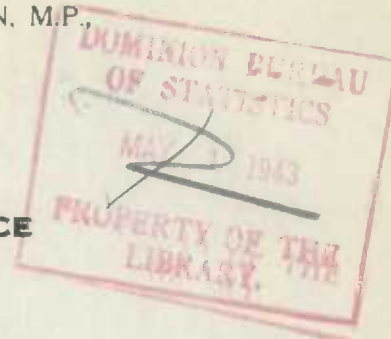


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Minister of Trade and Commerce.



CANADA
DEPARTMENT OF TRADE AND COMMERCE
DOMINION BUREAU OF STATISTICS
CENSUS OF INDUSTRY
MINING, METALLURGICAL & CHEMICAL BRANCH

THE
STONE INDUSTRY
IN
CANADA
1941

including: 1. The Stone Quarrying Industry;
2. The Stone Products Industry.



OTTAWA
1943

Price 50 cents

Dominion Statistician:
 Chief - Mining, Metallurgical and Chemical Branch:
 Statistician - Metal and Chemical Products:
 Mining Statistician:

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THE STONE INDUSTRY IN CANADA, 1941

The Stone Industry in Canada comprises two main divisions: 1. The Stone Quarrying Industry, including quarries and dressing works operated in conjunction with quarries, and 2. The Stone Products Industry, comprising the operations of firms having no quarries but who operate dressing works where stone for building and monumental purposes is cut, polished or otherwise finished. In the Census of Industry, statistics on the stone quarrying industry are included under mining, while statistics of the Stone Products industry are included under manufactures. For convenience this report carries data for both of these industries.

These two major divisions, constituting the Canadian stone industry, represented a capital investment of \$15,459,244 in 1941. Production during the year totalled \$10,640,167 which figure includes the value of the quarry output and the value added by manufacturing in the secondary stone industry. Salaried employees and wage-earners employed in 1941 numbered 3,745 and their combined earnings amounted to \$4,192,634.

The two industries are treated separately in the following review:

1. PRIMARY PRODUCTION - THE STONE QUARRYING INDUSTRY

The kinds of stone quarried in Canada include granite (trap rock, syenite and other igneous rock), limestone, marble, sandstone, and slate. Stone of almost every known variety occurs in Canada; rocks of the igneous areas of British Columbia, Manitoba, Ontario, Quebec and the Maritime Provinces exhibit a wide range of physical characteristics, some varieties being especially noted for their richness of colour and beauty of crystallization. The sedimentary rocks, including limestones, sandstones and marbles are quarried at various points in Canada. The products from quarries operating in these different formations not only yield high class structural and decorative materials but provide the chemical and other allied industries with many of their increasing requirements.

The gross value of all varieties of stone produced in Canada during 1941 totalled \$8,000,684 compared with \$7,398,959 in 1940. Comprising the tonnage shipped in 1941 were 800,922 tons of granite valued at \$1,498,786; 7,151,049 tons of limestone at \$6,057,727; 17,649 tons of marble at \$126,081; 169,885 tons of sandstone at \$305,528 and 1,296 tons of slate worth \$12,562. Of the total value of domestic stone sold in 1941, that of Quebec shipments amounted to 45.1 per cent; Ontario, 41.0 per cent, and British Columbia, 5.1 per cent.

The number of firms in the stone quarrying industry reported as active in 1941 totalled 457; capital employed amounted to \$11,162,036; employees numbered 2,758; salaries and wages paid aggregated \$2,896,100 and the cost of fuel, electricity and process supplies used was reported at \$1,283,183.

Data relating to Canadian imports and exports of stone have not been released for publication since 1939, and any requests for such information should be addressed to the External Trade Branch of the Dominion Bureau of Statistics, Ottawa.

Table 1 - PRINCIPAL STATISTICS OF THE STONE QUARRYING INDUSTRY IN CANADA, 1940 and 1941

	1940	1941
Number of firms	482	457
Capital employed	12,127,271	11,162,036
Number of employees - On salary	283	293
On wages	2,603	2,465
Total	2,886	2,758
Salaries and wages - Salaries	438,559	445,139
Wages	2,341,144	2,450,961
Total	2,779,703	2,896,100
Selling value of products (Gross)	7,398,959	8,000,684
Cost of fuel and electricity	528,319	642,085
Process supplies used	676,056	641,098
Selling value of products (Net)	6,194,584	6,717,501

Table 2 - PRINCIPAL STATISTICS OF THE STONE QUARRYING INDUSTRY IN CANADA, BY PROVINCES, 1937 - 1941

Province	Year	Number of firms	Capital employed \$	Fuel, elec- tricity (x) and process supplies used \$	Number of em- ployees	Salaries and wages paid \$	Net value of production \$
Nova Scotia	1937	26	195,181	35,191	127	100,823	243,907
	1938	20	31,891	11,573	61	51,176	135,371
	1939	18	166,286	18,143	80	67,095	115,774
	1940	47	272,284	30,971	158	128,257	282,673
	1941	40	178,967	25,611	102	88,597	243,734
New Brunswick ..	1937	9	192,761	9,491	93	60,891	129,550
	1938	6	154,258	3,684	75	58,141	116,641
	1939	8	243,358	16,660	136	118,890	249,447
	1940	9	222,471	16,097	146	138,733	294,202
	1941	11	243,460	17,605	125	120,484	330,259
Quebec	1937	184	5,327,000	373,123	1,438	1,022,174	1,839,898
	1938	189	5,219,520	408,199	1,744	1,239,082	2,119,729
	1939	218	5,339,375	531,029	1,903	1,577,265	2,792,570
	1940	199	4,865,498	466,948	1,572	1,280,955	2,360,653
	1941	203	5,267,599	618,873	1,552	1,453,640	2,990,694
Ontario	1937	163	5,914,613	612,870	1,032	1,139,066	3,050,898
	1938	181	4,882,560	429,202	767	741,251	1,893,963
	1939	175	5,609,524	476,667	754	826,949	1,821,244
	1940	193	5,674,896	638,120	785	995,005	2,719,275
	1941	170	4,435,408	572,826	767	395,085	2,705,110
Manitoba	1937	6	642,363	11,407	40	54,053	55,821
	1938	6	393,148	13,481	43	56,431	88,136
	1939	5	225,359	8,454	48	55,558	75,494
	1940	6	390,252	8,998	43	39,528	69,442
	1941	5	391,870	14,331	26	26,333	50,567
Alberta	1937	3	6,500	102	1	1,265	27,087
	1938	2	(/)	(/)	(/)	(/)	6,148
	1939	3	6,400	248	5	3,552	14,032
	1940	2	(/)	(/)	(/)	(/)	11,999
	1941	2	(/)	(/)	(/)	(/)	24,303
British Columbia	1937	27	579,119	43,364	167	198,072	508,651
	1938	25	505,897	24,211	125	152,073	305,608
	1939	25	622,728	30,483	150	167,269	325,251
	1940	26	681,870	43,241	182	197,225	426,340
	1941	26	644,732	33,937	186	211,961	372,834
TOTAL - CANADA -	1937	418	12,857,537	1,085,548	2,898	2,576,344	5,853,812
	1938	429	11,187,274	890,350	2,815	2,298,154	4,665,676
	1939	452	12,213,030	1,081,884	3,076	2,816,578	5,393,812
	1940	482	12,127,271	1,204,375	2,886	2,779,703	6,194,584
	1941	457	11,162,036	1,283,183	2,758	2,896,100	6,717,501

(x) Exclusive of electricity generated by operator.

(/) Included with data relating to lime industry.

Table 3 - AVERAGE NUMBER OF WAGE-EARNERS, BY MONTHS, 1940 and 1941

Month	1940	1 9 4 1		Month	1940	1 9 4 1	
		Quarry	Dressing works			Quarry	Dressing works
January	1,015	1,016	203	July	3,861	2,742	448
February	1,195	1,036	234	August	3,998	2,775	552
March	1,309	1,050	269	September	3,619	2,702	555
April	2,023	1,712	333	October	3,205	2,603	543
May	2,903	2,490	442	November	2,776	2,231	452
June	3,212	2,575	449	December	1,937	1,703	309

Table 4 - NUMBER OF WAGE-EARNERS WHO WORKED THE NUMBER OF HOURS SPECIFIED, DURING ONE WEEK IN MONTH OF HIGHEST EMPLOYMENT, 1941

Hours	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Alberta	British Columbia	CANADA
	No.	No.	No.	No.	No.	No. (x)	No.	No.
30 hours or less	4	6	191	44	...	...	3	248
31 - 43 hours	8	6	212	32	...	...	16	274
44 hours	6	...	155	16	38	...	21	256
45 - 47 hours	6	5	96	43	3	...	5	156
48 hours	6	45	274	194	...	...	181	700
49 - 50 hours	4	6	239	44	...	...	10	303
51 - 54 hours	20	19	225	33	...	...	33	330
55 hours	2	2	152	96	...	...	5	255
56 - 64 hours	40	112	624	254	...	...	19	1,049
65 hours and over ...	11	...	171	169	...	...	1	352
GRAND TOTAL	107	201	2,339	925	41	...	290	3,903
Total wages paid in that week	1,847	5,661	53,030	22,617	839	...	6,301	90,295

(x) Information not available.

