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THE CLAY & CLAY PRODUCTS INDUSTRY IN CANADA 1933

(including 1. Products from Domestic Clays
2. Products from Imported Clays.)

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DEPARTMENT OF TRADE AND COMMERCE
DOMINION BUREAU OF STATISTICS
MINING, METALLURGICAL AND CHEMICAL BRANCH
OTTAWA - CANADA

Dominion Statistician: R. H. Coats, LL.D., F.R.S.C., F.S.S. (Hon.)
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CLAY AND CLAY PRODUCTS, 1933.

The Clay and Clay Products Industry in Canada is classified into two divisions: (1) production from domestic clays which includes the production of refractories, building brick, structural tile, floor tile, roofing tile, drain tile, sewer pipe and pottery, and (2) production from imported clays which includes the manufacture of porcelain insulators, refractories, earthenware, pottery and ceramic floor and wall tile.

The Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics at Ottawa reports that there were 164 plants representing a total capital investment of $28,432,648 operating in the domestic and imported clay products industries in Canada during 1933. These two industries provided employment for 1,848 persons during the year; their earnings totalled $1,573,635. The combined production in 1933 was valued at $3,467,887 as compared with $5,240,629 in 1932.

1. PRODUCTION FROM DOMESTIC CLAYS

Clay and clay products sold by Canadian producers in 1933 were evaluated at $2,262,835 as compared with $3,650,218 in 1932, representing a decline of 38 per cent. Decreases in quantity were recorded for all products with the exception of drain tile, fireclay, ornamental brick and bentonite.

The almost continuous falling-off in sales as recorded during recent years in the clay products industry appears to have terminated as evidenced by trade returns for the first half of 1934 during which period the value of domestic clay products sales totalled $1,056,540 or 17.9 per cent above the total for the corresponding period of 1933. This improvement, synchronous with an almost general increase in mineral production, would suggest the commencement of an uptrend in the consumption of construction materials.

Of the total value of the domestic clay products production in Canada in 1933, Ontario produced 45.3 per cent; Quebec, 25.6 per cent; Alberta, 8.8 per cent; British Columbia, 7.7 per cent; and the other provinces, in the order of the value of sales, were Nova Scotia, Saskatchewan, New Brunswick and Manitoba.

The Census of 1665-1666 records one brickmaker in New France, this operator being located on the north shore of the St. Lawrence. In 1933 plants for the production of brick and tile were active in every province of Canada except Prince Edward Island. Throughout the Dominion there were 157 works engaged in the making of various kinds of building brick, sewer pipe, refractories, structural tile and other clay manufactures from Canadian clays. In 1933 the domestic clay products industry employed $24,211,880 in capital, provided employment for 1,312 persons, paid $1,101,893 in salaries and wages, and consumed fuel and electricity to the value of $377,321.

Five firms produced earthenware, stoneware and other pottery products from domestic clays and shipments of these products in 1933 were valued at $200,447. The output of this particular branch of the industry came entirely from plants operating in New Brunswick, Ontario, Alberta and British Columbia. Fireclay was produced in Nova Scotia, New Brunswick, Saskatchewan and British Columbia. Bentonite sales were reported only from British Columbia in 1933; the material has been utilized chiefly in oil and gasoline refining and as an admixture for concrete and cement. Bentonite occurring near Edson, Alberta, has been employed in the manufacture of cosmetic products.

The Department of Railways, Labour and Industry, Saskatchewan, with the co-operation of the Ceramic Department of the University of Saskatchewan have, for the past two years, been conducting an investigation as to the possible use of some of the highly colloidal clays of Saskatchewan for the purpose of clarifying and decolorizing oils and fats. Fifty Saskatchewan clays were investigated as to their possibilities for use in the place of imported clays of the Fullers earth type now used in packing houses, refineries and other plants in Canada. In view of what has been learned concerning these clays for purposes described it may be expected that Saskatchewan will eventually supply the various Canadian refining industries with their requirements of clays of the Fullers earth type.

Table 1 - PRINCIPAL STATISTICS OF THE DOMESTIC CLAY PRODUCTS INDUSTRY IN CANADA, 1932 and 1933.

		1932	1933
Number of firms		164	146
Capital employed	$	25,347,582	24,211,880
Number of employees - On salary		304	239
On wages		1,436	1,073
Total		1,740	1,312
Salaries and wages - Salaries	$	565,675	440,966
Wages	$	1,010,911	660,927
Total	$	1,576,586	1,101,893
Cost of fuel and electricity	$	579,803	377,321
Selling value of products	$	3,650,218	2,262,835

Table 2 - AVERAGE NUMBER OF WAGE-EARNERS, BY MONTHS, 1932 and 1933.

