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CANADA

# THE CLAY AND CLAY PRODUCTS INDUSTRY

## 1955

(Including data relating to Sand-Lime Brick)



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NOTICE

The annual reports prepared by the Industry and Merchandising Division of the Bureau of Statistics are divided into 3 volumes, as follows: Volume I - The Primary Industries, including mining, forestry and fisheries; Volume II - Manufacturing; Volume III - Merchandising and Services. The volumes are made up of parts, and the parts in turn are subdivided according to the industries which they comprise.

Volume I consists of the following parts:

- Part I - Mineral Statistics
- Part II - Forestry Statistics - Operations in the Woods
- Part III - Fisheries Statistics

Part I includes the following reports which constitute the complete series on Mineral Statistics of Canada. Individual reports are issued as the information becomes available; they are arranged in a form suitable for binding.

- A - General Review of the Mining Industry, 50¢
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- Q - The Clay and Clay Products Industry, 25¢
- R - The Lime Industry, 25¢
- S - The Sand and Gravel Industry, 25¢
- T - The Stone Industry, 25¢
- U - Contract Drilling in the Mining Industry, 25¢

# THE CLAY AND CLAY PRODUCTS INDUSTRY 1955

(Including data relating to Sand-Lime Brick)

The industrial clays of Canada may be classed as common clays, stoneware clays, fireclays and china-clays. Common clays are produced in all provinces, stoneware clays in Saskatchewan and British Columbia and to a lesser extent in Manitoba and Nova Scotia, fireclays in Saskatchewan and British Columbia and to a lesser extent in Nova Scotia. China-clay is not produced in Canada at present but there is some production of ball clay in Saskatchewan. Bentonite is produced in Manitoba and to a lesser extent in Alberta. Large quantities of fireclay and china-clay are imported.

Since the value of domestic clay products is included in the mineral production of Canada, whereas the value of products made from imported clays is not, the clay products industry in Canada is divided into two sections for statistical purposes:

(1) Production from domestic clays, which includes building brick, structural tile, roofing tile, drain tile, stoneware, sewer pipe, pottery and refractories, and

(2) Production from imported clays, which includes the manufacture of electrical porcelains, sanitaryware, sewer pipe, tableware, artware, floor and wall tile and fireclay blocks and shapes.

The manufacture of sand-lime bricks and blocks is reviewed in Section 3 of this report, being treated as a separate industry.

A total of 155 plants operated in the domestic and imported clay products industries in 1955. They employed 6,223 persons to whom \$19,664,142 were distributed in salaries and wages. The combined production was valued at \$54,747,573 compared with \$48,345,653 in 1954.

**TABLE 1. Principal Statistics of the Clay and Clay Products Industry, Significant years, 1921-1955**

	Estab-lish-ments	Em-ployees	Earnings	Cost of fuel and electricity at plant	Cost at plant of process supplies	Gross selling value of products	Net <sup>1</sup> value of production
	No.	No.	\$	\$	\$	\$	\$
<b>Products from domestic clays:</b>							
1921 .....	220	4,636	3,770,253	1,812,232	Not available	8,857,818	Not available
1929 .....	196	5,530	5,727,014	2,920,384	"	13,904,643	"
1931 .....	189	3,259	3,541,250	1,486,438	"	7,841,288	"
1933 .....	146	1,312	1,101,893	377,321	"	2,262,835	"
1937 .....	143	2,289	2,094,792	1,032,755	103,568	4,516,859	3,380,536
1939 .....	149	2,165	2,161,688	998,683	108,815	5,151,236	4,043,738
1941 .....	142	2,881	3,227,785	1,561,326	207,247	7,575,336	5,806,763
1944 .....	110	2,247	3,176,804	1,357,313	161,189	6,997,425	5,478,923
1946 .....	119	3,437	5,115,962	2,365,552	278,125	12,207,367	9,563,690
1949 .....	124	3,603	7,924,841	3,347,345	557,622	17,981,709	14,076,742
1950 .....	134	3,663	8,583,912	3,978,525	676,729	21,790,888	17,135,634
1951 .....	129	3,737	9,731,657	4,414,072	794,483	23,527,656	18,319,101
1952 .....	133	3,568	9,812,214	4,276,092	840,756	24,961,528	19,844,680
1953 .....	125	3,719	10,833,628	4,843,283	799,534	29,777,731	24,134,914
1954 .....	125	3,929	12,112,490	5,253,397	770,415	32,360,098	26,336,286
1955 .....	118	4,118	12,850,485	5,287,490	886,736	36,353,183	30,178,957
<b>Products from imported clays:</b>							
1929 .....	15	872	1,112,881	220,910	992,150	3,373,038	2,159,978
1933 .....	18	536	471,742	111,144	288,379	1,205,052	805,529
1937 .....	19	1,218	1,265,913	286,499	971,497	3,599,181	2,341,185
1939 .....	20	1,097	1,150,712	237,718	792,767	2,971,979	1,941,494
1946 .....	32	1,913	2,870,543	440,771	1,674,391	7,073,371	4,958,209
1949 .....	40	2,356	5,332,757	746,597	3,526,190	14,457,162	10,184,375
1950 .....	38	2,209	5,319,493	764,460	3,670,791	15,095,524	10,660,273
1951 .....	35	2,526	6,372,732	870,710	4,382,230	16,948,304	11,695,364
1952 .....	34	2,432	6,300,265	835,362	4,050,520	15,677,596	10,781,714
1953 .....	37	2,254	6,280,614	844,345	3,943,943	14,871,948	10,083,660
1954 .....	36	2,044	6,295,674	847,464	4,091,984	15,985,555	10,926,729
1955 .....	37	2,105	6,813,657	916,851	4,911,302	18,394,390	12,634,247
<b>Total:</b>							
1950 .....	172	5,872	13,903,405	4,742,985	4,347,520	36,886,412	27,795,907
1951 .....	164	6,263	16,104,389	5,284,782	5,176,713	40,475,960	30,014,465
1952 .....	167	6,000	16,112,479	5,111,454	4,891,276	40,639,124	30,626,394
1953 .....	162	5,973	17,114,242	5,687,628	4,743,477	44,649,679	34,218,574
1954 .....	161	5,973	18,408,164	6,100,861	4,862,399	48,345,653	37,263,015
1955 .....	155	6,223	19,664,142	6,204,341	5,798,038	54,747,573	42,813,204

1. Gross value less cost of materials, fuel and electricity.

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

## I. Production from Domestic Clays, 1955

Concerns which make brick or other products from domestic clays are usually located at the clay deposits and, as clay has no value until it has been made into saleable products, it is the custom for statistical purposes to measure output at the first stage at which it is possible to place a realistic value on the products, this being the shipments of bricks, tiles, etc.

The gross value of producers' sales of domestic clays and products made from domestic clays totalled \$35,259,770 in 1954 compared with \$32,360,098 in the preceding year. The computed value of production in 1955 was \$36,353,183. Domestic clays were produced and used in all provinces, except Prince

Edward Island, to manufacture building brick, tile and other clay products. The leading provinces in value of production were: Ontario, Quebec and Alberta.

The average number of employees was 4,118 to whom \$12,850,485 were distributed in salaries and wages. Fuel cost \$4,662,595 and 46,059,446 kwh. of electricity were purchased for \$624,895. Process supplies cost \$886,736.

Sales of building brick in 1955 amounted to 489,240 thousand pieces. Sewer pipe, drain tile and flue linings sales totalled \$7,107,946 and structural tile \$3,740,544.

