

553.5
C16
D
1945

26 217

Published by Authority of the Hon. James A. MacKINNON, M.P.,
Minister of Trade and Commerce

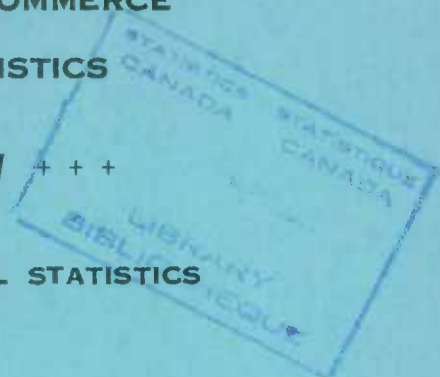
C. 3
CANADA

DEPARTMENT OF TRADE AND COMMERCE

DOMINION BUREAU OF STATISTICS

+++ Census of Industry +++

MINING, METALLURGICAL & CHEMICAL STATISTICS



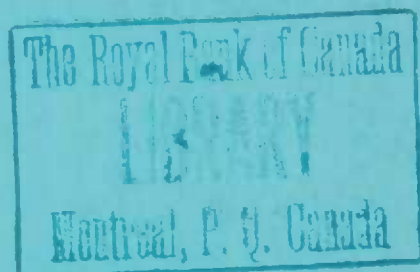
THE
STONE INDUSTRY
IN
CANADA
1945

**Including: 1. The Stone Quarrying Industry;
2. The Stone Products Industry.**



OTTAWA
1947

Price 50 Cents



553.5

C16

D

1945

(12 Aug 47)

Dominion Statistician:

Herbert Marshall

Director - Division of Census of Industry and Merchandising:

W. H. Losee

Chief - Mining, Metallurgical and Chemical Statistics:

H. McLeod

THE STONE INDUSTRY IN CANADA, 1945

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.

Production by these industries during the year totalled \$11,472,518, 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 1945 numbered 3,209, and their combined earnings amounted to \$4,780,240.

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. 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. Sedimentary rocks, including limestones, sandstones and marbles are worked at various locations and the quarries operating in these different formations not only yield high class structural and decorative products but also provide materials for the chemical and allied industries.

The gross value of all varieties of new stone produced in Canada during 1945 amounted to \$8,166,700, compared with \$7,159,177 in 1944. The tonnage shipped in 1945 included 221,630 tons of granite (igneous rock) valued at \$1,284,748; 5,677,192 tons of limestone valued at \$6,284,379; 13,388 tons of marble valued at \$113,337; 291,430 tons of sandstone valued at \$466,397 and 1,915 tons of slate valued at \$17,839. Quarries in Quebec contributed 47.8 percent of the total value in 1945; Ontario accounted for 35.7 percent; British Columbia for 5.7 percent; New Brunswick for 4.6 percent; Nova Scotia for 4.3 percent; Manitoba for 1.1 percent and Alberta for 0.8 percent.

This report has been prepared by A. R. Deir, Mining Statistician.

Table 1 - Principal Statistics of the Stone Quarrying Industry in Canada, 1943-1945

	1943	1944	1945
Number of firms	407	405	361
Capital employed \$	10,954,939	(x)	(x)
Number of employees - On salary	320	255	242
On wages	2,153	1,909	1,912
Total ..	2,473	2,164	2,154
Salaries and wages - Salaries	484,990	441,257	412,711
Wages	3,044,765	2,713,432	2,701,936
Total ..	3,529,755	3,154,689	3,114,647
Selling value of products (Gross) ..	7,964,179	7,159,177	8,166,700
Cost of fuel and electricity	678,409	671,056	711,111
Process supplies used	855,218	826,824	740,604
Selling value of products (Net)	6,430,552	5,661,297	6,714,985

(x) Not recorded in 1944 or 1945.

Table 2 - Principal Statistics of the Stone Quarrying Industry, By Provinces, 1944 and 1945

Province	Number of quarries	Average number of em- ployees	Salaries and wages \$	Cost of fuel and electricity \$	Process supplies \$	Gross value of production \$
1944						
Nova Scotia	39	57	56,132	12,871	7,700	225,113
New Brunswick	8	84	113,390	20,634	9,074	244,187
Quebec	151	1,260	1,642,193	354,877	492,990	3,334,811
Ontario	189	641	1,165,191	255,249	304,971	2,909,980
Manitoba	7	16	15,464	4,386	2,181	53,554
Saskatchewan .....	...	...	...	...	...	...
Alberta	2	...	...	...	...	43,049
British Columbia	70	106	162,319	23,039	9,908	348,483
Canada	466	2,164	3,154,689	671,056	826,824	7,159,177
1945						
Nova Scotia	36	100	77,076	12,450	9,229	315,179
New Brunswick	9	68	75,003	7,106	1,926	328,509
Quebec	140	1,274	1,738,960	406,695	440,339	4,056,272
Ontario	169	604	1,050,331	269,411	272,711	2,926,694
Manitoba	7	24	32,194	5,992	6,082	85,798
Saskatchewan .....	...	...	...	...	...	...
Alberta	3	...	...	...	...	54,962
British Columbia	65	84	141,083	9,457	10,317	399,286
Canada	429	2,154	3,114,647	711,111	740,604	8,166,700

Table 3 - Average Number of Wage-Earners, By Months, 1944 and 1945

Month	1944				1945			
	Quarry		Dressing Works		Quarry		Dressing Works	
	Male	Female	Male	Female	Male	Female	Male	Female
January	1,143	1	255	5	990	1	263	3
February	1,160	1	242	5	990	1	264	3
March	1,190	1	239	5	1,076	1	315	3
April	1,415	1	268	5	1,353	1	293	3
May	1,753	2	313	5	1,717	1	323	3
June	1,957	4	345	5	1,810	1	331	3
July	1,936	4	364	5	1,837	1	369	3
August	1,943	4	330	5	1,915	1	346	3
September	1,869	4	336	5	1,943	1	341	3
October	1,789	4	344	5	1,994	1	386	3
November	1,609	2	354	5	1,719	1	382	3
December	1,242	1	320	5	1,316	1	373	3
Average	1,590	3	311	5	1,572	1	336	3

Table 4 - Hours Worked Per Week By Wage Earners, 1945 (During one week in month of highest employment)

Hours	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Alberta	British Columbia	Canada
	(Number)							
30 hours or less ....	...	4	103	28	1	...	7	143
31-43 hours	1	9	163	33	11	...	9	226
44 hours	1	1	80	33	4	...	11	130
45-47 hours	3	2	90	28	1	...	2	126
48 hours	1	30	269	26	...	...	43	369
49-50 hours	2	8	112	103	...	...	1	226
51-54 hours	12	21	153	48	7	...	15	256
55 hours .....	...	8	107	50	...	...	4	169
56-64 hours	49	6	436	197	7	...	1	696
65 hours and over ...	2	3	120	50	...	...	14	189
Total	71	92	1,633(x)	596	31	...	107	2,530(x)
Total wages paid in selected week: Male \$	1,935	2,332	55,265	19,885	1,432	...	4,047	84,896
Female \$	...	...	97	...	...	...	...	97

(x) Includes 3 females.

Table 5 - Fuel and Electricity Used, 1945

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	130	1,062	21	220	2,447	27,209	744	9,778
Imported	short ton	...	...	3	63	2,313	23,763	7,328	63,142
Anthracite coal .	short ton	...	...	...	...	17	279	3	51
Lignite coal	short ton	...	...	...	...	...	...	...	...
Coke	short ton	...	...	...	...	47	654	34	426
Gasoline	Imp. gal.	18,498	5,056	10,189	2,465	432,329	132,469	200,072	58,479
Kerosene	Imp. gal.	...	...	...	...	19,325	5,864	326	50
Fuel oil	Imp. gal.	3,568	404	2,500	300	241,614	35,720	170,301	14,565
Wood	cord	21	126	85	640	486	3,205	364	1,831
Gas: Natural ...	M cu. ft.	...	...	...	...	...	...	2,746	1,992
Other fuel .....	...	...	...	...	...	...	...	...	...
Electricity pur- chased	K.W.H.	270,250	5,802	104,300	3,418	8,973,711	177,532	12,402,393	119,097
Total .....	...	...	12,450	...	7,106	...	406,695	...	269,411
Electricity gener- ated for own use	K.W.H.	...	...	...	...	...	...	448,100	...
		Manitoba		Alberta		British Columbia		C A N A D A	
Bituminous coal -									
Canadian	short ton	12	186	...	...	73	603	3,427	39,058
Imported	short ton	...	...	...	...	...	...	9,644	86,968
Anthracite coal .	short ton	43	648	...	...	...	...	63	978
Lignite coal ....	...	...	...	...	...	...	...	...	...
Coke	short ton	...	...	...	...	...	...	81	1,080
Gasoline	Imp. gal.	1,350	472	...	...	17,082	4,773	679,520	203,714
Kerosene	Imp. gal.	1,540	570	...	...	2,120	436	23,311	6,920
Fuel oil	Imp. gal.	...	...	...	...	26,436	2,461	444,419	53,450
Wood	cord	18	140	...	...	22	127	996	6,069
Gas: Natural ...	M cu. ft.	...	...	...	...	...	...	2,746	1,992
Other fuel .....	...	...	...	...	...	...	...	...	...
Electricity pur- chased	K.W.H.	132,800	3,976	...	...	47,230	1,057	21,930,684	310,882
Total .....	...	...	5,992	(x)	(x)	...	9,457	...	711,111
Electricity gener- ated for own use	K.W.H.	...	...	...	...	...	...	448,100	...

(x) Not available.

Table 6 - Power Equipment, 1945

	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	36	1,636	7	345
Steam turbines	1	2	1	2
Diesel engines	56	4,493	1	75
Gasoline, gas and oil engines other than diesel	180	6,329	13	505
Hydraulic turbines or water wheels	9	344	4	150
Electric motors run by purchased power	872	24,467	116	4,681
Electric motors run by own power	34	1,104	...	...
Stationary boilers	33	1,688	2	65
Motor generator sets .....	...	...	1	16

Table 7 - Production (Sales) of Stone From Canadian Quarries, By Kinds and By Provinces, 1944 and 1945

Province		Granite (a)	Limestone (b)	Marble	Sandstone	Slate	Total
<u>1944</u>							
Nova Scotia	tons	1,886	50,734	...	45,813	...	98,433
	\$	37,532	123,613	...	63,968	...	225,113
New Brunswick	tons	1,857	66,731	...	1,400	...	69,988
	\$	47,504	165,258	...	31,425	...	244,187
Quebec	tons	127,544	2,370,141	6,489	89,470	198	2,593,842
	\$	830,238	2,349,177	50,569	104,629	198	3,334,811
Ontario	tons	125,604	2,852,241	5,215	5,223	...	2,988,283
	\$	307,497	2,549,402	32,650	20,431	...	2,909,980
Manitoba	tons	357	31,572	...	...	...	31,929
	\$	4,957	48,587	...	...	...	53,554
Alberta	tons	...	12,726	...	...	...	12,726
	\$	...	43,049	...	...	...	43,049
British Columbia	tons	12,716	181,141	125	4,860	949	199,791
	\$	76,052	249,373	2,155	3,000	17,903	348,483
Canada	tons	269,964	5,565,286	11,829	146,766	1,147	5,994,992
	\$	1,303,790	5,528,459	85,374	223,453	18,101	7,159,177
<u>1945</u>							
Nova Scotia	tons	379	60,387	...	62,668	...	123,434
	\$	25,695	158,644	...	130,840	...	315,179
New Brunswick	tons	4,669	84,639	...	10,020	...	99,328
	\$	41,983	198,326	...	88,200	...	328,509
Quebec	tons	77,145	2,372,758	7,410	211,902	946	2,670,161
	\$	887,113	2,877,684	65,556	224,352	1,567	4,056,272
Ontario	tons	109,286	2,833,573	5,818	3,680	...	2,952,357
	\$	279,105	2,582,663	45,081	19,845	...	2,926,694
Manitoba	tons	425	62,201	...	...	...	62,626
	\$	6,130	79,668	...	...	...	85,798
Alberta	tons	...	13,528	...	...	...	13,528
	\$	...	54,962	...	...	...	54,962
British Columbia	tons	29,726	250,106	160	3,160	969	284,121
	\$	44,722	332,432	2,700	3,160	16,272	399,286
Canada	tons	221,630	5,677,192	13,388	291,430	1,915	6,205,555
	\$	1,284,748	6,284,379	113,337	466,397	17,839	8,166,700

(a) All igneous rocks included.

