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MANUFACTURES OF THE NON-METALLIC  
MINERALS IN CANADA

1927

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## NOTES ON STATISTICS OF PRODUCTION

In the collection of production data, the Dominion Bureau of Statistics makes a division between primary and secondary production. In the first-named class, there are separate sections for the collection of statistics on (a) **Agricultural Products**, (b) **Furs**, (c) **Fish**, (d) **Forest Products**, (e) **Mineral Products**.

In the second are included (a) **Manufacturing** and (b) **Construction**.

**Manufacturing** is subdivided into nine groups of industries, producing concerns being classified according to the principal component material of their major products. For example, manufactures of leather goods are classified under "Animal Products"; the pulp and paper industry, under "Wood and Paper," etc. An outline of the scheme of classification in use for manufacturing industries is given below:

### *Manufactures of:*

- (1) **Vegetable Products**, including—Coffee and Spices—Cocoa and Chocolate—Preserved and Canned Products—Pickles, Vinegar and Cider—Flour and Cereals—Bread and other Bakery Products—Macaroni and Vermicelli—Distilled and Brewed Liquors and Wines—Rubber Products—Starch and Glucose—Sugar—Tobacco Products—Linseed Oil and Oil Cake.
- (2) **Animal Products**, including—Fish and Fish Products—Dairy Factory Products—Meat and Meat Products—Leather and Leather Products—Furs and Fur Products.
- (3) **Textiles and Textile Products**, including—Cotton Textiles (Cloth, Yarn, Thread and Waste)—Woolen Textiles (Cloth, Yarn, Blankets, Felt and Waste)—Silk Products—Factory-Made Clothing—Carpets, Rugs and Mats—Cordage, Rope and Twine.
- (4) **Wood and Paper**, including—Pulp and Paper Mill Products—Paper Goods—Printing, Publishing and Lithographing—Saw and Planing Mill Products—Furniture—Carrriages, Wagons and Sleighs—Wooden Containers—Woodenware—Turned Wood Products—and the Output of Similar Wood-Using Industries.
- (5) **Iron and Steel and Their Products**, including—Pig Iron and Ferro-Alloys—Steel and Rolled Products—Castings and Forgings—Boilers, Tanks and Engines—Agricultural Implements—Machinery—Automobiles—Automobile Supplies—Bicycles—Railway Rolling Stock—Wire and Wire Goods—Sheet Metal Products—Hardware and Tools—Miscellaneous Iron and Steel Products.
- (6) **Manufactures of Non-Ferrous Metals**, including—Aluminium and Aluminium Ware—Brass and Copper Products—Lead, Tin and Zinc Products—Precious Metal Products—Electrical Apparatus and Supplies—Miscellaneous Non-Ferrous Metal Products—Non-Ferrous Metal Smelting and Refining.
- (7) **Manufactures of Non-Metallic Minerals**, including—Aerated Waters—Asbestos and Allied Products—Cement—Cement Products—Coke and By-Products—Gas, Illuminating and Fuel—Glass (blown, cut, ornamental, etc.)—Lime—Petroleum Products—Products from Domestic Clays—Products from Imported Clays—Salt—Sand—Lime Brick—Stone, Monumental and Ornamental—Miscellaneous Non-Metallic Mineral Products including (a) Artificial Abrasives (b) Abrasive Products (c) Artificial Graphite and Electrodes (d) Gypsum Products (e) Mica Products (f) Miscellaneous Non-Metallic Mineral Products, n.e.s.
- (8) **Chemicals and Allied Products**, including—Coal Tar and its Products—Acids, Alkalies, Salts and Compressed Gases—Explosives, Ammunition, Fireworks and Matches—Fertilizers—Medicinal and Pharmaceutical Preparations—Paint, Pigments and Varnishes—Soaps, Washing Compounds and Toilet Preparations—Inks, Dyes and Colours—Wood Distillates and Extracts—Miscellaneous Chemical Products including (a) Adhesives, (b) Baking Powder, (c) Boiler Compounds, (d) Celluloid Products, (e) Flavouring Extracts, (f) Insecticides, (g) Polishes and Dressings, (h) Sweeping Compounds, (i) Chemical Products, n.e.s.
- (9) **Miscellaneous Products**, including—Brooms and Brushes—Electric Light and Power—Musical Instruments, etc.

The statistics of manufactures are also classified according to the use or purpose of the end product as follows:—

- (1) **Food**, including—Breadstuffs—Fish—Nuts—Fruits and Vegetables—Meats—Milk Products—Oils and Fats—Sugar—Infusions—Miscellaneous.
- (2) **Drink and Tobacco**, including—Beverages, alcoholic—Beverages, non-alcoholic—Tobacco.
- (3) **Clothing**, including—Boots and Shoes—Fur Goods—Garments and Personal Furnishings—Gloves and Mitts—Hats and Caps—Knitted Goods—Waterproofs—Miscellaneous.
- (4) **Personal Utilities**, including—Jewellery and Time-Pieces—Recreational Supplies—Personal Utilities, n.e.s.
- (5) **House Furnishings**.
- (6) **Books and Stationery**.
- (7) **Vehicles and Vessels**.
- (8) **Producers' Materials**, including—Farm Materials—Manufacturers' Materials—Building Materials—General Materials.
- (9) **Industrial Equipment**, including—Farm Equipment—Manufacturing Equipment—Trading Equipment—Service Equipment—Light, Heat and Power Equipment—General Equipment.
- (10) **Miscellaneous**.

## PREFACE

The establishment of new industries to work up non-metallic minerals, and the expansion of existing enterprises, are reflected in the continued rise through several years, of the sums invested in such plants, and in the growth of output values.

Producing more than \$175,000,000 worth of finished products the 1,184 concerns whose combined activities are reviewed herein, represent a wide range of manufactures, of which petroleum refining, the manufacture of illuminating and fuel gas, the production of coke, and the manufacture of cement, may be regarded as leading examples.

In this report, the format is similar to that used in the 1926 edition; some economies have been effected in the grouping of tabular matter, and somewhat less letter-press has been used. Industries such as brick and tile making, cement, lime, and salt, formerly listed only among the primary mining industries, but which were included last year for the first time as "manufacturing industries," in this group, have been given a place again as an integral part of this report, in which an attempt is made to review, comprehensively, the field of manufacturing that depends essentially on the use of non-metallic minerals.

On the next preceding page is a brief note on the Bureau's classification of industries for the collection of production statistics, which shows the place of the present report in the general scheme.

As in the previous issues, there has been included a list of the names and addresses of the reporting firms arranged by industries and by provinces.

The present report has been prepared by Mr. H. McLeod, B.Sc., under the direction of Mr. S. J. Cook, B.A., A.I.C., F.C.I.C., Chief of the Mining, Metallurgical and Chemical Branch.

R. H. COATS,  
*Dominion Statistician.*

DOMINION BUREAU OF STATISTICS,  
OTTAWA, February 14, 1929.

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# DOMINION BUREAU OF STATISTICS

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## MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA, 1927

### CHAPTER ONE

#### GENERAL REVIEW

##### (a) Summary

Manufactures of the non-metallic minerals in Canada during 1927 amounted in value to \$175,746,065, marking a gain of \$2.2 millions over the former record figure of \$173,587,527 established in 1926. In this class 1,184 factories were in operation in 1927 and the capital employed was reported at \$273,933,057, an increase of \$18.2 millions over 1926. The number of employees was 26,662 as against 26,045 in 1926 and salaries and wages totalled \$33,958,541 as compared with \$31,986,949 in the previous year.

Fifteen main industries were included in this group and of these 13 reported gains in output value over the previous year and only 2 showed lower output values. Glass products showed an advance of 21 per cent in value to \$14,164,086; sales of aerated waters gained 18 per cent to \$8,712,427; sales of Portland cement were higher by 16 per cent at \$14,391,937; the value of cement products was up 5 per cent to \$2,663,065; sand-lime brick gained 50 per cent to \$939,911; salt production increased by 9 per cent to \$1,614,667; asbestos products gained 9 per cent to \$1,663,300; the miscellaneous industries, 19 per cent to \$10,231,304; lime, 4 per cent to \$3,923,388; products from domestic clay, 8 per cent to \$11,173,189; artificial gas, 3 per cent to \$18,725,869; products from imported clays, 2.5 per cent to \$2,088,238; coke, 0.5 per cent to \$15,318,880. The petroleum products industry, which is the most important member of the group, showed a decline of 9 per cent in output value to \$64,528,820; and monumental and ornamental stone was down 4 per cent to \$5,606,984.

Manufacturing of secondary products from non-metallic minerals was centred in Ontario and Quebec. Of the 1,184 factories in operation in 1927, there were 643 or 54 per cent in Ontario and 250 or 21 per cent in Quebec. Ontario's plants produced commodities worth \$85,832,634 or 51 per cent of the total, and Quebec's output was worth \$41,998,404 or 27 per cent of the Canadian total. Nova Scotia ranked third with 51 establishments and a total output worth \$12,265,962; Alberta was next with production valued at \$10,456,295 from 43 plants; 65 factories in British Columbia made non-metallic mineral products worth \$11,376,239; the 35 plants in Saskatchewan produced commodities worth \$7,885,008; Manitoba's 51 concerns had an aggregate output valued at \$4,997,944; New Brunswick had 43 plants with an output worth \$882,880; and the 3 concerns in Prince Edward Island reported a total production worth \$50,699.

Capital employed in the manufacture of non-metallic mineral products in 1927 was reported at \$273,933,057, an increase of \$18.2 millions over the corresponding figure for 1926. The cost of lands, buildings and plant fixtures including machinery and tools was given at \$201,006,051; the cost of supplies and stock on hand was placed at \$43,375,601; and working capital including cash, trading and operating accounts and bills receivable totalled \$29,559,405. Artificial gas works showed the greatest investment at \$54,131,873; petroleum products came next with \$56,135,564; cement mills reported \$40,509,319; plants making products from domestic clay, such as brick and tile, sewer pipe, etc., represented an investment of \$30,437,607; capital in coke plants was placed at \$29,879,157; aerated waters, glass, and the miscellaneous group reported a capital

in the neighbourhood of \$12 millions each; lime and stone dressing, \$6 millions; salt, asbestos products, cement products, imported-clay products, about \$3 millions each; and sand-lime brick, about \$1.5 millions.

Investment in Ontario plants amounted to \$119,908,060 or 43 per cent of the total; Quebec reported an aggregate capital of \$68,167,009; British Columbia, \$27,783,928; Nova Scotia, \$24,222,460; Manitoba, \$13,138,222; Alberta, \$12,624,508; New Brunswick, \$1,104,301; Saskatchewan \$6,950,511; and Prince Edward Island, \$34,058. Every province showed a higher capital investment than in 1926.

Including both salaried employees and wage-earners, the total number of people employed in the manufacture of non-metallic minerals in Canada in 1927 was 26,662 of whom 13,427 were working in Ontario, 7,575 in Quebec, 1,632 in British Columbia, 4,135 in Alberta, 999 in Nova Scotia, 887 in Manitoba, 673 in Saskatchewan, 321 in New Brunswick, and 13 in Prince Edward Island. Total payment for salaries and wages amounted to \$33,958,541.