TABLE 2. Principal Statistics for the Domestic Clay Products Industry, 1954 and 1955

Province	Estab- lish- ments	Em- ployees	Earnings	Cost of fuel and electricity at plant	Cost at plant of process supplies	Gross selling value of products
	No.	No.	\$	\$	\$	\$
1954						
Newfoundland .....	1	4	4,000	9,900	—	33,042
Nova Scotia .....	6	210	436,976	318,930	6,034	1,082,039
New Brunswick .....	3	94	213,784	205,135	2,750	587,994
Quebec .....	18	867	2,780,075	1,334,496	328,341	8,055,692
Ontario .....	67	1,887	6,212,802	2,756,894	353,314	17,230,231
Manitoba .....	5	126	281,806	112,320	24,637	512,989
Saskatchewan .....	3	115	326,841	121,833	6,518	844,398
Alberta .....	11	382	1,091,633	74,729	19,983	2,316,982
British Columbia .....	11	244	764,573	319,160	28,838	1,696,731
<b>Canada .....</b>	<b>125</b>	<b>3,929</b>	<b>12,112,490</b>	<b>5,253,397</b>	<b>770,415</b>	<b>32,360,098</b>
1955						
Newfoundland .....	1	9	16,360	11,895	—	49,338
Nova Scotia .....	6	189	502,094	325,786	9,278	1,184,349
New Brunswick .....	3	78	169,224	167,532	5,075	661,559
Quebec .....	15	886	2,889,747	1,331,616	300,771	8,531,081
Ontario .....	63	1,945	6,354,106	2,776,900	410,565	18,891,014
Manitoba .....	5	139	319,467	104,467	30,148	650,310
Saskatchewan .....	4	123	361,888	146,490	7,355	1,116,395
Alberta .....	11	443	1,281,189	91,501	74,934	2,912,836
British Columbia .....	10	306	956,410	331,303	48,610	2,356,301
<b>Canada .....</b>	<b>118</b>	<b>4,118</b>	<b>12,850,485</b>	<b>5,287,490</b>	<b>886,736</b>	<b>36,353,183<sup>1</sup></b>

1. In 1955 gross value of products made; prior years were value of shipments.

TABLE 3. Producers' Sales of Domestic Clay and Domestic Clay Products, 1954 and 1955

Product	Sales or shipments				
	1954		1955		
	Quantity	\$	Quantity	\$	
<b>Clay:</b>					
Fireclay .....	tons	10,770	61,750	11,669	72,815
Other clay (includes bentonite).....	-	-	334,610	-	449,104
Fireclay blocks and shapes.....	-	-	316,061	-	418,554
Firebrick.....	M	2,416	230,907	4,055	402,263
<b>Brick:</b>					
Soft mud process:					
Face .....	M	11,225	547,756	19,529	920,855
Common.....	M	9,229	293,909	14,327	405,024
Stiff mud process (wire cut):					
Face .....	M	265,684	12,932,689	280,360	13,632,999
Common.....	M	55,691	1,619,229	48,261	1,528,011
Dry press:					
Face .....	M	76,373	3,703,126	79,132	4,052,127
Common.....	M	49,289	1,645,040	47,381	1,607,879
Fancy or ornamental brick (including special shapes, embossed and enamelled brick).....	M	11	1,335	1	81
Sewer brick.....	M	236	9,141	249	10,861
Paving brick.....	M	1,504	123,167	342	34,088
<b>Structural tile:</b>					
Hollow blocks (including fireproofing and load-bearing tile).....	tons	185,069	3,432,799	199,982	3,647,690
Roofing tile .....	no.	10,000	350	-	-
Floor tile (quarries) and glazed tile.....	sq. ft.	169,326	70,091	229,098	92,854
Drain tile .....	M	42,817	2,554,711	49,540	2,980,690
Sewer pipe .....	-	-	2,687,119	-	3,027,650
Flue linings .....	-	-	970,595	-	1,099,606
Pottery, glazed or unglazed (including coarse earthenware, sanitaryware, stoneware, flower pots, and all pottery).....	-	-	534,220	-	603,865
Other products .....	-	-	291,493	-	272,754
<b>Total</b> .....	-	-	<b>32,360,098</b>	-	<b>35,259,770</b>

TABLE 4. Producers' Sales of Clay Building Brick, 1946-1955

Year	Quantity	\$	Average value per M <sup>1</sup>	Year	Quantity	\$	Average value per M <sup>1</sup>
	No.				No.		
1946 .....	272,389	6,627,517	24.33	1951 .....	379,434	14,042,191	37.01
1947 .....	295,446	7,930,714	26.84	1952 .....	369,605	14,851,176	40.18
1948 .....	320,693	9,597,463	29.93	1953 .....	426,446	18,352,718	43.08
1949 .....	330,867	10,523,675	31.81	1954 .....	467,738	20,752,225	43.44
1950 .....	375,247	12,713,753	33.88	1955 .....	489,240	22,157,837	45.29

1. Based on shipments of all grades; the value per M should be interpreted as the average value of pressed, common and other varieties together and not the value of any one particular type of brick.

TABLE 5. Producers' Sales of Clay Building Brick,<sup>1</sup> by Provinces, 1954 and 1955

Province	1954		1955	
	M	\$	M	\$
Newfoundland .....	865	33,042	941	49,338
Nova Scotia .....	12,905	505,542	12,140	487,658
New Brunswick .....	10,658	392,142	13,000	485,000
Quebec .....	162,038	6,227,660	165,810	6,465,911
Ontario .....	223,340	11,553,407	237,580	12,343,940
Manitoba .....	5,944	219,524	6,490	251,250
Saskatchewan .....	11,986	399,635	12,600	448,256
Alberta .....	33,326	1,077,947	31,983	1,152,525
British Columbia .....	6,676	343,326	8,696	473,959
<b>Canada</b> .....	<b>467,738</b>	<b>20,752,225</b>	<b>489,240</b>	<b>22,157,837</b>
Average value per M .....	—	43.44	—	45.29

1. Includes fancy and sewer brick.

TABLE 6. Producers' Sales of Drain Tile, Sewer Pipe and Flue Linings made from Domestic Clays, 1946-1955

Year	Value	Year	Value
	\$		\$
1946 .....	2,032,403	1951 .....	4,426,186
1947 .....	2,730,312	1952 .....	4,919,260
1948 .....	3,449,294	1953 .....	5,838,362
1949 .....	3,415,278	1954 .....	6,212,425
1950 .....	4,259,992	1955 .....	7,107,946

TABLE 7. Producers' Sales of Drain Tile, Sewer Pipe and Flue Linings made from Domestic Clays, by Provinces, 1954 and 1955

Province	1954	1955
	\$	\$
Newfoundland .....	—	—
Nova Scotia .....	339,757	465,046
New Brunswick .....	24,927	56,340
Quebec .....	460,917	442,236
Ontario .....	3,814,037	4,212,130
Saskatchewan .....	13,720	18,058
Alberta .....	731,368	1,014,868
British Columbia .....	827,699	899,268
<b>Canada</b> .....	<b>6,212,425</b>	<b>7,107,946</b>

TABLE 8. Producers' Sales of Fireclay, Fireclay Blocks and Shapes and Firebrick made from Domestic Clays, 1946-1955

Year	Fireclay		Fireclay blocks and shapes	Firebrick	
	Short tons	\$	\$	M	\$
1946 .....	4,696	30,607	222,430	3,367	205,849
1947 .....	3,960	33,907	274,783	3,780	250,668
1948 .....	10,206	59,317	318,810	4,111	311,517
1949 .....	5,204	46,377	311,104	1,127	87,186
1950 .....	8,840	55,449	340,137	1,631	132,052
1951 .....	17,920	86,190	374,707	2,880	245,722
1952 .....	16,118	85,437	395,017	3,198	280,146
1953 .....	10,102	62,162	412,467	2,671	247,634
1954 .....	10,770	61,750	316,061	2,416	230,907
1955 .....	11,669	72,815	418,554	4,055	402,263

Note. Firebrick and fireclay blocks and shapes are also made from imported clays; see Table 26.