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

Note: Not included in the above limestone statistics are 1,849,258 tons of limestone consumed in the cement industry in 1945 and 1,865,597 tons in 1944. Also, the limestone used in the lime industry is not included; it is estimated that approximately 1,432,077 tons of limestone were burned in the manufacture of lime in 1945 and 1,571,451 tons in 1944.

Stone

- 5 -

Table 8 - Production (Sales) of Stone(x) From Canadian Quarries, By Provinces, Showing Purposes For Which Used, 1944 and 1945

For use as follows:		Nova Scotia	New Brunswick	Quebec	Ontario	Mani- toba	Alberta	British Columbia	Canada
<u>1944</u>									
Building stone - Rough .	tons	372	80	7,275	3,414	245	...	1,436	12,822
	\$	4,719	962	23,391	11,096	2,003	...	3,624	45,795
Dressed	tons	...	620	6,136	3,337	227	...	...	10,320
	\$	...	31,890	261,228	47,325	9,964	...	...	350,407
Monumental and ornamen- tal stone - Rough	tons	37	1,488	6,777	...	...	...	1,305	9,607
	\$	552	11,625	96,552	...	...	...	13,800	122,529
Dressed ...	tons	349	188	5,200	174	120	...	304	6,335
	\$	33,980	33,074	491,894	918	4,575	...	50,594	615,035
Flagstone	tons	...	...	...	1,315	27	...	...	1,342
	\$	...	...	...	4,748	180	...	...	4,928
Curbstone	tons	...	...	200	...	...	...	...	200
	\$	...	...	1,298	...	...	...	...	1,298
Paving blocks	tons	...	...	1,250	300	...	...	...	1,550
	\$	...	...	7,874	600	...	...	...	8,474
Lining open-hearth furnaces	tons	8,930	...	...	...	...	...	...	8,930
	\$	16,967	...	...	...	...	...	...	16,967
Chemical -									
Flux in iron and steel furnaces	tons	...	57	1,005	414,625	4,457	1,000	589	421,733
	\$	...	110	854	373,334	7,480	2,500	976	385,254
Flux in non-ferrous smelters	tons	...	...	49,729	117,099	...	...	37,491	204,319
	\$	...	...	26,706	87,188	...	...	24,406	138,300
Glass factories	tons	...	...	391	...	...	3,742	...	4,133
	\$	...	...	1,466	...	...	5,613	...	7,079
Pulp and paper mills ..	tons	...	4,188	129,642	25,375	1,741	...	47,719	208,665
	\$	...	7,748	179,815	82,986	1,913	...	101,675	374,137
Sugar refineries	tons	...	...	...	4,978	...	...	...	4,978
	\$	...	...	4,231	4,231	...	...	...	4,231
Other chemical uses ...	tons	...	...	...	244,592	...	...	20,942	265,534
	\$	...	...	...	240,107	...	...	21,264	261,371
Pulverized Stone -									
Whiting (substitute) ..	tons	...	...	...	2,732	...	...	233	2,965
	\$	...	...	...	16,611	...	...	2,996	19,607
Asphalt filler	tons	277	...	9,031	4,153	...	...	966	14,427
	\$	2,493	...	32,910	14,853	...	...	4,830	55,086
Dusting coal mines	tons	...	...	...	...	...	3,030	473	3,503
	\$	...	...	...	...	...	12,120	3,193	15,313
Agricultural purposes and fertilizer plants.	tons	41,454	62,467	171,637	32,074	1,833	1,514	5,966	316,945
	\$	103,367	157,353	239,521	74,337	4,923	6,056	15,485	601,042
Other uses	tons	...	...	80	10,547	2,282	...	23	12,932
	\$	...	...	465	35,090	2,028	...	207	37,790
Crushed stone for manu- facture of artificial stone	tons	...	...	172	82	...	...	...	254
	\$	...	...	786	255	...	...	...	1,041
Roofing granules	tons	...	...	...	35,031	...	...	952	35,983
	\$	...	...	...	126,135	...	...	17,975	144,110
Poultry grit	tons	73	...	1,910	8,318	...	3,440	1,466	15,207
	\$	786	...	10,628	49,752	...	16,760	7,317	85,243
Stucco dash	tons	...	...	531	97	...	...	522	1,150
	\$	...	...	3,439	582	...	...	5,314	9,335
Terrazzo chips	tons	...	...	1,327	1,465	...	...	...	2,792
	\$	...	...	7,283	10,850	...	...	...	18,133
Rock wool	tons	...	...	...	7,130	...	...	...	7,130
	\$	...	...	...	6,890	...	...	...	6,890
Rubble and riprap	tons	6,441	900	101,598	84,207	1,600	...	6,855	201,601
	\$	10,949	1,425	88,722	80,683	1,810	...	4,234	187,823
Crushed stone -									
Concrete aggregate	tons	30,000	...	1,293,101	514,841	14,393	...	...	1,852,335
	\$	33,300	...	1,152,845	400,144	14,403	...	...	1,600,592
Road metal	tons	10,500	...	382,773	1,030,303	4,443	...	70,239	1,498,258
	\$	18,000	...	351,067	911,685	3,761	...	68,283	1,352,796
Railroad ballast	tons	...	...	424,077	442,094	561	...	2,310	869,042
	\$	...	...	356,067	329,580	514	...	2,310	688,471
Total Canada	tons	98,433	69,988	2,593,842	2,988,283	31,929	12,726	199,791	5,994,992
	\$	225,113	244,187	3,334,811	2,909,980	53,554	43,049	348,483	7,159,177
Per cent of total ...	Quantity	1.64	1.17	43.27	49.85	.53	.21	3.33	100.00
	Value	3.14	3.41	46.58	40.65	.75	.60	4.87	100.00

Table 8 - Production (Sales) of Stone(x) From Canadian Quarries, By Provinces, Showing Purposes For Which Used, 1944 and 1945 (Con.)

For use as follows:		Nova Scotia	New Brunswick	Quebec	Ontario	Mani- toba	Alberta	British Columbia	Canada
1945									
Building stone - Rough .	tons	600	67	6,568	29,194	271	...	2,319	39,019
	\$	6,848	101	33,278	44,808	2,309	...	6,324	93,668
Dressed	tons	...	1,040	11,225	5,058	359	...	10	17,692
	\$	...	80,000	485,918	75,580	15,821	...	414	657,733
Monumental and ornamen- tal stone - Rough	tons	50	336	8,213	91	...	...	1,600	10,290
	\$	800	3,063	121,096	2,957	...	...	16,000	143,916
Dressed ...	tons	329	190	5,223	...	150	...	47	5,939
	\$	24,895	27,766	575,912	...	5,700	...	8,214	642,487
Flagstone	tons	...	20	540	1,710	65	...	...	2,335
	\$	...	200	2,700	7,662	395	...	...	10,957
Curbstone	tons	...	...	90	...	...	...	...	90
	\$	...	...	668	...	...	...	...	668
Paving blocks	tons	...	...	411	300	...	...	...	711
	\$	...	...	3,126	3,600	...	...	...	6,726
Lining open-hearth furnaces	tons	14,760	...	...	...	...	...	...	14,760
	\$	28,042	...	...	...	...	...	...	28,042
Chemical -									
Flux in iron and steel furnaces	tons	...	...	168	385,662	3,966	800	10	390,606
	\$	...	...	168	341,165	6,603	2,000	200	350,136
Flux in non-ferrous smelters	tons	...	...	3,110	99,861	...	...	45,221	148,192
	\$	...	...	2,872	74,869	...	...	61,178	138,919
Glass factories	tons	...	...	1,192	...	...	4,346	...	5,538
	\$	...	...	5,673	...	...	17,380	...	23,053
Pulp and paper mills ..	tons	3,650	3,077	128,895	27,561	1,860	...	47,008	212,051
	\$	18,714	5,693	189,567	85,114	2,044	...	111,923	413,055
Sugar refineries	tons	...	11	...	8,213	...	...	1	8,225
	\$	...	52	...	6,981	...	...	12	7,045
Other chemical uses ...	tons	...	...	...	257,376	...	...	29,526	286,902
	\$	...	...	...	253,435	...	...	29,526	282,961
Pulverized Stone -									
Whiting (substitute) ..	tons	...	...	3,662	4,309	...	...	232	8,203
	\$	...	...	36,617	26,165	...	...	2,702	65,484
Asphalt filler	tons	1	...	6,023	4,310	...	...	517	10,851
	\$	29	...	21,581	14,973	...	...	2,585	39,168
Dusting coal mines	tons	...	...	...	...	...	2,992	313	3,305
	\$	...	...	...	...	...	11,970	2,112	14,082
Agricultural purposes and fertilizer plants	tons	41,067	81,319	258,828	31,649	1,664	1,480	3,572	419,579
	\$	109,277	192,400	495,851	74,579	3,730	5,920	10,045	891,802
Other uses	tons	869	...	10,846	13,769	3,391	...	30	28,905
	\$	2,173	...	39,704	44,252	3,411	...	270	89,810
Crushed stone for manu- facture of artificial stone									
	tons	...	...	394	668	...	...	...	1,062
	\$	...	...	2,330	2,489	...	...	...	4,819
Roofing granules	tons	...	...	100	43,261	...	...	969	44,330
	\$	...	...	150	125,016	...	...	16,272	141,438
Poultry grit	tons	40	...	1,243	7,178	...	3,490	1,617	13,568
	\$	409	...	5,374	39,883	...	16,960	8,280	70,906
Stucco dash	tons	...	...	1,350	291	...	...	1,488	3,129
	\$	...	...	9,500	2,778	...	...	17,307	29,585
Terrazzo chips	tons	...	...	2,657	2,127	...	...	...	4,784
	\$	...	...	17,106	21,724	...	...	...	38,830
Rock wool	tons	...	...	...	1,423	...	...	...	1,423
	\$	...	...	...	1,886	...	...	...	1,886
Rubble and riprap	tons	1,168	13,268	125,004	73,598	120	...	28,622	241,780
	\$	2,192	19,234	124,469	76,480	240	...	14,403	237,018
Crushed stone -									
Concrete aggregate	tons	...	...	1,302,572	567,811	37,657	420	...	1,908,460
	\$	...	...	1,142,020	417,242	36,262	732	...	1,596,256
Road metal	tons	60,900	...	430,226	931,143	12,711	...	117,859	1,552,839
	\$	121,800	...	426,000	822,998	8,888	...	88,359	1,468,045
Railroad ballast	tons	...	...	361,621	455,794	412	...	3,160	820,987
	\$	...	...	314,592	360,058	395	...	3,160	678,205
Total Canada	tons	123,434	99,328	2,670,161	2,952,357	62,626	13,528	284,121	6,205,555
	\$	315,179	328,509	4,056,272	2,926,694	85,798	54,962	399,286	8,166,700
Per cent of total ...	Quantity	1.98	1.60	43.03	47.58	1.01	0.22	4.58	100.00
	Value	3.86	4.02	49.67	35.84	1.05	0.67	4.89	100.00

(x) Includes the production of slate and marl.