Employment, as reflected by the monthly records of the number of wage-earners on the rolls on the fifteenth of each month, showed 18,475 wage-earners (exclusive of salaried employees) on the rolls in January and thereafter a gradually increasing number to a maximum of 25,125 in July; then there was a steady reduction in staffs each month to 20,587 in December. The average for the year was 22,975.

Fuel and electricity used during the year in the plants classified under the manufactures of the non-metallic minerals cost \$15,243,931. Purchased electric power alone cost \$2,547,444 while among the fuel items, bituminous coal was of most importance, there being used a total of 1,248,388 tons at a cost of \$6,929,006. Fuel oil was of next importance, consumption amounting to 50 million gallons worth \$2,375,396. Concerns in Ontario expended \$7,621,025 for fuel and electricity while firms in Quebec spent \$4,595,138 for this purpose.

Imports into Canada of non-metallic minerals and their products totalled \$155,404,666 in value during 1927 as compared with \$152,687,995 in the previous year. Imports of coal and its products were valued at \$67,127,769 and imports of petroleum, asphalt and their products, chiefly crudes, were worth \$53,844,494. United States supplied \$121,155,686 worth or 78 per cent of Canada's imports in this class, while only \$14,567,830, worth, or 9.5 per cent came from the United Kingdom. Exports of similar products from Canada during 1927 were valued at \$26,343,349 as against \$27,095,283 in 1926. Asbestos and its products were worth \$10,801,645, coal and its products were valued at \$7,076,911, and stone and its products at \$5,208,164. United States took 59.5 per cent of Canada's exports of non-metallic minerals and their products and the United Kingdom took 8.5 per cent.

#### (b) By Industries

**Aerated Waters.**—A total of 335 plants in Canada manufactured carbonated beverages in 1927. Production from these concerns was valued at \$8,712,427; employees numbered 1,802; salaries and wages totalled \$2,053,043 and materials used cost \$3,461,311. Ontario had 139 plants which made beverages worth \$3,139,146 and Quebec had 92 factories with a total output of \$3,500,478. New Brunswick had 20 plants; British Columbia, 20; Nova Scotia, 21; Saskatchewan, 16; Alberta, 15; Manitoba, 11; and Prince Edward Island, 1.

In 1926, there were 347 plants in this line of work but the value of production was only \$7,406,504 and the number of employees was 1,691. Each province excepting British Columbia and Nova Scotia, showed a higher output value in 1927 than in 1926.

**Asbestos and Allied Products.**—Thirteen factories in Canada were included under this industry in 1927; 10 made asbestos packings, brake linings, etc., and 3 produced magnesite flooring and stucco. Four factories were in Quebec, 4 in Ontario, 3 in British Columbia, 1 in Nova Scotia and 1 in Manitoba. Output was valued at \$1,663,300, an increase of 9 per cent over the value reported for the industry in 1926; and the average number of employees was 300 as against 270 in the previous year.

Imports of asbestos manufactures were valued at \$671,882 in 1927 as against \$565,635 in 1926, and exports of crude and manufactures were valued at \$10,801,645 as compared with \$10,705,301 in the preceding year.

**Cement.**—Twelve plants in Canada, operated by 6 different companies, produced portland cement in 1927. Shipments were the highest ever recorded for the industry at 10,065,865 barrels as against 8,707,021 in 1926 and the aggregate value rose to \$14,391,937 as compared with \$13,013,283 in the previous year. Imports of cement during 1927 amounted to 19,354 barrels and exports were recorded at 249,694 barrels; thus the apparent consumption of cement in Canada during 1927 was 9,835,525 barrels.

Quebec showed a higher production than any other province at 4,636,751 barrels, while Ontario produced 3,751,786 barrels; Manitoba, 551,698 barrels; British Columbia, 523,931 barrels; and Alberta, 601,699 barrels.

**Cement Products.**—Value of cement products made in Canada during 1927 was \$2,663,065, a new high level for the industry and 5 per cent above the figure for 1926. A total of 151 plants manufactured concrete blocks, tile, pipe, etc., in 1927. These concerns represented a capital of \$2,671,273 and employed on the average, 872 people during the year. Materials cost \$912,686, and the value added by manufacturing was \$1,750,379. There were 109 factories in Ontario, 31 in Quebec, 5 in British Columbia, 2 in Saskatchewan, 1 in Alberta, 2 in Nova Scotia and 1 in New Brunswick.

Records for this group include a great number of small producers, but many small operators who worked in spare time only were not asked to make reports.

In 1926, reports were received from 185 plants in this group, employment was given at 922 people and output was valued at \$2,544,242.

**Coke and By-Products.**—This industry includes only the producers of metallurgical coke from by-product or bee-hive ovens. Coke was also recovered as a by-product from artificial gas plants or petroleum refineries but these latter industries have been reviewed separately in other chapters of this report.

Only 6 plants in Canada produced metallurgical coke in 1927; 3 were in Ontario; 2 in British Columbia; and 1 in Nova Scotia. These concerns represented an investment of \$29,879,157 and gave work to an average of 652 people the year round. The same 6 plants were in operation in 1926 but the production value of coke and by-products at \$15,318,880 in 1927 was slightly above the figure for 1926.

During 1927 a total of 1,431,345 tons of foreign coal and 809,135 tons of Canadian coal were charged to coke ovens to produce 1,582,632 tons of metallurgical coke. Production in Ontario amounted to 1,049,097 tons or 66 per cent of the total output for the industry. The bulk of the metallurgical coke made in Eastern Canada was for use in iron blast furnaces while that made in the Western provinces was used chiefly in copper smelters.

Including coke from gas plants, the total production in Canada amounted to 2,026,438 tons, imports totalled 772,235 tons and exports amounted to 74,109 tons. The apparent consumption of coke in Canada during 1927 was 2,724,564 tons as against 2,973,393 tons in 1926.

**Illuminating and Fuel Gas.**—Artificial gas made in the industrial gas plants in Canada in 1927 totalled 14,758,928 M cubic feet of which 13,273,413 M cubic feet were sold for \$15,157,327. By-products of gas manufacture were worth \$2,360,590, thus bringing the total value of products for the industry to \$18,725,869 as compared with \$18,264,860 in the previous year.

There were 42 establishments in operation in 1927 of which 27 made coal gas or carburetted water gas, 9 made pintsch oil gas and 6 manufactured acetylene. Capital employed was reported at \$54,131,873, the average number of employees was 3,494, and materials for use in manufacturing cost \$6,178,791.

Straight coal gas and carburetted water gas were the most important products. Pintsch oil gas was made at certain divisional plants along the railroads and was supplied in cylinders for railway car lighting purposes, and acetylene gas was made and used for lighting purposes in several small prairie towns.

**Glass.**—Production in the glass industry in Canada was valued at \$14,164,086 in 1927. This output included \$10,232,634 from the 7 factories manufacturing pressed and blown glass and



\$3,931,452 from the 47 concerns engaged in bevelling and cutting plate glass, cutting sheet glass, and assembling leaded and other art glass. These 54 concerns represented an investment of \$12,736,057 and employed 3,120 people during the year.

There was no plate glass made in Canada and the entire supply, therefore, was imported and cut and bevelled as required.

Imports of glass and glassware of all kinds were valued at \$8,146,698 in 1927 and exports were worth \$128,958.

**Lime.**—Sixty different plants in Canada produced quicklime or hydrated lime during 1927. Output from these units totalled 12,707,221 bushels worth \$3,923,388 and included 10,671,678 bushels of quicklime worth \$3,081,891 and 2,035,543 bushels of hydrated lime valued at \$841,497. Ontario with 29 operating plants produced 6,946,630 bushels or 55 per cent of all lime made in Canada, while Quebec made 3,075,819 bushels or 24 per cent of the total.

Capital employed in this industry in 1927 was reported at \$6,200,481 and the average number of employees was 1,132. In 1926, there were 60 plants in operation, capital stood at \$5,825,809, employees numbered 1,106 and production amounted to 11,825,736 bushels worth \$3,781,484.

**Petroleum Products.**—Petroleum products in Canada showed a decline of \$6.4 millions in output value in 1927 to a total of \$64,528,820. This figure includes the output of 16 oil refineries, valued at \$63,979,849 and the production of compounding plants, worth \$548,971.

Oil refineries in 1927 treated 15,632,271 gallons of Canadian oil and 700,737,619 gallons of imported oil to make 258,549,724 gallons of gasoline, 286,525,733 gallons of fuel oil, 54,316,079 gallons of kerosene, 18,532,072 gallons of lubricating oils, 11,101,247 pounds of grease, 9,526,072 pounds of wax and candles, as well as petroleum, coke, asphalt, stove oil and other products. Employees in the various refineries numbered 3,802 in 1927.

The 7 plants making lubricating oils or greases employed 54 people and used materials costing \$316,391. Products included lubricating oil worth \$375,845, core oil valued at \$6,794, greases worth \$67,668 and other products worth \$98,664.

Imports of petroleum and its products in 1927 were valued at \$52,878,717 and exports were worth \$1,648,966.

**Domestic-Clay Products.**—Production of clay products in Canada from domestic raw materials was valued at \$11,173,189 in 1927 as against \$10,357,323 in 1926. The number of plants in operation was 194; capital employed amounted to \$30,437,607; employees numbered 4,776, payments for salaries and wages totalled \$4,769,307, and expenditures for fuel and electricity amounted to \$2,088,724.

In 1927, this group included an output value of \$8,995,741 from 176 factories which made brick and tile as main products; \$1,137,284 from the 5 concerns which made clay sewer pipe; \$729,079 from 8 firms which were engaged chiefly in manufacturing fire brick and other refractories; and \$311,085 from the 5 establishments included in the stoneware and pottery group.

**Imported-Clay Products.**—Under this heading have been grouped those plants in Canada which manufactured clay products such as porcelain insulators, fire brick, sanitary ware, etc., from special clays imported for the purpose. In 1927 there were 13 plants in this class and the value of production was \$2,088,238, a slight increase over the figure for 1926. These concerns employed a capital of \$2,834,820 and gave work to 652 persons during the year.

Porcelain insulators were the main product, the output in 1927 being worth \$1,025,224.

**Salt.**—Production of salt in Canada during 1927 again showed an increase to 268,672 tons, a gain of 2.3 per cent over the former record of 262,547 tons in 1926. The value of the output was \$1,614,667 in 1927 and \$1,480,149 in 1926. Eleven factories employing 376 people were in operation during the year; 9 were in Ontario, 1 in Alberta and 1 in Nova Scotia. Ontario accounted for 95 per cent of the entire Canadian output.

**Sand-Lime Brick.**—Sand-lime brick was manufactured in Canada in 11 different plants during 1927; 7 were located in Ontario, 2 in Quebec and 2 in Manitoba. Production totalled 72,864 M valued at \$864,911 as compared with an output of 50,282 M worth \$606,409 from the 10 factories which were operating in 1926. Two new factories in Quebec were opened during the year. Capital employed in 1927 stood at \$1,586,064 and employees numbered 254.