TABLE 9. Producers' Sales of Fireclay Blocks and Shapes and Firebrick made from Domestic Clays, by Provinces, 1955

Province	Fireclay		Fireclay blocks and shapes	Firebrick	
	Short tons	\$	\$	M	\$
Nova Scotia .....	1,509	7,287	—	—	—
Saskatchewan .....	1,175	18,771	340,488	—	—
British Columbia .....	8,985	46,757	78,066	4,055	402,263
Canada .....	11,669	72,815	418,554	4,055	402,263

TABLE 10. Producers' Sales of Pottery made from Domestic Clays, 1946-1955

Year	Value	Year	Value
	\$		\$
1946 .....	1,195,478	1951 .....	374,016
1947 .....	853,440	1952 .....	540,862
1948 .....	921,970	1953 .....	569,069
1949 .....	501,241	1954 .....	534,220
1950 .....	612,669	1955 .....	603,865

TABLE 11. Producers' Sales of Pottery made from Domestic Clays, by Provinces, 1954 and 1955

Province	1954	1955
	\$	\$
Nova Scotia.....	3,500	4,500
New Brunswick.....	118,115	107,685
Quebec.....	2,500	—
Ontario.....	294,028	363,122
Alberta.....	83,983	90,523
British Columbia.....	32,094	38,035
<b>Canada.....</b>	<b>534,220</b>	<b>603,865</b>

TABLE 12. Producers' Sales of Structural Tile made from Domestic Clays, 1946-1955

Year	Hollow blocks <sup>1</sup>		Roofing tile		Floor tile (quarries) <sup>2</sup>	
	Short tons	\$	Number	\$	Sq. ft.	\$
1946.....	129,694	1,453,549	—	97	205,950	50,699
1947.....	149,733	1,950,098	—	—	204,977	56,845
1948.....	166,195	2,364,949	—	—	240,101	89,719
1949.....	166,090	2,482,224	—	—	178,884	70,969
1950.....	178,372	2,872,885	32,590	1,855	254,208	94,388
1951.....	195,184	3,168,239	7,000	400	249,067	90,897
1952.....	184,981	3,185,775	—	—	227,542	98,285
1953.....	209,879	3,582,625	—	—	182,466	75,982
1954.....	185,069	3,432,799	10,000	350	169,326	70,091
1955.....	199,982	3,647,690	—	—	229,098	92,854

1. Includes fireproofing and load-bearing tile.
2. Includes value of glazed floor and wall tile.

TABLE 13. Producers' Sales of Structural Tile made from Domestic Clays, by Provinces, 1955

Province	Hollow blocks <sup>1</sup>		Floor tile (quarries) <sup>2</sup>	
	Short tons	\$	Sq. ft.	\$
Nova Scotia.....	15,804	232,477	—	—
New Brunswick.....	3,707	55,000	—	—
Quebec.....	69,830	1,501,153	—	—
Ontario.....	61,567	1,133,473	229,098	92,854
Manitoba.....	—	—	—	—
Saskatchewan.....	5,961	102,048	—	—
Alberta.....	37,249	509,079	—	—
British Columbia.....	5,864	114,460	—	—
<b>Canada.....</b>	<b>199,982</b>	<b>3,647,690</b>	<b>229,098</b>	<b>92,854</b>

1. Includes fireproofing and load-bearing tile.
2. Includes value of glazed floor and wall tile.

TABLE 14. Producers' Sales of Bentonite and Kaolin, by Provinces, 1946-1955

Year	Bentonite <sup>2</sup>				Kaolin <sup>1</sup>	
	Manitoba	Alberta	British Columbia	Canada	Tons	\$
	\$	\$	\$	\$		
1946 .....	207,572	4,253	—	211,825	821	5,775
1947 .....	253,786	4,541	—	258,327	—	—
1948 .....	336,003	3,710	—	339,713	—	—
1949 .....	360,591	7,277	—	367,868	—	—
1950 .....	533,390	1,483	—	534,873	—	—
1951 .....	496,403	3,153	—	499,556	—	—
1952 .....	385,448	3,094	—	388,542	—	—
1953 .....						
1954 .....			Not available			
1955 .....			Not available			
			Not available			

1. All from Quebec.

2. Quantity not available for publication.

TABLE 15. Consumption of Bentonite in Canada, 1953 and 1954

	1953	1954
(a) By industries:	tons	
Steel foundries .....	4,163	3,434
Cement products .....	78	78
Miscellaneous non-metallic mineral products .....	836	1,074
Soaps and cleaning preparations .....	743	586
Pulp and paper .....	244	204
Petroleum refining .....	7,090	5,538
Vegetable oil mills .....	313	357
Oil well drilling <sup>1</sup> .....	19,578	11,775
Polishes and dressings .....	8	4
Asbestos products .....	16	—
Miscellaneous chemicals .....	1,635	116
Iron castings .....	463	612
Gypsum products .....	—	66
<b>Total</b> .....	<b>35,167</b>	<b>23,844</b>
(b) By provinces:		
Newfoundland and Nova Scotia .....	—	—
New Brunswick .....	102	25
Quebec .....	2,427	2,564
Ontario .....	9,580	7,251
Manitoba .....	1,836	998
Saskatchewan .....	832	730
Alberta .....	20,115	12,064
British Columbia .....	275	212
<b>Canada</b> .....	<b>35,167</b>	<b>23,844</b>

1. Conjectural.

TABLE 16. Available Data on the Consumption of Fuller's Earth in Canada, 1953 and 1954

	1953	1954
(a) By industries:	tons	
Soaps and cleaning preparations .....	290	289
Petroleum refining .....	13,996	1,443
Slaughtering and meat-packing .....	1,479	not listed
Vegetable oil mills .....	14	—
Starch and glucose .....	293	—
<b>Total</b> .....	<b>15,982</b>	<b>1,732</b>
(b) By provinces:		
Quebec .....	10,537	167
Ontario .....	4,978	1,515
Manitoba .....	266	—
Saskatchewan .....	37	14
Alberta .....	151	18
British Columbia .....	13	18
<b>Canada</b> .....	<b>15,982</b>	<b>1,732</b>

TABLE 17. Available Data on the Consumption of China-clay (Kaolin) in Canada, 1953 and 1954

	1953	1954
	Tons	
(a) By industries:		
Paints .....	1,520	1,520
Toilet preparations .....	20	26
Miscellaneous chemical products .....	2,179	956
Imported clay products .....	7,695	8,545
Linoleum .....	269	2,038
Wall paper .....	3,627	see paper goods
Rubber goods .....	10,982	81,098
Pulp and paper .....	60,358	57,085
Miscellaneous non-metallic minerals .....	126	22
Polishes and dressings .....	35	76
Adhesives .....	777	2,161
Electrical apparatus .....	2,192	2,629
Cement products .....	7	3
Tanneries .....	34	142
Enamelling .....	—	96
Paper goods .....	—	2,867
<b>Total .....</b>	<b>89,821</b>	<b>86,364</b>
(b) By provinces:		
Newfoundland and Nova Scotia .....	—	165
New Brunswick .....	668	756
Quebec .....	36,669	33,285
Ontario .....	47,928	48,820
Manitoba .....	1,120	200
Saskatchewan .....	—	149
Alberta .....	1,871	725
British Columbia .....	1,565	2,264
<b>Canada .....</b>	<b>89,821</b>	<b>86,364</b>

TABLE 18. Clays and Earths<sup>1</sup> Used in the Rubber Goods Industry, 1951-1955

Year	Tons	Value
		\$
1951 .....	12,222	376,643
1952 .....	13,502	411,094
1953 .....	14,520	449,909
1954 .....	13,804	442,694
1955 .....	14,529	449,249

1. Includes china-clay, kaolin, and other clays and earths.

TABLE 19. Firebrick, Fireclay and Cupola Blocks Used in the Manufacture of Iron and Steel and Their Products, 1951-1955

Year	Cost at works
	\$
1951 .....	5,920,000
1952 .....	6,123,000
1953 .....	6,949,000
1954 .....	6,163,000
1955 .....	8,008,000

TABLE 20 Filtering Earths Used in the Sugar Refining Industry, 1951-1955

Year	Sugar refineries	
	Pounds	\$
1951 .....	4,644,612	169,743
1952 .....	4,040,175	132,796
1953 .....	3,887,955	128,658
1954 .....	3,742,900	126,414
1955 .....	4,188,644	158,960