Stone

- 7 -

Table 9 - Production (Sales) of Stone From Canadian Quarries, By Kinds, Showing Purposes For Which Used, 1944 and 1945

For use as follows:		Granite (a)	Limestone (b)	Marble	Sandstone	Slate	Total
<u>1944</u>							
Building stone - Rough	tons	4,260	4,770	142	3,650	...	12,822
	\$	10,033	11,149	9,268	15,345	...	45,795
Dressed	tons	1,592	7,458	120	1,150	...	10,320
	\$	83,485	214,037	18,135	34,750	...	350,407
Monumental and ornamental stone -							
Rough	tons	9,607	...	...	...	...	9,607
	\$	122,529	...	...	...	...	122,529
Dressed	tons	6,041	120	...	174	...	6,335
	\$	609,542	4,575	...	918	...	615,035
Flagstone	tons	...	907	...	435	...	1,342
	\$	...	1,336	...	3,592	...	4,928
Curbstone	tons	200	...	...	...	...	200
	\$	1,298	...	...	...	...	1,298
Paving blocks	tons	1,235	...	...	315	...	1,550
	\$	7,770	...	...	704	...	8,474
Lining open-hearth furnaces	tons	...	8,930	...	...	...	8,930
	\$	...	16,967	...	...	...	16,967
Chemical -							
Flux in iron and steel furnaces	tons	...	421,713	20	...	...	421,733
	\$	...	384,924	330	...	...	385,254
Flux in non-ferrous smelters ..	tons	...	204,319	...	...	...	204,319
	\$	...	138,300	...	...	...	138,300
Glass factories	tons	...	4,133	...	...	...	4,133
	\$	...	7,079	...	...	...	7,079
Pulp and paper mills	tons	...	208,665	...	...	...	208,665
	\$	...	374,137	...	...	...	374,137
Sugar refineries	tons	...	4,978	...	...	...	4,978
	\$	...	4,231	...	...	...	4,231
Other chemical uses	tons	...	265,534	...	...	...	265,534
	\$	...	261,371	...	...	...	261,371
Pulverized stone -							
Whiting (substitute)	tons	...	2,915	50	...	...	2,965
	\$	...	18,807	800	...	...	19,607
Asphalt filler	tons	...	14,427	...	...	...	14,427
	\$	...	55,086	...	...	...	55,086
Dusting coal mines	tons	...	3,503	...	...	...	3,503
	\$	...	15,313	...	...	...	15,313
Agricultural purposes and	tons	400	316,545	...	...	...	316,945
fertilizer plants	\$	2,825	598,217	...	...	...	601,042
Other uses	tons	...	12,502	430	...	...	12,932
	\$	...	35,925	1,865	...	...	37,790
Crushed stone for manufacture of	tons	...	82	172	...	...	254
artificial stone .....	\$	...	255	786	...	...	1,041
Roofing granules	tons	33,039	1,995	...	...	949	35,983
	\$	123,732	2,475	...	...	17,903	144,110
Poultry grit	tons	279	10,251	4,677	...	...	15,207
	\$	2,800	53,930	28,513	...	...	85,243
Stucco dash	tons	4	565	581	...	...	1,150
	\$	70	4,826	4,439	...	...	9,335
Terrazzo chips	tons	...	270	2,522	...	...	2,792
	\$	...	810	17,323	...	...	18,133
Rock wool	tons	...	7,130	...	...	...	7,130
	\$	...	6,890	...	...	...	6,890
Rubble and riprap	tons	29,265	153,892	3,115	15,131	198	201,601
	\$	24,021	136,294	3,915	23,395	198	187,823
Crushed stone -							
Concrete aggregate	tons	54,476	1,751,849	...	46,010	...	1,852,335
	\$	83,951	1,455,549	...	61,192	...	1,600,692
Road metal	tons	129,566	1,350,374	...	18,318	...	1,498,258
	\$	231,734	1,090,968	...	30,094	...	1,352,796
Railroad ballast	tons	...	807,459	...	61,583	...	869,042
	\$	...	635,008	...	53,463	...	688,471
Total Canada (b)	tons	269,964	5,565,286	11,829	146,766	1,147	5,994,992
	\$	1,303,790	5,528,459	85,374	223,453	18,101	7,159,177

Stone

- 8 -

Table 9 - Production (Sales) of Stone From Canadian Quarries, By Kinds, Showing Purposes For Which Used, 1944 and 1945 (Con.)

For use as follows:		Granite (a)	Limestone (b)	Marble	Sandstone	Slate	Total
1945							
Building stone - Rough	tons	3,117	33,431	135	2,336	...	39,019
	\$	14,198	57,930	8,809	12,731	...	93,668
Dressed	tons	1,267	15,056	119	1,250	...	17,692
	\$	97,098	464,411	18,224	78,000	...	657,733
Monumental and ornamental stone-							
Rough	tons	10,199	...	91	...	...	10,290
	\$	140,959	...	2,957	...	...	143,916
Dressed	tons	5,789	150	...	...	...	5,939
	\$	636,787	5,700	...	...	...	642,487
Flagstone	tons	...	1,071	...	1,264	...	2,335
	\$	...	3,845	...	7,112	...	10,957
Curbstone	tons	90	...	...	...	...	90
	\$	668	...	...	...	...	668
Paving blocks	tons	411	...	...	300	...	711
	\$	3,126	...	...	3,600	...	6,726
Lining open-hearth furnaces	tons	...	14,760	...	...	...	14,760
	\$	...	28,042	...	...	...	28,042
Chemical -							
Flux in iron and steel furnaces	tons	...	390,596	10	...	...	390,606
	\$	...	349,936	200	...	...	350,136
Flux in non-ferrous smelters ..	tons	...	148,192	...	...	...	148,192
	\$	...	138,919	...	...	...	138,919
Glass factories'	tons	...	4,496	1,042	...	...	5,538
	\$	...	17,943	5,110	...	...	23,053
Pulp and paper mills	tons	...	212,051	...	...	...	212,051
	\$	...	413,055	...	...	...	413,055
Sugar refineries	tons	...	8,225	...	...	...	8,225
	\$	...	7,045	...	...	...	7,045
Other chemical uses	tons	...	286,902	...	...	...	286,902
	\$	...	282,961	...	...	...	282,961
Pulverized stone -							
Whiting (substitute)	tons	...	8,153	50	...	...	8,203
	\$	...	64,984	500	...	...	65,484
Asphalt filler	tons	...	10,851	...	...	...	10,851
	\$	...	39,168	...	...	...	39,168
Dusting coal mines	tons	...	3,305	...	...	...	3,305
	\$	...	14,082	...	...	...	14,082
Agricultural purposes and	tons	...	419,579	...	...	...	419,579
fertilizer plants .....	\$	...	891,802	...	...	...	891,802
Other uses	tons	...	28,305	600	...	...	28,905
	\$	...	87,410	2,400	...	...	89,810
Crushed stone for manufacture of	tons	...	668	394	...	...	1,062
artificial stone .....	\$	...	2,489	2,330	...	...	4,819
Roofing granules	tons	43,261	100	...	...	969	44,330
	\$	125,016	150	...	...	16,272	141,438
Poultry grit	tons	485	9,000	4,083	...	...	13,568
	\$	4,445	43,862	22,599	...	...	70,906
Stucco dash	tons	240	1,439	1,450	...	...	3,129
	\$	2,526	15,559	11,500	...	...	29,585
Terrazzo chips	tons	...	520	4,264	...	...	4,784
	\$	...	1,560	37,270	...	...	38,830
Rock wool	tons	...	1,423	...	...	...	1,423
	\$	...	1,886	...	...	...	1,886
Rubble and riprap	tons	40,231	186,561	1,150	12,892	946	241,780
	\$	31,530	182,907	1,438	19,576	1,567	237,018
Crushed stone -							
Concrete aggregate	tons	38,871	1,849,865	...	19,724	...	1,908,460
	\$	61,977	1,502,390	...	31,889	...	1,596,256
Road metal	tons	77,669	1,392,566	...	82,604	...	1,552,839
	\$	166,418	1,143,079	...	158,548	...	1,468,045
Railroad ballast	tons	...	649,927	...	171,060	...	820,987
	\$	...	523,264	...	154,941	...	678,205
Total Canada (b)	tons	221,630	5,677,192	13,388	291,430	1,915	6,205,555
	\$	1,284,748	6,284,379	113,337	466,397	17,839	8,166,700

(a) Includes all igneous rock.

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

Table 10 - Production of Stone For Building Purposes, Chemical Use, Cement Manufacture, Concrete Aggregate, Road Metal and Railroad Ballast, 1935-1945

Year		Building stone(a)	For chemical purposes(b)	For concrete aggregate	For road metal	For railroad ballast	For cement manufacture(c)
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	1,653,134	659,656	...
1937	tons	49,098	693,947	1,497,655	3,169,136	642,248	1,465,168
	\$	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
	\$	725,402	468,000	791,971	2,347,010	58,816	...
1939	tons	71,288	577,278	1,344,636	2,131,306	600,266	1,407,099
	\$	1,344,340	523,579	1,109,028	1,773,337	522,882	...
1940	tons	97,336	725,685	2,673,078	2,300,613	896,408	1,784,291
	\$	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
	\$	653,077	889,574	1,986,226	2,484,393	322,348	...
1942	tons	24,897	1,236,044	2,924,737	2,275,706	683,317	2,186,248
	\$	361,781	1,651,982	2,424,357	1,877,473	527,814	...
1943	tons	17,087	1,329,226	1,981,222	2,108,428	852,928	1,994,202
	\$	314,428	1,330,127	1,727,889	1,989,509	704,389	...
1944	tons	23,142	1,109,362	1,852,335	1,498,258	869,042	1,939,900
	\$	396,202	1,170,372	1,600,692	1,352,796	688,471	...
1945	tons	56,711	1,051,514	1,908,460	1,552,839	820,987	1,919,858
	\$	751,401	1,215,169	1,596,256	1,468,045	678,205	...

(a) Does not include monumental or ornamental stone.

(b) Does not include limestone used in Canadian lime industry which totalled 1,482,077 tons in 1945.

(c) Includes shale in 1938-1945: 1938 - 13,821 tons; 1939 - 27,241 tons; 1940 - 18,347 tons; 1941 - 26,837 tons; 1942 - 30,498 tons; 1943 - 75,460; 1944 - 74,303 tons; 1945 - 70,600 tons.

Table 11 - Imports Into Canada and Exports of Stone, By Kinds, 1944 and 1945

		1 9 4 4		1 9 4 5	
		Quantity	Value	Quantity	Value
			\$		\$
<u>Imports</u>					
Building stone, n.o.p.	cwt.	36,972	15,120	106,159	48,997
Curling stones and handles therefor	pair	396	10,667	231	5,982
Granite, rough, not hammered or chiselled ....	...	...	53,707	...	42,942
Granite, sawn only ....	...	...	15,783	...	22,964
Granite, monuments ....	...	...	...	...	...
Granite, manufactures of, n.o.p. ....	...	...	9,430	...	9,877
Marble, rough, not hammered or chiselled ....	...	...	8,844	...	9,139
Marble, sawn or sand rubbed, not polished ....	...	...	22,653	...	41,229
Marble, not further manufactured than sawn for tombstones ....	...	...	38,036	...	62,045
Marble, manufactures of, n.o.p. ....	...	...	7,869	...	10,252
Refuse stone	ton	734,141	398,378	705,716	481,348
Slate roofing	square	720	7,986	439	5,276
Slate mantels and manufactures of slate, n.o.p. ....	...	...	28,075	...	26,131
Chalk, china, cornwall or cliff stone and mica schist ....	...	...	26,107	...	16,967
Mineral wool	ton	1,310	147,862	4,495	460,677
Whiting, gilders' whiting and Paris white	ton	13,432	279,112	14,159	307,201
Manufactures of stone, n.o.p. ....	...	...	25,067	...	27,010
Chalk, prepared ....	...	...	19,525	...	6,425
Pumice and pumice stone and lava tufa ....	...	...	27,880	...	45,041
Grindstones, not mounted and not less than 36 inches in diameter	No.	578	59,211	466	45,494
Grindstones, n.o.p.	No.	672	2,098	549	2,381
Burrstones, rough, in blocks	No.	62	1,062	27	779
Ganister	ton	347	2,463	425	3,384
Total ....	...	...	1,206,935	...	1,681,541
<u>Exports</u>					
Crushed stone	ton	597	735	904	858
Granite and marble, unwrought	ton	3,871	42,567	3,835	48,606
Dressed stone of all kinds ....	...	...	5,713	...	7,331
Grindstones, manufactured ....	...	...	211	...	19,519
Total ....	...	...	49,226	...	76,314

GRANITE

Table 12 - Production of Granite(x) in Canada, 1935-1945

Year	Short tons	\$	Year	Short tons	\$
1935	326,354	1,126,287	1940	1,147,747	1,884,410
1936	941,743	1,319,313	1941	600,922	1,498,735
1937	1,135,099	1,827,433	1942	1,366,425	1,946,249
1938	705,307	1,379,417	1943	780,422	1,522,072
1939	1,102,395	2,119,501	1944	269,964	1,303,790
			1945	221,630	1,284,748

(x) Includes all igneous rock.

The annual review by the Bureau of Mines gives the following information with regard to the quarrying of granite in Canada:

"Large areas in Canada are underlain by granite and other related crystalline igneous rocks, and in a number of localities quarries in such rocks have been opened up for the production of building stone, monumental stock, riprap, etc. More than 90 percent of the Canadian output of granite in 1945 was supplied by Ontario and Quebec, and the remainder came from Nova Scotia, New Brunswick, Manitoba and British Columbia.

"Prior to the war most of the Canadian production of granite was used for riprap and crushed stone and in the construction of public and semi-public buildings, and smaller quantities for monumental stock, but during the war there was little demand for dimensioned stone for building so that many of the quarries producing only this type of stone were forced to close. There was sufficient demand, however, for monumental stock for the domestic market and for export to enable a number of firms to keep their dressing sheds in operation on a small scale, and some of the larger quarries favourably situated were able to supply any demand for rip-rap that arose. With the prospects of extensive building construction, these companies can turn again to the production of building stone with little loss of time.