**Monumental and Ornamental Stone.**—This group includes all firms engaged only in the cutting and finishing of monumental and building stone; the primary industry or the quarrying of stone has been reviewed in a separate report. In 1927, there were 228 plants in this group and production was valued at \$5,606,984 as compared with 232 establishments and an output worth \$5,799,690 in 1926. Many of the establishments were small and employed only 2 or 3 persons. Capital employed in the industry was given at \$5,758,806 and the average number of employees was 1,514.

**Miscellaneous Non-Metallic Mineral Products.**—This group includes factories in Canada which manufactured non-metallic mineral products that could not be classified in any of the other industrial groups considered in this report. In 1927, the output was valued at \$10,231,304, including \$6,106,794 from 11 plants making abrasive products, \$2,292,428 from 4 factories making gypsum products, \$285,555 from 9 mica trimming shops, \$1,457,722 from 3 concerns making carbon electrodes and artificial graphite and \$88,805 from 4 concerns making foundry facings, etc. For the group as a whole, capital employed was \$13,331,203, the average number of employees was 1,592 and materials used cost \$3,582,815.

### (c) By Provinces

**Prince Edward Island.**—Only 3 establishments in Prince Edward Island made non-metallic mineral products in 1927. Of these, 1 made aerated waters and 2 produced monumental and ornamental stone. The total value of products from these plants was \$50,699 and 13 people were employed the year round. In the previous year there were also 3 plants in this group when output was valued at \$52,248 and 12 people were employed.

**Nova Scotia.**—In 1927, Nova Scotia had 21 plants producing aerated waters, 11 in the monumental and ornamental stone industry, 10 making clay products, 2 manufacturing cement products, 2 in the lime industry, and 1 concern in each of the asbestos and allied products, coke, gas, salt and petroleum refining industries. These 51 factories represented a capital investment of \$24,222,460, afforded employment to 999 persons and had a combined output valued at \$12,265,962. From the standpoint of output values the petroleum refinery at Halifax was the most important of the works in this group, and the coke plant of the Dominion Iron and Steel Company at Sydney was next in line. The plants making clay products, gas, aerated waters, stone, salt, lime, asbestos manufactures and cement products followed in the order named.

**New Brunswick.**—Non-metallic mineral products were made in 43 different factories in New Brunswick in 1927 and the aggregate output value was \$882,880. In that year, there were 20 concerns manufacturing aerated waters, 11 in the monumental and ornamental stone group, 5 producing lime, 3 manufacturing products from domestic clays, 2 making artificial or oil gas, 1 in the glass industry and 1 making cement products. Production of aerated waters amounted to \$367,107, the highest value for any of the industries mentioned above; the output of lime was worth \$148,321; and of monumental and ornamental stone, \$150,134.

**Quebec.**—Quebec ranked next to Ontario in the production of manufactured non-metallic mineral products. In 1927, there were 250 plants in operation in the following industries: aerated waters, 92; monumental and ornamental stone, 49; cement products, 31; domestic-clay products, 20; lime, 15; miscellaneous non-metallic mineral products, 11; glass, 9; imported-clay products, 5; artificial gas, 4; petroleum products, 5; asbestos manufactures, 4; Portland cement, 3; and sand-lime brick, 2. Production from these plants during the year was valued at \$41,998,404 of which petroleum products contributed \$11,254,507; gas, \$6,663,667; Portland cement, \$5,383,058; glass, \$5,652,540; products from domestic clays, \$2,734,738; aerated waters, \$3,500,478; asbestos products, \$1,229,658; the miscellaneous non-metallic mineral products, \$2,305,948; imported clay products, lime and stone industries about \$800,000 each; and cement products, \$682,765.

These concerns represented a capital of \$68,167,009 and employed 7,575 people the year round. A total of \$8,829,925 was paid out in wages and salaries during the year; \$4,595,138 was spent for fuel and electricity, and \$18,785,521 was expended for materials used in manufacturing in the various plants.

**Ontario.**—Of the 1,184 establishments in Canada which were classified under the manufacture of the non-metallic mineral products in 1927, there were 643 or 54 per cent in Ontario, and of a total production valued at \$175,746,066 Ontario accounted for \$85,852,534, or 51 per cent.

**Petroleum products held first place** with 4 refineries and 4 compounding plants which represented a total investment of \$19,878,344 and produced commodities worth \$25,610,720. The coke industry was next with only 3 plants and an output valued at \$11,026,512; 2 of these plants made coke principally for use in iron blast furnaces while the other made metallurgical coke for sale. The manufacture of illuminating and fuel gas was of next importance, there being in this business in 1927 some 20 concerns which distributed gas worth \$8,987,315. The miscellaneous non-metallic group including artificial abrasives, gypsum products, etc., had an output worth \$7,566,152; glass products were worth \$7,468,917; products from domestic clays, \$5,853,035; Portland cement, \$5,144,326; monumental and ornamental stone, \$3,217,742; aerated waters, \$3,139,146; lime, \$2,198,237; cement products, \$1,685,050; salt, \$1,510,777; imported-clay products, \$1,239,677; sand-lime brick, \$793,845; and asbestos and allied products, \$391,641.

Including 1,861 salaried employees and 11,566 wage-earners the manufacture of non-metallic minerals in Canada gave employment to an average of 13,422 people throughout the year while payments for salaries and wages amounted to \$17,759,809. Capital employed in the industries in this group was given at \$119,908,060, expenditures for fuel and electricity was \$7,621,025, and the cost at the plant of all materials used in manufacture was \$38,835,609.

**Manitoba.**—In 1927, Manitoba had 14 plants in the monumental and ornamental stone industry; 11 in the aerated waters group; 4 making clay products; 4 burning lime; 8 in the gas industry; 3 in the glass group; 2 making sand-lime brick; 2 cement mills; 1 petroleum refinery; 1 concern making magnesite stucco, and 1 gypsum wallboard plant. These 51 establishments used raw materials worth \$1,387,755 in the production of non-metallic minerals products valued at \$4,997,944 and afforded employment to 887 persons throughout the year. The cement industry was the most important of the group, with the gas industry, monumental and ornamental stone, aerated waters, gypsum products, petroleum refining, lime, clay products, glass and sand-lime brick following in order of importance.

**Saskatchewan.**—Manufactures of non-metallic mineral products in Saskatchewan were valued at \$7,885,008 in 1927. There were 35 plants in operation during the year; 16 made aerated waters; 8 produced monumental or ornamental stone; 6 made products from domestic clays; 1 made acetylene gas and 1 made Pintsch gas; 2 made cement products; and 1 plant refined petroleum. Capital employed in these industries was reported at \$6,950,511; the average number of employees was 673 and expenditures for raw materials totalled \$5,456,112.

**Alberta.**—With 43 plants in this group Alberta contributed \$10,456,295 to the total value of non-metallic mineral products made in Canada. Alberta was represented by 15 firms manufacturing aerated waters; 4 oil refineries; 10 making clay products; 5 concerns producing monumental and dressed building stone; 2 making cement; 2 producing lime; 1 plant making oil gas; 1 making pressed and blown glass; 1 cutting and bevelling glass to make mirrors, etc.; 1 producing salt; and 1 concern making cement products. Some 1,135 people were employed in these factories which represented a capital of \$12,624,508 and used materials valued at \$4,927,845.

**British Columbia.**—Plants in British Columbia engaged in the manufacture of non-metallic mineral products numbered 65 and the total production was valued at \$11,376,239. Capital employed in the whole group amounted to \$27,783,928 and employment was given to an average of 1,632 people the year round. There were 20 plants manufacturing carbonated beverages of all kinds and the total output was worth \$303,727; 4 establishments produced artificial gas and by-products worth \$1,374,048; 10 factories made clay products valued at \$679,788; 3 concerns produced lime having a sales value of \$376,683; 9 plants produced finished stone worth \$157,609; 5 firms made leaded glass, mirrors, art glass, etc., valued at \$77,041; 5 firms made cement products; 2 made metallurgical coke; 1 made Portland cement; 3 refined petroleum to produce commodities worth \$5,886,606; and 3 made asbestos pipe covering, magnesite products, etc., worth \$19,904.

**(d) Prices of Non-Metallic Minerals and Their Products**

(Prepared in the Internal Trade Branch)

The Bureau's index number of prices for this group declined from 176.1 in 1926 to 171.1 in 1927.

*Bricks.*—For the most part, prices were unchanged from the 1926 levels. Reflecting increased local construction activity, common plastic bricks at Montreal, rose from \$16.63 net to \$17.58 per M. in March.

*Pottery.*—Prices were mostly stable. Cups and saucers, No. 1 quality, English earthenware, declined slightly, averaging \$1.32 as compared with \$1.35, the previous year.

*Coal.*—Anthracite coal prices were easier, reflecting the more normal situation in Great Britain and the United States. The usual seasonal movement was in evidence. Anthracite egg coal, in carload lots, f.o.b. Toronto began the year at \$13.57, declined to \$13.02 in March, rose to \$13.27 in June and to \$13.52 in September, at which level it remained for the rest of the year. Bituminous coal production in Canada increased by 1,000,000 tons. Nova Scotia run of mine in small lots, f.o.b. mines, declined from an average of \$6.08 per net ton in 1926 to \$6.00 in 1927. Quotations for British Columbia coal and for coke were unchanged.

*Glass and Its Products.*—The index for this group fell from 100.3 in 1926 to 90.2 in 1927. Window glass, under 26", showed a gradual downward movement throughout the year, declining from \$3.60 to \$3.00 per box. The yearly averages were \$3.62 in 1926 and \$3.25 in 1927. Prices for glass are practically on a pre-war basis, due to cheap Belgian imports and to price cutting, induced by keen competition. Another factor is the competition in Belgium between manufacturers using machine methods and those using the old hand processes.

*Petroleum Products.*—Both production and consumption of these commodities increased in 1927, but the former was relatively greater and prices were depressed. In the United States the production of crude oil increased from 767,000,000 barrels in 1926 to 900,000,000 barrels in 1927. An already increased supply of gasoline due to greater crude oil supplies was further augmented by improved refining methods. Gasoline consumption increased from 262,000,000 barrels in 1926 to 298,000,000 in 1927; fuel oil consumption also increased, but neither of these increases was sufficient to prevent prices from falling. Gasoline at Toronto averaged 21½c. as compared with 25½c. in 1926. From 24½c. in January prices declined to 23½c. in March, to 21½c. in May and to 19½c. in June, which level prevailed throughout the remainder of the year. Gasoline, it will be noted, is one of the few commodities below pre-war levels. Coal oil W.W. averaged 21½c. as against 22½c. in 1926.

*Lime and Cement.*—Lime, high calcium, remained at \$7.50 throughout the year. Portland cement averaged \$1.36 per bbl. as compared with \$1.54 in 1926. Price cutting occurred in this industry during part of the year.

*Sulphur.*—Crude sulphur remained at \$23.50 per ton throughout the year. The practical monopoly possessed by the United States makes for a strong situation.