Month	1932	1933
January	1,217	644
February	1,144	554
March	1,180	576
April	1,246	669
May	1,634	980
June	1,876	1,274
July	1,766	1,571
August	1,764	1,611
September	1,684	1,604
October	1,586	1,242
November	1,057	1,083
December	806	780

Table 3 - FUEL AND ELECTRICITY USED, 1932 and 1933.

Kinds	Unit of measure	1932 Quantity	1932 Cost at works	1933 Quantity	1933 Cost at works
			$		$
Bituminous coal - Canadian	short ton	11,752	72,277	6,887	39,891
Imported	short ton	50,440	306,833	33,943	200,269
Anthracite coal (for fuel only)	short ton	1,142	8,495	...	...
Lignite coal - Canadian	short ton	3,082	8,808	271	1,068
Coke	short ton	596	4,386	115	1,099
Gasoline (exclusive of vehicle fuel)	Imp. gal.	11,246	2,677	19,424	4,451
Fuel oil	Imp. gal.	15,614	1,869	12,622	1,320
Wood	cord	15,764	61,149	14,408	52,529
Gas - Natural	M cu.ft.	178,650	6,280	173,485	11,232
Electricity purchased	K.W.H.	6,386,134	106,783	3,749,105	65,435
Other fuel	xxx	...	246	...	27
TOTAL	xxx	...	579,803	...	377,321

Table 4 - POWER EQUIPMENT INCLUDING STAND-BY, 1933.

Description	1933 Number of units	1933 Total horse power
Steam engines and steam turbines	58	5,082
Diesel engines	10	460
Gasoline, gas and oil engines, other than diesel	37	897
Hydraulic turbines or water wheels	...	...
Electric motors -		
Operated by purchased power	485	16,208
Operated by power generated by establishment	12	128
Boilers	79	7,199

Table 5 - PRODUCTION OF DOMESTIC CLAY AND CLAY PRODUCTS IN CANADA, 1932 and 1933.

Products	Unit of measure	SALES OR SHIPMENTS 1932 Quantity	1932 $	1933 Quantity	1933 $
Clay - Bentonite	tons	7	176	55	1,363
Fireclay	tons	990	11,826	1,421	11,273
Kaolin (china clay)	tons	...	...	...	...
Fireclay blocks and shapes	xx	...	75,209	...	80,625
Firebrick	M	1,580	71,757	1,547	73,226
Brick -					
Soft mud process - Face	M	6,188	108,582	2,482	41,737
Common	M	12,801	182,372	12,389	156,769
Stiff mud process - Face	M	30,197	664,756	19,602	412,367
(wire cut) Common	M	40,753	638,922	23,894	356,498
Dry press - Face	M	5,522	119,547	4,544	101,252
Common	M	4,248	46,762	3,916	44,377
Fancy or ornamental brick (including special shapes, embossed and enamelled brick)	M	125	6,237	630	7,824
Sewer brick	M	643	12,156	243	3,693
Paving brick	M	6	155	1	42
Structural tile -					
Hollow blocks (including fireproofing, and load-bearing tile)	tons	48,118	421,672	26,747	160,059
Roofing tile	No	48,939	3,900	20,469	1,136

Table 5 - PRODUCTION OF DOMESTIC CLAY AND CLAY PRODUCTS IN CANADA, 1932 and 1933. (concluded)

Products	Unit of measure	SALES OR SHIPMENTS 1932 Quantity	1932 $	1933 Quantity	1933 $
Structural tile - concluded					
Floor tile (quarries)	sq.ft.	94,316	21,502	91,495	14,297
Ceramic or glazed floor and wall tile.	xx	...	...	...	...
Drain tile	M	7,385	186,670	10,057	222,829
Sewer pipe (including copings, flue linings, etc.)	xx	...	813,224	...	354,458
Pottery, glazed or unglazed (including coarse earthenware, stoneware, and all other pottery)	xx	...	244,861	...	202,500
Other products	xx	...	19,932	...	16,510
TOTAL	xx	...	3,650,218	...	2,262,835

Table 6 - PRODUCTION OF CLAY PRODUCTS IN CANADA FROM DOMESTIC CLAYS, BY PROVINCES, 1929 - 1933.

Province	1929.	1930	1931	1932	1933
	$	$	$	$	$
Nova Scotia	653,157	495,333	467,126	172,557	125,500
New Brunswick	160,006	162,536	143,348	68,151	46,917
Quebec	3,187,702	2,464,044	2,360,908	1,064,551	580,088
Ontario	6,830,162	5,221,214	3,552,800	1,639,508	1,024,579
Manitoba	362,240	215,967	122,628	49,773	20,966
Saskatchewan	502,522	349,283	166,257	109,739	92,207
Alberta	1,342,427	997,685	529,716	329,584	198,373
British Columbia	866,427	687,516	498,505	216,355	174,205
CANADA	13,904,643	10,593,578	7,841,288	3,650,218	2,262,835

Table 7 - PRODUCTION OF BUILDING BRICK IN CANADA, BY PROVINCES, 1929 and 1932 and 1933.