"Many of the Canadian granites are suitable for monumental use, and prior to the war much of this material was used within a limited radius of various quarries, but appreciable quantities of special monumental stock such as 'reds' and 'black granites' were imported from the Scandinavian countries, notably Finland and Sweden. When shipments were cut off, Canada and the United States had to depend on their own quarries. In Canada a number of quarries produce granite of pleasing characteristics for monumental use and in the past few years there has been a small but steady increase in the domestic demand for such stone. Moreover, numerous requests from the United States for samples have been received by Canadian firms, and exports to that country have shown an appreciable increase.

"Quebec continued to furnish most of the granite used in building, road foundation and other heavy construction, the leading producing areas being Stanstead, Stanstead county; St. Samuel, Frontenac county; Riviere-a-Pierre, Portneuf county; and Lake St. John district. Granite for monumental use is produced in the Maritime Provinces, and in Quebec, Ontario, Manitoba, and British Columbia. 'Black granite' is produced mainly in the vicinity of Lake St. John and from quarries along the north shore of Lake Superior.

"In Nova Scotia and New Brunswick the industry was again comparatively quiet. Production in Nova Scotia came from well established firms in Shelbourne and Nictaux West areas and most of the material was monumental stock. In New Brunswick, the granite quarry at Hampstead was in production, and two firms at St. George produced for the monumental trade. A few tons of 'black granite' was produced from the quarry at Lake Digdequash.

"In Quebec, grey granite comprises over half the total output for the province and is quarried mainly in Stanstead district. At St. Gedeon and at St. Joseph d'Alma in the Lake St. John district, Le Granit National Ltée produces 'black granite', which finds a ready market for monumental use and for building trim. Brodies Limited, Montreal, has its' new cutting shed, erected to replace the shed destroyed by fire, in full operation. The company obtains its granite from Graniteville, Stanstead county; from Guenette, Labelle county; and from Mount Johnson, near Iberville. Stanstead Granite Quarries Company of Beebe, obtained its grey granite stock from quarries at Graniteville; its rough monumental stock was purchased from various other

localities. Prospecting for some of the coloured granites that are in demand for monumental use was active in the province. Granite of deep red colour and pleasing texture is being developed in several districts, notably, near Grenville in Grenville county; and in the vicinity of Donnacona, Portneuf county.

"In Ontario, the Ontario Rock Company, Toronto, quarried a trap rock at Havelock, Peterborough county, which is used mainly for road foundations, railroad ballast, and concrete aggregate.

"In Manitoba and British Columbia, there were no developments of special importance during the year under review."

LIMESTONE

Table 13 - Production of Limestone(x) in Canada, 1935-1945

Year	Short tons	\$	Year	Short tons	\$
1935	3,631,665	3,253,573	1940	6,108,591	5,126,075
1936	3,731,548	3,143,872	1941	7,151,049	6,057,727
1937	5,542,806	4,673,942	1942	6,442,583	6,468,525
1938	4,288,507	3,864,619	1943	6,265,181	6,105,749
1939	4,149,589	3,817,551	1944	5,565,286	5,528,459
			1945	5,677,192	6,284,379

(x) Includes dolomite and marl; production of marl totalled 22,913 tons in 1943; 19,848 tons in 1944 and 14,148 tons in 1945.

With regard to limestone production, the Bureau of Mines has reported as follows:

"Quarries for the production of limestone for building purposes are worked in Quebec, Ontario and Manitoba. Modern requirements of the building-stone industry call for blocks of stone of large dimensions from which are sewn slabs and blocks of the exact size required for constructing the building. Although limestone is abundant in Canada the heavily bedded variety of desirable texture, free from cracks and other defects, and capable of being carved and otherwise worked, is not plentiful.

"During the war the construction of buildings of the type requiring cut stone was drastically curtailed and the production of building stone declined almost to the vanishing point, and such shipments as were made were from stock. Stocks are now depleted and with the construction of many buildings planned for the coming years the outlook for the industry engaged in the production of structural limestone is distinctly promising.

"In Quebec, the quarries yielding heavily bedded building stone are at St. Marc des Carrieres in Portneuf county, and in the vicinity of Montreal. At both localities a grey limestone is obtained.

"In Ontario, heavily bedded silver-grey limestone is quarried from extensive deposits near Queenston in the Niagara peninsula, and smaller quantities of buff and varugated buff and grey limestone are also obtained. At Longford Mills, near Orillia, buff, silver grey, and brown limestone, suitable for use as building stone and as marble, is available, but the quarries have been inactive during the past several years.

"In Manitoba, quarries are near Tyndall. They yield mottled buff, mottled grey, and mottled varugated limestone suitable for exteriors of buildings and for use as interior decorative stone. There has been very little production in recent year.

"In addition to the large quarries, the products of which normally have a wide shipping range, small quarries producing rough building stone for local use are worked intermittently near Quebec City, Montreal and Hull, in Quebec; and at Ottawa, Kingston and Warton in Ontario. Rubble is the chief product.

"For industrial 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. For certain uses (in the wood pulp industry, for example) the limestone quarried requires little or no processing, but most 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. Most of the limestone used in chemical and metallurgical industries is of the high calcium variety, but dolomite is rapidly increasing in importance as an industrial raw material.

"Argillaceous dolomite is used for the manufacture of rock wool, a widely used insulating material. Five new plants, two in British Columbia, and one each in Nova Scotia, Quebec, and Ontario, were being built in 1945 and one in Ontario, previously destroyed by fire, is being rebuilt.

"Pure dolomite has become an important source of magnesia, and during the latter years of World War II was an important source of magnesium metal. Magnesia and basic magnesium carbonate are made from calcined dolomite by the Pattinson process.

"Dead-burned dolomite is widely used as a refractory material in basic open hearth furnaces in the steel industry. The first Canadian plant to produce dead-burned dolomite was built at Dundas, Ontario, in 1945.

"Magnesitic dolomite is processed at Kilmar, Quebec, for the production of refractory products. Brucitic limestone is processed at Wakefield, Quebec, for the production of magnesia and hydrated lime.

"The use of limestone in agriculture is capable of very extensive development. Though the necessity for applying limestone or lime to agricultural land to remedy deficiencies of calcium and magnesium, to neutralize soil acidity, and to maintain or increase soil fertility has been emphasized for many years, the quantity so used in Canada is still relatively small, whereas the agricultural use of limestone could well constitute one of its most important uses both from the economic and tonnage viewpoints."

MARBLE

Table 14 - Production of Marble in Canada, 1935-1945

Year	Short tons	\$	Year	Short tons	\$
1935	15,975	85,369	1940	13,739	75,409
1936	22,866	169,698	1941	17,649	126,081
1937	21,642	88,595	1942	13,824	88,209
1938	19,375	87,274	1943	11,848	68,022
1939	14,124	200,054	1944	11,829	85,374
			1945	13,388	113,337

The following excerpt is from the annual review by the Bureau of Mines:

"The marble industry in Canada, in common with all belligerent countries, was relatively inactive during the war because most of the buildings erected were of the strictly utilitarian type, in which very little marble was used. With the resumption of construction of the ornamental type of buildings the demand for marble is increasing and preparations were made late in 1945 for the reopening in 1946 of quarries that have been closed for several years. Foreign marble, which has always largely dominated the Canadian market, is now obtainable only with difficulty and at higher prices than formerly because of depleted European stocks, damage to quarries and equipment during the war, and because of labour trouble. Thus the outlook for increased production of domestic marble in the near future is good.

"Canada is well supplied with deposits of marble, and quarries are operated in Quebec, Ontario, Manitoba, and British Columbia. The products in recent years have been terrazzo chips, stucco dash, poultry grit, marble flour, whiting substitute, rubble and material for making artificial stone, but some squared blocks for sawing into slabs for interior decorative use have also been produced."

"In Quebec, clouded grey marbles and also a black marble are obtained in the quarries of Missisquoi Stone and Marble Co. Ltd., at Phillipsburg, near the foot of Lake Champlain. Brown marble for counters and wainscoting is obtained from the building-stone quarries in the Trenton limestone at St. Marc des Carrières, Portneuf county. Red and green marble for use as terrazzo is quarried by MAB Ltée at St. Joseph de Beauce. Orford Marble Co. Ltd., a new company, commenced preparations for quarrying a variegated red, green and grey serpentinous marble near North Stukely, Shefford county, late in 1945. White dolomite is quarried and crushed by Canadian Dolomite Company, Limited, at Portage du Fort, Pontiac county, for terrazzo chips, stucco dash, artificial stone, and various minor products.

"In Ontario, black marble beds up to 40 inches thick is produced by Silverton Black Marble Quarries Limited, Ottawa, at St. Albert, 30 miles southeast of Ottawa. Buff, red, white, green, and black marbles are quarried north of Madoc by Karl Stocklosar and by Connolly Marble, Mosaic and Tile Company Limited, for use as terrazzo. White Star Mine (Bolender Bros.) produces terrazzo and poultry grit at Marmora.

"In Manitoba, a number of highly coloured marbles are available along the Flin Flon and Hudson Bay railroads, and also at Fisher Branch and other places, but there is no activity at present.

"In British Columbia, there are many deposits of marble, but there is only a small production of white marble by Marble and Associated Products from a quarry near Victoria and by Beale Limestone Quarries on Texada Island."

SANDSTONE

Table 15 - Production of Sandstone in Canada, 1935-1945

Year	Short tons	\$	Year	Short tons	\$
1935	342,824	838,005	1940	176,475	305,543
1936	285,508	495,856	1941	169,885	305,528
1937	235,165	343,871	1942	153,865	236,810
1938	101,854	218,405	1943	164,163	250,603
1939	176,265	331,830	1944	146,766	223,453
			1945	291,430	466,397

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 1945 from quarries located in all of the provinces with the exception of Prince Edward Island, Manitoba, Saskatchewan and Alberta.

The greater part of the crude output in 1945 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. Crude, crushed or ground quartzite sold for fluxing purposes or as silica sand is included under quartz as production.

SLATE

Table 16 - Production of Slate in Canada, 1935-1945

Year	Short tons	\$	Year	Short tons	\$
1935	1,129	4,329	1940	1,113	7,522
1936	1,247	5,414	1941	1,296	12,562
1937	900	5,519	1942	1,369	16,801
1938	979	6,311	1943	1,336	17,733
1939	1,149	6,760	1944	1,147	18,101
			1945	1,915	17,839

Canadian slate production in 1945 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.

ROOFING GRANULES

(From the annual review by the Bureau of Mines, Ottawa)

During the past decade the roofing granule industry in Canada has increased over four fold and the growth has been particularly rapid in the past three years. Canadian made granules are obtained from 7 deposits, 3 of which are in Ontario and 4 in British Columbia.

The granules consist of small broken particles of rock or slate in their natural state or artificially coloured, that are affixed to asphalt sheeting. The underside of the sheeting is coated with a film of talc or fine mica and is then cut into shapes for roofing shingles or for sidings (resembling rows of bricks separated by mortar). The exposed portion of the improved shingle has an inner coating, usually of natural granules, upon which another coating of the required coloured granules is spread.

In Ontario three deposits are being quarried for granules in the vicinity of Madoc, 100 air miles east and north of Toronto. These are: a gray rhyolite deposit 5 miles north-east of Madoc; a black amphibole rhyolite 4 miles northwest of Madoc; and a greenish gray basalt 20 miles west of Madoc, near Havelock. Building Products Company, the leading Canadian manufacturer, crushes and screens the rock from these quarries at a mill near Madoc, and artificially colours the granules at a plant at Havelock, the only granule colouring plant in Canada.

In British Columbia, G. W. Richmond is quarrying a dark gray slate at McNab Creek, Howe Sound, and a greenish siliceous rock at Bridal Falls, near Chilliwack. At Kapoor on southern Vancouver Island, O. M. Brown is mining a gray black slate and, from an adjacent deposit, hard greenish rock. These two operators have crushing and screening plants in Vancouver and Victoria, respectively, where natural granules are produced and sold to roofing companies in the two cities.

Small quantities of granules that were made from slate deposits at Madoc proved to be too soft and their colour was too light a gray to be suitable for use. Red and green slates from the dumps of old slate quarries near Granby and Richmond in the Eastern Townships of Quebec have been used also to a small extent. Tests were made recently on the slate that occurs near Kentville, Nova Scotia.

Some of the leading manufacturers of granule roofings, as well as individuals, have been making tests and searching certain areas in Canada for rocks suitable for making the best type of granules, but the specifications are rigid. Apart from slates, there appear to be few such rocks in areas where they can be economically mined, crushed, and shipped to producing plants.