Table 1.—Principal Statistics of the Manufactures of the Non-Metallic Minerals in Canada, by Industries, 1923-1927

Year	Number of plants	Capital employed \$	Number of employees	Salaries and wages \$	Cost of fuel and electricity \$	Cost of materials \$	Selling value of products \$	Value added by manufacturing \$
<b>AERATED WATERS</b>								
1923.....	295	8,315,389	1,724	1,843,531	98,807	2,672,332	6,408,832	3,736,500
1924.....	296	9,385,802	1,543	1,807,572	131,009	1,982,340	6,354,358	4,372,018
1925.....	313	10,673,331	1,684	1,849,251	145,506	3,076,535	6,877,524	3,800,961
1926.....	347	10,695,527	1,691	1,879,321	150,510	3,053,477	7,406,504	4,353,027
1927.....	335	11,665,089	1,802	2,053,043	126,959	3,461,311	8,712,427	5,251,116
<b>ASBESTOS AND ALLIED PRODUCTS</b>								
1923.....	9	1,486,589	145	176,986	12,292	260,281	583,013	322,732
1924.....	9	1,468,728	120	169,979	19,949	267,201	589,339	322,138
1925.....	12	2,624,260	256	282,382	62,640	783,033	1,344,097	561,034
1926.....	14	2,773,433	270	321,865	64,288	750,907	1,530,094	779,187
1927.....	13	2,800,945	300	358,959	73,495	797,975	1,663,300	895,325
<b>CEMENT PRODUCTS</b>								
1923.....	118	1,664,580	421	458,745	25,242	596,654	1,505,528	938,874
1924.....	116	1,673,758	455	425,078	28,419	493,270	1,257,871	764,601
1925.....	197	2,594,736	819	697,716	40,442	736,294	2,020,239	1,289,943
1926.....	185	2,857,752	922	778,662	70,815	890,041	2,544,242	1,664,201
1927.....	151	2,671,273	872	936,053	56,576	912,888	2,663,065	1,750,379
<b>COKE AND BY-PRODUCTS</b>								
1923.....	5	20,494,442	598	842,376	211,515	11,437,863	13,901,445	2,463,582
1924.....	6	24,315,744	530	900,992	1,125,097	6,879,516	10,438,492	3,558,940
1925.....	6	23,905,454	583	885,637	1,213,677	7,112,311	11,020,295	3,907,987
1926.....	6	24,769,899	615	1,013,752	1,063,122	9,744,081	15,261,474	5,517,393
1927.....	6	29,879,157	652	1,118,538	1,153,344	10,436,112	15,318,883	4,882,768
<b>ILLUMINATING AND FUEL GAS</b>								
1923.....	45	45,526,495	3,021	3,891,832	2,706,182	9,024,084	19,005,340	10,581,251
1924.....	44	42,818,276	3,648	4,835,351	1,128,816	6,178,909	18,101,724	11,329,148
1925.....	44	49,129,651	3,804	5,057,702	1,128,816	6,178,909	17,874,479	11,695,870
1926.....	44	49,543,267	3,678	4,883,521	589,476	6,226,100	18,264,830	12,038,760
1927.....	42	54,131,873	3,494	4,759,581	815,778	6,178,791	18,725,839	12,517,075
<b>GLASS</b>								
1923.....	40	14,892,372	3,350	3,778,892	1,365,993	3,714,515	11,095,026	7,383,511
1924.....	48	13,304,814	3,137	3,666,213	1,255,190	3,667,660	10,776,816	7,109,153
1925.....	52	12,691,338	2,778	3,291,912	1,191,808	4,029,035	10,117,601	6,088,569
1926.....	52	11,432,823	3,033	3,443,644	1,141,180	4,881,559	11,670,269	6,785,710
1927.....	54	12,736,057	3,120	3,876,959	1,243,311	5,257,951	14,144,081	8,993,136
<b>PETROLEUM PRODUCTS</b>								
1923.....	20	61,027,704	4,257	5,048,329	3,899,272	36,810,096	46,280,534	9,466,898
1924.....	25	53,795,794	3,669	5,749,705	3,586,832	37,092,711	49,411,067	12,318,354
1925.....	21	50,589,519	3,738	5,775,016	3,147,130	38,261,024	57,762,127	12,591,193
1926.....	23	57,178,125	3,753	5,892,399	3,594,795	51,172,159	71,193,311	20,024,152
1927.....	23	59,135,514	3,859	6,189,226	3,639,456	53,059,921	64,528,820	11,468,899
<b>IMPORTED—CLAY PRODUCTS</b>								
1924.....	12	1,377,533	489	59,143	141,491	535,793	1,879,769	1,344,976
1925.....	12	2,762,951	552	653,211	170,339	326,023	1,741,745	1,415,722
1926.....	12	2,849,558	597	783,448	194,003	520,218	2,039,514	1,519,291
1927.....	13	2,834,820	652	843,535	185,779	57,519	2,088,298	1,520,719
<b>SAND—LIME BRICK</b>								
1923.....	8	1,042,619	225	285,248	59,810	218,118	887,930	679,842
1924.....	12	1,346,239	236	248,015	61,237	181,269	619,946	438,684
1925.....	10	960,729	239	257,116	62,044	139,555	851,055	723,500
1926.....	10	1,082,577	218	223,599	50,119	197,400	629,672	432,272
1927.....	11	1,588,064	254	300,318	67,416	258,777	939,911	681,134
<b>MONUMENTAL AND ORNAMENTAL STONE</b>								
1923.....	210	5,073,018	1,278	1,842,933	29,170	1,083,123	5,025,093	3,341,877
1924.....	210	4,914,269	1,314	1,887,462	95,791	1,441,753	4,734,572	3,288,819
1925.....	214	5,015,729	1,262	1,811,512	99,929	1,934,817	5,355,997	3,391,180
1926.....	232	5,438,767	1,491	2,175,223	103,492	1,859,944	5,799,600	3,939,726
1927.....	228	5,758,803	1,514	2,255,628	112,895	1,798,972	5,806,984	3,898,312
<b>MISCELLANEOUS NON-METALLIC MINERAL PRODUCTS</b>								
1923.....	38	7,262,404	2,917	1,492,819	99,596	2,839,015	8,147,331	5,268,316
1924.....	36	6,659,059	1,767	1,328,976	594,220	2,127,145	6,991,934	4,514,759
1925.....	35	8,322,095	1,316	1,371,895	592,327	2,083,856	7,978,183	5,291,327
1926.....	31	8,923,857	1,552	1,639,604	790,904	3,004,413	8,612,653	5,608,245
1927.....	31	13,331,203	1,542	1,729,777	1,033,592	3,582,815	10,231,394	6,648,489
<b>Total for all Industries Listed Above</b>								
1923.....	793	166,296,211	17,336	21,174,614	3,772,697	69,392,684	193,451,612	94,154,328
1924.....	814	161,390,046	16,938	21,586,516	8,713,687	61,711,225	181,151,828	94,419,693
1925.....	916	166,265,821	17,031	21,943,383	8,061,688	65,279,452	193,315,318	94,667,196
1926.....	956	177,583,885	17,821	21,022,095	7,251,394	82,243,139	211,953,288	102,661,969
1927.....	997	192,599,848	18,198	21,411,622	8,493,511	86,312,321	244,642,884	114,339,353



Table 1.—Principal Statistics of the Manufactures of the Non-Metallic Minerals in Canada, by Industries, 1923-1927—Concluded

Year	Number of plants	Capital employed \$	Number of employees	Salaries and wages \$	Cost of fuel and electricity \$	Cost of materials \$	Selling value of products \$	Value added by manufacturing \$
<b>DOMESTIC CLAY PRODUCTS</b>								
<b>BRICK AND TILE</b>								
1923.....	204	24,866,834	3,954	4,045,487	2,254,445	.....	8,220,269	.....
1924.....	192	24,423,104	3,332	3,071,379	1,508,573	.....	7,046,355	.....
1925.....	175	22,410,450	3,403	3,167,926	1,565,341	.....	7,374,551	.....
1926.....	184	23,034,976	3,044	3,468,052	1,761,516	.....	8,146,514	.....
1927.....	176	24,795,253	3,977	3,828,106	1,780,684	.....	8,095,741	.....
<b>CLAY SEWER PIPE</b>								
1923.....	5	3,022,522	459	541,515	307,681	.....	1,421,002	.....
1924.....	5	3,149,838	467	593,598	281,448	.....	1,343,197	.....
1925.....	5	2,810,782	382	461,527	240,038	.....	1,182,454	.....
1926.....	5	3,026,076	407	497,512	227,456	.....	1,177,247	.....
1927.....	5	3,246,193	421	509,730	214,068	.....	1,137,284	.....
<b>FIRE BRICK AND FIRE CLAY PRODUCTS</b>								
1923.....	6	1,786,353	192	284,377	90,286	.....	605,098	.....
1924.....	7	1,850,385	208	258,416	74,431	.....	584,838	.....
1925.....	6	2,114,738	220	274,019	88,552	.....	702,707	.....
1926.....	8	1,783,957	195	250,869	75,544	.....	710,836	.....
1927.....	8	2,034,753	226	283,595	75,016	.....	729,079	.....
<b>STONWARE AND POTTERY</b>								
1923.....	4	314,802	119	117,221	14,607	.....	230,924	.....
1924.....	4	387,667	113	114,925	14,642	.....	240,687	.....
1925.....	4	424,894	131	129,703	15,660	.....	269,979	.....
1926.....	4	310,043	149	130,254	15,538	.....	322,726	.....
1927.....	5	359,918	152	150,905	12,954	.....	311,085	.....
<b>CEMENT</b>								
1923.....	10	38,284,494	1,842	2,551,784	2,809,414	.....	15,064,661	.....
1924.....	10	36,766,574	1,837	2,531,622	2,872,711	.....	13,398,411	.....
1925.....	11	38,081,583	1,928	2,511,400	2,843,904	.....	14,046,704	.....
1926.....	12	41,380,000	2,340	3,052,662	3,424,156	.....	13,013,283	.....
1927.....	12	49,599,319	2,270	3,103,939	3,546,000	.....	14,391,937	.....
<b>LIME</b>								
1923.....	56	6,050,954	1,197	1,191,416	953,709	.....	3,266,608	.....
1924.....	49	5,165,064	927	970,672	740,878	.....	3,178,541	.....
1925.....	62	5,154,046	1,006	960,434	762,814	.....	3,387,652	.....
1926.....	60	5,825,809	1,106	1,082,854	789,990	.....	3,781,484	.....
1927.....	60	6,200,481	1,132	1,133,708	826,436	.....	3,923,388	.....
<b>SALT</b>								
1923.....	12	2,406,992	368	412,597	356,794	.....	1,713,516	.....
1924.....	12	2,479,563	364	431,618	342,118	.....	1,374,780	.....
1925.....	13	2,563,508	402	467,487	315,368	.....	1,410,897	.....
1926.....	12	2,782,728	384	482,651	324,612	.....	1,480,149	.....
1927.....	11	3,194,802	376	490,067	287,260	.....	1,614,667	.....
<b>Total of Mineral Industries Listed Above</b>								
1923.....	297	76,344,011	8,131	9,166,397	6,786,936	.....	30,522,948	.....
1924.....	281	74,224,095	7,218	7,975,230	5,831,801	.....	27,166,809	.....
1925.....	276	73,569,001	7,470	7,975,396	5,836,677	.....	28,374,744	.....
1926.....	245	76,149,599	8,223	8,961,834	6,617,812	.....	28,632,239	.....
1927.....	277	80,342,239	8,554	9,546,914	6,748,120	.....	31,103,311	.....
<b>GRAND TOTAL</b>								
1923.....	1,091	244,519,222	26,067	27,448,046	12,557,543	.....	143,775,964	.....
1924.....	1,095	235,613,111	24,186	27,561,746	15,518,488	.....	138,318,637	.....
1925.....	1,192	231,824,925	24,501	27,906,779	13,898,465	.....	144,321,092	.....
1926.....	1,241	251,724,184	26,045	31,986,949	14,372,116	.....	173,582,527	.....
1927.....	1,184	273,933,057	26,662	33,858,541	15,241,931	.....	175,746,065	.....