Province	1929 M	1929 $	1932 M	1932 $	1933 M	1933 $
Nova Scotia	15,411	217,985	3,276	46,748	2,633	36,859
New Brunswick	6,087	99,288	2,276	39,757	1,207	20,640
Quebec	149,497	2,475,403	41,969	767,041	26,559	452,501
Ontario	199,045	3,757,555	42,235	784,028	29,323	518,700
Manitoba	17,449	305,421	2,073	32,499	1,161	17,718
Saskatchewan	14,301	230,306	1,001	12,450	121	2,152
Alberta	42,014	606,671	4,999	52,947	3,957	34,634
British Columbia	14,826	310,729	2,648	43,864	2,739	41,313
CANADA	458,630	8,003,358	100,477	1,779,334	67,700	1,124,517

Table 8 - VALUE(x) OF DRAIN TILE AND SEWER PIPE PRODUCED IN CANADA, BY PROVINCES, 1929, and 1932 and 1933.

Province	1929 $	1932 $	1933 $
Nova Scotia	230,412	95,044	70,756
New Brunswick	...	120	64
Quebec	175,615	104,175	61,310
Ontario	1,796,785	601,375	364,063
Manitoba	15,565	5,309	2,716
Saskatchewan	1,000	...	...
Alberta	343,665	114,132	37,042
British Columbia	163,161	79,739	41,336
CANADA	2,726,203	999,894	577,287

(x) Includes value of copings, flue linings, etc.

LIST OF OPERATORS SHIPPING BRICK, TILE AND SEWER PIPE MADE FROM DOMESTIC CLAYS, 1933.

Name of Firm	Head Office Address	Plant Location
NOVA SCOTIA -		
Brooks, Stephen, & Sons	Box 359, New Glasgow	New Glasgow
Miller, Jas. B.	Elmsdale, Hants Co.	Barney Brook
Shaw, L.E., Ltd.	137 Lower Water St., Halifax	Elmsdale
Standard Clay Products Ltd.	St. Johns, P.Q.	New Glasgow
NEW BRUNSWICK,-		
Little River Brick Co. Ltd.	Little River	Little River
Ryan, M., & Son, Ltd.	Fredericton	Fredericton
Shaw, L.E., Ltd.	137 Lower Water St., Halifax,N.S.	Chipman
QUEBEC -		
Ascot Tile & Brick Co. Ltd.	Ascot Corner	Richmond Co.
Begin, Olivier	Petite Riviere, R. R. 1	Petite Riviere
Brunelle, L. H.	Victoriaville	Ste. Victoire
Chicoutimi Brick Ltd.	Chicoutimi	Chicoutimi
Citadel Brick Ltd.	14 St. Joseph St., Quebec	L'Islet Station, Boischatel and Lauzon
Duquette & Lacroix	East Angus	Westbury
Frontenac Brick Ltd.	140 St. John St., Quebec	Beauport Est
Granby Brick Co.	Granby	Granby
Hodgins, David T.	Shawville	Clarendon Tp.
Laprairie Co. Inc.	320 Canada Cement Bldg.,Montreal	Laprairie and Delson
Lotbiniere Brick Works Ltd.	Deschaillons	Deschaillons
Montreal Terra Cotta Co. Ltd.	Dominion Square Bldg., Montreal	Lakeside
Panet Brick Co. Ltd.	L'Islet	L'Islet Station
Potvin, Alphonse	Deschaillons	Deschaillons
Scott Brick Inc.	8 St. Joseph St., Quebec	Dorchester Co.
Standard Clay Products Ltd.	Box 819, St. Johns	St. Johns
St. Lawrence Brick Co. Ltd.	1010 St.Catherine St.W.,Montreal	Laprairie
St. Tite Industrial Ltd.	St. Tite	St. Tite
ONTARIO -		
Barnhardt, W. H.	Stratford	Stratford
Booth Brick & Lumber Co.	New Toronto	York Co.
Brampton Pressed Brick Co. Ltd.	Brampton	Chingaucousy Tp.
Broodwell, B., & Son	Kingsville	Essex Co.
Campbell, N. F.	West Lorne	Elgin Co.
Canadian Pressed Brick Co. Ltd.	195 Ottawa St.,S., Hamilton	Hamilton
Casemore, R., & Son	Shallow Lake	Shallow Lake
Chapman Bros.	145 Dawes Rd., Toronto	East York Tp.
Chapman, John	R. R. 3, Napanee	N.Fredericksburg Tp.
Cooksville Co. Ltd.	132 St. James St. W.,Montreal,P.Q.	Cooksville
Coultis, George, & Son	Thedford	Lambton Co.
Crang, Booth Ltd.	New Toronto	N. York
Curtin, F., Estate	R. R. 4, Lindsay	Victoria Co.
Curtis Bros.	Box 809, Peterboro	Otonabee and Douro Tps.
Cowell, Geo. W.	Box 361, Tillsomburg	Oxford Co.
Dalton, Mark	Dresden	Dawn Tp.
Deller, Albert, & Son	Brownsville	Oxford Co.
Deller Bros.	R. R. 2, Norwich	Oxford Co.