Table 5 - POWER INSTALLATION, 1941

	Ordinarily in use		In reserve or idle	
	Number of units	Total h.p. (according to manufacturers' rating)	Number of units	Total h.p. (according to manufacturers' rating)
Steam engines and steam turbines	63	2,327	14	725
Diesel engines	51	3,834	2	125
Gasoline, gas and oil engines other than diesel	190	7,147	30	1,124
Hydraulic turbines or water wheels	13	1,005	4	150
Electric motors run by purchased power..	843	25,042	82	3,003
Electric motors run by own power	23	790	3	70
Stationary boilers	37	1,754	6	270

Table 6 - FUEL AND ELECTRICITY USED, 1941

Kind	Unit of measure	Nova Scotia		New Brunswick		Quebec		Ontario	
		Quantity	Cost at works	Quantity	Cost at works	Quantity	Cost at works	Quantity	Cost at works
			\$		\$		\$		\$
Bituminous coal -									
Canadian	short ton	198	1,198	1	12	1,090	10,258	16	137
Imported	short ton	...	...	11	211	1,495	15,272	7,296	53,348
Anthracite coal	short ton	...	...	...	...	103	1,373	153	1,137
Lignite coal	short ton	...	...	...	...	...	...	...	...
Coke	short ton	25	244	...	...	174	1,806	62	696
Gasoline	Imp. Gal.	14,510	4,175	7,173	1,635	338,708	115,119	376,222	96,668
Kerosene	Imp. Gal.	...	...	...	...	1,542	409	589	104
Fuel oil	Imp. Gal.	5,000	590	7,106	710	111,671	14,651	30,860	3,208
Wood	cord	36	196	41	262	1,628	5,262	522	2,732
Gas - Natural	M cu. ft.	...	...	...	...	...	...	3,000	1,367
Other fuel .....	...	...	...	...	...	...	2	...	9
Electricity purchased	K.W.H.	238,666	4,388	285,918	8,045	7,890,646	158,030	12,905,609	117,142
TOTAL .....	...	...	11,281	...	10,875	...	320,162	...	277,046
Electricity generated for own use	K.W.H.	...	...	...	...	3,500	...	248,800	...
Cost of explosives and other process supplies used .....	...	...	14,330	...	6,730	...	298,711	...	295,780

Kind	Unit of measure	Manitoba		Alberta		British Columbia		C A N A D A	
		Quantity	Cost at works	Quantity	Cost at works	Quantity	Cost at works	Quantity	Cost at works
			\$		\$		\$		\$
Bituminous coal -				(x)	(x)				
Canadian	short ton	20	260	...	...	335	3,154	1,660	15,009
Imported	short ton	...	...	...	...	...	...	8,902	68,831
Anthracite coal	short ton	...	...	...	...	6	200	262	2,710
Lignite coal	short ton	...	...	...	...	...	...	...	...
Coke	short ton	4	56	...	...	...	...	265	2,802
Gasoline	Imp. Gal.	6,623	2,067	...	...	27,379	6,923	830,615	224,587
Kerosene	Imp. Gal.	160	25	...	...	108	30	2,399	568
Fuel oil	Imp. Gal.	...	...	...	...	30,444	2,500	185,081	21,637
Wood	cord	137	457	...	...	...	...	2,364	8,909
Gas - Natural	M cu. ft.	...	...	...	...	...	...	3,000	1,367
Other fuel .....	...	...	...	...	...	...	60	...	71
Electricity purchased	K.W.H.	109,404	4,361	...	...	97,280	2,628	21,527,523	295,094
TOTAL .....	...	...	7,226	...	...	...	15,495	...	642,085
Electricity generated for own use	K.W.H.	...	...	...	...	...	...	252,300	...
Cost of explosives and other process supplies used .....	...	...	7,105	...	...	...	18,442	...	641,098

(x) Not available.

Table 7 - The following table gives the value of construction contracts awarded in Canada from 1925 to 1941, also index numbers of wholesale prices of building materials, index numbers of wage rates and value of total stone produced.

Year	Value of construction contracts awarded in Canada (a)	Value of Canadian primary stone production (b)	Average index numbers of employment in building construction (1926=100) (c)	Average index numbers of wholesale prices of building materials (1926=100) (d)	Index of wage rates in the building trades (1915=100) (e)
	\$	\$			
1925	297,973,000	7,464,777	75.8	102.9	170.4
1926	372,947,900	7,865,874	100.0	100.0	172.1
1927	418,951,600	9,265,304	108.7	96.1	179.3
1928	472,032,600	10,272,301	112.0	97.4	185.6
1929	576,651,800	12,066,532	135.3	99.0	197.5
1930	456,999,600	13,037,209	134.3	90.8	203.2
1931	315,482,000	11,075,184	104.3	81.9	195.7
1932	132,872,400	4,942,211	54.1	77.2	178.2
1933	97,289,800	3,000,326	38.5	78.3	158.0
1934	125,811,500	4,157,131	47.8	82.5	154.8
1935	160,305,000	5,307,563	55.4	81.2	159.8
1936	162,588,000	5,134,153	55.4	85.3	160.8
1937	224,056,700	6,939,360	60.1	94.4	165.3
1938	187,277,900	5,556,026	60.1	89.1	169.4
1939	187,178,500	6,475,696	62.1	89.7	170.7
1940	346,009,800	7,398,959	85.5	95.6	174.8
1941	393,991,300	8,000,684	139.5(e)	107.5	184.6

(a) Compiled by McLean Building Reports Ltd.

(b) Includes all stone except limestone used in making lime and cement.

(c) Employment Statistics Branch, Dominion Bureau of Statistics.

(d) Internal Trade Branch, Dominion Bureau of Statistics.

(e) Labour Department.

Table 8 - PRODUCTION (SALES) OF STONE FROM CANADIAN QUARRIES, BY KINDS AND BY PROVINCES, 1940 and 1941

Province		Granite (a)	Limestone (b)	Marble	Sandstone	Slate	TOTAL
1940							
Nova Scotia	tons	87,975	24,160	...	69,316	...	181,451
	\$	155,458	46,717	...	111,469	...	313,644
New Brunswick ..	tons	1,326	159,812	...	5,015	...	166,153
	\$	69,833	206,916	...	33,550	...	310,299
Quebec	tons	366,662	2,287,384	8,767	92,378	639	2,755,830
	\$	792,708	1,854,423	50,652	129,179	639	2,827,601
Ontario	tons	529,440	3,302,596	4,792	3,446	...	3,840,274
	\$	704,421	2,649,809	22,157	11,008	...	3,387,395
Manitoba	tons	218	48,488	...	...	...	48,706
	\$	4,524	74,116	...	...	...	78,440
Alberta	tons	...	3,981	...	...	...	3,981
	\$	...	11,999	...	...	...	11,999
British Columbia	tons	162,126	282,170	180	6,320	474	451,270
	\$	157,666	282,095	2,600	20,337	6,883	469,581
CANADA	tons	1,147,747	6,108,591	13,739	176,475	1,113	7,447,665
	\$	1,884,410	5,126,075	75,409	305,543	7,522	7,398,959

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Table 8 - PRODUCTION (SALES) OF STONE FROM CANADIAN QUARRIES, BY KINDS AND BY PROVINCES, 1940 and 1941 (Con.)

Province		Granite (a)	Limestone (b)	Marble	Sandstone	Slate	TOTAL
<u>1941</u>							
Nova Scotia	tons	410	46,973	...	66,219	...	113,602
	\$	30,537	69,501	...	169,307	...	269,545
New Brunswick ..	tons	1,529	131,941	...	4,678	...	138,149
	\$	63,134	274,000	...	10,683	...	347,817
Quebec	tons	316,372	3,370,875	10,809	76,928	346	3,775,330
	\$	866,132	2,567,422	92,916	82,701	346	3,609,567
Ontario	tons	152,426	3,353,856	6,540	13,420	...	3,526,242
	\$	388,325	2,832,056	30,365	27,190	...	3,277,936
Manitoba	tons	244	38,103	...	...	...	38,347
	\$	4,155	60,743	...	...	...	64,893
Alberta	tons	...	7,942	...	...	...	7,942
	\$	...	24,303	...	...	...	24,303
British Columbia	tons	129,941	201,359	300	8,640	950	341,190
	\$	146,403	229,702	2,300	15,650	12,216	406,771
CANADA	tons	600,922	7,151,049	17,649	169,885	1,296	7,940,801
	\$	1,498,736	6,057,727	126,081	305,528	12,562	8,000,684

(a) All igneous rocks included.