Table 2.—\*Principal Statistics of the Manufactures of the Non-Metallic Minerals in Canada, by Provinces, 1923-1927

Year	Number of plants	Capital employed \$	Number of employees	Salaries and wages \$	Cost of fuel and electricity \$	Cost of materials \$	Selling value of products \$	Value added by manufacturing \$
PRINCE EDWARD ISLAND AND NOVA SCOTIA								
1923.....	39	24,956,656	894	1,020,224	771,427	7,561,461	10,459,641	2,898,180
1924.....	37	22,466,177	773	1,041,279	926,885	6,067,375	9,185,442	3,118,067
1925.....	39	21,371,154	784	1,012,115	914,466	5,500,831	8,530,039	3,020,208
1926.....	58	21,580,760	961	1,167,353	680,826	7,367,943	13,008,539	5,640,596
1927.....	54	24,256,518	1,012	1,342,732	719,137	10,003,971	12,316,661	2,312,060
NEW BRUNSWICK								
1923.....	30	438,603	200	168,116	6,238	193,464	523,732	330,268
1924.....	31	460,483	190	187,569	23,426	199,038	563,917	364,879
1925.....	35	804,221	209	193,807	15,934	234,383	826,790	592,407
1926.....	45	1,111,242	324	275,253	78,963	190,288	830,400	640,112
1927.....	43	1,104,304	321	306,078	77,995	224,816	882,880	658,064
QUEBEC								
1923.....	175	28,009,688	5,295	4,230,294	1,218,740	12,238,980	23,734,921	11,495,641
1924.....	183	28,246,887	5,010	5,316,150	2,277,432	10,304,845	22,864,664	12,559,759
1925.....	203	32,385,178	5,182	5,838,067	2,044,572	13,071,000	25,741,323	12,670,232
1926.....	260	60,733,609	7,420	8,156,631	4,135,229	17,278,400	39,946,596	22,668,136
1927.....	250	68,167,009	7,575	8,829,925	4,595,138	18,785,521	41,998,404	28,581,241
ONTARIO								
1923.....	434	75,344,439	8,510	11,193,071	2,761,838	33,603,742	58,479,525	24,575,783
1924.....	436	71,813,426	8,655	11,506,180	4,833,871	29,454,473	54,455,507	25,001,034
1925.....	502	77,446,321	8,613	11,725,935	3,921,626	31,239,746	58,037,530	26,725,314
1926.....	676	116,091,479	13,035	16,928,932	7,408,249	39,729,031	84,195,934	45,466,883
1927.....	643	119,308,060	13,427	17,759,809	7,621,025	38,835,609	85,832,634	51,839,389
MANITOBA								
1923.....	31	6,360,255	468	566,921	30,957	1,487,362	2,600,261	1,112,899
1924.....	33	7,411,954	434	590,435	251,077	1,052,928	2,351,632	1,298,706
1925.....	37	7,634,485	480	624,786	112,241	1,312,345	2,570,788	1,267,443
1926.....	52	12,718,184	927	1,141,667	428,493	1,385,828	5,088,556	3,702,728
1927.....	51	13,138,222	887	1,165,653	532,414	1,387,755	4,997,944	5,199,727
SASKATCHEWAN								
1923.....	22	6,084,784	451	997,710	631,358	4,932,684	8,169,997	3,237,313
1924.....	25	5,811,964	445	982,609	470,019	4,467,124	6,315,382	1,848,258
1925.....	28	5,097,434	378	539,575	376,562	3,857,650	6,053,791	2,190,141
1926.....	36	6,152,055	504	684,837	469,855	5,784,316	8,434,804	2,650,404
1927.....	35	6,950,511	673	918,057	504,752	5,456,112	7,895,008	2,428,806
ALBERTA								
1923.....	25	10,355,623	1,369	1,512,604	48,152	797,550	1,651,084	854,434
1924.....	32	11,731,574	681	1,032,931	316,168	4,576,518	7,346,582	2,770,064
1925.....	28	7,264,120	441	645,231	229,189	4,109,879	6,416,139	2,306,260
1926.....	42	12,420,660	1,131	1,473,653	633,511	5,226,940	11,459,059	6,232,110
1927.....	43	12,624,508	1,135	1,507,128	540,864	4,927,845	10,456,295	6,809,707
BRITISH COLUMBIA								
1923.....	38	13,430,166	749	782,709	303,897	8,487,441	8,132,951	.....
1924.....	37	13,447,551	750	1,199,363	584,800	5,618,926	8,068,762	2,449,836
1925.....	44	14,200,911	911	1,339,717	447,098	5,952,827	7,760,018	1,808,001
1926.....	72	21,610,189	1,683	2,158,623	636,990	6,330,519	10,623,659	4,293,140
1927.....	65	27,783,928	1,632	2,129,159	652,606	6,990,990	11,376,239	5,861,365
CANADA								
1923.....	791	166,786,211	17,936	23,171,649	5,772,667	63,392,681	113,453,912	44,159,324
1924.....	814	161,430,016	16,938	21,586,516	9,713,687	61,741,225	111,151,828	49,419,603
1925.....	916	166,761,821	16,998	21,919,263	8,061,688	65,278,762	115,916,348	59,535,096
1926.....	1,241	255,721,184	26,045	31,886,949	11,372,116	82,233,314	173,587,527	91,231,238
1927.....	1,181	273,841,057	26,662	33,958,511	15,243,931	86,312,524	175,216,065	103,694,079

\*Prior to 1926, statistics on manufactures of the non-metallic minerals did not include data for the following industries:—Domestic-Clay Products; Salt; Lime; and Cement.

Table 3.—Principal Statistics of the Manufactures of the Non-Metallic Minerals in Canada, by Provinces and by Industries, 1927

Industry	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Canada*
<b>ABRATED WATERS—</b>									
Number of plants.....	21	20	92	139	11	16	15	20	335
Capital employed..... \$	199,238	337,063	3,842,867	4,661,691	918,094	586,410	576,426	540,172	11,665,086
Salaried employees—									
Male.....	24	22	140	141	29	29	30	16	432
Female.....	4	4	23	17	5	1	6	2	62
Wage-earners—									
Male.....	47	46	520	413	50	51	52	54	1,234
Female.....	3	2	28	20	1	2	10	2	74
Total employees.....	78	74	711	501	85	83	104	74	1,802
Salaries and wages—									
Salaries..... \$	22,568	34,095	242,323	270,519	47,098	50,816	61,074	30,960	760,753
Wages..... \$	33,248	45,322	557,100	416,810	62,430	62,635	54,880	59,201	1,292,290
Total..... \$	55,816	79,417	799,423	687,479	109,534	113,451	115,953	90,161	2,053,043
Cost of fuel and electricity..... \$	3,725	5,426	45,576	42,074	6,762	8,291	7,343	7,720	126,959
Cost of materials..... \$	75,163	147,406	1,383,065	1,232,301	225,597	118,601	142,064	134,628	3,461,311
Value of products..... \$	161,078	367,107	3,500,478	3,139,146	464,815	358,050	410,873	303,727	8,712,427
<b>ASBESTOS AND ALLIED PRODUCTS—</b>									
Number of plants.....	1		4	4		1		3	13
Capital employed..... \$			2,346,749	460,504					2,866,945
Salaried employees—									
Male.....			29	15					46
Female.....			4	5					9
Wage-earners—									
Male.....			190	25					224
Female.....			19	1					21
Total employees.....			242	46					300
Salaries and wages—									
Salaries..... \$			71,550	43,373					118,543
Wages..... \$			198,085	32,561					240,416
Total..... \$			269,635	75,934					358,959
Cost of fuel and electricity..... \$			64,861	8,211					73,495
Cost of materials..... \$			591,430	189,404					797,975
Value of products..... \$			1,229,658	391,541					1,663,300
<b>CEMENT—</b>									
Number of plants.....			3	4	2		2	1	12
Capital employed..... \$			14,670,629	12,863,511					40,509,319
Salaried employees—									
Male.....			46	41					113
Female.....			6	3					12
Wage-earners—									
Male.....			859	875					2,245
Female.....									
Total employees.....			911	919					2,370
Salaries and wages—									
Salaries..... \$			107,701	87,855					270,328
Wages..... \$			1,138,863	1,129,546					2,873,664
Total..... \$			1,246,654	1,217,431					3,143,932
Cost of fuel and electricity..... \$			1,607,442	1,216,952					3,546,000
Value of products..... \$			5,383,058	5,144,326					14,391,937
<b>CEMENT PRODUCTS—</b>									
Number of plants.....	2	1	31	109		2	1	5	151
Capital employed..... \$			559,037	1,888,102				112,247	2,671,273
Salaried employees—									
Male.....			53	57				5	117
Female.....			2	9					11
Wage-earners—									
Male.....			231	430				55	741
Female.....			2	1					3
Total employees.....			288	497				60	872
Salaries and wages—									
Salaries..... \$			79,156	108,871				4,888	189,515
Wages..... \$			200,047	968,371				50,848	746,538
Total..... \$			279,203	577,242				55,736	936,653
Cost of fuel and electricity..... \$			24,428	29,257				2,631	56,576
Cost of materials..... \$			228,334	584,100				52,131	912,686
Value of products..... \$			682,765	1,685,050				160,758	2,663,065

\*When fewer than three firms in one province were engaged in the same industry the data for these companies are not shown by provinces but they are included in the Canada totals for each industry. Canada total also included data for 1 plant in the aerated waters industry and 2 in the monumental and ornamental stone industry in Prince Edward Island.