TABLE 21. Imports and Exports of Clay and Clay Products, 1954 and 1955

Item	1954		1955		
	Quantity	\$	Quantity	\$	
Imports					
China-clay .....	cwt.	1, 870, 919	1, 527, 075	2, 383, 445	1, 902, 470
Fireclay .....	"	1, 339, 350	396, 336	1, 374, 697	421, 205
Pipe clay .....	"	111, 999	14, 836	70, 880	12, 277
Clays, all other, n.o.p. ....	—	—	431, 534	—	466, 709
Zirconium silicate .....	—	—	135, 926	—	116, 366
Zirconium oxide .....	—	—	9, 970	—	19, 234
Saggars .....	—	—	37, 417	—	42, 382
Activated clay, for the refining of oils .....	—	—	835, 433	—	1, 247, 355
Grog for refractory materials .....	tons	7, 189	179, 070	8, 796	251, 829
Brick, building .....	"	102, 628	1, 949, 872	111, 094	2, 284, 116
Brick, fire, other, valued at not less than \$100 per M, rectangular shaped, the dimensions of each not to exceed 125 cubic inches, for use exclusively in the construction or repair of a furnace, kiln, etc. ....	—	—	810, 204	—	1, 008, 504
Brick, fire, n.o.p., for use exclusively in the construction or repair of a furnace, kiln, or other equipment of a manufacturing establishment (not made in Canada) .....	—	—	2, 745, 364	—	3, 792, 718
Brick, fire, n.o.p. ....	—	—	2, 432, 383	—	3, 149, 240
Brick, paving .....	tons	1, 692	26, 988	3, 732	61, 349
Building blocks, building tile .....	—	—	853, 932	—	1, 231, 229
Drain pipes, sewer pipes and earthenware fittings, chimney linings or vents, chimney tops or inverted blocks, glazed or unglazed, n.o.p. ....	—	—	533, 220	—	602, 021
Drain tiles, not glazed .....	—	—	443	—	308
Tiles or blocks of earthenware or stone, prepared for mosaic flooring .....	—	—	305, 700	—	359, 059
Earthenware tiles for roofing .....	—	—	34, 470	—	12, 004
Tiles, earthenware, n.o.p. ....	—	—	1, 298, 526	—	1, 680, 680
Chemical stoneware .....	—	—	138, 073	—	173, 015
Hand forms of porcelain, for the manufacture of rubber gloves .....	—	—	16, 807	—	10, 824
China and porcelain ware, n.o.p. ....	—	—	92, 973	—	86, 567
Demijohns, churns, or crocks, n.o.p. ....	—	—	22, 774	—	40, 963
Tableware of china, porcelain .....	—	—	12, 857, 479	—	13, 304, 929
Stoneware, Rockingham ware and earthenware, n.o.p. ....	—	—	1, 771, 751	—	1, 933, 108
Artificial teeth, not mounted .....	—	—	1, 141, 604	—	1, 142, 597
Baths, bathtubs, etc., n.o.p. ....	—	—	3, 171, 180	—	4, 337, 542
Crucibles, n.o.p., and covers .....	—	—	88, 516	—	106, 426
Insulators, electric porcelain, and parts .....	—	—	502, 471	—	475, 025
Manufactures of clay, n.o.p. ....	—	—	622, 391	—	719, 147
<b>Total</b> .....	—	—	<b>34, 984, 718</b>	—	<b>40, 991, 198</b>
Exports					
Building brick .....	M	4, 219	221, 529	4, 997	283, 764
Bricks, fire .....	—	—	1, 387, 700	—	1, 712, 579
Clay, manufactures of, n.o.p. ....	—	—	64, 601	—	181, 343
Clays, unmanufactured .....	cwt.	112, 742	34, 866	147, 446	94, 685
Earthenware .....	—	—	221, 194	—	244, 460
Porcelain insulators .....	—	—	293, 144	—	136, 864
<b>Total</b> .....	—	—	<b>2, 223, 034</b>	—	<b>2, 653, 695</b>

Note. "n.o.p." means "Not otherwise provided for" in the statistical classification.

TABLE 22. Employees and Their Earnings in the Domestic Clay Products Industry, 1951-1955

Year	Number of employees					Number of man-hours worked (all employees)	Earnings		
	Administration and office		Workmen		Total		Administration and office	Workmen	Total
	Male	Female	Male	Female					
						\$	\$	\$	
1951 .....	194	34	3,454	55	3,737	9,094,187	777,262	8,954,395	9,731,657
1952 .....	201	41	3,241	85	3,568	8,399,521	845,100	8,967,114	9,812,214
1953 .....	206	36	3,382	95	3,719	9,022,951	966,902	9,866,726	10,833,628
1954 .....	214	42	3,593	80	3,929	9,209,403	1,044,295	11,068,195	12,112,490
1955 .....	258	46	3,743	71	4,118	9,612,125	1,220,077	11,630,408	12,850,485

TABLE 23. Workmen in the Domestic Clay Products Industry, by Months, 1954 and 1955

Month	1954				1955			
	Pit	Plant		Total	Pit	Plant		Total
	Male	Male	Female		Male	Male	Female	
	Number							
January .....	95	2,896	82	3,073	113	2,991	70	3,174
February .....	89	2,937	84	3,110	106	2,888	71	3,065
March .....	93	2,983	79	3,155	110	3,004	71	3,185
April .....	103	3,146	80	3,329	125	3,305	71	3,501
May .....	133	3,578	94	3,805	147	3,755	79	3,981
June .....	146	3,766	94	4,006	155	3,900	82	4,137
July .....	151	3,882	98	4,131	161	4,018	88	4,267
August .....	149	3,934	80	4,163	166	4,080	61	4,307
September .....	141	3,861	78	4,080	156	3,991	66	4,213
October .....	136	3,687	75	3,898	140	3,842	59	4,041
November .....	108	3,477	72	3,657	128	3,704	62	3,894
December .....	101	3,308	40	3,449	121	3,495	62	3,678
<b>Average .....</b>	<b>130</b>	<b>3,463</b>	<b>80</b>	<b>3,673</b>	<b>147</b>	<b>3,596</b>	<b>71</b>	<b>3,814</b>
Number of man-hours worked .....	8,579,990				8,865,196			

## List of Firms in the Domestic Clay Products Industry, 1955

(a) Clay used (b) Shale used (c) Idle, 1955 (d) Produce bentonite

Name of firm	Head office address	Location of plant
<b>Newfoundland:</b>		
Pelly, C. & M., Limited (b) .....	Milton .....	Milton
<b>Nova Scotia:</b>		
Foley Pottery Ltd. ....	Saint John, New Brunswick .....	Musquodoboit
Harriss & Harriss .....	5 Byng Ave., Sydney .....	Sydney
Shaw, L.E., Limited (a) .....	Box 996, Halifax .....	Elmsdale and New Glasgow
Standard Clay Products Limited (a) (b) .....	St. Johns, Quebec .....	New Glasgow
<b>New Brunswick:</b>		
Shaw, L.E., Limited (a) .....	Box 996, Halifax, Nova Scotia .....	Chipman
<b>Quebec:</b>		
Brique St. Jean Ltée (a) .....	Deschailions .....	Deschailions
Briqueterie Mistassini Inc. (c) .....	St-Michel .....	St-Michel
Castonguay, H. (a) .....	Deschailions .....	Deschailions
Citadelle Brique Ltée (b) .....	2140 Blvd. Ste-Anne .....	Beauport E. et Boischatel
Demers, Bordeleau (a) .....	Deschailions .....	Deschailions
East Angus Brick & Tile Reg'd. (a) (b) .....	Box 553, East Angus .....	East Angus
Isherwood, J. ....	South Bolton .....	South Bolton
Laprairie Co. Inc., The (a) (b) .....	906 University Tower Bldg., Montreal ...	Laprairie and Delson Junction
Montreal Terra Cotta Limited (a) .....	901 Dominion Square Bldg., Montreal ...	Deschailions and Lakeside
Roy, Philippe (a) .....	St. George West .....	St. George West
St. Lawrence Brick Co., Limited (b) .....	1010 Ste. Catherine St. W., Montreal .....	Laprairie
St-Tite Briqueterie Ltée (c) .....	St-Tite .....	St-Tite
Scott Brique Ltée, La (a) .....	Scott Junction .....	Scott Junction
Standard Clay Products Limited (a) .....	Box 189, St. Johns .....	St. Johns
Victoria Brique Limitée (a) .....	Casier Postalio, Victoriaville .....	Victoriaville
<b>Ontario:</b>		
Bannerman, M. (a) .....	Greenock .....	Greenock
Barnes, Wm. R., Co. Ltd. ....	Waterdown .....	Waterdown
Bartlett Brick & Tile Co. (a) .....	208 Norfolk St., Stratford .....	Stratford
Bauman, N. (a) .....	Wallenstein .....	Waterloo Co.
Beaverton Brick & Tile (a) .....	Beaverton .....	Beaverton
Bracebridge Brick Works (a) .....	Bracebridge .....	Bracebridge
Brampton Brick Limited (b) .....	147 University Ave., Toronto .....	Brampton
Brantford Clay Products Ltd. (a) .....	R.R. 3, Brantford .....	Brantford
Broadwell, B., & Son (a) .....	Box 537, Kingsville .....	Kingsville
Canadian Pressed Brick Co. Ltd., (The) (b) .....	Kenilworth Drive, Hamilton .....	Hamilton
Central Tile Brick Corporation Ltd. (a) .....	Tilbury .....	Belle River and Tilbury
Construction Materials Limited (b) .....	320 Horner Ave., Toronto 14 .....	New Toronto
Cooksville Company Limited, (The) (b) .....	1055 Yonge St., Toronto .....	Cooksville
Cornhill, James, & Sons Ltd. (a) .....	Box 36, Chatham .....	Harwich Twp.
Coultis, Geo., & Son (b) .....	Thedford .....	Bosanquet Twp.
Crang-Booth Limited (a) .....	320 Horner Ave., Toronto 14 .....	North York
Curtin, F., Estate (a) .....	R. R. 4, Lindsay .....	Lindsay
Curtis Bros. (a) .....	Box 603, Peterborough .....	Otonabee Twp.
Dellers Tile Limited (a) .....	Brownsville .....	Brownsville