(b) Includes dolomite, also marl for agricultural purposes.

NOTE: Not included in the above limestone statistics are 1,765,944 tons of limestone consumed in the cement industry in 1940 and 2,086,731 tons in 1941. Limestone used in the Canadian lime industry is also not included; it is estimated that approximately 1,230,349 tons of limestone were burned in the manufacture of lime in 1940 and 1,530,200 tons in 1941.

Table 9 - PRODUCTION (SALES) OF STONE FROM CANADIAN QUARRIES BY PROVINCES, SHOWING PURPOSES FOR WHICH USED, 1941 (x)

For use as follows:		Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Alberta	British Columbia	CANADA
<u>1941</u>									
Building stone - Rough	tons	600	962	8,611	9,355	111	...	600	20,239
	\$	3,600	1,630	21,192	29,358	2,595	...	2,000	60,425
Dressed ..	tons	...	120	22,461	9,881	972	...	589	34,023
	\$	...	5,880	466,048	61,435	16,822	...	42,467	592,652
Monumental and ornamental	tons	80	161	6,022	172	...	...	997	7,432
stone - Rough	\$	800	5,220	63,057	2,812	...	...	10,416	82,305
Dressed	tons	330	406	4,149	30	40	...	42	4,997
	\$	29,737	56,284	199,119	768	1,647	...	6,827	294,582
Flagstone	tons	...	58	47	2,333	98	...	...	2,536
	\$	...	700	106	7,089	540	...	...	8,435
Curbstone	tons	...	...	3,379	101	...	...	...	3,480
	\$	...	...	14,483	249	...	...	...	14,732
Paving blocks	tons	...	...	2,108	...	...	...	...	2,108
	\$	...	...	16,931	...	...	...	...	16,931
Lining open-hearth furnaces	tons	...	...	...	29,124	...	...	...	29,124
	\$	...	...	...	20,893	...	...	...	20,893
Chemical -									
Flux in iron and steel	tons	...	...	1,234	246,973	5,414	741	636	254,998
furnaces .....	\$	...	...	1,164	209,372	9,242	1,623	1,515	222,916
Flux in non-ferrous	tons	...	...	1,135	193,498	...	...	81,295	275,918
smelters .....	\$	...	...	2,041	127,468	...	...	49,034	178,543
Glass factories	tons	...	...	899	...	...	2,605	...	3,504
	\$	...	...	3,428	...	...	3,256	...	6,684
Pulp and paper mills	tons	3,624	5,670	128,986	47,032	1,763	...	53,290	240,365
	\$	14,636	10,500	144,646	44,494	1,978	...	89,437	305,691
Sugar refineries	tons	...	30	...	...	6,189	...	...	6,219
	\$...	120	7,904	8,024
Other chemical uses	tons	183,692	994	184,686
	\$	167,120	596	167,716

Stone

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Table 9 - PRODUCTION (SALES) OF STONE FROM CANADIAN QUARRIES, BY PROVINCES, SHOWING PURPOSES FOR WHICH USED,

1941 (x) - (Con.)								
For use as follows	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Alberta	British Columbia	CANADA
1941 (Con.)								
Pulverized Stone -								
Whiting (substitute)	tons	...	...	5,315	...	...	166	5,481
	\$	...	...	30,107	...	...	1,800	31,907
Asphalt filler	tons	279	16,054	7,649	...	...	209	24,191
	\$	1,674	48,824	22,082	...	...	1,604	74,184
Dusting coal mines	tons	...	...	...	...	1,443	451	1,894
	\$	...	...	...	...	5,772	2,700	8,472
Agricultural purposes and fertilizer plants	tons	13,070	60,545	120,531	17,066	...	1,708	4,217
	\$	29,191	213,700	157,861	34,875	...	6,832	11,929
Other uses	tons	...	237	7,151	6,030	80	210	13,708
	\$	...	1,167	32,395	5,683	320	1,980	41,545
Crushed stone for manufac- ture of artificial stone..								
	tons	...	385	477	...	...	...	862
	\$	...	1,796	1,915	...	...	...	3,711
Roofing granules	tons	...	537	14,624	...	...	887	16,048
	\$	...	1,880	143,853	...	...	11,712	157,445
Poultry grit	tons	...	74	2,371	1,041	1,365	781	6,109
	\$	...	740	1,602	11,877	1,987	6,500	27,596
Stucco dash	tons	...	1,112	150	86	...	2,766	4,114
	\$	...	6,918	800	378	...	15,995	24,091
Terrazzo chips	tons	...	2,796	2,231	...	...	...	5,027
	\$	...	16,467	12,270	...	...	...	28,737
Rock wool	tons	...	...	8,313	...	...	...	8,313
	\$	...	...	8,339	...	...	...	8,339
Rubble and riprap	tons	4,730	16,029	432,091	41,528	530	86,681	581,589
	\$	5,484	9,937	254,385	33,321	725	63,321	367,175
Crushed stone -								
Concrete aggregate	tons	44,889	...	1,873,809	662,885	...	...	2,581,583
	\$	112,223	...	1,335,458	538,545	...	...	1,986,226
Road metal	tons	46,000	53,556	1,062,551	1,682,063	14,894	99,549	2,958,613
	\$	72,000	41,223	782,358	1,492,642	14,264	81,908	2,484,393
Railroad ballast	tons	...	...	86,258	352,228	1,179	6,840	446,505
	\$	...	...	70,518	243,857	1,133	6,840	322,548
TOTAL CANADA								
	tons	113,602	138,148	3,775,330	3,526,242	38,347	7,942	341,190
	\$	269,345	347,864	3,609,567	3,277,936	64,898	24,303	406,771
Per cent of total								
Quantity		1.43	1.74	47.54	44.41	0.48	0.10	4.30
Value		3.37	4.35	45.11	40.98	0.81	0.30	5.08

(x) Includes the production of slate and marl.

Table 10 - PRODUCTION (SALES) OF STONE FROM CANADIAN QUARRIES, BY KINDS, SHOWING PURPOSES FOR WHICH USED, 1940 and 1941

For use as follows	Granite (a)	Limestone (b)	Marble	Sandstone	Slate	TOTAL
<u>1940</u>						
Building stone - Rough tons	54,214	15,095	58	1,514	...	70,881
\$	120,372	70,885	3,070	5,658	...	199,985
Dressed tons	10,908	13,281	131	2,135	...	26,455
\$	255,527	192,183	19,680	55,139	...	522,529
Monumental and ornamental stone -						
Rough tons	5,230	4	52	...	...	5,286
\$	55,176	80	1,704	...	...	56,960
Dressed tons	2,623	47	...	...	...	2,670
\$	223,203	2,218	...	...	...	225,421
Flagstone tons	137	585	...	401	...	1,123
\$	310	1,943	...	2,886	...	5,139
Curbstone tons	844	539	...	1,383
\$	4,142	1,617	...	5,759

Stone

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Table 10 - PRODUCTION (SALES) OF STONE FROM CANADIAN QUARRIES, BY KINDS, SHOWING PURPOSES FOR WHICH USED, 1940 and 1941 - (Con.)