Table 3.—Principal Statistics of the Manufactures of the Non-Metallic Minerals in Canada, by Provinces and by Industries, 1927—Continued

Industry	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Canada*
<b>COKE—</b>									
Number of plants.....	1			3				2	6
Capital employed.....\$				13,681,603					29,879,157
Salaried employees—									
Male.....				23					32
Female.....				1					1
Wage-earners—									
Male.....				326					618
Female.....				1					1
Total employees.....				351					652
Salaries and wages—									
Salaries.....\$				75,127					98,324
Wages.....\$				565,426					1,020,314
Total.....\$				640,553					1,118,538
Cost of fuel and electricity.....\$				952,179					1,156,344
Cost of materials.....\$				7,510,807					10,436,112
Value of products—									
Made for use in coke plant.....\$				1,030,280					1,283,973
Made for use in metallurgical works.....\$				4,980,632					7,194,452
Made for sale.....\$				5,015,600					6,840,455
Total.....\$				11,026,512					15,318,880
<b>GAS—</b>									
Number of plants.....	1	2	4	20	8		2	1	42
Capital employed.....\$			6,883,966	29,368,618	5,654,579			10,232,949	54,231,873
Salaried employees—									
Male.....			202	362	34			66	690
Female.....			76	199	24			9	316
Wage-earners—									
Male.....			522	1,400	101			365	2,475
Female.....				2	2				13
Total employees.....			800	1,963	164			440	3,494
Salaries and wages—									
Salaries.....\$			473,833	750,997	90,405			132,402	1,488,257
Wages.....\$			634,864	1,957,442	154,190			413,392	3,262,324
Total.....\$			1,108,697	2,708,439	244,595			545,794	4,750,581
Cost of fuel and electricity.....\$			31,064	604,049	34,434			91,318	815,778
Cost of materials.....\$			2,065,794	3,108,672	515,486			379,013	6,178,791
Value of products—									
By-products made for use.....\$			190,971	769,670	96,943			65,283	1,207,952
By-products made for sale.....\$			922,445	904,200	327,214			141,475	2,360,590
Income from gas sold.....\$			5,550,251	7,313,445	521,461			1,167,290	15,157,327
Total.....\$			6,663,667	8,987,315	1,245,618			1,374,048	18,725,869
<b>GLASS PRODUCTS—</b>									
Number of plants.....		1		9	3			2	5
Capital employed.....\$			5,802,961	5,927,590	114,724			85,317	12,736,657
Salaried employees—									
Male.....			83	116	7			5	219
Female.....			27	36	2			3	71
Wage-earners—									
Male.....			925	1,449	13			19	2,527
Female.....			150	130				3	303
Total employees.....			1,185	1,731	22			30	3,120
Salaries and wages—									
Salaries.....\$			198,944	322,277	14,450			9,447	571,599
Wages.....\$			1,238,046	1,877,818	19,639			22,752	3,392,360
Total.....\$			1,436,990	2,200,095	34,089			32,199	3,876,959
Cost of fuel and electricity.....\$			581,228	646,432	851			1,131	1,243,314
Cost of materials.....\$			1,777,065	3,005,122	72,576			53,876	5,257,950
Value of products.....\$			5,652,540	7,468,917	127,867			77,041	14,164,086
<b>LIME—</b>									
Number of plants.....	2	5	15	29	4			2	3
Capital employed.....\$		245,265	1,716,394	2,227,399	505,749			1,317,812	6,210,481
Salaried employees—									
Male.....		10	18	34	8			10	83
Female.....				10				3	14
Wage-earners—									
Male.....		62	262	410	113			129	1,035
Female.....									
Total employees.....		72	280	454	121			142	1,132

\*Where fewer than three firms in one province were engaged in the same industry the data for these companies are not shown by provinces but they are included in the Canada totals for each industry. Canada totals also include data for 1 plant in the aerated waters industry, and 2 in the monumental and ornamental stone in Prince Edward Island.



Table 3.—Principal Statistics of the Manufactures of the Non-Metallic Minerals in Canada, by Provinces and by Industries, 1927—Continued

Industry	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Canada*
<b>LIME—Concluded</b>									
Salaries and wages—									
Salaries .....		16,400	32,415	82,005	14,166			18,309	164,195
Wages .....		50,198	227,582	422,097	69,194			128,995	965,513
Total .....		66,598	259,997	504,102	83,360			147,304	1,133,708
Cost of fuel and electricity .....		40,469	274,426	399,937	48,001			20,773	826,436
Value of products .....		148,321	806,607	2,198,237	246,279			376,683	3,923,388
<b>PETROLEUM PRODUCTS—</b>									
Number of plants .....	1		5	8	1		4	3	23
Capital employed .....			12,065,994	10,878,344			5,632,534	5,002,593	56,135,564
Salaried employees—									
Male .....			93	185			38	61	447
Female .....			22	35			4	3	72
Wage-earners—									
Male .....			666	1,587			258	184	3,311
Female .....			4	20			2	1	26
Total employees .....			785	1,827			302	248	3,856
Salaries and wages—									
Salaries .....			194,060	543,562			101,342	151,009	1,193,466
Wages .....			956,697	2,410,558			397,208	307,570	4,994,760
Total .....			1,150,663	2,960,120			498,550	458,579	6,188,226
Cost of fuel and electricity .....			823,512	1,497,557			219,987	233,718	3,633,456
Cost of materials .....			11,192,165	19,150,970			4,380,392	5,169,570	53,059,921
Value of products—									
Made for use .....			808,103	730,306			107,765	211,693	2,747,699
Made for sale .....			10,446,405	24,880,414			6,651,017	5,674,913	61,781,121
Total .....			11,254,508	25,610,720			6,758,782	5,886,606	64,528,820
<b>PRODUCTS FROM DOMESTIC CLAY—</b>									
Number of plants .....	10	3	20	131	4	6	10	10	194
Capital employed .....	1,073,397	129,002	10,771,722	14,051,326	217,459	726,973	2,279,425	1,188,309	30,437,607
Salaried employees—									
Male .....	8	7	71	161	9	13	24	20	313
Female .....	1	1	7	28	2		6	2	47
Wage-earners—									
Male .....	197	51	1,001	2,315	93	141	322	296	4,416
Female .....									
Total employees .....	206	59	1,079	2,504	104	154	352	318	4,776
Salaries and wages—									
Salaries .....	28,100	9,811	149,938	398,917	19,350	26,477	62,211	49,563	714,367
Wages .....	141,200	32,184	918,480	2,129,687	91,536	100,820	319,988	291,045	4,024,940
Total .....	169,300	41,995	1,068,418	2,528,604	110,886	127,297	382,199	340,608	4,769,307
Cost of fuel and electricity .....	77,309	10,795	575,813	1,165,815	59,485	49,376	38,137	111,994	2,088,324
Value of products .....	416,417	87,185	2,734,738	5,863,035	201,464	311,204	889,358	679,788	11,173,189
<b>PRODUCTS FROM IMPORTED CLAY—</b>									
Number of plants .....			5	8					13
Capital employed .....			991,083	1,843,737					2,834,820
Salaried employees—									
Male .....			29	42					71
Female .....			3	14					17
Wage-earners—									
Male .....			207	306					513
Female .....			6	45					51
Total employees .....			245	407					652
Salaries and wages—									
Salaries .....			68,824	138,945					207,769
Wages .....			253,028	382,738					635,766
Total .....			321,852	521,683					843,535
Cost of fuel and electricity .....			95,537	90,242					185,779
Cost of materials .....			171,640	395,879					567,519
Value of products .....			848,561	1,239,677					2,088,238
<b>SALT—</b>									
Number of plants .....	1			9					11
Capital employed .....				2,278,659					3,194,802
Salaried employees—									
Male .....				37					40
Female .....				12					14
Wage-earners—									
Male .....				252					285
Female .....				37					37
Total employees .....				338					376

\*Where fewer than three firms in one province were engaged in the same industry, the data for these companies are not shown by provinces but are included in the Canada totals for each industry. Canada totals also include data for 1 plant in the aerated waters industry and 2 in the monumental and ornamental stone industry in Prince Edward Island.

Table 3.—Principal Statistics of the Manufactures of the Non-Metallic Minerals in Canada, by Provinces and by Industries, 1927—Concluded

Industry	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Canada*
<b>SALT—Concluded</b>									
Salaries and wages—									
Salaries .....				111,980					121,100
Wages .....				322,549					378,867
Total .....				434,529					499,967
Cost of fuel and electricity .....				285,010					287,260
Value of products .....				1,510,777					1,614,667
<b>SAND-LIME BRICK—</b>									
Number of plants .....			2	7	2				11
Capital employed .....				1,025,453					1,586,664
Salaries and wages—									
Male .....				14					22
Female .....				1					2
Wage-earners—									
Male .....				172					230
Female .....									
Total employees .....				187					254
Salaries and wages—									
Salaries .....				33,154					47,354
Wages .....				219,534					252,964
Total .....				252,688					300,318
Cost of fuel and electricity .....				59,798					67,416
Cost of materials .....				207,355					258,777
Value of products .....				793,485					938,911
<b>STONE DRESSING—</b>									
Number of plants .....	11	11	49	119	14	8	5	9	228
Capital employed .....	68,200	159,483	911,863	3,394,983	589,417	247,161	236,165	120,541	5,758,806
Salaries and wages—									
Male .....	2	7	32	127	23	13	5	7	217
Female .....		2	1	15	6	2	4		30
Wage-earners—									
Male .....	35	49	236	627	180	33	40	42	1,252
Female .....		2		5	1		7		15
Total employees .....	37	60	269	774	210	48	56	49	1,514
Salaries and wages—									
Salaries .....	3,200	13,340	68,219	285,236	63,649	23,170	14,960	14,437	487,220
Wages .....	31,593	53,437	305,816	957,847	248,314	44,239	50,185	65,833	1,768,418
Total .....	34,793	66,777	374,035	1,243,083	311,963	67,418	65,145	80,270	2,255,638
Cost of fuel and electricity .....	2,255	2,455	26,702	55,519	16,003	3,602	1,827	4,036	112,895
Cost of materials .....	37,831	31,371	262,986	1,072,215	195,710	82,132	58,225	36,157	1,798,672
Value of products .....	115,601	150,134	838,892	3,217,742	659,452	232,848	191,160	157,009	5,606,994
<b>MISCELLANEOUS—</b>									
Number of plants .....			11	19	1				31
Capital employed .....				6,356,546					13,331,263
Salaries and wages—									
Male .....				91					129
Female .....				30					38
Wage-earners—									
Male .....				696					971
Female .....				21					454
Total employees .....				838					1,592
Salaries and wages—									
Salaries .....				263,855					345,518
Wages .....				943,972					1,384,259
Total .....				1,207,827					1,729,777
Cost of fuel and electricity .....				567,993					1,023,502
Cost of materials .....				2,378,784					3,582,815
Value of products .....				7,506,152					10,231,304
<b>All Industries—</b>									
Number of plants .....	51	43	250	643	51	35	43	65	1,181
Capital employed .....	24,222,460	1,104,301	68,167,609	119,908,060	13,138,222	6,950,511	12,624,568	27,783,928	273,933,657
Salaries and wages—									
Male .....	97	59	839	1,446	124	85	119	200	2,971
Female .....	19	7	180	415	39	7	24	25	716
Wage-earners—									
Male .....	879	242	5,914	11,283	720	579	947	1,402	21,977
Female .....	4	13	642	283	4	2	45	5	998
Total employees .....	999	321	7,575	13,427	897	673	1,135	1,632	26,662
Salaries and wages—									
Salaries .....	224,148	80,698	1,764,942	3,516,803	279,456	189,911	294,206	458,844	6,815,268
Wages .....	1,110,631	225,380	7,064,983	14,243,006	886,197	728,146	1,212,922	1,670,315	27,143,333
Total .....	1,328,779	306,078	8,829,925	17,759,809	1,165,653	918,057	1,507,128	2,129,159	33,958,541
Cost of fuel and electricity .....	718,599	77,995	4,595,138	7,621,025	532,414	564,752	540,864	652,666	15,243,931
Cost of materials .....	9,980,346	224,816	18,785,521	38,835,609	1,389,755	5,456,112	4,927,815	6,690,900	86,312,529
Value of products .....	12,265,962	882,880	41,998,404	85,832,634	4,997,944	7,885,068	10,456,295	11,376,239	175,746,065

\*When fewer than three firms in one province were engaged in the same industry, the data for these companies are not shown by provinces but they are included in the Canada totals for each industry. Canada totals also include data for 1 plant in the aerated waters industry and 2 in the monumental and ornamental stone industry in Prince Edward Island.