## List of Firms in the Domestic Clay Products Industry, 1955 - Continued

(a) Clay used (b) Shale used (c) Idle, 1955 (d) Produce bentonite

Name of firm	Head office address	Location of plant
<b>Ontario - concluded:</b>		
Dochart Brick & Tile Co. Ltd. (a)	Box 397, Arnprior	Arnprior
Dresden Tile Yard Ltd. (a)	R. R. 2, Dresden	Dresden
Elliott's Brickyard (a)	Box 427, Sault St. Marie	Korah Twp.
Elliott, Wm. J. (a)	Glenannan	Glenannan
Fletcher Brick & Tile (a)	Fletcher	Tilbury E. Twp.
Frid Bros. Limited (a)	690 Main St. W., Hamilton	Hamilton
Grimsby Brick & Tile Limited (a)	Box 448, Grimsby	Clinton Twp.
Hamilton Pressed Brick Co. (b)	215 Kensington Ave. S., Hamilton	Wentworth Co.
Henderson, J. (a)	Listowel	Grey Twp.
Hill, A.W., & Sons (a)	Coatsworth	Tilbury E. Twp.
Hodder's Tile Yard (c)	Dutton	Dutton
Howlett, Fred W., & Sons (a)	Box 849, Petrolia	Petrolia
Huntsville Brick Works (a)	Box 219, Huntsville	Huntsville
Interprovincial Brick Company Limited (b)	1055 Yonge St., Toronto	Cheltenham and Milton
Janes, D. A. (a)	Mt. Brydges	Caradoc Twp.
Kitchener Brick Co. Ltd. (a) (b)	60 Heiman St., Kitchener	Waterloo Twp.
Lindsay, Earl, & Sons (a)	R. R. 2, Wallaceburg	Wallaceburg
Martin, Amos (a)	R. R. 3, Wallenstein	Peel Twp.
McFarlane, W.J. (a)	Forest	Forest
McFarren, F. B. (b)	120 Wellington St. W., Toronto	Streetsville
Milton Brick Co. Limited (b)	170 Bloor St. W., Toronto	Milton
Napanee Brick & Tile Works (a)	R.R. 3, Napanee	Napanee
Natco Clay Products Limited (b)	57 Bloor St. W., Toronto	Aldershot
National Sewer Pipe Ltd. (a) (b)	320 Bay St., Toronto	Hamilton and Swansea
Norwich Brick & Tile Works (a)	R. R. 2, Norwich	Norwich
Ontario Reformatory (a) (b)	Box 75, New Toronto	Mimico
Ottawa Brick & Terra Cotta Co. Ltd., The (a) (b)	Billings Bridge	Billings Bridge
Paisley Brick & Tile Yard (a)	Box 220, Paisley	Paisley
Paxton Brick & Coal Co. Limited (b)	70 Herrick Ave., St. Catharines	St. Catharines
Phippen Brick Co. (a)	390 Dawes Rd., Toronto	East York
Rydall, J. A., Brick & Tile (a)	R. R. 2, London	London
St. Clements Tile Yard (a)	St. Clements	St. Clements
Singer, H.H., (Owen Sound Brick Co.) (a)	Owen Sound	Owen Sound
Sproat & Sproat (c)	R. R. 4, Seaforth	Tuckersmith Twp.
Superior Brick & Tile Co. Limited (a)	121 South May St., Fort William	Paipoonge Twp.
Thomson, Ralph (a)	R. R. 4, Atwood	Grey Twp.
Toronto Brick Co. Ltd. (a) (b)	425 Bayview Ave., Toronto	Todmorden and Toronto
Wallace, R., & Son (a)	238 First Ave. E., North Bay	Widdifield Twp.
Wilkesport Tile & Brick Company (a)	Wilkesport	Wilkesport
Wright, F.M., & Son (a)	Comber	Tilbury W. Twp.
<b>Manitoba:</b>		
Alsip Brick, Tile & Lumber Company Limited (a)	508 Portage Ave., Winnipeg	Portage la Prairie, Whitemouth and Winnipeg
Pembina Mountain Clay Ltd. (d)	945 Logan Ave., Winnipeg	Morden
Swan River Clay Products Limited (a)	Swan River	Swan River

List of Firms in the Domestic Clay Products Industry, 1955 - Concluded

(a) Clay used (b) Shale used (c) Idle, 1955 (d) Produce bentonite

Name of firm	Head office address	Location of plant
<b>Saskatchewan:</b>		
Aggregates & Construction Products Ltd. (a)	255 Third Ave. S., Saskatoon	Regina
Bruno Clay Works Limited (a)	508 Portage Ave., Winnipeg, Manitoba	Bruno
Dominion Fire Brick & Clay Products (1954) Ltd., The (a)	Box 99, Moose Jaw	Claybank
Saskatchewan Clay Products Corporation (a)	Estevan	Estevan
<b>Alberta:</b>		
Alberta Clay Products Co. Ltd. (a)	Box 90, Medicine Hat	Medicine Hat
Alexandra Brick & Tile Co. (Canada) Ltd. (a)	306 Qu'Appelle Bldg., Edmonton	Cannell
Grande Prairie Brick Yard (a)	Grande Prairie	Grande Prairie
Kidd, Gordon L. (d)	Box 230, Drumheller	Drumheller
Little, J.B., & Sons Ltd. (a)	9120-100th Ave., Edmonton	Riverdale
Medicine Hat Brick & Tile Co. Ltd. (a)	Box 410, Medicine Hat	Medicine Hat
Perry Brick & Tile Co. Ltd. (a) (b)	Redcliff	Redcliff
Redcliff Premier Brick Co. Ltd. (a)	Redcliff	Redcliff
Redcliff Pressed Brick Co. Ltd. (a)	Redcliff	Redcliff
<b>British Columbia:</b>		
Baker Brick & Tile Company Limited (a)	Box 1270, Victoria	Victoria
Bazan Bay Brick & Tile Co. Ltd. (a)	1051 Main St., Vancouver	Saanichton
Bear Creek Brick Co. (a)	2521 Maple St., Vancouver	Surrey
Clayburn Company Limited (a) (b)	850 West Hastings St., Vancouver	Kilgard and Abbotsford
Fairey & Company Limited (a)	661 Taylor St., Vancouver	Vancouver
Mainland Clay Products Limited (a)	8699 Angus Drive, Vancouver	Barnett
Port Haney Brick Co. Ltd., The (a)	Haney	Haney
Richmond, Geo. W., Co. (a)	2890-12th Ave. E., Vancouver	Kilgard

Producers of Stoneware and Pottery, 1955

Name of firm	Head office address	Location of plant
<b>Nova Scotia:</b>		
Lorenzen, E. (a)	Lantz	Lantz
<b>New Brunswick:</b>		
Canuck Pottery (a)	Box 123, Saint John	Little River
The Dykelands (a)	Clifton Royal	Moss Glen
<b>Ontario:</b>		
Foster Pottery Company Ltd. (a)	Frid St., Hamilton	Hamilton
Royal Canadian Art Pottery	Hamilton	Hamilton
Zavi, Jarko (a)	Cobourg	Cobourg
<b>Alberta:</b>		
Alberta Potteries Limited (a)	Box 590, Medicine Hat	Redcliff
Hycroft China Ltd. (a)	Box 530, Medicine Hat	Medicine Hat
<b>British Columbia:</b>		
B.C. Clay Products (a)	3439 Euclid Ave., Vancouver	Bear Creek

## II. Production from Imported Clays, 1955

This industry covers the operations of Canadian plants which were occupied chiefly in making ceramic products from imported clays. Products made in these plants during 1955 included high tension insulators, vitreous china, sanitaryware, china dinnerware, firebrick, sewer pipe, floor and wall tile, refractory cements, electrical porcelains, etc.