For use as follows		Granite (a)	Limestone (b)	Marble	Sandstone	Slate	TOTAL
<u>1940 (Con.)</u>							
Paving blocks	tons	8,383	...	...	...	...	8,383
	\$	17,165	...	...	...	...	17,165
Lining open-hearth furnaces	tons	...	34,565	...	...	...	34,565
	\$	...	24,516	...	...	...	24,516
Chemical -							
Flux in iron and steel furnaces..	tons	...	167,476	166	...	...	167,642
	\$	...	136,598	358	...	...	136,956
Flux in non-ferrous smelters	tons	...	163,512	...	...	...	163,512
	\$	...	103,446	...	...	...	103,446
Glass factories	tons	...	1,613	121	...	...	1,734
	\$	...	2,016	692	...	...	2,708
Pulp and paper mills	tons	...	248,755	...	...	...	248,755
	\$	...	315,080	...	...	...	315,080
Sugar refineries	tons	...	10,164	...	...	...	10,164
	\$	...	12,331	...	...	...	12,331
Other chemical uses	tons	...	133,878	...	...	...	133,878
	\$	...	111,275	...	...	...	111,275
Pulverized Stone -							
Whiting (substitute)	tons	...	900	...	...	...	900
	\$	...	9,600	...	...	...	9,600
Asphalt filler	tons	...	13,311	...	...	...	13,311
	\$	...	45,234	...	...	...	45,234
Dusting coal mines	tons	...	610	...	...	...	610
	\$	...	2,440	...	...	...	2,440
Agricultural purposes and fertilizer plants	tons	...	174,114	1,440	...	...	175,554
	\$	...	272,161	3,070	...	...	275,231
Other uses	tons	...	27,464	378	...	...	27,842
	\$	...	55,228	2,112	...	...	57,340
Crushed stone for manufacture of artificial stone	tons	...	...	800	...	...	800
	\$	...	...	3,526	...	...	3,526
Roofing granules	tons	12,406	524	...	...	1,113	14,043
	\$	105,709	1,274	...	...	7,522	114,505
Poultry grit	tons	2	1,877	1,499	...	...	3,378
	\$	57	8,211	7,120	...	...	15,388
Stucco dash	tons	2	55	1,327	...	...	1,384
	\$	55	266	9,129	...	...	9,450
Terrazzo chips	tons	...	1,290	3,484	...	...	4,774
	\$	...	5,650	17,184	...	...	22,834
Rock wool	tons	...	5,825	...	...	...	5,825
	\$	...	6,451	...	...	...	6,451
Rubble and riprap	tons	168,274	267,934	3,980	12,526	...	452,714
	\$	126,302	156,862	7,562	7,909	...	298,635
Crushed stone -							
Concrete aggregate	tons	288,703	2,352,153	...	32,222	...	2,673,078
	\$	341,581	1,784,808	...	45,096	...	2,171,487
Road metal	tons	160,819	2,018,353	303	121,138	...	2,300,613
	\$	186,714	1,517,592	202	181,236	...	1,885,744
Railroad ballast	tons	435,202	455,206	...	6,000	...	896,408
	\$	448,097	287,675	...	6,000	...	741,772
TOTAL CANADA (b)	tons	1,147,747	6,108,591	13,739	176,475	1,113	7,447,665
	\$	1,884,410	5,126,075	75,409	305,543	7,522	7,398,959

(a) Includes all igneous rock.

(b) Does not include limestone used in Canadian lime and cement industries but includes marl used for agricultural purposes.

Stone

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Table 10 - PRODUCTION (SALES) OF STONE FROM CANADIAN QUARRIES, BY KINDS, SHOWING PURPOSES FOR WHICH USED, 1940 and 1941 - (Con.)

For use as follows	Granite (a)	Limestone (b)	Marble	Sandstone	Slate	TOTAL
1941						
Building stone - Rough	tons 2,589	15,687	61	1,902	...	20,239
\$ 11,248		36,557	3,036	9,584	...	60,425
Dressed	tons 13,772	19,455	422	374	...	34,023
\$ 284,805		241,298	51,535	15,016	...	592,652
Monumental and ornamental stone -						
Rough	tons 7,260	148	24	...	...	7,432
\$ 81,073		434	798	...	...	82,305
Dressed	tons 4,926	52	...	20	...	4,997
\$ 291,643		2,339	...	400	...	294,382
Flagstone	tons 150	1,459	...	927	...	2,536
\$ 336		2,625	...	5,474	...	8,435
Curbstone	tons 3,379	70	...	31	...	3,480
\$ 14,483		42	...	207	...	14,732
Paving blocks	tons 2,106	...	...	...	...	2,106
\$ 16,931		...	...	...	...	16,931
Lining open-hearth furnaces	tons ...	29,124	...	...	...	29,124
\$...		20,893	...	...	...	20,893
Chemical -						
Flux in iron and steel furnaces..	tons ...	254,998	...	...	...	254,998
\$...		222,916	...	...	...	222,916
Flux in non-ferrous smelters	tons ...	275,918	...	...	...	275,918
\$...		178,543	...	...	...	178,543
Glass factories	tons ...	2,605	899	...	...	3,504
\$...		3,256	3,428	...	...	6,684
Pulp and paper mills	tons ...	240,031	334	...	...	240,365
\$...		305,023	668	...	...	305,691
Sugar refineries	tons ...	6,219	...	...	...	6,219
\$...		8,024	...	...	...	8,024
Other chemical uses.....	tons ...	184,686	...	...	...	184,686
\$...		167,716	...	...	...	167,716
Pulverized Stone -						
Whiting (substitute)	tons ...	5,481	...	...	...	5,481
\$...		31,907	...	...	...	31,907
Asphalt filler	tons 425	18,463	5,240	...	63	24,191
\$ 1,635		62,089	9,956	...	504	74,184
Dusting coal mines	tons ...	1,894	...	...	...	1,894
\$...		8,472	...	...	...	8,472
Agricultural purposes and	tons ...	216,657	480	...	...	217,137
fertilizer plants	\$...	453,548	840	...	...	454,388
Other uses	tons ...	12,871	837	...	...	13,708
\$...		37,278	4,267	...	...	41,545
Crushed stone for manufacture of	tons ...	...	862	...	...	862
artificial stone .....	\$ ...	...	3,711	...	...	3,711
Roofing granules	tons 14,274	887	...	...	887	16,048
\$ 143,328		2,405	...	...	11,712	157,445
Poultry grit	tons 2	3,912	2,195	...	...	6,109
\$ 90		16,397	10,909	...	...	27,396
Stucco dash	tons 5	2,697	1,412	...	...	4,114
\$ 115		14,958	9,018	...	...	24,091
Terrazzo chips	tons ...	896	4,151	...	...	5,027
\$...		2,688	26,049	...	...	28,737
Rock wool	tons ...	8,313	...	...	...	8,313
\$...		8,339	...	...	...	8,339
Rubble and riprap	tons 118,328	414,827	410	47,678	546	581,589
\$ 85,212		232,741	1,638	47,236	546	567,175

Table 10 - PRODUCTION (SALES) OF STONE FROM CANADIAN QUARRIES, BY KINDS, SHOWING PURPOSES FOR WHICH USED, 1940 and 1941 - (Con.)

For use as follows	Granite (a)	Limestone (b)	Marble	Sandstone	Slate	TOTAL
<u>1941 (Con.)</u>						
Crushed stone -						
Concrete aggregate tons	178,611	2,350,850	...	52,122	...	2,581,583
Concrete aggregate \$	214,956	1,648,057	...	123,213	...	1,386,226
Road metal tons	254,171	2,647,797	342	56,303	...	2,958,613
Road metal \$	352,378	2,038,208	228	93,579	...	2,484,358
Railroad ballast tons	925	435,052	...	10,528	...	446,505
Railroad ballast \$	555	310,974	...	10,819	...	322,548
TOTAL CANADA (b) tons	600,922	7,151,049	17,649	169,385	1,296	7,940,301
TOTAL CANADA (b) \$	1,498,786	6,057,727	126,081	305,528	12,562	8,000,684

(a) Includes all igneous rock.

(b) Does not include limestone used in Canadian lime and cement industries, but includes marl used for agricultural purposes.

GRANITE

Table 11 - PRODUCTION OF GRANITE(x) IN CANADA, 1932 - 1941

Year	Short tons	\$	Year	Short tons	\$
1932	490,822	1,110,582	1937	1,135,099	1,827,433
1933	256,723	679,585	1938	705,307	1,779,417
1934	200,285	781,739	1939	1,102,395	2,119,501
1935	326,354	1,126,287	1940	1,147,747	1,884,410
1936	941,743	1,319,313	1941	600,922	1,498,786

(-) Includes all igneous rock.

"The stone quarried in this industry consists of granite and related crystalline igneous rocks used for building, decorative, ornamental, or constructional purposes. Producing properties are situated in Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba, and British Columbia. Large areas in Canada are underlain by granite, and the prospects of finding stone suitable for its various uses are good.

"Much of the granite produced in Canada is used for foundations for highways; for the permanent ballasting of railway roadbeds; for heavy aggregate in large concrete structures; for the filling of breakwaters; and for bridge piers. The marked curtailment of such operations during the past several years has seriously affected production. Production is still far below the record years.

"Granite for monumental use is produced in the Maritime Provinces and in Quebec, Ontario, Manitoba, and British Columbia, and is finding a small but steadily increasing market. Black granite has been quarried in Canada, notably in the vicinity of Lake St. John, Quebec, and from quarries along the north shore of Lake Superior, and stone from these areas should find a ready market for monumental use. Other deposits of black granite in the Maritime Provinces, Quebec, Ontario, and Manitoba show promise of yielding stone of good quality.

"Now that shipments from the Scandinavian countries to the United States and to Canada have been discontinued, Canadian producers would be well advised to give careful study to the market possibilities of a monumental stock, especially for the black and red varieties.

"In the building trade, coloured granites are being used to an increasing extent in the form of thin polished slabs for trim for buildings in which the main colour scheme calls for contrast.