Table 4.—Capital Employed in the Manufactures of the Non-Metallic Minerals in Canada, by Classes and by Provinces, 1926 and 1927

Province	1926				1927			
	Capital employed as represented by				Capital employed as represented by			
	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash, trading and operating accounts and bills receivable	Total	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash, trading and operating accounts and bills receivable	Total
\$	\$	\$	\$	\$	\$	\$	\$	
Prince Edward Island.....	8,400	18,393	1,950	28,743	8,400	23,658	2,000	34,058
Nova Scotia.....	18,348,692	3,039,526	163,799	21,552,017	17,062,948	4,127,640	2,131,872	24,222,460
New Brunswick.....	541,022	210,259	359,961	1,111,242	470,455	236,050	397,796	1,104,391
Quebec.....	43,640,192	10,299,476	6,793,941	60,733,609	49,628,673	11,293,009	7,245,325	68,167,009
Ontario.....	81,580,603	19,015,945	15,494,931	116,091,479	86,633,369	19,382,728	13,891,963	119,908,060
Manitoba.....	11,114,718	687,097	916,369	12,718,184	11,308,007	969,484	859,831	13,138,222
Saskatchewan.....	4,078,503	2,150,799	213,753	6,452,055	4,772,354	1,918,515	259,642	6,950,511
Alberta.....	8,707,026	2,831,262	888,378	12,426,666	8,711,270	2,722,770	1,190,468	12,624,508
British Columbia.....	20,050,358	3,067,272	1,492,559	24,610,189	21,509,673	2,701,747	3,572,508	27,783,928
<b>Canada.....</b>	<b>188,069,514</b>	<b>41,379,029</b>	<b>26,325,641</b>	<b>255,724,184</b>	<b>201,006,651</b>	<b>43,375,601</b>	<b>29,551,465</b>	<b>273,933,657</b>

Table 5.—Capital Employed in the Manufactures of the Non-Metallic Minerals in Canada, by Classes and by Industries, 1926 and 1927

Industry	1926				1927			
	Capital employed as represented by				Capital employed as represented by			
	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash, trading, and operating accounts and bills receivable	Total	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash, trading and operating accounts and bills receivable	Total
\$	\$	\$	\$	\$	\$	\$	\$	
Aerated waters.....	6,926,413	1,275,883	2,493,231	10,695,527	7,667,318	1,348,598	2,749,170	11,665,086
Asbestos and allied products.....	1,893,133	518,009	392,291	2,772,433	1,925,947	542,561	392,437	2,860,945
Cement.....	35,368,100	3,235,136	2,776,704	41,380,000	34,405,477	3,114,415	2,899,427	40,509,319
Cement products.....	1,577,850	540,185	739,717	2,857,752	1,465,707	522,735	682,831	2,671,273
Coke.....	22,442,081	1,875,413	452,405	24,769,899	24,138,215	3,690,116	2,050,826	29,879,157
Gas.....	40,304,730	2,252,148	7,016,389	49,573,267	43,110,188	3,122,405	7,899,280	54,131,873
Glass.....	6,457,544	3,000,519	1,914,760	11,432,823	7,241,907	3,553,131	1,941,019	12,736,057
Lime.....	4,713,056	484,470	628,283	5,825,809	4,802,179	597,420	800,882	6,200,481
Petroleum products.....	34,344,928	21,265,958	1,567,239	57,178,125	35,492,137	19,036,157	1,607,270	56,135,564
Products from domestic clays.....	22,518,231	2,895,632	2,740,199	28,152,062	24,477,665	3,005,575	2,954,367	30,437,607
Products from imported clays.....	1,691,969	611,697	545,892	2,849,558	1,058,328	722,593	453,899	2,834,820
Salt.....	1,899,373	270,078	613,279	2,782,730	2,330,112	321,007	543,683	3,194,802
Sand-lime brick.....	937,115	42,796	102,666	1,082,577	1,338,303	70,152	177,609	1,586,064
Stone dressing.....	2,480,635	1,373,493	1,589,639	5,443,767	2,753,271	1,416,005	1,589,630	5,758,906
Miscellaneous.....	4,516,356	1,627,614	2,782,887	8,926,857	8,209,297	2,312,731	2,809,175	13,331,203
<b>Total.....</b>	<b>188,069,514</b>	<b>41,379,029</b>	<b>26,325,641</b>	<b>255,724,184</b>	<b>201,006,651</b>	<b>43,375,601</b>	<b>29,551,465</b>	<b>273,933,657</b>

Table 6.—Wage-Earners Employed in the Manufactures of the Non-Metallic Minerals in Canada, by Months and by Provinces, 1927, with Comparative Totals for 1926

Month	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Canada
January.....	9	735	163	5,196	9,666	406	346	751	1,203	18,475
February.....	9	730	155	5,391	9,630	421	331	756	1,254	18,677
March.....	10	774	199	5,811	9,996	471	398	848	1,198	19,765
April.....	10	832	226	5,788	10,511	596	575	986	1,253	20,777
May.....	12	915	263	6,730	11,554	743	615	1,055	1,412	23,299
June.....	13	918	277	6,938	12,060	862	728	1,196	1,466	24,478
July.....	14	911	277	7,125	12,409	910	757	1,219	1,503	25,125
August.....	14	914	271	6,994	11,996	908	687	1,195	1,500	24,479
September.....	14	933	266	6,701	11,591	804	563	1,029	1,479	23,330
October.....	10	906	258	6,227	11,575	716	525	908	1,308	22,433
November.....	10	900	230	6,294	11,106	660	488	840	1,287	21,815
December.....	10	872	170	5,898	10,526	629	343	867	1,272	20,587
*Average for 1927.....	11	883	255	6,556	11,566	724	591	992	1,467	22,975
*Average for 1926.....	11	847	260	6,375	11,249	765	473	979	1,448	22,467

\*Note on the method of Computing the Average Number of Wage-Earners for each Industry—If a company works only three months in the year, the average number of wage-earners for this company is obtained by adding the monthly figures and dividing by three. If a second company operates every month in the year, the average number of wage-earners for this company is obtained by adding the monthly figures and dividing by twelve. The average number of wage-earners for each other company is computed in the same way. The average number of wage-earners in the industry during the year is the sum of these individual averages, and not simply the sum of the monthly totals divided by twelve.

Table 7.—Wage-Earners Employed in the Manufactures of the Non-Metallic Minerals in Canada, by Months and by Industries, 1927, with Comparative Totals for 1926

Month	Aerated waters	Asbestos and allied products	Cement	Cement products	Coke	Gas	Glass	Lime
January.....	1,016	210	1,725	352	638	2,205	2,946	800
February.....	1,017	244	1,748	412	626	2,195	2,990	811
March.....	1,035	247	1,711	433	616	2,217	2,994	852
April.....	1,181	250	1,854	623	621	2,284	2,614	932
May.....	1,345	248	2,143	808	609	2,640	2,747	1,027
June.....	1,479	260	2,319	854	630	2,629	2,949	1,033
July.....	1,631	257	2,545	855	628	2,603	2,975	1,085
August.....	1,610	264	2,548	862	622	2,780	2,637	1,092
September.....	1,387	250	2,554	765	595	2,601	2,577	1,080
October.....	1,221	237	2,125	745	599	2,567	2,792	1,046
November.....	1,116	223	2,160	677	614	2,551	2,942	959
December.....	1,110	219	2,087	616	621	2,563	2,833	858
*Average for 1927.....	1,308	245	2,145	744	619	2,488	2,830	1,035
*Average for 1926.....	1,242	213	2,216	772	590	2,642	2,744	1,017

\*See note page 20.



Table 7.—Wage-Earners Employed in the Manufactures of Non-Metallic Minerals in Canada, by Months and by Industries, 1927, with Comparative Totals for 1926—Con.

Month	Petroleum products	Products from domestic clay	Products from imported clay	Salt	Sand-lime brick	Stone dressing	Miscellaneous	Total
January.....	3,068	2,376	549	283	107	939	1,251	18,475
February.....	3,148	2,251	558	307	106	919	1,345	18,677
March.....	3,351	2,754	556	317	167	1,061	1,394	19,705
April.....	3,376	3,400	560	329	222	1,192	1,339	20,777
May.....	3,439	4,421	574	327	251	1,249	1,471	23,299
June.....	3,551	4,868	585	328	247	1,350	1,456	24,478
July.....	3,555	4,920	577	320	263	1,409	1,502	25,125
August.....	3,383	4,705	570	327	258	1,391	1,370	24,479
September.....	3,284	4,443	577	321	239	1,409	1,298	23,380
October.....	3,321	4,075	569	332	217	1,342	1,242	22,433
November.....	3,261	3,664	549	335	215	1,298	1,251	21,815
December.....	3,234	2,990	552	316	211	1,206	1,171	20,587
<b>*Average for 1927.....</b>	<b>3,337</b>	<b>4,416</b>	<b>564</b>	<b>322</b>	<b>239</b>	<b>1,267</b>	<b>1,425</b>	<b>22,975</b>
<b>*Average for 1926.....</b>	<b>3,235</b>	<b>4,066</b>	<b>524</b>	<b>333</b>	<b>197</b>	<b>1,238</b>	<b>1,388</b>	<b>22,467</b>

\*See note on page 20.