Processes for colouring granules are covered by many patents. A few of the methods employed consist of: heating, which darkens the colour; adding oxides of iron and chromium and then burning; addition of sodium silicate, clay and the required pigment; addition of zinc oxide, clay and liquid phosphoric acid, heating and then adding the pigment. Many combinations are employed and generally the formulae used by individual companies are closely guarded secrets.

Specifications for the types of rock that make the best granules are somewhat exacting and samples must pass severe tests. At one time they called for flat granules, and nearly all were made from slate. The present trend, however, is toward more solid angular fragments, and the use of true slate is decreasing, though in 1945, 36 percent of the total used in Canada was slate granules (21 percent natural and 15 percent artificially coloured). Rocks suitable for granules should be fairly hard, of low porosity, fine grained, opaque, possess a high melting point, and break well. They should be composed mainly of silica or silicates and should be free of metallic minerals, flaky minerals, minerals with fibrous partings, and the carbonates. They should withstand weathering action over long periods, and prevent "blistering" of the underlying asphalt caused by combination of the penetration of water and actinic rays of the sun.

Coloured rocks are generally preferred and the colours (reds and greens) are often intensified artificially, but the granules must have the physical properties that will enable them to maintain the colour permanently. Slates suitable for granules should be hard and their colour should be as dark (blue-black) as possible, or else greens and reds. All granules are oiled to improve adhesion to the asphalt and to intensify the colour, but for the latter the effect is not permanent. Two mesh grades of granules are used, namely 'coarse' (10 to 28 mesh) and to a much smaller extent 'fine' (28 to 35 mesh).

Prices vary considerably depending upon the type of granule, and upon whether the colour is natural or artificial. Imported granules range in price from \$16 to \$20 per ton, f.o.b. eastern Canadian plants, for natural rocks and slates; from \$20 to \$26 for artificially coloured reds and greens; from \$36 to \$40 for blues; and from \$22 to \$25 for buffs and browns.

WHITING SUBSTITUTE

(From the annual review by the Bureau of Mines, Ottawa)

Whiting substitute, also referred to as domestic whiting and as marble flour, is finely pulverized white limestone, or white marble or marl. It also may be made from lime or from waste calcium carbonate sludge resulting from the manufacture of caustic soda.

White marble and white limestone when used for whiting substitutes are pulverized to degrees of fineness ranging from 200 to 400 mesh. Only marble and limestone containing very little magnesium carbonate are used for making whiting substitute, and in Canada most of it is made from white marble, though two plants have been built in Ontario to make it from marl.

By-product precipitated chalk, made from waste sludge resulting from the manufacture of caustic soda from dead ash and lime, is classed as 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 its manufacture are available, but it is not made in Canada.

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.

Marl suitable for making whiting substitute should be white or nearly so, nearly free from grit and clayey material, and be very low in organic matter. This matter is present to some extent in all deposits of marl and 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 otherwise the physical properties are much the same.

- - - - -

DIRECTORY OF THE STONE QUARRYING INDUSTRY, 1945

- (x) Firms operating dressing works in conjunction with quarry.
 (✓) Did not ship in 1945.

Name	Head Office Address	Location
<u>Granite</u>		
<u>Nova Scotia -</u>		
Bower, A. R.	Box 255, Shelburne	Shelburne
Dauphinee, W. T. (x)	Shelburne	Shelburne
Nixon, W. H. & Sons (x)	R.R. 3, Middleton	Nictaux West
Rice Bros. (x)	Lawrencetown	Nictaux West
Rice, W. D. (x)	Middleton	Nictaux West
<u>New Brunswick -</u>		
Milne Coutts & Co. Ltd. (x)	St. George	St. George
Granite Street Pavement & Construction Co. Ltd.	Box 1137, Saint John	Hampstead
O'Brien & Baldwin (x)	St. George	St. George
Spinney's Quarry	Box 96, St. George	St. George
<u>Quebec -</u>		
Anderson, James (x)	Box 125, Beebe	Beebe
Bérubé, Lucien (x)	Brownsburg	Chatham Tp.
Bolduc, Antonio (x)	St. Sebastien	Beauce
Boyer, Herve	Mont Royal	New Glasgow
Brodies' Ltd. (x)	1070 Bleury St., Montreal	Guenette
		Graniteville
		Mount Johnson
Bussière & Frère (x)	St. Sebastien	Ste. Cecile
Carrière Shawinigan	57a First St., Shawinigan Falls	Ste. Flore
Cie de Marbre & de Tuile de Quebec Ltée	327 Dorchester St., Quebec	Ste. Cecile
Cloutier, R. L. (x)	Beebe	Beebe
Delevalde & Goffin (x)	1365 St. Valier St., Quebec	Chicoutimi
Deschambault Quarry Corp. (x)	56 St. Pierre St., Quebec	St. Gerard
Drummond, La Compagnie Pierre Concassée	Box 712, Sherbrooke	Drummond
Dubois, Honore (x)	Rivière à Pierre	Rivière à Pierre
Gaboriau & Nevers (x)	Box 65, Grenville	Grenville Tp.
Gagnon, Arthur	1740 Fourth St., Grand'Mère	Grand'Mère
Giguere, H. Camille	Rouyn	Rouyn
Gosselin, Oscar	Lac Megantic	St. Samuel
Granit National Ltée (x)	St. Joseph d'Alma	St. Gédéon
		St. Joseph d'Alma
Grenier, Elie	Glenada	Glenada
Jacques, Arthur	Rivière à Pierre	Rivière à Pierre
Lacasse & Bouleais	Box 23, Beebe	Beebe
Laforce, H. & Fils (x)	1327 St. Valier St., Quebec	Chicoutimi
Maltais, Charles	St. Joseph d'Alma	St. Joseph d'Alma
Quebec North Shore Paper Co.	680 Sherbrooke St. W., Montreal	Baie Comeau
Riverin & Riverin	Chicoutimi	Chicoutimi
Rousseau, Ben	283 Heriot St., Drummondville	St. Charles
St. Bruno Quarry & Paving Co. Ltd.	636 Ave. Querbes, Outremont	St. Bruno
Scotstown Granite Co. Ltd. (x)	Cap St. Martin	Cap St. Martin
Sherbrooke, City of	Box 754, Sherbrooke	Sherbrooke
Silver Granite Co. Ltd. (x)	2331 rue Provençal, Montreal	St. Samuel
		St. Gédéon
Stanstead Granite Quarries Co. Ltd. (✓)	Beebe	Beebe
<u>Ontario -</u>		
Building Products Ltd. (x)	Box 6063, Montreal, Quebec	Madoc
Hewitson Construction Co. Ltd.	509 Public Utilities Bldg., Port Arthur	McIntyre Tp.

DIRECTORY OF THE STONE QUARRYING INDUSTRY, 1945 (Continued)

Name	Head Office Address	Location
<u>Granite (Con.)</u>		
<u>Ontario (Con.) -</u>		
Ontario Rock Co. Ltd.	2 Colleg St., Toronto	Peterboro Co.
Verona Rock Products Ltd.	Verona	Verona
<u>Manitoba -</u>		
Winnitoba Marble Co. Ltd. (x)	1180 Wall St., Winnipeg	West Hawk Lake
<u>British Columbia -</u>		
Canadian National Railways	Montreal, Que.	Skeena
Coast Quarries Ltd.	1840 West Georgia St., Vancouver	Granite Falls
Nelson, City of	501 Front St., Nelson	Nelson M.D.
Nelson Granite and Monumental Co.(x)	505 Front St., Nelson	Nelson M.D.
Prince Rupert, City of (/)	Prince Rupert	Skeena
Vancouver Granite Co. Ltd.	308 Pacific Bldg., Vancouver	Nelson Island
Vernon Granite & Marble Co. (x)	Box 265, Vernon	Vernon M.D.
Wilson, James (x)	Sirdar	Nelson M.D.
<u>Limestone</u>		
<u>Nova Scotia -</u>		
Dillman Bros.	Admiral Rock	Admiral Rock
Eastern Lime Co. Ltd. (x)	Box 60, Windsor	Windsor
Mersey Paper Co. Ltd.	Liverpool	East River Point
Mosher Limestone Co. Ltd.	Upper Musquodoboit	Upper Musquodoboit
Nairn, J. S.	24 Whitney Ave., Sydney	Scotch Lake
Nova Scotia Department of Agriculture	Halifax	Various
Windsor Foundry	Windsor	Windsor
<u>New Brunswick -</u>		
Alward, Roy M.	Butternut Ridge	Springhill
Brookville Manufacturing Co. Ltd.	Brookville	Brookville
Elm Tree Limestone Co-operative Co.(x)	Petit Rocher North	Petit Rocher North
Snowflake Lime Ltd.	3 Pokiok Rd., Saint John	Saint John
<u>Quebec -</u>		
Amendements Calcaires de R-B, Les	Rivière-Bleue	Rivière-Bleue
Andorno, Jean (x)	Cap St. Martin	Cap St. Martin
Beaudry, J. P.	Joliette	Joliette
Beauregard, La Compagnie Ltd.	Stukely North	Stukely North
Bédard, Jean Ltée (x)	82 - 33rd Ave., Lachine	Caughnawaga
Boucher, Louis	Perce	Gaspé Co.
Boucher, Telesphore	Notre Dame de la Salette	Notre Dame de la Salette
Bourget, John D.	Deforceville	Gaspé Co.
Canada Cement Co. Ltd.	Box 290, Montreal	Hull
Canadian Quarries Co.	2251 Chemin de la Côte, St. Michel	St. Michel
Carrière Bernier Enrg.	R.R. 2, St. Jean	St. Jean
Carrière du Cap St. Martin	636 Ave. Querbes, Outremont	Cap St. Martin
Carrière Gravel Ltée	Chateau Richer	Chateau Richer
Carrière Pointe-Claire	Dorion-Vaudreuil	Beaconsfield
Carrière St. Barthelemi Ltée	St. Barthelemi	St. Barthelemi
Carrières de St. Dominique Ltée (x)	555 - 16th Ave., St. Hyacinthe	St. Dominique
Carrière St. Maurice Inc.	1497 Craig St., Trois Rivières	St. Louis de France
Carrière Trois Rivières Ltée	St. Louis de France	St. Louis de France
Charbonneau, L. & Cie	St. François de Sales	Laval Co.
Cie de Construction de Roberval Ltée	Roberval	Roberval
Construction de L'Est Enrg., Les	Iles de la Madeleine	Havre Aubert
Department de la Justice (x)	Ottawa, Ontario	St. Vincent de Paul
Deschambault Quarry Corp. (x)	56 rue St. Pierre, Quebec	St. Marc des Carrières
Dominion Lime Ltd.	Lime Ridge	Lime Ridge
Durocher, Cyrille	11021 Notre Dame E., Montreal	Montreal East
Filion Aldege	Lachute	Lachute

DIRECTORY OF THE STONE QUARRYING INDUSTRY, 1945 (Continued)

