 1930, together with those furnished at the 1924 Census. The 1930 figures relate to firms that employed an average of more than five persons, while those for 1924 relate to all firms.

Particulars	Unit	1930	1924
Value of goods made and work done (Gross output)	£'000	61	19
Cost of materials used	"	24	6
Paid for work given out to other firms	"	1	*
Net output	"	36	13
Average number of persons employed	No.	255	94
Net output per person employed	£	141	138
Power available:—			
Prime movers	H.P.	75	63
Electric motors driven by purchased electricity	"	183	3

* Not ascertained.

The principal items included in the gross output values shown in the above table were as follows:—

	1930	1924
	£'000	£'000
Carts and carriages for animal traction	3	4
Motor car bodies	14	1
Other vehicles... ..	—	2
Repair and jobbing work	44	12
TOTAL	61	19

Production

Principal products.—The following table shows the value and, where available, the quantity of complete vehicles (other than those mechanically driven) and parts thereof made in 1930 and 1924:—

Kind of goods	1930						1924	
	Returned on schedules for						Total	
	The Carriage, Cart and Wagon Trade			All trades				
	Quantity	Value	Entries	Quantity	Value	Entries	Quantity	Value
Complete vehicles, not mechanically propelled:—	Number	£'000	No.	Number	£'000	No.	Number	£'000
Carts and carriages for animal traction (omnibuses, charabancs, cabs, private carriages, carts, wagons, etc.) ...	1,314	41	38	1,563*	58	63	2,426*	131
Hand trucks and trollies ...	21,290	88	40	21,378	90	51	21,904	139
Perambulators and mail carts for children ...	200,114	629	38	271,614	791	40	333,480†	959†
Steel folding baby cars	255,691	214	18	369,787	289	21	*	679†
Invalid carriages and bath chairs	15,352	39	16	15,352	39	16		
Other vehicles not mechanically propelled (including wheelbarrows) ...	...	60	33	...	103	77	33,345*	67
TOTAL—Complete vehicles ...	...	1,168	...	...	1,538	...	...	2,299
Parts of vehicles (not mechanically propelled) sold separately or added to stock:—	Tons			Tons				
Axles for road vehicles, other than motor cars...	599	27	4	1,175	51	9	...	136
Wheels, rims and spokes ...	838	60	6	844	60	7	...	373
Other metal parts (tyres, etc.) ...	...	50	20	...	60	32	...	51
Other wood parts (poles, shafts, etc.)	...	2	19	...	69	136	...	30
TOTAL—Parts of vehicles ...	...	335	...	...	442	...	...	590
TOTAL—PRINCIPAL PRODUCTS	...	1,503	...	...	1,980	...	...	2,889

* Quantity not stated.

† Including some toy perambulators, scooters, etc.

Prices.—The average selling values of complete vehicles (other than those mechanically driven) in 1930 and 1924, as calculated from the Census returns, are shown in the following table. It should be borne in mind that these comparisons do not take account of any changes that may have occurred since the earlier year in the type of the vehicles specified.

Kind of goods	Average value		1930 as a percentage of 1924
	1930	1924	
Carts and carriages for animal traction	£ each 36·8	£ each 54·0	Per cent. 68·2
Hand trucks and trollies ...	4·19	6·33	66·2
Perambulators and mail carts for children	2·91	2·88	61·1
Steel folding baby cars ...	0·78		
Invalid carriages and bath chairs ...	2·55		

Volume of production in 1930 and 1924.—The following table compares the volume of production of complete vehicles (other than those mechanically driven) and parts thereof, and the volume of repair work, in 1930 and 1924:—

Kind of goods	Total production			1930 as a percentage of 1924
	1930	1924		
	As returned	As returned	At 1930 average values	Per cent.
Carts and carriages for animal traction ...	£'000 98	£'000 320	£'000 218	45
Hand trucks and trollies ...	120	176	117	103
Perambulators and mail carts for children ...	859	1,638	1,001	122
Steel folding baby cars ...	289			
Invalid carriages and bath chairs	69			
Other vehicles not mechanically propelled (including wheelbarrows)	103	165	95*	108
Parts of vehicles ...	442	590	398†	111
Repair and jobbing work ...	392	1,092	691‡	57
TOTAL ...	2,372	3,981	2,520	94

* Based on average export values.

