

SLATE MINES AND QUARRIES

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 mining or quarrying of slate. 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 products (Gross output)	£'000	1,738	2,161
Cost of materials used	,,	114	152
Net output	,,	1,624	2,009
Average number of persons employed	No.	9,868	9,968
Net output per person employed	£	165	202
Power available :—			
Prime movers	H.P.	8,581	6,290
Electric motors driven by purchased electricity	,,	12,195	9,826
Number of returns	No.	59	59
Number of mines and quarries	,,	61	*

* 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 79, the corresponding figure for 1924 being 147. The value of the gross output of the small firms in 1924 was £21,000, of which £19,000 represented slate for roofing purposes and £2,000, slate slabs.

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	18	36	33	304	108
25-49	11	62	57	400	143
50-99	14	170	155	1,001	155
100-199	7	148	136	937	145
300-399	4	220	199	1,382	144
400 and over	5	1,102	1,044	5,844	179
TOTAL	59	1,738	1,624	9,868	165

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 slate mines and quarries are situated:—

Area	Number of returns	Gross output	Net output	Average number of persons employed	Net output per person employed
	No.	£'000	£'000	No.	£
2	{ 1930 7	52	49	298	164
	{ 1924 5	57	49	313	157
6	{ 1930 8	98	86	589	147
	{ 1924 8	54	50	331	151
8	{ 1930 38	1,546	1,450	8,677	167
	{ 1924 42	1,937	1,852	8,938	207
10	{ 1930 6	42	39	304	127
	{ 1924 4	63	58	386	150
TOTAL	{ 1930 59	1,738	1,624	9,868	165
	{ 1924 59	2,161	2,009	9,968	202

Northern Ireland.—In the report published by the Government of Northern Ireland on the 1930 Census of Production, aggregate figures only are given in respect of the mining and quarrying industries. These aggregates are given in the report on Non-Metalliferous Mines and Quarries on pages 387-8. No production of slate was recorded for Northern Ireland at the 1924 Census.

Production

Principal products.—The following table shows the quantity and value of slate raised in 1930 and 1924:—

Slate	1930			1924	
	Quantity	Value	Entries	Quantity	Value
Dressed slate ...	Tons 239,500	£'000 1,727	No. 59	Tons 265,100	£'000 2,163
Undressed slate ...	4,600	1	6	—	—
TOTAL ...	244,100	1,728	...	265,100*	2,163*

* The output for 1924 was classified as follows:—

	Tons	£'000
Slate for roofing purposes ...	250,600	2,089
Slate slabs ...	11,900	67
Slate for damp-courses, returned as such ...	2,600	7

Prices.—The average selling value of dressed slate, as calculated from the Census returns, was £7.21 per ton in 1930 and £8.16 per ton in 1924, representing a decrease of 11.6 per cent. between the two years.

* For particulars see page xviii.

Volume of production in 1930 and 1924.—On the basis of the average selling values recorded for the two years, the output of slate in 1924 (£2,163,000) would represent a sum of about £1,912,000 if re-valued at the average value of dressed slate returned for 1930. The volume of production was thus about 10 per cent. less in 1930 than in 1924.

Exports and imports.—Separate figures are given in the trade returns only in respect of *slates for roofing*: particulars of the quantities of such slates exported from the United Kingdom in 1930 and 1924 are given below, together with corresponding particulars of the quantities imported and retained:—

	1930	1924
	Th. tons	Th. tons
Slates for roofing:—		
Exports ...	9.1	10.6
Retained imports ...	44.6	11.6

Other products.—In addition to the output of slate shown above, other products valued at £10,000 in 1930 and at less than £500 in 1924 were returned by owners of slate mines and quarries.

Employment and Wages

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

Persons employed	Males			Females			Total		
	Under 16	16 and under 18	All ages	Under 16	16 and under 18	All ages	Under 16	16 and under 18	All ages
1930									
Operatives (average for the year) ...	186	450	9,618	—	—	2	186	450	9,620
Administrative, technical and clerical staff (as at 13th December)	—	2	243	—	1	5	—	3	248
TOTAL ...	186	452	9,861	—	1	7	186	453	9,868
1924									
Operatives (average for the year) ...	551	*	9,668	—	—	—	551	*	9,668
Administrative, technical and clerical staff (as at 18th October) ...	3	*	291	1	*	9	4	*	300
TOTAL ...	554	*	9,959	1	*	9	555	*	9,968

* Not recorded.

Wages.—The available information as to the amount of wages paid in 1930 and 1924 is given on pages 366 and 367.