LIST OF OPERATORS SHIPPING BRICK, TILE AND SEWER PIPE MADE FROM DOMESTIC CLAYS, 1933.
(continued)

Name of Firm	Head Office Address	Plant Location
ONTARIO - continued		
Deller, Wm. H.	R. R. 4, Thorndale	W. Nissouri Co.
Denison Tile Co. Ltd.	Windsor	Fletcher, Tilbury East Tp., Rochester
Dochart Brick, Tile & Terra Cotta Works	Arnprior	Arnprior
Dolan, John & Sons	R. R. 2, Watford	Lambton Co.
Douglas & Douglas	Wilkesport	Lambton Co.
Dover Brick & Tile Works	Chatham	Dover Tp.
Donaldson, Thos. Geo.	R. R. 1, Greenock	Cylross Tp.
Elliott, Chas.	Bluevale	Turnbury Tp.
Elliott, James, Jr.	Sault Ste. Marie	Korah Tp.
Elliott, Wm.	Glenannon	Bruce Co.
Fort William Brick Co.	Fort William	Fort William
Frid Bros. Ltd.	Main W. and Macklin Sts., Hamilton	Hamilton
Grimsby Brick & Tile Ltd.	Grimsby	Grimsby
Godfrey, Thos., & Co.	Carleton Place	Beckwith Tp.
Gomall Brick and Tile Works	Powassan	Himsworth Tp.
Haist, Wellington R.	Crediton	Huron Co.
Halton Brick Co. Ltd.	Lindsay	Halton Co.
Hamilton Pressed Brick Co. Ltd.	Kensington Ave.S., Hamilton	Wentworth Co.
Harper Brick Works	348 Greenwood Ave., Toronto	York Co.
Hill, Aaron	Essex	Essex Co.
Hill, A. W.	Coatsworth	Tillbury East
Hitch, D. A.	Ridgetown	Ridgetown
Hitch, Thomas	Box 254, St. Thomas	Elgin Co.
Hodder, Mrs. J.H., & Sons	Dutton	Dunwich
Howlett, Fred W., & Sons, Ltd.	Box 3, Petrolia	Petrolia and Brigden
Huntsville Brick Works	Box 308, Huntsville	Muskoka
Interprovincial Brick Co. Ltd.	132 St.James St.W.,Montreal,P.Q.	Chinquacoucy Tp. Nassagaweya Tp.
Jackson, W. B.	290 Rawdon St., Brantford	Brantford
Jamieson Lime Co.	Renfrew	Renfrew
James, D. A.	Mt. Brydges	Middlesex Co.
Jasperson Brick & Tile Co.	Box 586, Kingsville	Coatsworth
Jervis, W. J.	Dorchester	N. Dorchester
Johnson, James, Estate	R. R. 3, Pembroke	Stafford Tp.
Kerr, Chas., & Son	R. R. 4, Goderich	Colborne Tp.
Kerr, Fred	Crediton	Crediton
Koebel Bros.	Box 54, St. Clements	Waterloo Co.
Lindsay, Earl, & Sons	R. R. 2, Wallaceburg	Chatham Gore Tp.
McComb, Chester	R. R. 2, London	Middlesex Co.
McCormick Bros.	R. R. 5, Watford	Lambton Co.
McFarlane, W. J.	Forest	Forest
McFarren, F.B., Ltd.	18 Toronto St., Toronto	Streetsville
McMahon, Robert	R. R. 2, Kerwood	Metcalfe Tp.
Milton Brick Ltd.	1158 Bay St., Toronto	Milton and Streetsville
Moulton, John	R. R. 2, Holyrood	Bruce Co.
National Fire Proofing Co. of of Canada, Ltd.	211 Dominion Bank Bldg., Toronto, 2	Aldershot