† Based on average values of carts and carriages for animal traction and hand trucks and trollies.

‡ Based on average value of all preceding items in the table.

Exports and retained imports.—Owing to the deficiencies in the aggregate output for 1930 due to the exclusion of small firms, no precise comparison can be made between the exports or retained imports for that year and the recorded figures of production. It seems probable, however, in regard both to carts and carriages for animal traction and to hand trucks and trollies that a larger proportion was exported in 1930 than in 1924.

The following table shows the number and value of the various classes of vehicles, other than those mechanically driven, exported from the United Kingdom in 1930 and 1924, together with similar particulars for those imported and retained :—

Kind of goods	Exports		Retained imports	
	Number	Value	Number	Value
		£'000		£'000
Carts and carriages for animal traction ...	1930 1,317	22·5	27	1·0
	1924 1,144	34·6	195	5·3
Hand trucks and trollies ...	1930 3,075	17·1	1,209	7·2
	1924 2,214	12·7	621	2·3
Perambulators and mail carts for children ...	1930 73,594	143·4	157	0·4
	1924 42,867	104·7	1,284	2·5
Other sorts (including wheelbarrows) ...	1930 18,613	92·2	7,671	7·8
	1924 6,929	59·4	3,938	3·6

Repair and jobbing work and other work done.—The following table shows the amounts received for repair and jobbing work, etc., done in 1930 and 1924 :—

Kind of work	1930	1924
	£'000	£'000
Repair and jobbing work done on vehicles, including contracts for repair and work done in repairing and renovating second-hand vehicles ...	347*	1,013
Horse-shoeing and general smiths' work ...	20	30
Jobbing building work, sign writing, etc. ...	14	48
Other jobbing work ...	11	1
TOTAL AMOUNT RECEIVED FOR WORK DONE ...	392	1,092

* Including £3,000 returned on schedules for other trades.

Other products.—In addition to the output shown in the table of principal products on page 386, the following goods were produced in 1930 and 1924 by firms that made their returns on schedules for the Carriage, Cart and Wagon 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
	£'000	£'000
Motor car bodies (as sold or delivered), complete ...	51	150
Parts of motor bodies, returned as such ...	*	49
Motor car and motor cycle accessories (tyres, lamps, horns, etc.), sold separately ...	5	26
Toy perambulators, scooters, juvenile cycles, etc. ...	221	†
Builders' woodwork (window frames, doors, ladders, etc.) ...	28	—
Furniture and cabinet work ...	64	77
Other manufactures of wood ...	11	44
Machinery and parts ...	60	—
Other iron and steel manufactures ...	14	21
Other goods made... ..	3	—
TOTAL VALUE	457	367

* Less than £500.

† Not separately recorded.

Work in progress.—The value of the work in progress both at the beginning and at the end of 1930 was returned as £46,000. Work in progress at the beginning of 1924 was valued at £74,000, and at the end of the year at £71,000. Work in progress at the end of the year represents the estimated value of unfinished carts, carriages, etc., that were in course of construction at the end of the year, and work in progress at the beginning of the year represents a similar estimate for vehicles in course of construction at that time, some or all of which would represent goods completed within the year. The amount by which the value of the work in progress at the beginning of the year exceeded that at the end, viz., £3,000 for 1924, should be deducted from the value of the goods completed in order to arrive at the value of the output attributable to that year; no adjustment is necessary in the case of the 1930 figures.

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)	966	4,590	366	1,339	1,332	5,929
Administrative, technical and clerical staff (as at 18th October) ...	39	522	65	309	104	831
TOTAL	1,005	5,112	431	1,648	1,436	6,760
1924						
Operatives (average for the year)	1,439	7,801	564	1,533	2,003	9,334
Administrative, technical and clerical staff (as at 18th October) ...	65	889	73	370	138	1,259
TOTAL	1,504	8,690	637	1,903	2,141	10,593

Wages.—The available information as to the amount of wages paid in 1930 and 1924 is given on pages 212-3.