Name	Head Office Address	Location
<u>Limestone (Con.)</u>		
<u>Quebec (Con.) -</u>		
Fiset, Eliodore	St. Marc des Carrières	St. Alban
Fortin, Camille	Chambord Junction	Lac St. Jean
Fuger & Smith Ltd.	78 Victoria Ave., Pointe Claire	Pointe Claire
Gagné, Octave	St. Ulric	St. Ulric
Gagnon & Leclerc	St. Joachim	St. Joachim
Gaspesian Fertilizer Co.	Port Daniel E.	Port Daniel E.
Gauthier, J. O. (x)	St. Marc des Carrières	St. Marc des Carrières
Gosselin, Alphonse	St. Laurent	St. Laurent
Kennedy Construction Co. Ltd.	407 McGill St., Montreal	Actonvale
Lagace Quarry	130 Blvd. Labelle, L'Abord-à-Plouffe	L'Abord-à-Plouffe
Lakeshore Construction Co. Ltd.	137 Cartier Ave., Pointe Claire	Pointe Claire
Landry, J. P. A.	St. Andre, Matapedia	St. Andre
Langlois, Adjutor	St. Marc des Carrières	St. Marc des Carrières
Larouche, J.B.	Baie St. Paul	Baie St. Paul
Lasalle Quarry Ltd.	8413 Blvd. St. Michel, Montreal	Ville St. Michel
Laurentian Stone Co. Ltd.	195 Nicholas St., Ottawa, Ontario	Hull
Leclerc, J. J.	Drapeau	Drapeau
Martineau, La Cie de Pierre de Taille Ltée (x)	Box 10, Rosemont, Montreal	Pont Viau
McDonald, R. & Co. Ltd.	2020 Union Ave., Montreal	Wakefield
Mercure, Camille	555 - 16th Ave., St. Hyacinthe	St. Dominique de Bagot
Miner, R. H. Co. Ltd.	Room 719, Sun Life Bldg., Montreal	Belanger Village
Ministère de la Voirie	Quebec	St. Laurent
Montreal Cut Stone Co. (x)	9301 rue Foucher, Montreal	St. Charles de Bellechasse
Montreal Quarry & Cut Stone Co.	2020 Union Ave., Montreal	St. François de Sales
National Quarries Ltd.	6301 Park Ave., Montreal	St. Michel
Paquette, Levis	Cap St. Martin	Laval Co.
Pelletier, Jos. E.	Ste. Anne des Monts	Cap St. Martin
Pulverized Products Ltd.	4820 Fourth Ave., Rosemount	Gespé N.
Rioux, Louis	Cowansville	St. Armand
St. Francis Rock Products & Equip- ment Ltd.	St. Laurent	Cowansville
St. Laurent Stone Products & Supplies Ltd.	St. Laurent	St. Laurent
Salaberry de Valleyfield, La Cité	Valleyfield	Valleyfield
Shawinigan Chemicals Ltd.	Montreal	Bedford
Standard Lime Co. Ltd.	Joliette	St. Paul de Joliette
Syndicat Co-opératif de la Carrière de Ferme Neuve	Ferme Neuve	Ferme Neuve
Syndicat de Broyage de Levis	St. Joseph de Lévis	St. Joseph de Lévis
Tanguay & Royer Enrg.	Ste. Justine	Ste. Justine
Trappe de N.D. de Mistassini, La	La Village des Pères (Roberval)	Mistassini
Tremblay, Napoleon	31 rue Joffre, Hull	Hull
Tremblay, Welley	Ste. Anne	Canton Tremblay
Turcotte & Asselin	370 Dorchester St., Quebec	Chateau Richer
Union des Carrières & Pavages Ltée	48 Second Ave., Quebec	Charlesbourg
Varin, Joseph	3275 Chemin St. Michel, St. Michel	St. Michel
Verreault, Elz. Ltée	194 du Pont, Quebec	Gifford
Viau, Paul	340 Blvd. du Havre, Valleyfield	Grande Isle
<u>Ontario -</u>		
Abitibi Power & Paper Co. Ltd.	408 University Ave., Toronto	Bucke Tp.
Bonter Marble & Calcium Co. Ltd.	Box 61, Marmora	Marmora
Bonter, W. F.	Malone	Malone
Brunner Mond Canada Ltd.	Canadian Bank of Commerce Bldg., Toronto	Anderdon Tp.
Canada Cement Co. Ltd.	Box 290, Montreal, Que.	Belleville
Canada Crushed Stone Ltd.	72 Sun Life Bldg., Hamilton	Dundas
		Hagersville

DIRECTORY OF THE STONE QUARRYING INDUSTRY, 1945 (Continued)

Name	Head Office Address	Location
<u>Limestone (Con.)</u>		
<u>Ontario (Con.) -</u>		
Carleton Lime Products Co.	Box 26, Carleton Place	Ramsay Tp.
Chemical Lime Ltd.	Beachville	Beachville
Chem-Ore Mines Ltd.	156 Yonge St., Toronto	Bobcaygeon
Cook, J. S. Stone Quarries (x)	Warton	Amabel Tp.
Gypsum, Lime & Alabastine, Canada, Ltd.	Paris	Beachville
Hagersville Quarries Ltd.	Hagersville	Hespeler
Haldimand Quarries & Construction Ltd.	137 Wellington St. W., Toronto	Hagersville
Kingston Penitentiary	Box 22, Kingston	Kingston
Kirkfield Crushed Stone Ltd.	2700 Dufferin St., Toronto	Kirkfield
Lapierre, M. C.	1949 - 8th Ave. E., Owen Sound	Owen Sound
Law, R. E. Crushed Stone Ltd.	Port Colborne	Port Colborne
Limestone Products Ltd.	1109 Millwood Rd., Toronto	N. Orillia Tp.
Marlhill Mines Ltd.	Thorold	Marlbank
McDonald, A. G.	Bronte	Lake Ontario
McGinnis & O'Connor	394 King St., Kingston	Pittsburg Tp.
Mica & Stone Products	Bancroft	Bancroft
North American Cyanamid Ltd.	Niagara Falls	Ingersoll
Ontario Rock Co. Ltd.	2 College St., Toronto	Belmont Tp.
Pembroke, Town of	Pembroke	Pembroke
Queenston Quarries Ltd. (x)	72 Sun Life Bldg., Hamilton	St. Davids
Verona Rock Products Ltd.	Verona	Verona
Walker Bros.	Box 586, Thorold	Stamford Tp.
Wehman, John	578 Division St., Kingston	Kingston Tp.
Welland Crushed Stone & Building Co.	R. R. 2, Niagara Falls	Stamford Tp.
<u>Manitoba -</u>		
Building Products & Coal Co. Ltd.	111 Christie St., Winnipeg	Inwood
Tyndall Quarry Co. Ltd. (x)	1591 Erin St., Winnipeg	Garson
Winnipeg, City of	223 James Ave., Winnipeg	Stoney Mountain
Winnipeg Supply & Fuel Co. Ltd.	812 Boyd Bldg., Winnipeg	Moosehorn
		Stonewall
<u>Alberta -</u>		
Errico, M.	Cadomin	Cadomin
Loder's Lime Co. Ltd.	Kananaskis, Exshaw P.O.	Kananaskis
Summit Lime Works Ltd.	Box 273, Lethbridge	Lethbridge
<u>British Columbia -</u>		
Agassiz Lime Quarry	Box 178, Agassiz	New Westminster M.D.
Beale Quarries Ltd.	744 West Hastings St., Vancouver	Van Anda
British Columbia Department of Highways	Victoria	Various
British Columbia Pulp & Paper Co. Ltd.	Bank of Nova Scotia Bldg, Vancouver	Quatsino Sound
Canadian Pacific Railway Co.	Montreal, Quebec	Golden M.D.
Consolidated Mining & Smelting Company of Canada Ltd.	Trail	Grand Forks
Fernie, City of	Fernie	Fernie
Koeye Limestone Co.	Namu	Koeye River
Pacific Lime Co. Ltd.	602 Pacific Bldg., Vancouver	Blubber Bay
<u>Marble</u>		
<u>Quebec -</u>		
Canadian Dolomite Co.	Portage du Fort	Portage du Fort
MAB Ltée	77 Cremazie, Quebec	St. Joseph de Beauce
Missisquoi Stone & Marble Co. Ltd. (x)	Phillipsburg	Phillipsburg
Orford Marble Co. Ltd. (/)	65 Beaudet, St. Laurent	St. Laurent

DIRECTORY OF THE STONE QUARRYING INDUSTRY, 1945 (Concluded)

Name	Head Office Address	Location
<u>Marble (Con.)</u>		
<u>Ontario -</u>		
Silvertone Black Marble Quarries Ltd.	328 Waverley St., Ottawa	St. Albert
Stockloser, K. & Son	Madoc	Madoc
White Star Mines	Haliburton	Eagle Lake
<u>British Columbia -</u>		
Marble & Associated Products	507 Ellice St., Victoria	Malahat
<u>Sandstone</u>		
<u>Nova Scotia -</u>		
Fairview Crushed Stone Ltd. (f)	637A Gottingen St., Halifax	Halifax
Wallace Quarries Ltd.	Wallace	Wallace
<u>New Brunswick -</u>		
Read Stone Company Ltd. (f)	Sackville	Stonehaven
Smith, E. A. (x)	Shediac	Shediac
<u>Quebec -</u>		
Blais, Joseph	32 Mont-Marie Ave., Lévis	St. Romuald
Côté & Forbes	Matane	Matane
Gagnon, L. P.	St. David de Lévis	St. David de Lévis
Peel Construction Co. Ltd.	Brampton	Trois Pistoles
Rousseau, T. E.	105 Cote de la Montagne, Quebec	New Carlisle
Sherbrooke, City of	Sherbrooke	Sherbrooke
Simard, Adjutor	Pointe-au-Pic	Pointe-au-Pic
Vezina, Joseph	St. Foy	St. Foy
<u>Ontario -</u>		
Austin Corner	Belfountain	Inglewood
Campbell Sandstone Quarries Ltd. (x)	Box C19, Westboro	Bells Corners
Martin, E.	Glen Williams	Halton
Norton, A. W.	Limehouse	Limehouse
Sinfield, E. W.	Cheltenham	Terra Cotta
Sykes Quarries	Young St., Georgetown	Glen Williams
<u>British Columbia -</u>		
Consolidated Mining & Smelting Co. of Canada Ltd.	Trail	Kimberley
<u>Slate</u>		
<u>Quebec -</u>		
Thermo Coal Compound	7465 St. Denis, Montreal	Granby
Williamson & Crombie	Kingsbury	Kingsbury
<u>British Columbia -</u>		
Brown, O.M.	1903 Lansdowne Rd., Victoria	Leachtown

- - - - -

2. SECONDARY PRODUCTION--THE STONE PRODUCTS INDUSTRY, 1945

In 1945 there were 144 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. Eight producers of rock wool were also included in this industry.

Output from this industry was valued at \$5,199,120 in 1945, an increase of 19.0 percent over the total of \$4,370,430 reported for the previous year. The 62 works in Ontario accounted for 54.3 percent of the total output and the 39 plants in Quebec for 24.9 percent. The average number of employees was 1,055 and \$1,665,593 were paid in salaries and wages. Materials used in the cutting and dressing processes, including stone, cost \$1,706,599. The latter figure also includes the cost of materials used in the production of rock wool. Expenditures for fuel and electricity amounted to \$196,703.

Table 17 - Principal Statistics of the Stone Products Industry, 1935-1945

Year	Number of plants	Average number of em- ployees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross sell- ing value of products at works
			\$	\$	\$	\$
1935	222	1,066	1,174,229	107,836	1,010,999	3,079,118
1936	227	1,245	1,257,808	127,151	1,070,902	3,309,911
1937	229	1,159	1,352,566	122,209	1,142,885	3,371,242
1938	234	1,261	1,560,931	138,259	1,271,650	3,902,774
1939	190	1,257	1,458,780	139,438	1,259,547	3,805,989
1940	182	1,061	1,236,825	133,417	1,183,112	3,592,623
1941	173	987	1,296,534	137,842	1,244,013	3,883,496
1942	174	925	1,267,382	147,972	1,423,387	3,939,764
1943	151	857	1,256,415	138,127	1,521,308	4,098,100
1944	142	854	1,426,262	160,725	1,670,718	4,370,430
1945	144	1,055	1,665,593	196,703	1,706,599	5,199,120
Percent change						
1945 from 1944 .	...	+23.5	+16.8	+22.4	+2.1	+19.0

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, 1944 and 1945.