LIST OF OPERATORS SHIPPING BRICK, TILE AND SEWER PIPE MADE FROM DOMESTIC CLAYS, 1933.
(continued)

Name of Firm	Head Office Address	Location of Plant
ONTARIO - concluded		
National Sewer Pipe Co. Ltd.	Aldershot	Hamilton, Mimico, Swansea, E. Flamboro Tp.
New Liskeard Brick Works	Box 74, New Liskeard	New Liskeard
Ontario Brick & Tile Plant (Goverment)	Provincial Secretary, Parliament Bldg., Toronto	Mimico
O'Reilly, Thos.	320 Bay St., Ottawa	Prescott Highway
Ott Brick & Tile Manufacturing Co. Ltd.	Kitchener	Kitchener
Ottawa Brick & Terra Cotta Co.Ltd.	Billings Bridge	Gloucester Tp.
Owen Sound Brick Co. Ltd.	Owen Sound	Owen Sound
Parks, H. W.	R. R. 2, Dresden	Camden Tp.
Paxton, Fred R.	70 Herrick Ave.,St.Catharines	St. Catharines
Phim, George A.	St.James Park P.O., London	Middlesex Co.
Phippen, H.W., & Son	Box 11, Coleman P.O.	East York
Port Rowan Brick & Tile Co.	Port Rowan	Port Rowan
Richardson, J., & Son	Kerwood	Kerwood
Snelgrove, A.	Beaverton	Ontario Co.
Sproat and Sproat	R. R. 4, Seaforth	Tuckersmith Tp.
Standard Brick Co. Ltd.	500 Greenwood Ave., Toronto	Toronto
Stroh, M. C.	Conestogo	Waterloo Co.
Sun Brick & Tile Co. Ltd.	1104 Bay St., Toronto	Don Valley
Superior Brick & Tile Co. Ltd.	426 Victoria Ave.,Fort William	Paipoonge
Thompson, Ralph	Hengryn	Huron Co.
Tope, Richard, Brick Works	677 Main St. W., Hamilton	Hamilton
Toronto Brick Co. Ltd.	897 Bay St., Toronto	Milton, Toronto, York Tp.
Vernon Brick Works	Dawes Road, Toronto	East York
Wagstaff, Chas.	R. R. 4, Lindsay	Linday
Wallace, R., & Son	Toronto General Trust Corp., 253 Bay St., Toronto	Widdifield Tp.
Wein, Aaron	Crediton	Huron Co.
Weitzel, John E.	R. R. 1, Tavistock	Oxford Co.
Wright, Geo., & Sons	Comber	Comber
MANITOBA -		
Alsip Brick, Tile & Lumber Co. Ltd.	537 Portage Ave., Winnipeg	Winnipeg
Snyder Brick Yards, Ltd.	Portage la Prairie	Portage la Prairie
Wardrop, D. M.	Whitemouth	Whitemouth
SASKATCHEWAN -		
Bruno Clay Works Ltd.	405 Birks Bldg., Saskatoon	Bruno
Dominion Fire Brick & Clay Products Ltd.	Moose Jaw	Claybank
International Clay Products Ltd.	Estevan	Estevan and Prince Albert
Shand Coal & Brick Co.	Shand	Shand
ALBERTA -		
Acme Brick Co. Ltd.	125 Alberta Block, Edmonton	Cannell Siding
Alberta Clay Products Co. Ltd.	Box 672, Medicine Hat	Medicine Hat
Gunderson Brick and Coal Co. Ltd.	Redcliff	Redcliff

LIST OF OPERATORS SHIPPING BRICK, TILE AND SEWER PIPE MADE FROM DOMESTIC CLAYS, 1933.
(concluded)

Name of Firm	Head Office Address	Location of plant
ALBERTA - concluded		
Jahansen, K.	Grand Prairie	Grand Prairie
Little, J. B., & Sons Ltd.	Edmonton	Edmonton
Medicine Hat Brick & Tile Co. Ltd.	Medicine Hat	Medicine Hat
Redcliff Pressed Brick Co. Ltd.	Redcliff	Redcliff
Redcliff Premier Brick Co. Ltd.	Redcliff	Redcliff
BRITISH COLUMBIA -		
Baker Brick & Tile Co. Ltd.	3191 Douglas St., Victoria	Victoria
B. C. Refractories Ltd.	660 Taylor St., Vancouver	Williams Lake, Princeton
C. C. of U.B. Ltd.	Brilliant	Grand Forks
Clayburn Co. Ltd.	850 West Hastings St., Vancouver	Kilgard
Gabriola Shale Products Ltd.	1304 Broad St., Victoria	Gabriola Island
Gorse, Percy A.	Salmon Arm	Enderby
Haug, Wm., and Son	Box 166, Kelowna	Kelowna
Port Haney Brick Co. Ltd.	846 Howe St., Vancouver	Port Haney
Prince George Brick Yard	Prince George	Prince George
Vancouver Brick & Tile Co. Ltd.	2521 Maple St., Vancouver	Sullivan

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CANADIAN PRODUCERS OF STONEWARE AND POTTERY FROM DOMESTIC CLAYS, 1933.