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
PRIME MOVERS	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
Reciprocating steam engines	346	—	346	535	44	579
Internal combustion engines :—						
Gas	934	129	1,063	1,992	203	2,195
Petrol, kerosene, or other light oils ...	29	—	29	71	1	72
Heavy oils	53	—	53	90	—	90
Water engines	—	—	—	20	—	20
TOTAL	1,362	129	1,491	2,708	248	2,956
ELECTRIC GENERATORS	Kw.	Kw.	Kw.	Kw.	Kw.	Kw.
Driven by						
Reciprocating steam engines	—	—	—	13	—	13
Internal combustion engines :—						
Gas	192	—	192	128	16	144
Petrol, kerosene, or other light oils	—	—	—	2	—	2
TOTAL	192	—	192	143	16	159
ELECTRIC MOTORS	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
Driven by						
Electricity generated in same works ...	132	90	222	92	6	98
Electricity generated in other works under same ownership	42	—	42	—	—	—
Purchased electricity	4,394	195	4,589	3,685	215	3,900
TOTAL	4,568	285	4,853	3,777	221	3,998

Consumption of fuel

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

Kind of fuel used	For power (driving engines)	For other purposes (so far as recorded)
	Tons	Tons
Coal	4,333	1,143*
Coke	—	2,417*
		B.T.U. (Kw.-hrs.) '000
Electricity used for all purposes :—		
Generated in same works		182
Generated in other works under same ownership		12
Purchased		2,530
TOTAL—Electricity... ..		2,724

* These figures were recorded by firms representing 90.6 per cent. of the net output of the whole trade.

TABLES
I. Summary of results

Particulars	Unit	England and Wales	Scotland	Great Britain
Value of goods made and work done (Gross output)	£'000	2,235	114	2,349
Cost of materials used	"	1,167	49	1,216
Paid for work given out to other firms	"	7	*	7
Net output	"	1,061	65	1,126
Average number of persons employed	No.	6,416	344	6,760
Net output per person employed	£	165	189	167
Power available :—				
Prime movers	H.P.	1,435	56	1,491
Electric motors driven by purchased electricity... ..	"	3,931	658	4,589

* Less than £500.

II. Production

Goods sold or added to stock and work done	Unit	England and Wales	Scotland	Great Britain
Complete vehicles (not mechanically propelled) :—				
Carriages and carts for animal traction (omnibuses, char-a-bancs, cabs, private carriages, carts, wagons, etc.)	No. £'000	1,257 37	57 4	1,314 41
Hand trucks and trollies	No. £'000 £'000	* * *	* * *	21,290 88 13
Perambulators and mail carts for children	No. £'000 £'000	* * *	* * *	200,114 629 65
Steel folding baby cars	No. £'000	255,691 214	—	255,691 214
Invalid carriages and bath chairs	No. £'000 £'000	15,352 39 19	—	15,352 39 19
Other vehicles not mechanically propelled (including wheelbarrows)	£'000	28	32	60
Total—Complete vehicles	£'000	1,118	50	1,168

Good sold or added to stock and work done	Unit	England and Wales	Scotland	Great Britain
Parts of vehicles (not mechanically propelled) sold separately or added to stock :—				
Axles for road vehicles other than motor cars	Tons £'000 £'000	599 27 38	—	599 27 38
Wheels, rims and spokes	Tons £'000 £'000	838 60 146	—	838 60 158
Other metal parts (tyres, etc.)	£'000	*	*	50
Other wood parts (poles, shafts, etc.)	£'000	*	*	2
Total—Parts of vehicles	£'000	321	14	335
Total—Complete vehicles and parts	£'000	1,439	64	1,503
Motor car bodies as sold or delivered, complete	£'000	41	10	51
Motor car and motor cycle accessories (tyres, lamps, horns, etc.), sold separately	"	5	—	5
Toy perambulators, scooters and other wood toys	"	220	1	221
Builders' woodwork (window frames, doors, ladders, etc.)	"	28	—	28
Furniture and cabinet ware	"	64	—	64
Other manufactures of wood	"	11	—	11
Machinery and parts	"	60	—	60
Other manufactures of iron and steel	"	14	—	14
Other goods made	"	3	—	3
TOTAL VALUE OF GOODS MADE	£'000	1,885	75	1,960
		Amount received	Amount received	Amount received
Repair and jobbing work on vehicles, including contracts for repair and work done in repairing and renovating second-hand vehicles	£'000	311	33	344
Horse-shoeing and general smiths' work	"	14	6	20
Jobbing building work, sign writing, etc.	"	14	—	14
Other work done	"	11	†	11
TOTAL AMOUNT RECEIVED FOR WORK DONE	£'000	350	39	389
TOTAL	£'000	2,235	114	2,349
Plus Value of work in progress at end of 1930	"	45	1	46
Less Value of work in progress at beginning of 1930	"	45	1	46
TOTAL VALUE OF GOODS MADE AND WORK DONE (GROSS OUTPUT)	£'000	2,235	114	2,349