Thirty-seven plants reported in this group in 1955 and their output was valued at \$18,394,390 as against last year's total of \$15,985,555 and the 1953 total of \$14,871,948. The total number of employees was 2,105 and payments for salaries and wages amounted to \$6,813,657. Fuel and electricity cost \$916,851 and materials for use in manufacturing processes cost \$4,911,302.

NOTE: Figures for value added by manufacture, shown in Table 24, prior to 1952 were obtained by subtracting the cost of materials used, including fuel and electricity, from the value of production. In 1952 the gross value of production was replaced by value of factory shipments, f.o.b. plant. As no information on inventory change is available for 1952 and 1953, value added figures for these years were obtained by subtracting from the value of shipments the cost of materials, fuel and electricity. In 1954 and 1955 information on the value of year-end inventory holdings at plant and plant warehouses was collected as part of the annual Census of Industry and information thus made available was taken into account in calculating the value figures for 1954 and 1955.

TABLE 24. Principal Statistics of the Imported Clay Products Industry, Significant Years 1929-1955 and by Provinces, 1954 and 1955

Year and province	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity at works	Cost at plant of materials used	Value added by manufacture <sup>1</sup>	Gross selling value of products <sup>1</sup>
	No.	No.	\$	\$	\$	\$	\$
1929 .....	15	872	1,112,881	220,910	992,150	2,159,978	3,373,038
1933 .....	18	536	471,742	111,144	288,379	805,529	1,205,052
1937 .....	19	1,218	1,265,913	286,499	971,497	2,341,185	3,599,181
1939 .....	20	1,097	1,150,712	237,718	792,767	1,941,494	2,971,979
1942 .....	24	1,396	2,050,238	386,969	1,170,938	3,839,321	5,397,228
1946 .....	32	1,913	2,870,543	440,771	1,674,391	4,958,209	7,073,371
1949 .....	40	2,356	5,332,757	746,597	3,526,190	10,184,375	14,457,162
1951 .....	35	2,526	6,372,732	870,710	4,382,230	11,695,364	16,948,304
1952 .....	34	2,432	6,300,265	835,362	4,050,520	10,791,714	15,677,596
1953 .....	37	2,254	6,280,614	844,345	3,943,943	10,083,660	14,871,948
1954							
Quebec .....	11	733	2,245,135	328,587	1,308,108	4,240,019	5,942,388
Ontario .....	20	1,126	3,636,368	495,251	2,609,672	6,142,081	9,277,718
Alberta .....	3	185	414,171	25,626	174,204	544,629	765,449
British Columbia .....	2						
Canada .....	36	2,044	6,295,674	847,464	4,091,984	10,926,729	15,985,555
1955							
Quebec .....	11	744	2,457,615	358,418	1,562,799	5,064,211	7,006,416
Ontario .....	22	1,199	4,114,203	541,790	3,293,216	7,238,815	10,980,313
Alberta .....	2	162	241,839	16,643	55,287	331,221	407,661
British Columbia .....	2						
Canada .....	37	2,105	6,813,657	916,851	4,911,302	12,634,247	18,394,390

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.

1. See footnote to Text.

TABLE 25. Inventories<sup>1</sup> in the Imported Clay Products Industry, 1955

	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total
	\$	\$	\$	\$
Opening:				
Quebec .....	397,542	136,637	311,782	845,961
Ontario .....	871,441	201,228	544,382	1,617,051
Alberta .....	31,094	10,001	53,822	94,917
British Columbia .....				
Canada .....	1,300,077	347,866	909,986	2,557,929
Closing:				
Quebec .....	445,413	149,768	290,794	885,975
Ontario .....	852,807	246,160	637,890	1,736,857
Alberta .....	28,931	11,273	49,312	89,516
British Columbia .....				
Canada .....	1,327,151	407,201	977,996	2,712,348

1. (a) Book value of all manufacturing inventories owned and held at plant and plant warehouses.

(b) Beginning with 1954, information on the value of year-end inventory holdings at plant and plant warehouses is being collected as part of the annual Census of Industry. These data were formerly collected by a separate survey. The summarized results for the Imported Clay Products Industry for the year under review are shown in the above table.

(c) The opening inventory for 1955 does not necessarily agree with the closing inventory for 1954, because of the addition of new plants, the transfer of plants to other industries and plants going out of business, etc. However, the value added figures for the previous year have not been recalculated to allow for the changes mentioned above.

TABLE 26. Products Made in the Imported Clay Products Industry, 1954 and 1955

Product	Value of factory shipments	
	1954	1955
	\$	\$
Firebrick and stove linings:		
Rigid .....	785,905	515,744
Plastic .....	504,277	606,390
High-temperature cements .....	291,260	413,331
Electrical porcelains (high-tension insulators and other electrical porcelains) .....	4,767,527	5,657,545
Pottery - artware .....	275,128	290,011
Pottery, other (sanitaryware, tableware, stoneware, etc.) .....	6,252,824	6,449,021
All other products <sup>1</sup> .....	3,108,634	4,462,348
Total .....	15,985,555	18,394,390

1. Includes sewer pipe, floor tile, wall tile, flue lining, etc.

TABLE 27. Materials Used in the Imported Clay Products Industry, 1954 and 1955

Material	1954		1955	
	Short tons	Total cost at works	Short tons	Total cost at works
		\$		\$
Imported clays:				
Ball clay .....	7, 135	207, 875	9, 612	284, 773
China-clay .....	8, 345	255, 618	8, 085	257, 687
Fireclay .....	32, 182	340, 981	33, 562	347, 813
Saggar clay .....	631	17, 246	643	17, 549
Other imported clays .....	1, 338	32, 269	1, 306	28, 233
Canadian clays:				
China-clay .....	200	2, 000	600	3, 520
Fireclay .....	—	—	—	824
Other Canadian clays .....	177	1, 393	654	2, 938
Firebrick, ground or broken (grog), including scrap brick .....	—	215, 610	—	345, 251
Feldspar .....	5, 291	179, 222	5, 839	192, 053
Nepheline syenite .....	2, 063	62, 065	1, 520	53, 517
Silica sand and ground quartz .....	5, 995	105, 713	6, 608	106, 825
Sodium silicate .....	238	11, 826	979	33, 040
Talc .....	2, 345	98, 631	3, 302	129, 883
Other glazing materials .....	—	297, 431	—	326, 156
Insulator hardware .....	—	980, 197	—	1, 199, 097
Shipping containers and packing materials .....	—	622, 325	—	733, 701
All other materials and process supplies .....	—	661, 582	—	848, 442
<b>Total .....</b>	<b>—</b>	<b>4, 091, 984</b>	<b>—</b>	<b>4, 911, 302</b>

TABLE 28. Principal Statistics of the Imported Clay Products Industry, Classified According to Type of Ownership, 1954 and 1955

Type	Estab-lish-ments	Employees	Salaries and wages	Cost at plant of materials used	Selling value of factory shipments
	No.	No.	\$	\$	\$
<b>1954</b>					
Individual ownership .....	5	17	20, 177	8, 066	40, 808
Partnerships .....	3	25	53, 741	43, 621	138, 721
Incorporated companies .....	27	2, 002	6, 221, 756	4, 040, 297	15, 806, 026
Co-operatives .....	1				
<b>Total .....</b>	<b>36</b>	<b>2, 044</b>	<b>6, 295, 674</b>	<b>4, 091, 984</b>	<b>15, 985, 555</b>
<b>1955</b>					
Individual ownership .....	5	19	28, 653	18, 334	80, 313
Partnerships .....	3	22	59, 798	60, 341	159, 851
Incorporated companies .....	28	2, 064	6, 725, 206	4, 832, 627	18, 154, 226
Co-operatives .....	1				
<b>Total .....</b>	<b>37</b>	<b>2, 105</b>	<b>6, 813, 657</b>	<b>4, 911, 302</b>	<b>18, 394, 390</b>

**TABLE 29. Principal Statistics of the Imported Clay Products Industry, Grouped According to Size of Establishment, 1954 and 1955**