Name of Firm	Head Office Address	Location of Plant
NEW BRUNSWICK -		
Foley Pottery Ltd.	Sub. P. O. 4, Saint John	Saint John
ONTARIO -		
Foster Pottery Co.	Main St. W., Hamilton	Hamilton
London Pottery Mfg. Co.	95 Rectory St., London	London
ALBERTA -		
Medalta Potteries Ltd.	Medicine Hat	Medicine Hat
BRITISH COLUMBIA -		
Baker Brick & Tile Co. Ltd.	3191 Douglas St., Victoria	Victoria
B. C. Clay Products Co.	3439 Euclid Ave., Vancouver	Vancouver

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2. PRODUCTS FROM IMPORTED CLAYS

A number of factories in Canada manufacture ceramic products from clays which they import chiefly from England and the United States. Refractories, sanitary earthenware, porcelain insulators, floor and wall tile and pottery are the principal commodities made in these works. The refractories include rigid fire brick stove linings, special shapes, plastic firebrick and high temperature cements; sanitary earthenware includes bathtubs, water closets, etc.; and pottery includes Rockinghamware such as teapots, bowls, etc., and art pottery such as lampstands, small vases and novelties.

In 1933 there were 18 factories in operation in this industry as compared with 16 in 1932 but output declined 24 per cent to $1,205,052 from $1,590,411 in the previous year. Capital employed was about the same at $4,220,768 but the number of workers dropped to 536 from 715 and salaries and wages fell correspondingly to $471,742 from $707,269. Materials for manufacturing cost $288,379 in 1933 as against $406,441 in 1932.

Table 9 - PRINCIPAL STATISTICS OF THE IMPORTED CLAY PRODUCTS INDUSTRY, 1929 - 1933.

Years	No. of plants	Capital employed	Average number of employees	Salaries and wages	Cost of materials at works	Selling value of products at works	Value added by manufacturing
		$		$	$	$	$
1929	15	3,472,052	872	1,112,881	992,150	3,373,038	2,380,888
1930	15	4,099,965	841	1,052,286	834,181	2,978,143	2,143,962
1931	14	4,320,382	832	958,900	695,706	2,455,738	1,760,032
1932	16	4,207,767	715	707,269	406,441	1,590,411	1,183,970
1933 -							
Quebec ..	4	1,857,056	166	173,645	73,927	402,126	328,199
Ontario .	14	2,363,712	370	298,097	214,452	802,926	588,474
CANADA .	18	4,220,768	536	471,742	288,379	1,205,052	916,673

Table 10 - CAPITAL EMPLOYED IN THE IMPORTED CLAY PRODUCTS INDUSTRY, BY CLASSES AND BY PROVINCES, 1932 and 1933.

Provinces	Present value of lands, buildings, fixtures, machinery and tools and other equipment	Inventory value of materials on hand, stocks in process, fuel and miscellaneous supplies on hand	Inventory value of finished products on hand	Operating capital (cash, bills and accounts receivable, prepaid expenses, etc.)	TOTAL CAPITAL EMPLOYED
	$	$	$	$	$
1932					
Quebec	1,445,582	95,546	200,361	210,985	1,952,474
Ontario ...	1,456,332	222,775	244,650	331,536	2,255,293
CANADA ...	2,901,914	318,321	445,011	542,521	4,207,767
1933					
Quebec	1,443,722	115,079	107,187	191,068	1,857,056
Ontario ...	1,538,559	210,811	251,216	363,126	2,363,712
CANADA ...	2,982,281	325,890	358,403	554,194	4,220,768

Table 11 - EMPLOYEES, SALARIES AND WAGES IN THE IMPORTED CLAY PRODUCTS INDUSTRY, BY PROVINCES, 1932 and 1933.