"Canadian granites are suitable for all the purposes for which granite is used, and with persistent advertising there is no reason why this industry should not have a flourishing future." (Bureau of Mines, Ottawa)

LIMESTONE

Table 12 - PRODUCTION OF LIMESTONE IN CANADA, 1932-1941

Year	Short tons	\$	Year	Short tons	\$
1932	3,687,241	3,227,715	1937	5,542,806	4,673,942
1933	2,572,311	2,142,516	1938	4,288,507	3,864,619
1934	3,747,779	3,157,832	1939	4,149,589	3,817,551
1935	3,631,665	3,253,573	1940	6,108,591	5,125,075
1936	3,731,548	3,143,872	1941	7,151,049	6,057,727

"Limestone in blocks of large dimensions for sawing into building stone is quarried in Quebec, Ontario, and Manitoba. In Quebec, quarries at St. Marc des Carrières, Portneuf county, produce grey limestone, and several in and near Montreal yield limestone of similar colour. In Ontario, a large quarry near Queenston in the Niagara peninsula yields silver-grey limestone as well as small quantities of buff and of variegated buff and grey. At Longford Mills, near Orillia, buff, silver-grey, and brown limestone for use both as marble and as building stone is available, but has not been quarried for the past several years. The Manitoba quarries are near Tyndall and yield mottled buff, mottled grey and mottled variegated limestone. Besides these large quarries, the products of which have a wide shipping range, small quarries producing building stone for local use are worked near Quebec City, Montreal, and Hull in Quebec; and at Ottawa, Kingston, Erin, and Warton in Ontario. Rubble is their chief product.

"Some of the quarry companies market stone in all stages of manufacture, from the mill block to elaborately carved material; others sell stone only in the mill block. Waste material is utilized for crushed stone, rubble, riprap, flagging, chemical and metallurgical purposes, and for lime manufacture.

"There were no developments of importance in 1941. Although building construction is very active owing to defence needs, most of the buildings are of the factory type and require little cut stone; thus, the building-stone industry is relatively inactive and a number of the quarries are either shut down or operated only for a short time each year.

"The limestone deposits being worked for building stone are favourably situated in respect to centres of population and the supply of stone is adequate for present and future demands.

"Prices of limestone in the mill block f.o.b. quarry have remained almost stationary in recent years, and range from 50 cents to \$1 per cubic foot, depending on the size of block and grade of stone.

"Limestone is available in great bedded formations and in massive highly metamorphosed deposits—the former being much more common and yielding most of the production. At present, almost all Canadian limestone is won by open pit methods, though underground mining of the rock has been adopted by several companies producing limestone for chemical and metallurgical uses and for making lime. Underground mining will undoubtedly become more common, particularly for the production of high-grade stone for chemical use, as the readily accessible parts of deposits become worked out.

"Of significance in connection with future production of pure limestone is the progress being made in beneficiation, whereby siliceous material is in part removed from limestone by flotation. This method of purifying limestone is now in use at several Portland cement plants in various parts of the world.

"Limestone is widely distributed and is quarried on a large scale in all industrial countries. Rarely is there any considerable international trade in it, but, because foreign limestone can be obtained more cheaply at certain large consuming centres in Canada than the domestic, considerable quantities are imported from the United States and Newfoundland for use as blast furnace flux, and from the United States alone for road metal, and for use in some pulp mills in Ontario near the International Boundary. Comparatively small tonnages are exported to the United States for use in agriculture and in sugar refineries. No separate record is maintained of the trade in limestone.

"For domestic use, limestone is marketed in a variety of forms ranging from huge squared blocks of dimension stone used in construction, to extremely fine dust used chiefly as a mineral filler. Some of the products are processed but little if at all from the condition in which the rock is obtained from the quarry, as for example limestone used in the wood pulp industry, but the bulk of the output is crushed and screened for use as road metal, concrete aggregate, railroad ballast, and as flux in metallurgical plants. Large

quantities are used in the manufacture of Portland cement, lime, and various chemical products. Argillaceous dolomite is used in the manufacture of rock wool. This industry is steadily expanding in Canada and in 1941 its output was valued at well over \$1,000,000. Pure dolomite is assuming a position of importance as a raw material for the manufacture of magnesium metal. A process has been developed to extract magnesium directly from calcined dolomite, and a plant employing this process is now under construction in Ontario. Calcined dolomite is also used in other countries to precipitate magnesia from sea water and magnesium chloride brines--the magnesia so obtained being used either for the manufacture of magnesium metal or for refractory materials. A present use for limestone, capable of enormous development, is in agriculture. Though the necessity of applying limestone or lime to agricultural land in order to maintain or increase soil fertility has been emphasized for many years by authorities on agriculture, the quantity so used in Canada is still very small, whereas if the proper quantity were applied it would constitute one of the principal outlets for limestone." (Bureau of Mines, Ottawa)

MARBLE

Table 13 - PRODUCTION OF MARBLE IN CANADA, 1932 - 1941

Year	Short tons	\$	Year	Short tons	\$
1932	12,379	250,706	1937	21,642	88,595
1933	10,897	65,913	1938	19,375	87,274
1934	13,783	69,475	1939	14,124	200,054
1935	15,975	85,369	1940	13,739	75,409
1936	22,866	169,698	1941	17,649	126,081

"Marble quarries are operated in the provinces of Quebec, Ontario, Manitoba, and British Columbia. The products include squared blocks for sawing into slabs and for making monuments, and broken marble for rubble and for making terrazzo, stucco dash, whiting substitute, marble flour and artificial stone. Waste from some of the quarries is sold for chemical uses and for road metal.

"In Quebec, several varieties of clouded grey marble and also a black marble are quarried at Philipsburg by Missisquoi Stone and Marble Company, Limited. Some brown marble used for counters and wainscoting is obtained from the building stone quarries in the Trenton limestones at St. Marc des Carrières, Portneuf county. Dolomitic white marble is quarried and crushed by White Grit Company at Portage de Fort, Pontiac county, and by Canada Marble and Lime Company at l'Annonciation, Labelle county, for the making of terrazzo chips, stucco dash, poultry grit, artificial stone, and for chemical and ceramic uses. A small quantity of dark red marble has been quarried at Cap St. Martin near Montreal, chiefly for making tombstones.

"In Ontario, black marble is quarried at St. Albert, near Ottawa, by Silverstone Black Marble Quarries, Limited. Recently a 40-inch bed of marble was uncovered in this quarry which, because of its soundness and uniformity, is suitable for making large monolithic pillars. White marble is quarried at Marmora by Bonter Marble and Calcium Company, Limited, and at Haliburton by Bolender Brothers for making terrazzo chips, poultry grit, stucco dash, and artificial stone. Buff, red, white, green, and black marbles are quarried north of Madoc by Karl Stockloser and by Connolly Marble, Mosaic and Tile Company, Limited for use as terrazzo.

"In Manitoba, a number of highly coloured marbles are available, but there is only a small production to supply terrazzo chips and building rubble.

"In Alberta, a deposit of calcareous tufa near Radnor station on the Canadian Pacific Railway has been quarried for terrazzo and a small quantity has also been marketed in block form.

"In British Columbia there are many deposits of marble, but there is only a small production of white marble near Victoria and on Texada Island for use as terrazzo, poultry grit, marble sand, and whiting substitute.

"Many known deposits of beautifully coloured marbles have never been fully investigated, chiefly because the present demand in Canada for marble of any one colour, other than for a staple variety such as white, is comparatively small.

"The war has adversely affected the Canadian marble industry, for though construction activity is again at a high level, most of the buildings erected are of the industrial type in which little or no standing marble is used.

"The Canadian market calls for interior decorative marble almost entirely, and very little is used for tombstones. In recent years there has been an increasing demand for marble in the form of terrazzo for flooring, and many inquiries have reached the Bureau of Mines, Ottawa, as to where marbles of various colours can be obtained." (Bureau of Mines, Ottawa).

SANDSTONE

Table 14 - PRODUCTION OF SANDSTONE IN CANADA, 1932 - 1941

Year	Short tons	\$	Year	Short tons	\$
1932	500,480	349,458	1937	235,165	343,871
1933	99,043	108,562	1938	101,854	218,405
1934	115,169	143,283	1939	176,265	331,830
1935	342,824	838,005	1940	176,475	305,543
1936	285,898	495,856	1941	169,885	305,528

Canadian sandstone has been utilized extensively in the construction of many important public buildings in Canada and is finding increasing favour as a material in the construction of the better type home. The rock occurs in Canada in a variety of colours, including white, reddish brown, yellow and grey. Shipments of sandstone were made in 1941 from quarries located in all of the provinces with the exception of Prince Edward Island, Manitoba and Saskatchewan.

The greater part of the crude output in 1941 was employed as rubble and riprap and in the crushed state for concrete, highway construction and railroad ballasting. Sandstone in British Columbia, New Brunswick and Nova Scotia has been employed in the manufacture of abrasive wheels and sharpening stones; such production is included with natural abrasives manufacture.