Establishments having a production of	Estab-lish-ments	Employees	Salaries and wages	Cost at plant of materials used	Selling value of factory shipments
	No.	No.	\$	\$	\$
<b>1954</b>					
Under \$25,000 .....	7	23	32, 293	12, 087	61, 870
\$25,000 to \$49,999 .....	7	102	196, 963	107, 597	436, 158
\$50,000 to \$99,999 .....	2				
\$100,000 to \$199,999 .....	5	146	370, 085	196, 798	784, 523
\$200,000 to \$499,999 .....	6	375	962, 434	420, 289	1, 885, 887
\$500,000 to \$999,999 .....	5	499	1, 379, 210	1, 205, 155	3, 974, 356
\$1,000,000 to \$4,999,999 .....	4	899	3, 354, 689	2, 150, 058	8, 842, 761
<b>Total .....</b>	<b>36</b>	<b>2, 044</b>	<b>6, 295, 674</b>	<b>4, 091, 984</b>	<b>15, 985, 555</b>
<b>1955</b>					
Under \$25,000 .....	7	27	45, 349	18, 385	80, 253
\$25,000 to \$49,999 .....	7	76	163, 874	63, 575	363, 501
\$50,000 to \$99,999 .....	2				
\$100,000 to \$199,999 .....	5	128	327, 406	208, 518	683, 942
\$200,000 to \$499,999 .....	7	512	1, 272, 228	816, 015	3, 649, 241
\$500,000 to \$999,999 .....	2				
\$1,000,000 to \$4,999,999 .....	7	1, 362	5, 004, 800	3, 804, 809	13, 617, 453
<b>Total .....</b>	<b>37</b>	<b>2, 105</b>	<b>6, 813, 657</b>	<b>4, 911, 302</b>	<b>18, 394, 390</b>

**TABLE 30. Capital and Repair Expenditures in the Imported Clay Products Industry, 1951-1955**

Year	Capital expenditures		Sub-total	Repair and maintenance expenditures		Sub-total	Total capital and repair expenditures
	Construction	Machinery and equipment		Construction	Machinery and equipment		
\$'000							
1951 .....	175	232	407	77	358	435	842
1952 .....	197	371	568	114	233	347	915
1953 .....	168	217	385	161	328	489	874
1954 .....	2	2	242	2	2	337	579
1955 <sup>1</sup> .....	2	2	252	120	264	384	636

1. Preliminary.
2. Included in sub-totals.

**TABLE 31. Employees and Their Earnings in the Imported Clay Products Industry, by Provinces, 1954 and 1955**

Province	Number of employees					Earnings		
	Supervisory and office		Production workers		Total	Supervisory and office	Production workers	Total
	Male	Female	Male	Female				
<b>1954</b>								
Quebec .....	69	30	465	169	733	371, 791	1, 873, 344	2, 245, 135
Ontario .....	166	50	694	216	1, 126	921, 344	2, 715, 024	3, 636, 368
Alberta .....	5	4	93	72	174	23, 112	368, 818	391, 930
British Columbia .....	4	—	—	7	11	12, 036	10, 205	22, 241
<b>Canada .....</b>	<b>244</b>	<b>84</b>	<b>1, 252</b>	<b>464</b>	<b>2, 044</b>	<b>1, 328, 283</b>	<b>4, 967, 391</b>	<b>6, 295, 674</b>
<b>1955</b>								
Quebec .....	61	34	485	164	744	339, 889	2, 117, 726	2, 457, 615
Ontario .....	163	53	758	225	1, 199	983, 450	3, 130, 753	4, 114, 203
Alberta .....	3	2	79	65	149	12, 706	202, 045	214, 751
British Columbia .....	4	—	3	6	13	10, 722	16, 366	27, 088
<b>Canada .....</b>	<b>231</b>	<b>89</b>	<b>1, 325</b>	<b>460</b>	<b>2, 105</b>	<b>1, 346, 767</b>	<b>5, 466, 890</b>	<b>6, 813, 657</b>

TABLE 32. Production Workers in the Imported Clay Products Industry, by Months, 1954 and 1955

Month	1954			1955		
	Male	Female	Total	Male	Female	Total
	Number					
January .....	1, 230	459	1, 689	1, 271	458	1, 729
February .....	1, 242	458	1, 700	1, 280	472	1, 752
March .....	1, 263	486	1, 749	1, 297	480	1, 777
April .....	1, 261	487	1, 748	1, 304	477	1, 781
May .....	1, 272	481	1, 753	1, 302	470	1, 772
June .....	1, 274	482	1, 756	1, 329	474	1, 803
July .....	1, 277	424	1, 701	1, 323	483	1, 806
August .....	1, 210	465	1, 675	1, 336	440	1, 776
September .....	1, 247	461	1, 708	1, 357	448	1, 805
October .....	1, 244	446	1, 690	1, 376	450	1, 826
November .....	1, 249	448	1, 697	1, 375	453	1, 828
December .....	1, 257	445	1, 702	1, 378	437	1, 815
Average .....	1, 252	464	1, 716	1, 325	460	1, 785

TABLE 33. Total Production of Rigid Refractory Shapes, 1946-1955

Year	From domestic clays			Silica brick		Others <sup>1</sup>		Total
	Fireclay blocks and shapes	Firebrick				Rigid firebrick, stove linings, etc.		
		\$	M	\$	M	\$	Tons	\$
1946 .....	222, 430	3, 367	205, 849	2, 902	197, 804	26, 832	1, 603, 185	2, 229, 268
1947 .....	274, 783	3, 780	250, 668	3, 094	303, 406	30, 092	1, 779, 341	2, 608, 198
1948 .....	318, 810	4, 111	311, 517	3, 464	393, 821	37, 241	2, 540, 611	3, 564, 759
1949 .....	311, 104	1, 127	87, 186	3, 663	453, 797	37, 018	2, 521, 321	3, 373, 408
1950 .....	340, 137	1, 631	132, 052	3, 126	408, 813	42, 688	3, 381, 795	4, 262, 797
1951 .....	374, 707	2, 880	245, 722	3, 510	465, 229	51, 205	4, 456, 054	5, 541, 712
1952 .....	395, 017	3, 198	280, 146	3, 544	606, 394	51, 483	4, 632, 345	5, 913, 902
1953 .....	412, 467	2, 671	247, 634	3, 720	712, 271	51, 709	4, 711, 512	6, 083, 884
1954 .....	316, 061	2, 416	230, 907	3, 578	465, 157	54, 667	5, 136, 250	6, 148, 375
1955 .....	418, 554	4, 055	402, 263	4, 763	602, 625	68, 264	6, 774, 909	8, 208, 351

1. Includes shapes made from imported clays, magnesite, etc.

TABLE 34. Total Production<sup>1</sup> of Refractory Cements and Plastics, 1946-1955

Year	Short tons	Selling value at works	Year	Short tons	Selling value at works
		\$			\$
1946 .....	18, 166	1, 071, 224	1951 .....	24, 925	2, 075, 574
1947 .....	21, 118	1, 283, 480	1952 .....	24, 734	2, 122, 101
1948 .....	22, 007	1, 439, 618	1953 .....	23, 898	1, 974, 117
1949 .....	21, 619	1, 476, 000	1954 .....	22, 041 <sup>2</sup>	2, 035, 342 <sup>2</sup>
1950 .....	23, 326	1, 784, 000	1955 .....	27, 925	2, 645, 941