* Owing to 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, 1930

Persons employed	Males		Females		Males and females	
	Under 18	All ages	Under 18	All ages	Under 18	All ages
<i>England and Wales :—</i>						
Operatives	932	4,300	359	1,318	1,291	5,618
Administrative, etc.*	38	498	61	295	99	793
TOTAL	970	4,798	420	1,613	1,390	6,411
<i>Scotland :—</i>						
Operatives	31	277	6	17	37	294
Administrative, etc.*	1	24	4	14	5	38
TOTAL	32	301	10	31	42	332
<i>Great Britain :—</i>						
Operatives	963	4,577	365	1,335	1,328	5,912
Administrative, etc.*	39	522	65	309	104	831
TOTAL	1,002	5,099	430	1,644	1,432	6,743

* Administrative, technical and clerical staff.

B.—OPERATIVES EMPLOYED IN ONE WEEK IN EACH MONTH OF 1930

Week ended	Males and females			Week ended	Males and females		
	England and Wales	Scotland	Great Britain		England and Wales	Scotland	Great Britain
Jan. 18...	5,556	306	5,862	July 19 ...	5,637	304	5,941
Feb. 15...	5,648	308	5,956	Aug. 16...	5,514	303	5,817
Mar. 15...	5,668	310	5,978	Sept. 13...	5,486	300	5,786
Apl. 12...	5,627	314	5,941	Oct. 18 ...	5,618	294	5,912
May 17...	5,732	317	6,049	Nov. 15...	5,656	300	5,956
June 21...	5,702	317	6,019	Dec. 13 ...	5,626	302	5,928
AVERAGE FOR THE 12 MONTHS ...					5,623	306	5,929

IV. Power

PARTICULARS OF PRIME MOVERS, ELECTRIC GENERATORS AND ELECTRIC MOTORS

Power equipment	England and Wales		Scotland		Great Britain	
	Ordinarily in use	In reserve or idle	Ordinarily in use	In reserve or idle	Ordinarily in use	In reserve or idle
PRIME MOVERS						
Reciprocating steam engines	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
Internal combustion engines :—						
Gas	346	—	—	—	346	—
Petrol, kerosene, or other light oils	887	129	47	—	934	129
Heavy oils	20	—	9	—	29	—
	53	—	—	—	53	—
TOTAL	1,306	129	56	—	1,362	129
TOTAL OF PRIME MOVERS INSTALLED ...	1,435		56		1,491	
ELECTRIC GENERATORS						
Driven by Gas engines	Kw.	Kw.	Kw.	Kw.	Kw.	Kw.
	192	—	—	—	192	—
TOTAL OF ELECTRIC GENERATORS INSTALLED ...	192		—		192	
ELECTRIC MOTORS						
Driven by Electricity generated in same works	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
Electricity generated in other works under same ownership	132	90	—	—	132	90
Purchased electricity	40	—	2	—	42	—
TOTAL	3,751	180	643	15	4,394	195
	3,923	270	645	15	4,568	285
TOTAL OF ELECTRIC MOTORS INSTALLED ...	4,193		660		4,853	

V. Consumption of fuel

Kind of fuel used	England and Wales	Scotland	Great Britain
	Tons 4,333	Tons —	Tons 4,333
Coal used for power	B.T.U. (Kw.-hrs.) '000	B.T.U. (Kw.-hrs.) '000	B.T.U. (Kw.-hrs.) '000
Electricity used for all purposes :—			
Generated in same works	182	—	182
Generated in other works under same ownership	10	2	12
Purchased	2,369	161	2,530
TOTAL—Electricity	2,561	163	2,724