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.
PRIME MOVERS						
Reciprocating steam engines	906	654	1,560	1,637	470	2,107
Steam turbines	—	10	10	200	10	210
Internal combustion engines :—						
Gas	688	—	688	630	100	730
Petrol, kerosene, or other light oils	572	107	679	390	55	445
Heavy oils	2,383	150	2,533	485	20	505
Water engines	2,934	177	3,111	2,097	196	2,293
TOTAL	7,483	1,098	8,581	5,439	851	6,290
	Kw.	Kw.	Kw.	Kw.	Kw.	Kw.
ELECTRIC GENERATORS						
Driven by						
Internal combustion engines :—						
Gas	23	—	23	20	12	32
Heavy oils	888	93	981	50	—	50
Water engines	1,249	25	1,274	1,005	—	1,005
TOTAL	2,160	118	2,278	1,075	12	1,087
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
ELECTRIC MOTORS						
Driven by						
Electricity generated in same works						
Purchased electricity	3,282	385	3,667	1,670	34	1,704
	10,395	1,800	12,195	9,047	779	9,826
TOTAL	13,677	2,185	15,862	10,717	813	11,530

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)	For power and other purposes, not separately distinguished
	Tons	Tons	Tons
Coal	5,156	3,093*	88
Coke	—	44*	10
Electricity used for all purposes :—			B.T.U. (Kw.-hrs.) '000
Generated in same works			3,246
Purchased			6,037
TOTAL—Electricity			9,283

* These figures were recorded by firms representing 90·1 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 products (Gross output) ...	£'000	1,696	42	1,738
Cost of materials used	"	111	3	114
Net output	"	1,585	39	1,624
Average number of persons employed...	No.	9,564	304	9,868
Net output per person employed ...	£	166	127	165
Power available :—				
Prime movers	H.P.	8,350	231	8,581
Electric motors driven by purchased electricity	"	12,195	—	12,195

II. Production

Kind of products	Great Britain*	
	Quantity	Value
Dressed slate	Th. tons 239.5	£'000 1,727
Undressed slate	4.6	1
Other products	10
TOTAL VALUE OF PRODUCTS (GROSS OUTPUT)	1,738

* Owing to the possible disclosure of information relating to individual firms, detailed particulars cannot be given separately for England and Wales and for Scotland.

III. Employment

A.—NUMBERS EMPLOYED IN WEEK ENDED 13TH DECEMBER, 1930

Persons employed	Males			Females			Males and females		
	Under 16	16 and under 18	All ages	Under 16	16 and under 18	All ages	Under 16	16 and under 18	All ages
<i>England and Wales :—</i>									
Operatives ...	179	436	9,254	—	—	2	179	436	9,256
Administrative, etc.*...	—	2	238	—	1	3	—	3	241
TOTAL ...	179	438	9,492	—	1	5	179	439	9,497
<i>Scotland :—</i>									
Operatives ...	6	11	295	—	—	—	6	11	295
Administrative, etc.*...	—	—	5	—	—	2	—	—	7
TOTAL ...	6	11	300	—	—	2	6	11	302
<i>Great Britain :—</i>									
Operatives ...	185	447	9,549	—	—	2	185	447	9,551
Administrative, etc.*...	—	2	243	—	1	5	—	3	248
TOTAL ...	185	449	9,792	—	1	7	185	450	9,799

* Administrative, technical and clerical staff.

B.—OPERATIVES EMPLOYED AT FOUR SPECIFIED DATES IN 1930

1930	Males and females		
	England and Wales	Scotland	Great Britain
15th March	9,481	268	9,749
14th June	9,326	315	9,641
13th September	9,229	311	9,540
13th December	9,256	295	9,551
AVERAGE	9,323	297	9,620

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
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
PRIME MOVERS						
Reciprocating steam engines	898	654	8	—	906	654
Steam turbines	—	10	—	—	—	10
Internal combustion engines :—						
Gas	688	—	—	—	688	—
Petrol, kerosene, or other light oils ...	507	107	65	—	572	107
Heavy oils	2,225	150	158	—	2,383	150
Water engines	2,934	177	—	—	2,934	177
TOTAL	7,252	1,098	231	—	7,483	1,098
TOTAL OF PRIME MOVERS INSTALLED	8,350		231		8,581	
	Kw.	Kw.	Kw.	Kw.	Kw.	Kw.
ELECTRIC GENERATORS						
Driven by						
Internal combustion engines :—						
Gas	23	—	—	—	23	—
Heavy oils	838	93	50	—	888	93
Water engines	1,249	25	—	—	1,249	25
TOTAL	2,110	118	50	—	2,160	118
TOTAL OF ELECTRIC GENERATORS INSTALLED	2,228		50		2,278	
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
ELECTRIC MOTORS						
Driven by						
Electricity generated in same works ...	3,222	385	60	—	3,282	385
Purchased electricity	10,395	1,800	—	—	10,395	1,800
TOTAL	13,617	2,185	60	—	13,677	2,185
TOTAL OF ELECTRIC MOTORS INSTALLED	15,802		60		15,862	

V. Consumption of fuel

Kind of fuel used	England and Wales	Scotland	Great Britain
Coal used for power*	Tons 5,135	Tons 21	Tons 5,156
	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	3,162	84	3,246
Purchased	6,037	—	6,037
TOTAL—Electricity	9,199	84	9,283

* In addition, 88 tons of coal and 10 tons of coke (all in England and Wales) were recorded as used for power and for other purposes, not separately distinguished.