SLATE

Table 15 - PRODUCTION OF SLATE IN CANADA, 1932 - 1941

Year	Short tons	\$	Year	Short tons	\$
1932	250	3,750	1937	900	5,519
1933	250	3,750	1938	979	6,311
1934	738	4,802	1939	1,149	6,760
1935	1,129	4,329	1940	1,113	7,522
1936	1,247	5,414	1941	1,296	12,562

Canadian slate production in 1941 came entirely from the provinces of Quebec and British Columbia and represented shipments of the stone in the form of granules for roofing purposes, riprap and asphalt filling. No Canadian deposits of slate suitable for the production of high grade roofing slates or shingles have been reported as being under development in recent years.

Table 16 - PRODUCTION OF STONE FOR BUILDING PURPOSES, CHEMICAL USE, CEMENT MANUFACTURE, CONCRETE AGGREGATE, ROAD METAL AND RAILROAD BALLAST, 1934 - 1941

	Building stone(a)	For chemical purposes(b)	For concrete aggregate	For road metal	For railroad ballast	For cement manufacture
1934	tons 52,665	489,530	821,099	2,062,487	345,802	806,546
	\$ 490,095	447,429	608,240	1,668,927	209,296	...
1935	tons 200,899	537,799	804,719	1,976,363	351,302	818,443
	\$ 1,258,741	483,709	523,847	1,987,351	211,993	...
1936	tons 42,335	615,207	1,014,145	1,903,927	784,081	1,180,358
	\$ 714,616	553,597	730,617	1,655,134	659,656	...
1937	tons 49,098	693,947	1,497,655	3,169,136	642,248	1,465,168(c)
	\$ 746,370	626,297	1,214,181	2,522,080	570,606	...
1938	tons 49,666	551,737	981,739	2,721,922	86,019	1,358,689(d)
	\$ 725,402	468,000	791,971	2,347,010	53,816	...
1939	tons 71,238	577,278	1,344,636	2,131,306	600,266	1,407,099(d)
	\$ 1,334,340	523,579	1,109,028	1,773,537	522,382	...
1940	tons 97,336	725,685	2,673,078	2,300,613	896,408	1,784,291(d)
	\$ 722,514	681,796	2,171,487	1,885,744	741,772	...
1941	tons 54,262	965,690	2,581,583	2,958,613	446,505	2,113,618(d)
	\$ 653,077	889,574	1,986,226	2,484,393	322,348	...

For FOOTNOTES see Page 14.

Footnotes to Table 16:

- (a) Does not include monumental or ornamental stone.
- (b) Does not include limestone used in Canadian lime industry.
- (c) Includes shale.
- (d) Includes 13,821 tons shale in 1938, 27,241 tons in 1939, 18,347 in 1940 and 23,857 in 1941.

WHITING SUBSTITUTE

(Bureau of Mines, Ottawa)

"Whiting substitute, as the name implies, is a material that may be used in place of chalk whiting, all of which originates in England or in Europe. It may be made from white limestone or white marble, marl, lime, or the waste calcium carbonate sludge resulting from the manufacture of caustic soda.

"The principal differences between whiting made from chalk, and whiting substitute made from marble or limestone are that the latter is usually whiter, has a low capacity for absorbing oil, and the individual particles are sub-angular rather than rounded.

"The products made from white marble or white limestone are pulverized to various degrees of fineness ranging from 200 to 400 mesh; and the raw material used contains very little magnesium carbonate, though in the past a whiting substitute made from white dolomite was produced in Eastern Canada for making putty.

"Marl suitable for making whiting substitute should be white or nearly so, be nearly free from grit and clayey material, and have a very low content of organic matter. This last-named constituent, which is present to some extent in all deposits of marl, renders the product unsuitable for use as a filler in products such as putty and paint where it will come in contact with oils. The oil-absorptive capacity of whiting substitute made from marl is usually greater than that of whiting, but in other respects the physical characteristics of the two products are much the same.

"Calcium carbonate filler, a product closely akin to whiting substitute and made by introducing carbon dioxide gas into milk-of-lime made from high-calcium quicklime, has been produced in Canada for the past several years. Its use up to the present has been as a filler in newsprint, book, and magazine paper, and its manufacture has been undertaken by the paper companies using it.

"By-product precipitated chalk, made from waste sludge resulting from the manufacture of caustic soda from soda ash and lime, is classed as a whiting substitute, but its usefulness is restricted by the fact that it almost invariably contains a small amount of free alkali. The raw materials for the manufacture of by-product precipitated chalk are available but it is not yet being made in Canada.

"Producers of whiting substitute are Pulverized Products, Limited, Montreal; Claxton Manufacturing Company, Toronto; White Valley Chemicals, Limited, Toronto; Gypsum, Lime and Alabastine, Canada, Limited, Winnipeg; and Beale Quarries, Limited, Van Anda, Texada Island, British Columbia.

"Whiting substitute made in Canada is used mostly in the manufacture of oilcloth, linoleum, in certain kinds of rubber products, in putty, in explosives, and as a filler in newsprint, book, and magazine paper. In lesser quantities it is used in the manufacture of moulded articles, cleaning compounds and polishes, as a ceramic glaze and for a number of other purposes.

Prices per ton, bagged and in carload lots range from \$8.00 to \$15.00 per ton f.o.b. plants."

2. SECONDARY PRODUCTION

THE STONE PRODUCTS INDUSTRY, 1941

In 1941 there were 174 stone dressing works whose operations were reported separately from the quarries. These plants were engaged chiefly in cutting or polishing Canadian or imported stone to produce finished monuments or cut and dressed stone for construction purposes. Retail establishments engaged only in selling and lettering monuments have not been included. Five producers of rock wool were also included in this industry.

Output from this industry was valued at \$3,883,496 in 1941, an increase of 8.1 per cent over the total of \$3,592,623 reported for the previous year. The 78 works in Ontario accounted for 63.8 per cent of the total output and the 40 plants in Quebec for 19.6 per cent. The average number of employees was 967 and \$1,296,554 were paid in salaries and wages. Materials used in the cutting and dressing processes, including stone, cost \$1,244,013 and expenditures for fuel and electricity amounted to \$137,842.

Table 17 - PRINCIPAL STATISTICS OF THE STONE PRODUCTS INDUSTRY, 1931 - 1941

Year	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
		\$		\$	\$	\$	\$
1931	223	6,880,835	1,436	2,145,023	136,155	1,770,559	5,989,372
1932	206	5,823,109	1,003	1,200,214	108,053	928,572	2,961,914
1933	212	5,461,171	821	841,425	87,562	691,525	2,162,650
1934	218	5,194,702	881	886,809	90,874	834,323	2,407,474
1935	222	5,180,887	1,066	1,174,229	107,836	1,010,999	3,079,118
1936	227	5,766,308	1,245	1,257,308	127,151	1,070,902	3,309,911
1937	229	5,213,431	1,159	1,352,566	122,209	1,142,885	3,371,242
1938	234	5,172,014	1,261	1,560,951	158,259	1,271,650	3,902,774
1939	190	4,991,656	1,257	1,458,780	139,438	1,259,547	3,805,989
1940	182	4,697,903	1,061	1,236,825	133,417	1,183,112	3,592,623
1941	174	4,297,208	987	1,296,534	137,842	1,244,013	3,883,493
Per cent change 1941 from 1940.	...	- 8.5	- 7	+ 4.8	+ 3.3	+ 5.1	+ 8.1

NOTE: Profits or losses cannot be calculated from the above figures as data are not available for general expense items, such as, interest, rent, depreciation, taxes, insurance, advertising, etc.

Table 18 - PRINCIPAL STATISTICS OF THE STONE PRODUCTS INDUSTRY, BY PROVINCES, 1940 and 1941

Provinces	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
		\$		\$	\$	\$	\$
1940							
Prince Edward Island	2)						
New Brunswick	5)	103,345	35	33,914	3,282	20,301	86,801
Nova Scotia	8	132,683	36	36,160	2,787	27,354	105,189
Quebec	46	1,132,560	259	287,212	25,937	395,028	877,875
Ontario	81	2,592,319	563	689,923	86,762	635,495	2,101,147
Manitoba	13	185,740	55	49,794	4,638	35,964	111,282
Saskatchewan	9	144,745	38	47,230	3,468	30,545	100,821
Alberta	7	252,041	38	46,899	3,391	25,383	123,891
British Columbia ...	11	154,470	37	45,643	3,152	13,042	85,617
CANADA	182	4,697,903	1,061	1,236,825	133,417	1,183,112	3,592,623
1941							
Prince Edward Island	1)						
New Brunswick	5)	97,713	30	31,634	3,205	18,752	95,322
Nova Scotia	9	105,955	31	33,713	3,938	31,227	102,986
Quebec	40	1,093,733	214	252,604	22,292	509,060	761,881
Ontario	78	2,352,811	550	794,841	93,099	774,692	2,477,466
Manitoba	14	144,562	52	50,774	5,454	37,636	116,965
Saskatchewan	9	136,763	31	42,509	3,143	30,167	114,460
Alberta	6	228,374	39	42,151	3,415	26,051	110,405
British Columbia ...	12	137,297	40	48,328	3,296	16,428	104,111
CANADA	174	4,297,208	987	1,296,534	137,842	1,244,013	3,883,493