Province	Number of plants	Average number of em- ployees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross sell- ing value of products at works
			\$	\$	\$	\$
1944						
Prince Edward Island	1)					
New Brunswick	5)	34	49,692	3,457	30,302	136,172
Nova Scotia	8	32	34,242	3,773	38,696	108,993
Quebec	39	201	292,607	29,149	440,987	1,020,771
Ontario	59	452	846,883	108,983	979,130	2,473,876
Manitoba	9	42	54,175	4,032	37,287	134,790
Saskatchewan	7	33	56,759	3,868	52,432	183,068
Alberta	5	34	53,136	4,487	56,111	188,101
British Columbia ...	9	26	38,768	2,976	35,773	124,659
Canada	142	854	1,426,262	160,725	1,670,718	4,370,430

Table 18 - Principal Statistics of the Stone Products Industry, By Provinces, 1944 and 1945 (Concluded)

Province	Number of plants	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
			\$	\$	\$	\$
<u>1945</u>						
Prince Edward Island	1)	65	98,707	12,770	77,191	306,671
New Brunswick	6)					
Nova Scotia	6	31	38,406	4,201	36,708	127,223
Quebec	39	286	433,895	53,261	488,045	1,297,007
Ontario	62	513	850,689	106,830	915,879	2,823,793
Manitoba	8	36	54,834	4,701	41,388	122,821
Saskatchewan	7	48	71,599	6,926	63,883	189,260
Alberta	5	43	63,136	4,708	54,162	196,124
British Columbia ...	10	33	54,327	3,306	29,343	136,221
Canada	144	1,055	1,665,593	196,703	1,706,599	5,199,120

Table 19 - Employees, Salaries and Wages in the Stone Products Industry, By Provinces, 1944 and 1945

Province	Average Number of Employees					Salaries	Wages	Total Salaries and Wages
	On Salaries		On Wages		Total			
	Male	Female	Male	Female				
						\$	\$	\$
<u>1944</u>								
Prince Edward Island)	5	2	27	...	34	10,318	39,374	49,692
New Brunswick ,.....)								
Nova Scotia	9	2	21	...	32	12,977	21,265	34,242
Quebec	47	3	140	11	201	77,504	215,103	292,607
Ontario	86	21	314	31	452	212,340	634,543	846,883
Manitoba	15	2	24	1	42	22,983	31,192	54,175
Saskatchewan	10	3	20	...	33	27,214	29,545	56,759
Alberta	9	5	19	1	34	20,404	32,732	53,136
British Columbia ...	10	...	16	...	26	14,650	24,118	38,768
Canada ...	191	38	581	44	854	398,390	1,027,872	1,426,262
<u>1945</u>								
Prince Edward Island)	9	2	48	6	65	18,703	80,004	98,707
New Brunswick								
Nova Scotia	7	2	22	...	31	10,464	27,942	38,406
Quebec	65	8	202	11	286	118,113	315,782	433,895
Ontario	106	21	371	15	513	267,757	582,932	850,689
Manitoba	13	1	21	1	36	24,010	30,824	54,834
Saskatchewan	10	3	31	4	48	28,011	43,588	71,599
Alberta	10	9	22	2	43	27,918	35,218	63,136
British Columbia ...	14	1	18	...	33	22,850	31,477	54,327
Canada ...	234	47	735	39	1,055	517,826	1,147,767	1,665,593

Table 20 - Wage-Earners, By Months, In the Stone Products Industry, 1944 and 1945 (Number on payroll on the last work day of each month)

Month	1944			1945		
	Male	Female	Total	Male	Female	Total
January	494	43	537	646	48	694
February	495	45	540	662	47	709
March	528	44	572	612	39	651
April	557	44	601	624	31	655
May	597	45	642	635	35	670
June	594	37	631	698	35	733
July	599	43	642	740	38	778
August	595	37	632	756	41	797
September	600	35	635	800	42	842
October	614	41	655	856	30	886
November	614	45	659	886	32	918
December	558	37	595	835	31	866
Average	581	44	625	735	39	774

Table 21 - Hours Worked Per Week By Wage-Earners in the Stone Products Industry, 1944 and 1945 (In one week of highest employment; overtime included)

Hours Worked per Week	Number of Wage-Earners			
	1 9 4 4		1 9 4 5	
	Male	Female	Male	Female
30 hours or less	70	6	65	8
31-43 hours	91	17	157	22
44 hours	176	1	210	9
45-47 hours	37	3	79	5
48 hours	135	8	206	7
49-50 hours	18	1	60	...
51-54 hours	59	1	53	2
55 hours	6	1	15	1
56-64 hours	65	6	59	...
65 hours and over	45	...	101	...
Total	702	44	1,005	54
Total wages paid in selected week \$	22,423	1,059	31,782	1,076

Table 22 - Fuel and Electricity Used in the Stone Products Industry, 1944 and 1945

Kind	Unit of measure	1 9 4 4		1 9 4 5	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Bituminous coal - Canadian ..	ton	258	3,123	1,228	11,732
Imported ..	ton	4,741	38,624	4,232	39,014
Anthracite coal	ton	197	2,707	1,934	18,485
Lignite coal	ton	12	143	13	90
Coke	ton	477	6,520	206	2,844
Gasoline	Imp. gal.	48,283	16,177	50,077	16,167
Kerosene or coal oil	Imp. gal.	818	212	8	2
Fuel oil	Imp. gal.	24,256	2,696	145,464	14,942
Wood	cord	166	1,384	192	1,864
Gas - Manufactured	M cu. ft.	191	187	258	258
Natural	M cu. ft.	515	285	1,449	649
Other fuel .....	...	...	18,423	...	89
Electricity purchased	K. W. H.	5,989,250	70,244	7,422,679	90,567
Total .....	...	...	160,725	...	196,703

Table 23 - Power Equipment in the Stone Products Industry, 1944 and 1945

	Ordinarily in Use		In Reserve or Idle	
	Number	Total rated	Number	Total rated
	of units	horse power	of units	horse power
1 9 4 4				
Steam engines and steam turbines	2	157	...	...
Diesel engines	3	147	1	16
Gasoline, gas and oil engines (other than diesel)	12	185	...	...
Hydraulic turbines or water wheels ...	1	25	...	...
Total Primary Equipment	18	514	1	16
Electric motors run by purchased power	523	5,722	24	325
Total	541	6,236	25	341
Stationary power boilers	4	294	...	...
Motor generator sets	1	1	...	...
1 9 4 5				
Steam engines and steam turbines	2	210	...	...
Diesel engines	2	84	2	116
Gasoline, gas and oil engines (other than diesel)	12	227	1	6
Hydraulic turbines or water wheels ...	1	20	...	...
Total Primary Equipment	17	541	3	122
Electric motors run by purchased power	625	6,847	41	635
Total	642	7,388	44	757
Stationary power boilers	5	504	...	...
Motor generator sets	12	480	6	285

Table 24 - Output of the Stone Products Industry, 1944 and 1945

Product	Total Selling Value at Works	
	1944	1945
	\$	\$
Granite, cut and polished -		
(a) Monuments	1,871,157	2,183,799
(b) For building purposes	31,430	58,829
Marble, cut and polished -		
(a) Monuments	290,638	317,197
(b) For building purposes	80,803	132,498
Marble chips and dust	23,815	24,826
Limestone -		
(a) Monuments and bases	48,870	48,715
(b) For building purposes	98,866	290,618
Finished monuments, lettered only	228,169	219,483
Other products (x)	1,638,763	1,858,102
Repairs and custom work (re-lettering, etc.)	57,919	65,053
Total	4,370,430	5,199,120

(x) Includes rock wool, etc.

Table 25 - Production From the Stone Products Industry, By Provinces, 1944 and 1945

	Granite		Marble		Marble chips and dust	Limestone		Finished monuments, lettered only	Other products	Total
	Monu-ments	For building purposes	Monu-ments	For building purposes		Monu-ments and bases	For building purposes			
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Prince Edward Island and New Brunswick -										
1944	108,662	...	23,612	450	...	...	...	2,275	1,173	136,172
1945	115,497	...	20,121	...	...	...	...	2,265	168,788	306,671
Nova Scotia -										
1944	41,442	4,000	25,000	...	...	...	...	35,840	2,711	108,993
1945	46,402	6,000	29,241	3,460	...	...	...	41,325	795	127,223
Quebec -										
1944	557,591	15,471	7,506	26,668	4,679	3,007	650	15,241	389,958	1,020,771
1945	759,186	39,367	11,243	47,932	5,178	400	770	13,309	419,622	1,297,007
Ontario -										
1944	795,525	7,073	147,677	35,497	411	33,763	97,459	80,468	1,276,003	2,473,876
1945	928,194	6,500	166,747	54,184	1,500	29,725	289,543	70,294	1,277,106	2,823,793
Manitoba -										
1944	79,045	...	13,733	5,870	100	2,078	...	33,785	179	134,790
1945	61,218	2,122	12,095	14,064	8	2,340	225	29,881	868	122,821
Saskatchewan -										
1944	92,260	4,650	50,855	3,342	585	7,422	757	9,415	13,782	183,068
1945	79,185	4,500	41,438	5,300	590	13,830	...	5,595	38,822	189,260
Alberta -										
1944	96,737	...	21,810	...	18,040	2,600	...	41,988	6,926	188,101
1945	85,087	...	35,498	...	17,550	2,420	...	47,580	7,989	196,124
British Columbia -										
1944	99,895	236	445	8,976	...	...	...	9,157	5,950	124,659
1945	109,030	340	814	7,558	...	...	80	9,234	9,165	136,221
CANADA -										
1944	1,871,157	31,430	290,638	80,803	23,815	48,870	98,866	228,169	1,696,682	4,370,430
1945	2,183,799	58,829	317,197	132,498	24,826	48,715	290,618	219,483	1,923,155	5,199,120

Table 26 - Total Production in Canada of Dressed Building Stone, 1928-1945

Year	Granite		Marble		Limestone		Sandstone from quarries	Total
	From quarries	From dressing works	From quarries	From dressing works	From quarries	From dressing works		
	\$	\$	\$	\$	\$	\$	\$	\$
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	2,094,843
1936	171,858	330,306	104,738	175,834	189,064	514,375	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	832,123	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
1942	108,807	121,450	19,476	139,109	169,382	102,388	8,600	669,212
1943	103,691	65,868	10,745	96,630	172,198	36,021	1,300	486,453
1944	83,485	31,430	18,135	80,803	214,037	98,866	34,750	561,506
1945	97,098	58,829	18,224	132,498	464,411	290,618	78,000	1,139,678

Table 27 - Total Production in Canada of Dressed Monumental and Ornamental Stone, 1927-1945

Year	Granite		Marble		Limestone		Sandstone from quarries	Total
	From quarries	From dressing works	From quarries	From dressing works	From quarries	From dressing works		
	\$	\$	\$	\$	\$	\$	\$	\$
1927	147,510	1,728,293	449,717	420,651	1,523	97,264	...	2,844,958
1928	125,744	1,718,988	9,700	404,058	2,237	132,406	...	2,393,133
1929	149,810	1,815,463	...	391,947	4,722	325,876	...	2,687,818
1930	111,504	1,815,143	...	350,323	3,577	319,472	...	2,600,019
1931	251,379	1,584,099	...	257,668	6,300	43,584	...	2,143,030
1932	196,071	1,164,283	...	180,323	2,532	43,652	...	1,586,861
1933	215,616	1,111,354	...	200,313	2,868	30,370	...	1,560,521
1934	244,286	1,271,009	24,342	168,201	3,488	27,036	...	1,738,362
1935	277,568	1,268,414	...	158,249	1,680	26,690	...	1,732,601
1936	231,482	1,517,005	...	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
1942	356,459	1,602,854	...	197,189	4,513	23,435	...	2,184,450
1943	392,828	1,601,756	...	227,289	4,700	27,536	...	2,254,109
1944	609,542	1,871,157	...	290,638	4,575	48,870	918	2,825,700
1945	636,787	2,183,799	...	317,197	5,700	48,715	...	3,192,198

(x) Sandstone.

Table 28 - Production in Canada and Imports of Rock Wool, 1934-1945

Year	Production		Imports	
	\$	Pounds	\$	
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	
1942	1,417,258	1,613,914	54,776	
1943	1,707,501	1,839,670	72,780	
1944	1,617,420	2,619,513	147,862	
1945	1,839,122	8,989,862	460,677	

Table 29 - Production of Rock Wool in Canada, By Grades, 1945

		Quantity	Selling Value at Works
			\$
3-inch batts (x)	sq.ft.	13,784,980	481,614
2-inch batts	sq.ft.	18,868,015	508,769
1-inch batts	sq.ft.	1,714,078	35,157
Granulated	cu.ft.	4,754,179	689,989
Bulk or loose wool	cu.ft.	603,782	65,521
Industrial wool (both loose and granulated)	cu.ft.	453,115	58,172
Total .....	...	...	1,839,122

(x) Includes four-inch batts.