Provinces	Average number of employees: On salaries Male	On salaries Female	On wages Male	On wages Female	TOTAL	Salaries	Wages	TOTAL SALARIES AND WAGES
						$	$	$
1932								
Quebec ...	28	3	190	6	227	80,160	195,698	275,858
Ontario ..	46	12	351	79	488	132,969	298,442	431,411
CANADA ..	74	15	541	85	715	213,129	494,140	707,269
1933								
Quebec ...	24	3	136	3	166	63,420	110,225	173,645
Ontario ..	42	10	251	67	370	94,389	203,708	298,097
CANADA ...	66	13	387	70	536	157,809	313,933	471,742

Table 12 - WAGE-EARNERS, BY MONTHS, IN THE IMPORTED CLAY PRODUCTS INDUSTRY, 1932 and 1933.
(On 15th of each month or nearest representative date)

Months	1932 Male	1932 Female	1932 TOTAL	1933 Male	1933 Female	1933 TOTAL
January	652	85	737	308	67	375
February	661	94	755	269	57	326
March	661	104	765	295	66	361
April	647	98	745	315	60	375
May	565	97	662	374	59	433
June	595	88	683	387	67	454
July	569	87	656	416	69	485
August	551	88	639	418	69	487
September	466	74	540	462	81	543
October	422	70	492	456	78	534
November	340	63	403	463	80	543
December	334	64	398	489	77	566
AVERAGE	541	85	626	387	70	457

Table 13 - FUEL AND ELECTRICITY USED IN THE IMPORTED CLAY PRODUCTS INDUSTRY, 1932 and 1933.

Kinds	Unit of measure	1932 Quantity	1932 Cost at works	1933 Quantity	1933 Cost at works
			$		$
Coal, anthracite	short ton	12	180	15	218
Coal, bituminous - Canadian ..	short ton	1,672	10,616	401	2,452
Coal, bituminous - Imported ..	short ton	10,800	66,914	9,529	62,052
Coke	short ton	595	4,473	643	4,830
Gasoline	Imp. gal.	82	21	100	24
Kerosene	Imp. gal.	120	20	580	105
Fuel oil	Imp. gal.	462,518	30,733	302,907	19,277
Wood	cord	38	283	39	270
Gas, natural	M cu.ft.	14,999	7,448	2,199	1,201
Other fuel	xxx	...	54	...	16
Electricity purchased	K.W.H.	1,406,744	23,037	1,175,176	20,699
TOTAL	xxx	...	143,779	...	111,144

Table 14 - POWER EQUIPMENT IN THE IMPORTED CLAY PRODUCTS INDUSTRY, 1932 and 1933.

	1 9 3 2		1 9 3 3	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Steam engines	3	465	3	465
Gasoline, gas and oil engines	1	4	1	4
Total Primary Equipment	4	469	4	469
Electric motors run by purchased power	161	1,082	159	1,087
TOTAL	165	1,551	163	1,556
Electric motors run by above primary units	20	235	23	242
Total Electric Motors	181	1,317	186	1,798
Boilers	14	863	14	863

Table 15 - MATERIALS USED IN THE IMPORTED CLAY PRODUCTS INDUSTRY, 1932 and 1933.

Materials		1 9 3 2		1 9 3 3	
		Quantity	Cost at works	Quantity	Cost at works
			$		$
Feldspar	ton	1,406	28,043	861	16,297
Fireclay, imported	ton	14,961	83,865	11,834	74,530
Other clay, imported	ton	5,517	103,204	4,367	82,890
Flint	ton	1,136	18,277	752	10,457
Glazing materials, other	xx	...	6,175	...	4,472
Hardware for insulators	xx	...	38,609	...	38,109
Containers	xx	...	28,537	...	20,410
All other materials	xx	...	99,731	...	41,214
TOTAL	xx	...	406,441	...	288,379

Table 16 - PRODUCTS MADE IN THE IMPORTED CLAY PRODUCTS INDUSTRY, 1932 and 1933.

Products	1 9 3 2	1 9 3 3
	Selling value at works	Selling value at works
	$	$
Firebrick and stove linings (excluding plastic firebrick)	212,838	220,484
Porcelain insulators, sanitary ware, sewer pipe, floor tile, tanks, pottery, plastic firebrick, etc.	1,377,573	984,568
TOTAL	1,590,411	1,205,052

NOTE - Firebrick, floor tile, sewer pipe and pottery are also made in Canada from domestic clays. See Table 5.

LIST OF FIRMS WHICH MADE PRODUCTS FROM IMPORTED CLAYS, 1933.

Names of Firms	Location of Plants	Products Made
Bell Fire Brick Co. Ltd.	1347 Dufferin St., Toronto, Ont.	Firebrick; stove linings.
Canada Firebrick Company Ltd.	4741 St. Ambroise St.,Montreal,P.Q.	Firebrick.
Canada Vitrified Products Limited	675 Talbot St.,St.Thomas,Ont.	Sewer pipe.
Canadian General Electric Co. Limited	Peterborough, Ont.	Porcelain sockets; plugs,etc.; textolite parts; cord sets;insulators.