1. Factory shipments since 1952.  
2. Revised.

## List of Firms in the Imported Clay Products Industry, 1955

Name of firm	Address
<b>Quebec:</b>	
Canada Firebrick Company Limited .....	4741 St. Ambroise St., Montreal
Canadian Potteries Limited .....	5, boul. du Séminaire, St. Johns
Coiteux Ceramics Reg'd. ....	Cap St-Francois, Chicoutimi
Laurentian Art Pottery Inc. ....	Ave de la Poterie, St-Jérôme
Pilkington's Tiles (Canada) Limited .....	1740 Bois Franc Road, Ville St. Laurent
Standard Clay Products .....	St. Johns
St. Lawrence Ceramics Ltd. ....	280 St. Sacrement, Quebec
Syndicat des Ceramistes Paysans de la (Beauce) Quebec .....	St-Joseph, Co. Beauce
Vandesca Pottery Ltd. ....	405 De Salaberry St., Joliette
Vermette, Claude .....	Ste-Adele-en-Haut
Walker-Hind-Sutherland Refractories Ltd. ....	309 St. Ferdinand St., Montreal
<b>Ontario:</b>	
Ball, R. N. ....	456 Joint St., Woodstock
Blue Mountain Pottery .....	R. R. # 3, Collingwood
Canadian Ohio Brass Company Limited .....	Thorold Rd., Niagara Falls
Canadian Porcelain Company Limited .....	Paradise Rd., Hamilton
Canada Vitriified Products Limited .....	60 Burwell Road, St. Thomas
Colloma Ceramics .....	R. R. # 1, Keswick
Electro Porcelain Limited .....	173 Roger St., Waterloo
Frontenac Floor & Wall Tile Co., Limited .....	Kingston
General Ceramics (Georgetown) Ltd. ....	5 Cross St., Georgetown
Green, A. P., Fire Brick Co. Ltd. (2 Plants) .....	234 Rosemount Ave., (Weston) Toronto; and Acton.
Hamilton Porcelains Limited .....	38 Elgin St., Brantford
Industrial Ceramics Ltd. ....	Cooksville
McMaster Pottery Limited .....	122 Hatt St., Dundas
National Refractories Limited .....	Port Robinson
Plibrico (Canada) Limited .....	Horner Ave., Etobicoke Township
Refractories Engineering & Supplies Ltd. ....	99 Clinton, Hamilton
Robinson Clay Product Co. of Canada Ltd. ....	Concord
Rowland Fire Brick Co. ....	1347 Dufferin St., Toronto
Sovereign Potters Limited .....	282 Sherman Ave. N., Hamilton
Wyatt Art Pottery .....	31 Leighland Rd., Burlington
York China and Artware Ltd. ....	615 Spadina Ave., Toronto
<b>Alberta:</b>	
Hycroft China Ltd. ....	Industrial Site, Medicine Hat
National Porcelain Limited .....	Industrial Site, Medicine Hat
<b>British Columbia:</b>	
Crown Ceramics Ltd. ....	523 West 7th Ave., Vancouver
Lambert Potteries Ltd. ....	4316 Fraser St., Vancouver

## III. The Sand-Lime Brick Industry, 1955

Four plants in Canada operated in this industry during 1955. Three of these were located in Ontario and 1 in Quebec. Factory shipments, including some building blocks, haydite tile, etc., were valued at \$1,630,677 compared with the 1954 total of \$1,930,525.

Employees in these works numbered 162 in 1955 and they were paid \$571,315 in salaries and

wages. Expenditures for fuel and electricity amounted to \$87,972 and for processing materials, to \$443,848.

Factory shipments of sand-lime bricks amounted to 41,630 M valued at \$1,183,197, an increase in both quantity and value over the output of 38,588 M bricks at \$1,110,682 in the previous year. Output of sand-lime building blocks increased to 1,070 M at \$188,140 from 893 M at \$164,493 in 1954.

NOTE: Figures for value added by manufacture, shown in Table 35, prior to 1952 were obtained by subtracting the cost of materials used, including fuel and electricity, from the value of production. In 1952 the gross value of production was replaced by value of factory shipments, f.o.b. plant. As no information on inventory change is available for 1952 and 1953, value added figures for these years were obtained by subtracting from the value of shipments the cost of materials, fuel and electricity. In 1954 and 1955 information on the value of year-end inventory holdings at plant and plant warehouses was collected as part of the annual Census of Industry and information thus made available was taken into account in calculating the value added figures for 1954 and 1955.

TABLE 35. Principal Statistics of the Sand-Lime Brick Industry, Significant Years, 1929-1955

Year and province	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity at works	Cost at plant of materials used	Value added by manufacture <sup>1</sup>	Gross selling value of products <sup>1</sup>
	No.	No.	\$	\$	\$	\$	\$
1929 .....	12	304	341,005	68,039	264,465	621,222	953,726
1933 .....	6	67	62,584	13,814	37,934	64,619	116,367
1937 .....	5	81	72,219	20,095	63,285	114,541	197,921
1939 .....	5	74	73,885	19,587	66,187	126,449	212,223
1941 .....	6	139	164,802	39,919	142,942	248,498	431,359
1946 .....	5	134	236,566	47,651	211,920	392,210	651,781
1949 .....	5	184	415,844	83,025	330,906	966,808	1,380,739
1951 .....	5	198	541,034	88,494	512,094	1,254,547	1,855,135
1952 .....	4	183	540,108	71,933	516,331	1,064,330	1,652,594
1953 .....	5	178	558,490	82,860	483,747	1,187,484	1,754,091
1954 .....	4	146	496,998	78,914	515,425	1,349,877	1,930,525
1955 .....	4	162	571,315	87,972	443,848	1,057,528	1,630,677

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

1. See footnote to Text.

TABLE 36. Inventories in the Sand-Lime Brick Industry, 1955

	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total
	\$	\$	\$	\$
Opening .....	66,779	6,000	69,885	142,664
Closing .....	57,245	2,289	28,556	88,090

TABLE 37. Products Made in the Sand-Lime Brick Industry, 1954 and 1955

Product	1954		1955	
	Quantity	Selling value at works	Quantity	Selling value at works
	M	\$	M	\$
Sand-lime brick.....	38,588	1,110,682	41,630	1,183,197
Sand-lime building blocks.....	893	164,493	1,070	188,140
Other products <sup>1</sup> .....	—	655,350	—	259,340
<b>Total</b> .....	—	<b>1,930,525</b>	—	<b>1,630,677</b>

1. Includes cement blocks and haydite tile, etc.

TABLE 38. Materials Used in the Sand-Lime Brick Industry, 1954 and 1955

Material	1954		1955	
	Quantity	Cost at works	Quantity	Cost at works
		\$		\$
Portland cement..... bags	56,467	51,786	30,992	28,291
Quicklime..... tons	9,528	165,664	10,344	155,863
Sand and gravel..... cu. yd.	97,597	166,827	95,074	142,150
Other materials..... —	—	131,148	—	117,544
<b>Total</b> ..... —	—	<b>515,425</b>	—	<b>443,848</b>

TABLE 39. Production<sup>1</sup> of Sand-Lime Brick in Canada, 1946-1955 (From all industries)

Year	Quantity	Selling value at works	Year	Quantity	Selling value at works
	M	\$		M	\$
1946.....	39,096	572,008	1951.....	48,313	1,220,563
1947.....	35,017	527,275	1952.....	36,852	987,561
1948.....	40,006	795,402	1953.....	44,080	1,265,056
1949.....	43,260	939,435	1954.....	40,747	1,191,508
1950.....	46,993	1,074,955	1955.....	43,789	1,264,023

1. Factory shipments since 1952.

TABLE 40. Capital and Repair Expenditures in the Sand-Lime Brick Industry, 1951-1955

Year	Total capital and repair expenditures
	\$'000
1951.....	125
1952.....	132
1953.....	141
1954.....	161
1955 <sup>1</sup> .....	(2)

1. Preliminary.  
2. Less than \$100,000.



TABLE 41. Employees, Salaries and Wages, 1954 and 1955

	1954	1955
Supervisory and office employees:		
Male .....	14	14
Female .....	1	2
<b>Total</b> .....	<b>15</b>	<b>16</b>
Production workers:		
Male .....	131	146
Female .....	—	—
<b>Total</b> .....	<b>131</b>	<b>146</b>
<b>Total employees</b> .....	<b>146</b>	<b>162</b>
Salaries .....	\$ 68,541	77,943
Wages .....	\$ 428,457	493,372
<b>Total salaries and wages</b> .....	<b>\$ 496,998</b>	<b>571,315</b>

TABLE 42. Production Workers by Months, 1954 and 1955

Month	1954			1955		
	Male	Female	Total	Male	Female	Total
	Number					
January .....	146	—	146	138	—	138
February .....	139	—	139	132	—	132
March .....	135	—	135	108	—	108
April .....	128	—	128	117	—	117
May .....	136	—	136	147	—	147
June .....	136	—	136	157	—	157
July .....	145	—	145	158	—	158
August .....	141	—	141	160	—	160
September .....	124	—	124	159	—	159
October .....	120	—	120	159	—	159
November .....	118	—	118	158	—	158
December .....	114	—	114	158	—	158
<b>Average</b> .....	<b>131</b>	<b>—</b>	<b>131</b>	<b>146</b>	<b>—</b>	<b>146</b>

List of Firms in the Sand-Lime Brick Industry, 1955

Name of firm	Address
Standard Lime Company Limited .....	1595 St. Gregoire St., Montreal, Quebec
Cooksville Company Limited, The .....	447 Victoria Park Ave., Toronto, Ontario
Harbour Brick Co. Ltd. ....	565 Fleet St. West, Toronto, Ontario
Toronto Brick Co. Ltd. ....	2550 Gerrard St. E., Toronto, Ontario