Table 30 - Sales of Rock Wool By Canadian Producers, 1944 and 1945

	Three inch batts (x)	Two inch batts	One inch batts	Granulated wool	Bulk or loose wool	Industrial wool
	sq.ft.	sq.ft.	sq.ft.	cu.ft.	cu.ft.	cu.ft.
1944						
January	1,528,585	1,859,980	120,600	320,047	69,015	34,827
February ...	1,641,605	1,881,968	67,260	311,762	58,855	33,319
March	1,512,415	1,854,435	27,142	321,803	63,397	27,714
April	1,170,415	1,703,400	62,916	267,158	48,709	27,095
May	622,795	1,232,785	3,000	343,732	39,183	12,816
June	1,212,110	1,123,709	36,540	321,332	37,994	24,161
July	1,013,060	1,225,835	1,350	305,303	65,734	16,071
August	1,240,800	1,458,870	9,200	313,670	58,934	27,487
September ..	1,147,975	1,335,309	76,556	354,737	67,261	18,568
October	1,385,650	1,607,160	253,702	351,528	65,376	28,318
November ...	1,238,085	1,967,945	139,102	401,343	50,139	17,279
December ...	1,268,450	1,598,155	106,316	266,473	50,744	15,235
Total .	14,981,945	18,849,551	903,684	3,878,888	675,341	282,890
1945						
January	1,432,465	1,713,680	129,119	359,365	50,632	34,854
February ...	1,012,810	1,478,400	83,040	308,230	32,910	42,930
March	1,179,655	1,494,375	119,606	333,558	39,566	48,231
April	1,026,320	1,315,225	51,317	343,222	52,875	37,842
May	1,060,108	1,405,315	48,360	322,498	47,382	17,840
June	1,185,460	1,555,945	62,760	413,174	50,528	18,327
July	1,013,000	1,578,200	25,230	398,258	20,456	31,532
August	904,000	1,465,435	95,400	409,033	63,976	37,530
September ..	1,003,575	1,927,435	108,720	393,463	44,021	38,670
October	1,181,305	1,949,960	211,940	454,003	61,510	41,533
November ...	932,685	1,968,220	517,160	445,463	52,406	47,185
December ...	624,770	1,475,850	296,960	469,992	35,713	44,422
Total .	12,556,133	19,328,040	1,749,612	4,650,259	551,975	440,896

(x) Includes some four-inch batts.

Table 31 - Cost of Materials Used in the Stone Products Industry, 1944 and 1945

	Cost at Works	
	1944	1945
	\$	\$
Stone - (a) From Canadian quarries	409,677	522,878
(b) Imported	218,367	264,784
Monuments, cut and polished, for lettering only	124,383	135,977
Silica sand or ground quartz	4,679	7,379
Slag and stone for rock wool	167,808	160,500
Coke for rock wool	136,253	114,382
All other materials	609,551	500,699
Total	1,670,718	1,706,599

PRODUCERS OF ROCK WOOL, 1945

Name	Address
Canadian Gypsum Company Ltd.	Weston, Ontario
Canadian Johns Manville Co. Ltd.	Asbestos, Quebec
Gypsum, Lime & Alabastine, Canada, Ltd.	Caledonia, Ontario
Insulation Products Ltd.	Todmorden, Toronto, Ontario
Spun Rock Wools Ltd.	Thorold, Ontario
Elmac Company	Saint John, New Brunswick
Thermotex Insulation Ltd.	Granite Falls, Burrard Inlet, British Columbia
Glacial Rock Insulation Ltd.	Township 17, Moose Jaw, Saskatchewan

DIRECTORY OF FIRMS IN THE STONE PRODUCTS INDUSTRY, 1945

Name of Company	Location of Plant
<u>Prince Edward Island -</u>	
Beck, Vere & Son	Main St., Montague
<u>Nova Scotia -</u>	
Coughlan, James S., Marble and Granite Works	Simpson's Siding, Halifax
Kelly Monumental Works	Bridgewater
Nixon's Granite Works	R. R. 3, Middleton
Steele, John D., & Sons	Commercial St., North Sydney
Tingley, Harold W.	13 Merkel St., Halifax
Tingley, J. A., Granite Works	Amherst
<u>New Brunswick -</u>	
Elmac Co.	48 Celebration St., Saint John
Kane, M. T., & Co. Ltd.	Westmoreland Rd., Saint John
Miramichi Granite & Marble Works	Chatham
St. Stephen Granite Works	Queen St., St. Stephen
Sherrard, T. F., & Son	135 Victoria St., Moncton
Stults Monument Works	Rothsay Ave., Saint John
<u>Quebec -</u>	
Anderson, James	Beebe
Beaubien, Elzear & Fils Ltée Reg'd.	Ste. Hélène, Co. Kamouraska
Bergstrand, N.	Waterville
Berson, L., & Son	3884 St. Lawrence Blvd., Montreal
Brault, A.	3 Champlain St., Valleyfield
Brodie's, Limited,	9th Ave., Iberville
Brunet, J., Limites	4485 Cote des Neiges, Montreal
Brunet, A.	Ormstown
Buckland, D. E.	Beebe
Canadian Johns-Manville Co. Ltd.	Manville St., Asbestos
Caron, Eugene	Ste. Anne de Beaupre
Chabot, J. Ray	Scott Junction, Co. Beauce
Chausse, Edouard & Fils	524 King St. West, Sherbrooke
Crete, James	190 Sophie St., Sorel
Dalceggio, F.	4588 Chemin Cote des Neiges, Montreal
Daudelin, Rolland	1395 St. Antoine St., St. Hyacinthe
Ducharme, J. Maurice	257 Notre Dame St., Victoriaville
Fortin, Dollard	St. David de Lévis
Frenette, P. E.	351 St. Jean Baptiste, Rimouski
Gingras, Roch	Ste. Foy
Gignac, Joseph	St. Alban Village
Godin & Delisle	1253 St. Vallier St., Quebec
Gordon Stone Monument Reg'd.	4374 St. Lawrence Blvd., Montreal

DIRECTORY OF FIRMS IN THE STONE PRODUCTS INDUSTRY, 1945 (Continued)

Name of Company	Location of Plant
<u>Quebec - (Con.)</u>	
Gosselin, Arsene, Enrg.	Beauceville Est.
Houde & Frère, Enrg.	404 Notre Dame, Cap de la Madeleine
Jacques, Andre	20 Desjardins St., Lévis
Jeune, E. H.	Sutton
Laforce, H. & Fils, Enrg.	1327 St. Valier, Quebec
Liben, A. M.	12 Bagg Ave., Montreal
Anco Granites Ltd.	Iberville
Picard, Wilfred	3285 Desautels, Montreal
Provost, J. A.	187 Belmont, Sherbrooke
Rousseau, O., Enrg.	St. Fabien, P.Q.
Smith Bros. Memorial Art Ltd.	1195 Ducharme St., Montreal
Smith Marble & Construction Co. Ltd.	207 Van Horne Ave. W., Montreal
Stanstead Granite Quarries Co. Ltd.	Beebe
Thuot & Denicourt	87 Fourth St., Iberville
Todoro & Bigras	3275 Desautels, Montreal
Vincent, Chas. A., & Sons	5731 St. Denis St., Montreal
<u>Ontario -</u>	
Angers, E. & Son	140 Montreal Rd., Eastview
Ambroise Monuments	48 Alma St., Guelph
Ambroise, J. D.	Montreal Road, Eastview
Bayview Memorial Co.	Willow Cove
Bradfield, W., & Son	335 Main St., Simcoe
Brown, Geo., & Sons	473 Bronson Ave., Ottawa
Campbell, A. C.	21 Bridge St. W., Belleville
Canadian Art Memorials	Joseph St., Port Credit
Canadian Cut Stone Co. (Louis H. Gavard)	7 Isabella St., Ottawa
Canadian Gypsum Co. Limited	Oak St., Weston
Creber Son & Company	1333 St. Clair Ave. W., Toronto
Central Granite & Marble Works	1283 Dundas St. W., Toronto
Chesley Memorial Works	Chesley
Davis Monument Co.	3205 Danforth Ave., Toronto
Eglinton Monumental Works	1702 Eglinton Ave. W., Toronto
Excelsior Granite & Marble Works	163 Pitt St. E., Windsor
Gladstone & Ross	388 East Block St., Fort William
Geard Brothers	612 William St., London
George, John J.	Port Elgin
Gypsum, Lime and Alabastine, Canada, Limited	Caledonia
Hardwick, H. G., & Son	30 Ottawa St. N., Hamilton
Hargrave's Monumental Works	Haileybury, Ont.
Humberstone Cut Stone and Monument Works	590 King St., Humberstone
Insulation Products Ltd.	Beechwood Drive, Toronto 6
Johnston & Cranston	1849 Yonge St., Toronto
Kemp & Ronald	Listowel
Kilvington Granite Company	2A Caledonia Rd., Toronto
Kingsway Monument Works	3673 Dundas St., Toronto
Kitchener Monument Works	1015 King St. E., Kitchener
Lake Superior Granite and Marble Works	Sault Ste. Marie
Laurin, J. P.	103 George St., Ottawa
London Marble & Granite Co. Ltd.	493 Richmond St., London
McIntosh Granite Company Ltd.	1623 Yonge St., Toronto
McIntyre Monument Co.	60 Danforth Ave., Toronto
McKay Cut Stone Co.	65 Shalmar Ave., Forest Hill
McMillan Granite Co. Ltd.	105 Ontario St., Sarnia
Memorial Company of Toronto	2299 Bloor St. W., Toronto
Memorial Craftsmen Co.	429 Spadina Ave., Toronto
Monumental Art Co.	2168 Dundas St. W., Toronto
Oakville Monument Works	19 Colborne St. W., Oakville
Ontario Marble Co. Ltd.	Maria St., Peterborough
Orillia Monument Co.	252 Coldwater Rd. W., Orillia

DIRECTORY OF FIRMS IN THE STONE PRODUCTS INDUSTRY, 1945 (Concluded)

Name of Company	Location of Plant
<u>Ontario - (Con.)</u>	
Patterson & Cornelius	428 Queenston Rd., St. Catharines
Pollock & Ingham	151 Main St., Galt
Riggs Memorial Works	605 Queen St., Niagara Falls
The Ritchie Cut Stone Co., Ltd.	203 New Toronto St., New Toronto
Rivercourt Memorials	300 O'Connor Drive, Toronto
Sanderson, J. R., Marble Co.	33 Peter St. S., Orillia
Sault Granite & Marble Works	715 Queen St. E., Sault Ste. Marie
Sinclair Cut Stone	Frid St., Hamilton
Sharp Bros. Cut Stone Company Limited	516 Kenilworth St. N., Hamilton
Skelton, E. J., & Son	Yonge St., Walkerton
Smith Monument Works	1539 Main St. E., Hamilton
Smith Monument Co.	349 Weston Road, Toronto
Spun Rock Wools Limited	65 Ormond St., Thorold
Standard Stone Company, Limited	1704 Howard Ave., Windsor
Strathroy Granite & Marble Co. Ltd.	Strathroy
Sudbury Memorial Works	453 Annley St., Sudbury
Twin City Monument Company	541 King St. E., Kitchener
Wardell Monument Works	2696 Dundas St. W., Toronto
Wilcox Granite Co.	Plains Road, Hamilton
<u>Manitoba -</u>	
Brooke, J. H., & Sons	266 Main St., Winnipeg
Brunet, Joseph O.	26 Lyndale Drive, Norwood
Cassan Monumental Co.	402 - 10th St., Brandon
Fort Rouge Monumental	465 Gertrude St., Winnipeg
Guinn & Simpson Company Limited	52 Tupper St. N., Portage la Prairie
MacIntyre, A. L.	361 Bannatyne Ave., Winnipeg
Memorial Marble & Tile Co. Ltd.	1180 Wall St., Winnipeg
Neepawa Marble & Granite Works	Neepawa
<u>Saskatchewan -</u>	
Best Monumental Co.	721 Caribou St. W., Moose Jaw
Glacial Rock Insulation Ltd.	Township 17, Moose Jaw
Molaro Marble & Stone Works	23 St. & Pacific Ave., Saskatoon
Moose Jaw Marble & Granite Works Ltd.	706 Athabasca St. E., Moose Jaw
Regina Monumental Co.	2536 Railway St., Regina
Yorkton Monumental Works	20 Agricultural Ave., Yorkton
Young, Alex., Ltd.	Searth St. and 4th Ave., Regina
<u>Alberta -</u>	
Alberta Granite, Marble & Stone Co. Ltd.	10702 - 101st St., Edmonton
Hart, Albert J.	1821 Second St. E., Calgary
Maclean Granite Co.	Red Deer
McDonald Granite Co. Ltd.	2313 Second St. E., Calgary
Somerville Calgary Monumental Co.	121 - 13th Ave. W., Calgary
<u>British Columbia -</u>	
Art Monument Co. Ltd.	602 Kingsway, Vancouver
Burnaby Monumental Works	2655 Patterson Ave., Burnaby
Chandler, W. R., Memorials & Western Granite Co.	5498 Fraser St., Vancouver
Continental Marble Company Limited	1002 Georgia St. E., Vancouver
Forster Monumental Works	5528 Fraser St., Vancouver
Kingsway Monumental Works	3070 Kingsway St., Vancouver
Mortimer, J., & Son	633 David St., Victoria
Stewart Monumental Works Ltd.	1401 May St., Victoria
Thermotex Insulation Ltd.	996 Powell St., Vancouver
Westaway's Monumental Works	143 Columbia St. E., New Westminster

STATISTICS CANADA LIBRARY
BIBLIOTHÈQUE STATISTIQUE CANADA



1010522850