LIST OF FIRMS WHICH MADE PRODUCTS FROM IMPORTED CLAYS, 1933 (concluded)

Names of Firms	Location of Plants	Products Made
Canadian Ohio Brass Company Limited	Niagara Falls, Ont.	High tension insulators.
Canadian Porcelain Company Limited	Paradise Road, Hamilton, Ont.	High tension insulators.
Canadian Potteries Limited	St. Johns, P.Q.	Enamelled sanitary-earthenware; soda fountain fixtures; bathroom accessories
Dominion Sanitary Pottery Co. Limited	St. Johns, P.Q.	Enamelled sanitary earthenware; soda fountain fixtures
Frontenac Floor and Wall Tile Co. Limited	Kingston, Ont.	Floor tile; wall tile;ground feldspar
Green, A. P., Company of Canada, Limited	40 Hanna Ave., Toronto, Ont.	Plastic firebrick; high temperature cements.
Hamilton Potteries, Limited	100 Locke St.S., Hamilton, Ont.	Insulators; fire-brick; pottery; miscellaneous products
National Refractories Limited	Port Robinson, Ont.	Firebrick.
Ontario Refractories Limited	Fort Erie, Ont.	Firebrick.
Pilbrico Jointless Firebrick Limited	Lake Shore Rd., New Toronto, Ont.	Plastic firebrick.
Smith & Stone Ltd.	Georgetown, Ont.	Porcelain sockets, plugs, etc.; insulators.
Smith Potteries, The	373 King St.W., Oshawa, Ont.	Art pottery.
Standard Clay Products Ltd.	St. Johns, P.Q.	Sewer pipes; fire-brick; stove linings.
Turner, C. B., & Co. Reg'd.	Mimico, Ont.	Boiler lining; firebrick.

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Table 17 - IMPORTS INTO CANADA AND EXPORTS OF CLAY AND CLAY PRODUCTS, 1932 and 1933.

		1932		1933	
		Quantity	$	Quantity	$
IMPORTS -					
Building brick	ton	...	41,163	476	3,975
Building blocks	xx	...	15,682	...	2,682
Clays - China	cwt.	346,270	154,125	509,068	210,067
Fire	cwt.	385,956	101,768	593,894	101,916
Pipe	xx	...	18,308	...	1,222
Other clays, n.o.p.	xx	...	182,258	...	192,401
Zirconium silicate	xx	...	1,252	...	687
Zirconium oxide	xx	...	4,574	...	6,751
Drain tile, unglazed	xx	...	317	...	231

Table 17 - IMPORTS INTO CANADA AND EXPORTS OF CLAY AND CLAY PRODUCTS, 1932 and 1933. (concluded)

		1932 Quantity	1932 $	1933 Quantity	1933 $
IMPORTS - concluded					
Drain, sewer pipe and earthenware fittings therefor, chimney linings or vents, chimney tops or inverted blocks, glazed or unglazed	xx	...	10,856	...	10,294
Tiles or blocks of earthenware or stone prepared for mosaic flooring	xx	...	41,433	...	17,943
Tiles, earthenware, for roofing purposes, (From October 12, 1932)	xx	...	2,094	...	5,360
Tiles, earthenware, n.o.p.	xx	...	151,003	...	84,234
Insulators, electric, porcelain	xx	...	170,908	...	55,960
Pottery and chinaware	xx	...	3,236,055	...	2,858,562
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.	xx	...	48,133	...	68,725
Brick, fire, n.o.p., for use exclusively in the construction or repair of a furnace, kiln, or other equipment of a manufacturing establishment	xx	...	384,250	...	379,952
Firebrick, n.o.p.	xx	...	37,173	...	34,489
Firebrick, chrome	xx	...	9,848	...	38,431
Magnesite brick	xx	...	71,077	...	246,855
Silica brick (containing not less than 90 per cent silica)	xx	...	122,952	...	147,901
Paving brick	ton	...	14,446	797	4,866
Artificial teeth, not mounted	xx	...	333,114	...	285,274
Baths, bathtubs, basins, laundry tubs, etc., of earthenware, cement or clay, n.o.p.	xx	...	173,160	...	114,057
Crucibles, clay or sand	xx	...	27,514	...	36,703
Other manufactures of clay	xx	...	52,287	...	51,727
TOTAL	xx	...	5,405,750	...	4,961,265
EXPORTS -					
Building brick	M	535	8,011	383	6,789
Clay - Unmanufactured	Cwt.	3,031	895	9,769	1,522
Manufactures	xx	...	13,436	...	11,016
Earthenware	xx	...	33,391	...	26,965
Porcelain insulators	xx	...	140,761	...	95,260
TOTAL	xx	...	196,494	...	141,552

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