Table 19 - CAPITAL EMPLOYED IN THE STONE PRODUCTS INDUSTRY, 1940 and 1941

Province	Present value of land, build- ings, fixtures, machinery and tools	Inventory value of materials on hand, finished products and stocks in process	Operating capital (cash, bills and accounts receiv- able, prepaid expenses, etc.)	TOTAL CAPITAL EMPLOYED
	\$	\$	\$	\$
<u>1940</u>				
Prince Edward Island)				
New Brunswick	45,593	38,484	19,268	103,345
Nova Scotia	56,055	46,015	30,613	132,683
Quebec	752,981	240,403	139,176	1,132,560
Ontario	1,649,723	471,772	470,824	2,592,319
Manitoba	57,463	85,032	43,245	185,740
Saskatchewan	67,639	32,302	44,804	144,745
Alberta	142,951	31,225	77,865	252,041
British Columbia	88,941	27,409	38,120	154,470
CANADA	2,861,346	972,642	863,915	4,697,903
<u>1941</u>				
Prince Edward Island)				
New Brunswick	42,791	32,177	22,745	97,713
Nova Scotia	56,087	18,648	31,220	105,955
Quebec	733,849	230,554	129,330	1,093,733
Ontario	1,473,550	494,058	385,203	2,352,811
Manitoba	80,112	27,355	37,095	144,562
Saskatchewan	60,925	36,191	39,647	136,763
Alberta	135,217	34,682	58,475	228,374
British Columbia	89,021	30,158	18,118	137,297
CANADA	2,671,552	903,823	721,833	4,297,208

Table 20 - EMPLOYEES, SALARIES AND WAGES OF THE STONE PRODUCTS INDUSTRY, BY PROVINCES, 1940 and 1941

Provinces	Average number of employees				TOTAL	Salaries \$	Wages \$	TOTAL SALARIES and WAGES \$
	On Salaries		On Wages					
	Male	Female	Male	Female				
<u>1940</u>								
Prince Edward Island)								
New Brunswick	5	3	27	...	55	9,250	24,664	33,914
Nova Scotia	7	1	28	...	36	7,814	28,346	36,160
Quebec	71	3	185	...	259	99,394	187,818	287,212
Ontario	144	16	400	3	563	232,164	457,759	689,923
Manitoba	20	3	31	1	55	22,588	27,206	49,794
Saskatchewan	19	2	16	1	38	28,098	19,182	47,280
Alberta	10	4	23	1	38	17,272	29,627	46,899
British Columbia ...	17	1	19	...	37	23,280	22,363	45,643
CANADA	293	33	729	6	1,061	439,860	796,965	1,236,825
<u>1941</u>								
Prince Edward Island)								
New Brunswick	5	3	22	...	30	8,610	23,024	31,634
Nova Scotia	7	1	23	...	31	7,088	26,625	33,713
Quebec	57	2	155	...	214	80,020	172,584	252,604
Ontario	136	17	394	3	550	230,508	564,333	794,841
Manitoba	23	2	26	1	52	25,795	24,979	50,774
Saskatchewan	16	2	13	...	31	25,181	17,328	42,509
Alberta	7	5	27	...	39	14,661	27,470	42,131
British Columbia ...	18	1	21	...	40	22,967	25,361	48,328
CANADA	269	33	681	4	987	414,850	881,704	1,296,554

Table 21 - WAGE-EARNERS, BY MONTHS, IN THE STONE PRODUCTS INDUSTRY, 1940 and 1941 (Number on pay-rolls on the last work day of each month)

Months	1 9 4 0			1 9 4 1		
	Male	Female	TOTAL	Male	Female	TOTAL
January	563	3	566	508	1	509
February	573	2	575	505	1	506
March	591	2	593	562	1	563
April	728	3	731	671	1	672
May	773	4	777	740	1	741
June	802	6	808	758	...	758
July	834	6	840	756	3	759
August	838	6	844	760	2	762
September	840	5	845	753	3	756
October	733	5	738	762	2	764
November	716	4	720	716	2	718
December	621	4	625	627	3	630
AVERAGE	729	6	735	681	4	685

Table 22 - HOURS WORKED PER WEEK BY WAGE-EARNERS IN THE STONE PRODUCTS INDUSTRY, 1940 and 1941 (In one week of highest employment; overtime included)

Hours worked per week	Number of wage-earners		Hours worked per week	Number of wage-earners	
	1940	1941		1940	1941
30 hours or less	87	35	51 - 54 hours	50	111
31 - 43 hours	156	105	55 hours	28	22
44 hours	284	237	56 - 64 hours	110	103
45 - 47 hours	73	72	65 hours and over ...	121	79
48 hours	113	156	Total	1,096	960
49 - 50 hours	74	40	Total wages paid in selected week \$	26,504	33,992

Table 23 - FUEL AND ELECTRICITY USED IN THE STONE PRODUCTS INDUSTRY, 1940 and 1941

Kinds	Unit of measure	1 9 4 0		1 9 4 1	
		Quantity	Cost at works \$	Quantity	Cost at works \$
Bituminous coal - Canadian	ton	165	1,497	189	1,694
Imported	ton	2,300	14,766	2,689	17,556
Anthracite coal	ton	298	3,298	332	3,917
Lignite coal	ton	13	72	22	131
Coke	ton	146	1,600	190	2,083
Gasoline	Imp.gal.	30,268	8,933	60,563	20,249
Kerosene or coal oil	Imp.gal.	119	15	346	40
Fuel oil	Imp.gal.	94,721	7,539	71,050	5,538
Wood	cord	262	1,288	312	1,733
Gas - Manufactured	M cu.ft.	64	65	68	67
Natural	M cu.ft.	843	389	545	265
Other fuel .....	...	...	805	...	825
Electricity purchased	K.W.H.	6,727,888	93,150	6,315,783	83,744
TOTAL .....	...	...	133,417	...	137,842

Table 24 - POWER EQUIPMENT IN THE STONE PRODUCTS INDUSTRY, 1940 and 1941

	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
1 9 4 0				
Steam engines and steam turbines	1	150	...	...
Diesel engines	3	106	...	...
Gasoline, gas and oil engines (other than diesel)	10	234	...	...
Total Primary Equipment	14	490	...	...
Electric motors run by purchased power	667	8,445	63	1,042
TOTAL	681	8,935	63	1,042
Electric motors run by power generated by above primary units	1	10	...	...
Stationary boilers	5	302	...	...

Table 24 - POWER EQUIPMENT IN THE STONE PRODUCTS INDUSTRY, 1940 and 1941 (Concluded)

	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
<u>1 9 4 1</u>				
Steam engines and steam turbines	2	157	...	...
Diesel engines	3	157	...	...
Gasoline, gas and oil engines (other than diesel)	11	224	1	2
Hydraulic turbines or water wheels	1	15	...	...
Total Primary Equipment	17	553	1	2
Electric motors run by purchased power	695	8,347	71	1,135
TOTAL	712	8,900	72	1,135
Electric motors run by power generated by above primary units .....	...	...	...	...
Stationary boilers	7	320	1	90

Table 25 - COST OF MATERIALS USED IN THE STONE PRODUCTS INDUSTRY, 1940 and 1941

	Cost at works	
	1 9 4 0	1 9 4 1
	\$	\$
Stone - (a) From Canadian quarries	380,650	373,780
(b) Imported	235,872	185,162
Monuments, cut and polished, for lettering only	99,114	73,700
All other materials	467,476	611,272
TOTAL	1,183,112	1,244,013

Table 26 - OUTPUT OF THE STONE PRODUCTS INDUSTRY, 1940 and 1941

Products	TOTAL SELLING VALUE AT WORKS	
	1 9 4 0	1 9 4 1
	\$	\$
Granite, cut and polished -		
(a) Monuments	1,416,298	1,582,016
(b) For building purposes	159,427	92,899
Marble, cut and polished -		
(a) Monuments	167,805	186,269
(b) For building purposes	218,271	148,294
Marble chips and dust	14,005	22,326
Limestone -		
(a) Monuments and bases	29,861	31,820
(b) For building purposes	446,441	384,265
Finished monuments, lettered only	132,775	120,681
Other products (x)	964,112	1,249,065
Repairs and custom work (re-lettering, etc.)	43,628	65,861
TOTAL	3,592,623	3,883,496

(x) Includes rock wool, etc.

Table 27 - PRODUCTION FROM THE STONE PRODUCTS INDUSTRY, BY PROVINCES, 1940 and 1941

	GRANITE		MARBLE		LIMESTONE		Marble chips and dust	Monu-ments and bases	For building purposes	Finished monu-ments, lettered only	Other products	TOTAL
	Monu-ments	For building purposes	Monu-ments	For building purposes								
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Prince Edward Island and New Brunswick -												
1940	61,634	3,575	13,081	...	...	1,430	...	6,381	700	86,801		
1941	73,588	770	14,411	...	...	1,500	...	2,260	2,795	95,522		
Nova Scotia -												
1940	63,013	2,846	11,334	...	...	75	...	26,231	1,630	105,139		
1941	44,870	930	10,344	...	...	1,065	...	38,172	7,505	102,886		
Quebec -												
1940	332,685	109,680	9,892	118,835	4,442	7,240	45,047	9,710	242,344	877,875		
1941	335,936	35,332	5,639	57,565	7,862	4,389	22,972	9,133	285,053	761,681		
Ontario -												
1940	738,932	8,159	75,740	79,305	324	7,480	391,855	50,407	724,519	2,101,147		
1941	881,220	25,150	85,337	73,164	2,170	15,795	359,359	36,616	998,655	2,477,466		
Manitoba -												
1940	60,514	4,088	8,490	8,673	300	2,288	...	25,568	1,361	111,282		
1941	66,460	...	18,366	...	350	4,220	...	26,644	925	116,965		
Saskatchewan -												
1940	42,357	...	29,463	275	875	6,398	295	13,228	7,930	100,821		
1941	50,134	...	37,568	...	1,707	4,301	1,694	5,215	12,841	114,460		
Alberta -												
1940	49,373	27,750	17,650	6,000	8,000	4,950	9,084	...	1,084	123,891		
1941	50,233	25,000	12,328	8,000	10,112	550	...	641	3,541	110,405		
British Columbia												
1940	67,790	3,329	2,155	7,183	64	...	180	1,190	3,726	85,817		
1941	79,575	5,717	2,276	9,565	125	...	240	2,000	4,613	104,111		
CANADA -												
1940	1,416,298	159,427	167,805	213,271	14,005	29,861	446,441	132,775	1,007,740	3,592,623		
1941	1,582,016	92,899	186,269	148,294	22,326	31,820	384,265	120,681	1,314,926	3,883,496		

Table 28 - TOTAL PRODUCTION IN CANADA OF DRESSED BUILDING STONE, 1927 - 1941

Years	GRANITE		MARBLE		LIMESTONE		Sand-stone from quarries	TOTAL
	From quarries	From dressing works	From quarries	From dressing works	From quarries	From dressing works		
	\$	\$	\$	\$	\$	\$	\$	\$
1927	267,194	83,877	...	673,126	716,929	1,713,446	8,784	3,463,355
1928	667,050	314,553	340,585	883,076	702,081	2,861,336	18,000	5,786,681
1929	746,537	465,185	347,256	1,621,112	944,491	2,739,504	92,500	6,956,585
1930	1,189,120	902,519	687,115	1,339,108	1,416,277	2,706,390	286,972	8,527,501
1931	1,011,499	1,032,202	576,458	1,054,952	1,085,767	1,372,131	686,616	6,819,615
1932	336,632	79,136	188,743	339,627	348,187	636,294	20,580	1,949,199
1933	114,318	40,224	27,377	73,445	111,235	281,074	19,300	666,973
1934	216,574	35,957	...	137,902	173,536	280,279	5,500	849,748
1935	403,951	184,033	16,000	130,227	425,247	837,985	97,400	2,094,845
1936	171,858	330,306	104,738	175,834	189,064	514,575	167,859	1,654,034
1937	252,346	179,557	18,297	347,405	248,659	438,450	51,893	1,536,607
1938	244,501	216,485	1,440	369,698	227,324	332,123	83,692	1,975,263
1939	561,253	438,619	145,618	174,275	349,547	664,270	101,448	2,435,030
1940	255,527	159,427	19,680	218,271	192,183	446,441	55,139	1,346,668
1941	284,803	92,899	51,535	148,294	241,298	384,265	15,016	1,218,110

Table 29 - TOTAL PRODUCTION IN CANADA OF DRESSED MONUMENTAL AND ORNAMENTAL STONE, 1926-1941

Years	GRANITE		MARBLE		LIMESTONE		Sandstone from quarries	TOTAL
	From quarries	From dressing works	From quarries	From dressing works	From quarries	From dressing works		
	\$	\$	\$	\$	\$	\$	\$	\$
1926	196,820	1,619,206	466,648	576,859	3,908	94,446	...	2,757,887
1927	147,510	1,728,293	449,717	420,651	1,523	97,264	...	2,844,958
1928	125,744	1,718,986	9,700	404,058	2,227	132,406	...	2,393,133
1929	149,810	1,815,463	...	391,947	4,722	325,876	...	2,687,913
1930	111,504	1,815,143	...	350,323	3,577	319,472	...	2,600,319
1931	251,379	1,584,099	...	257,668	6,300	43,584	...	2,143,080
1932	196,071	1,164,283	...	180,323	2,532	43,652	...	1,586,861
1933	215,616	1,111,354	...	200,315	2,868	30,370	...	1,560,321
1934	244,286	1,271,009	24,342	168,201	3,488	27,036	...	1,738,369
1935	277,568	1,268,414	...	158,249	1,680	26,690	...	1,732,001
1936	251,482	1,317,005	...	150,629	...	35,162	...	1,734,278
1937	278,140	1,468,895	(x) 900	176,101	2,335	117,404	...	1,983,775
1938	294,001	1,515,000	2,644	127,803	79,156	109,036	...	2,127,640
1939	260,375	1,513,958	800	129,623	3,321	53,309	325	1,961,711
1940	223,203	1,416,298	...	167,805	2,218	29,861	...	1,839,385
1941	291,643	1,582,016	...	186,269	2,339	31,820	400	2,094,487

(x) Sandstone.

Table 30 - PRODUCTION IN CANADA AND IMPORTS OF ROCK WOOL, 1932 - 1941

	Production	IMPORTS	
	\$	Pounds	\$
1932 (From October 12) .....	...	309,791	5,301
1933 .....	...	2,230,762	38,262
1934	1,709	2,987,611	69,267
1935	66,459	1,922,938	57,877
1936	265,472	2,391,504	101,592
1937	346,460	2,030,144	81,050
1938	396,261	1,337,954	45,109
1939	525,998	1,820,763	44,860
1940	935,229	2,082,589	52,233
1941	1,185,324	2,633,544	74,791

Table 31 - SALES OF ROCK WOOL BY CANADIAN PRODUCERS, 1940 and 1941

	Full thick batts	Semi-thick batts	Granulated wool	Bulk or loose wool	Industrial wool
	sq. ft.	sq. ft.	cu. ft.	cu. ft.	cu. ft.
<u>1940</u>					
January	331,517	380,178	119,568	73,055	37,289
February	226,740	258,073	105,443	35,988	28,559
March	179,727	289,391	89,642	16,901	33,766
April	281,992	355,404	76,995	34,594	42,031
May	625,862	696,403	125,023	33,190	39,556
June	556,432	673,718	103,257	30,373	25,263
July	632,656	1,859,735	94,355	39,306	32,839
August	531,399	1,618,573	92,297	35,237	34,852
September	627,456	2,080,996	108,733	53,451	27,155
October	843,340	2,212,875	121,545	56,531	40,655
November	729,198	2,187,894	192,130	54,161	47,508
December	668,037	1,481,434	129,928	28,431	40,183
TOTAL	6,234,356	14,094,674	1,358,916	491,218	429,655

Table 31 - SALES OF ROCK WOOL BY CANADIAN PRODUCERS, 1940 and 1941 (Concluded)

	Three inch batts sq.ft.	Two inch batts sq.ft.	One inch batts sq.ft.	Granulated wool cu.ft.	Bulk or loose wool cu.ft.	Industrial wool cu.ft.
<u>1941</u>						
January	385,610	1,082,115	...	91,926	26,821	22,960
February	410,422	904,651	...	79,110	28,416	40,531
March	323,169	660,377	...	87,438	15,238	43,972
April	430,459	751,183	...	61,128	23,389	40,964
May	670,589	1,349,373	20,700	102,539	23,785	35,394
June	521,334	1,295,423	84,427	137,030	37,175	33,579
July	941,247	1,778,731	392,276	126,428	29,587	37,288
August	1,335,141	1,781,498	579,675	149,558	38,496	36,879
September	800,585	1,678,827	644,262	182,157	63,320	32,356
October	1,021,775	3,122,082	661,573	199,697	71,909	39,641
November	1,106,597	3,259,235	780,962	167,487	54,164	28,107
December	728,548	2,701,034	584,795	200,440	35,154	57,327
TOTAL	8,675,476	20,364,529	3,748,670	1,584,938	447,454	448,798

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