Table 8.—Fuel and Electricity Used in the Manufactures of the Non-Metallic Minerals in Canada, by Kinds and by Provinces, 1927

Province	Anthracite coal	Bituminous coal		Coke	Fuel oil	Gas	
		Canadian	Imported			Manu- factured	Natural
		Tons	Tons			Tons	M. cu. ft.
Prince Edward Island—	Quantity	23	2				
	\$	136	20				
Nova Scotia—	Quantity	29	15,353	6,780	8,451,028	1,362,902	
	\$	546	80,045	40,417	345,477	108,875	
New Brunswick—	Quantity	13	1,714	1,385	6,193	54	736
	\$	195	12,017	12,116	1,128	164	682
Quebec—	Quantity	3,931	234,349	165,774	1,767	15,290,737	37,354
	\$	31,466	1,362,528	1,141,212	17,170	921,067	25,587
Ontario—	Quantity	4,598	7,008	711,947	42,956	12,586,120	3,437,283
	\$	33,198	50,058	3,589,881	320,008	568,886	908,280
Manitoba—	Quantity	192	33,413	4,950	4,701	104,086	163
	\$	1,371	256,518	43,429	24,262	10,739	19
Saskatchewan—	Quantity	5	3,797	15		5,271,840	
	\$	82	32,434	159		261,521	
Alberta—	Quantity	8	29,183			1,915,503	1,651
	\$	45	150,831			52,841	538
British Columbia—	Quantity	473	40,812	48	15,493	5,891,397	319,367
	\$	2,410	203,231	487	72,025	213,737	43,212
<b>Canada—1927</b>	<b>Quantity</b>	<b>9,249</b>	<b>365,652</b>	<b>882,736</b>	<b>73,682</b>	<b>49,517,804</b>	<b>5,158,764</b>
	<b>\$</b>	<b>69,313</b>	<b>2,153,818</b>	<b>4,775,188</b>	<b>485,998</b>	<b>2,375,396</b>	<b>1,086,684</b>
<b>Canada—1926</b>	<b>Quantity</b>	<b>11,649</b>	<b>1,150,629</b>	<b>84,280</b>	<b>44,972,235</b>	<b>7,859,952</b>	<b>2,062,846</b>
	<b>\$</b>	<b>80,848</b>	<b>6,607,713</b>	<b>471,245</b>	<b>2,336,853</b>	<b>1,781,901</b>	<b>452,740</b>

Table 9.—Fuel and Electricity Used in the Manufactures of the Non-Metallic Minerals in Canada, by Kinds and by Industries, 1927, with Comparative Totals for 1926

Industry	Anthracite coal	Bituminous coal		Coke	Fuel oil	Gas		
		Canadian	Imported			Manu- factured	Natural	
		Tons	Tons			Tons	Imp. gals.	M cu. ft.
Aerated waters—	Quantity	800	2,938	1,722	112	7,318	179,001	50,850
	\$	12,188	26,014	15,514	1,355	1,190	4,156	3,847
Asbestos and allied products—	Quantity	411	4,514	109		165,430	270	20
	\$	901	27,782	674		15,371	433	35
Cement—	Quantity		248,161	250,182	69			
	\$		1,350,933	1,385,395	661			
Cement products—	Quantity	277	1,084	2,249	183	30	375	423
	\$	4,030	7,734	15,779	1,686	29	188	209
Coke—	Quantity		2,865	1,571	1,232		4,731,084	
	\$		8,533	9,527	2,894		1,022,889	
Gas—	Quantity		6,476	43,784	55,200	187,815	40,014	
	\$		44,751	284,022	357,062	18,452	17,897	
Glass—	Quantity	2,691	6,499	66,387	218	2,382,798	30,450	443,282
	\$	16,173	41,087	470,147	2,498	227,868	26,662	309,639
Lime—	Quantity	1,307	22,232	45,318	9,982		174,730	6,500
	\$	6,425	157,829	245,078	71,814		13,979	3,900
Petroleum products—	Quantity	10	5,795	197,642	1,733	46,537,277	58	1,050,288
	\$	142	19,232	664,554	12,146	2,085,333	92	94,541
Products from domestic clay—	Quantity	1,923	30,019	187,466	2,961	204,336	1,927	408,323
	\$	11,857	203,472	1,176,044	22,026	22,811	154	28,591
Products from imported clay—	Quantity	53	10,655	9,867	407	4,337		21,114
	\$	824	82,566	72,073	3,636	421		10,227
Salt—	Quantity			51,167		15,000		
	\$			263,009		2,250		
Sand-lime brick—	Quantity	1,260	613	5,379				
	\$	7,876	4,441	39,215				
Stone, dressing—	Quantity	470	614	498	147	9,565	37	80,660
	\$	5,551	3,066	4,239	1,423	1,296	45	765
Miscellaneous—	Quantity	257	23,187	18,765	858	3,898	215	1,347
	\$	3,346	176,378	129,418	8,195	345	189	936
<b>Total, 1927—</b>	<b>Quantity</b>	<b>9,219</b>	<b>365,652</b>	<b>882,736</b>	<b>73,682</b>	<b>49,517,804</b>	<b>5,158,764</b>	<b>2,062,846</b>
	<b>\$</b>	<b>69,313</b>	<b>2,153,818</b>	<b>4,775,188</b>	<b>485,998</b>	<b>2,375,396</b>	<b>1,086,684</b>	<b>452,740</b>
<b>Total, 1926—</b>	<b>Quantity</b>	<b>11,649</b>	<b>1,150,629</b>	<b>84,280</b>	<b>44,972,235</b>	<b>7,859,952</b>	<b>2,062,846</b>	
	<b>\$</b>	<b>80,848</b>	<b>6,607,713</b>	<b>471,245</b>	<b>2,336,853</b>	<b>1,781,901</b>		

Table 8.—Fuel and Electricity Used in the Manufactures of the Non-Metallic Minerals in Canada, by Kinds and by Provinces, 1927

Gasoline	Kerosene or coal oil	Lignite coal		Other fuel	Wood	Electricity purchased	Total
		Canadian	Imported				
Imp. gals.	Imp. gals.	Short tons	Short tons	\$	Cords	K.W.H.	
1,264							538
382							
1,306	470				3,294	5,764,405	
391	166			64,659	14,577	63,426	718,599
290	200		24		9,611	121,946	
102	66		288	45	47,672	3,520	77,995
19,090	3,171	60			21,140	231,425,901	
7,082	686			24,004	116,509	947,003	4,595,138
44,088	3,822	2	800		48,080	276,541,282	
11,892	874	35		298,137	253,505	1,240,091	7,621,023
868		45			20,450	14,282,618	
202		395			101,011	94,158	532,414
3,180		9,570			238	2,251,969	
992		22,114		149,937	1,428	36,085	504,752
4,529		21,385			1,492	13,518,113	
1,170		65,374		44,201	7,175	107,061	540,864
9,105	3	2			20,638	4,804,255	
2,690	7	23		3,997	54,672	56,100	652,606
84,320	7,672	31,064	24		124,943	548,720,489	
24,993	1,799	88,741	288	584,980	596,349	2,547,444	15,243,931
222,101		11,921			119,077	376,287,615	
69,350		39,532		54,762	536,788	2,393,124	14,372,116

Table 9.—Fuel and Electricity Used in the Manufactures of the Non-Metallic Minerals in Canada, by Kinds and by Industries, 1927, with Comparative Totals for 1926

Gasoline	Kerosene or coal oil	Lignite coal		Other fuel	Wood	Electricity purchased	Total
		Canadian	Imported				
Imp. gals.	Imp. gals.	Short tons	Short tons	\$	Cords	K.W.H.	
20,807	751	169	24		1,058	1,453,492	
7,877	315	833	288	547	5,849	46,986	126,959
					6	2,494,520	
					35	28,264	73,495
5,592	1,752	14,528				180,083,257	
1,140	371	46,487				761,013	3,546,000
18,758	1,852				200	460,050	
6,068	397			588	1,586	18,282	56,570
						14,612,913	
						112,501	1,156,344
		5				10,753,656	
		60		6,455		87,079	815,778
2,555					8	18,954,778	
756					45	147,906	1,243,311
4,552	150				60,058	1,085,056	
1,114	34			4	282,855	43,404	826,436
					13	17,047,621	
				570,448	120	189,842	3,633,456
26,296	1,060	16,257			62,951	16,063,068	
6,237	231	40,161		378	302,027	274,135	2,088,724
	400					212	974,387
	90					1,243	14,697
					2	1,361,491	185,779
				6,498	8	15,495	287,260
					41	973,296	
					328	15,556	67,416
5,760	1,627	105			327	3,876,417	
1,801	343	1,200		62	2,192	90,912	112,895
	80				68	278,286,587	
	18				255	704,372	1,023,592
84,320	7,672	31,064	24		124,943	548,720,489	
24,993	1,799	88,741	288	584,980	596,349	2,547,444	15,243,931
222,101		11,921			119,077	376,287,615	
69,350		39,532		54,762	536,788	2,393,124	14,372,116



**Table 10.—Power Employed in the Manufactures of the Non-Metallic Minerals in Canada, by Classes and by Provinces, 1927, with Comparative Totals for 1926**

Province	Steam engines and turbines	Gasoline, gas and oil engines	Hydraulic turbines or water wheels	Total primary power	Electric motors run by purchased power	Total power employed	Electric motors run by primary power in same plant	Total electric power	Boilers	
Prince Edward Island.....	No	3		3		3				
	H.P.	13		13		13				
Nova Scotia.....	No	58	16	74	64	138	216	280	30	
	H.P.	4,218	1,493	5,711	518	6,229	6,976	7,494	7,760	
New Brunswick.....	No	7	9	10	39	55	1	40	11	
	H.P.	297	118	415	270	685	30	300	488	
Quebec.....	No	183	24	208	1,402	1,610	21	1,433	71	
	H.P.	7,744	138	7,883	48,235	56,118	312	48,547	11,649	
Ontario.....	No	232	84	320	2,408	2,728	125	2,533	352	
	H.P.	9,176	1,160	10,376	55,683	66,059	1,702	67,385	26,673	
Manitoba.....	No	17	1	18	236	251		256	13	
	H.P.	571	1	572	7,343	7,915		7,343	1,705	
Saskatchewan.....	No	18	3	21	102	123	1	103	22	
	H.P.	1,584	176	1,700	1,385	3,145	4	1,389	2,903	
Alberta.....	No	56	13	69	294	363	45	339	25	
	H.P.	2,365	275	2,640	7,757	10,397	1,903	9,660	4,968	
British Columbia.....	No	53	10	66	277	343	5	282	26	
	H.P.	1,548	141	1,695	7,940	9,635	112	8,052	3,476	
<b>Canada, 1927.....</b>	<b>No</b>	<b>624</b>	<b>163</b>	<b>8</b>	<b>795</b>	<b>4,822</b>	<b>5,617</b>	<b>414</b>	<b>5,236</b>	<b>550</b>
	<b>H.P.</b>	<b>27,503</b>	<b>3,515</b>	<b>47</b>	<b>31,065</b>	<b>129,131</b>	<b>160,196</b>	<b>11,039</b>	<b>140,170</b>	<b>59,622</b>
<b>Canada 1926.....</b>	<b>No</b>	<b>649</b>	<b>190</b>	<b>7</b>	<b>846</b>	<b>4,528</b>	<b>5,374</b>	<b>433</b>	<b>4,961</b>	<b>614</b>
	<b>H.P.</b>	<b>25,384</b>	<b>3,667</b>	<b>45</b>	<b>29,096</b>	<b>121,864</b>	<b>150,960</b>	<b>9,796</b>	<b>131,660</b>	<b>60,552</b>

**Table 11.—Power Employed in the Manufactures of the Non-Metallic Minerals in Canada, by Classes and by Industries, 1927, with Comparative Totals for 1926**

Industry	Steam engines and turbines	Gasoline, gas and oil engines	Hydraulic turbines or water wheels	Total primary power	Electric motors run by purchased power	Total power employed	Electric motors run by primary power in same plant	Total electric motors	Boilers	
Aerated waters.....	No	10	22	4	36	649	685	6	29	
	H.P.	174	51	7	232	2,074	2,306	95	792	
Asbestos and allied products.....	No					103	103		6	
	H.P.					1,986	1,986		758	
Cement.....	No	3	9	12	1,101	1,113	44	1,145	13	
	H.P.	158	273	431	04,555	64,866	1,000	06,455	2,308	
Cement products.....	No	7	55	62	123	185	2	125	17	
	H.P.	101	318	419	1,604	2,083	90	1,754	499	
Coke.....	No	101		101	219	329	170	389	27	
	H.P.	3,874		3,874	4,808	8,682	4,743	9,561	5,469	
Gas.....	No	60	3	1	64	170	234	170	106	
	H.P.	1,618	86	3	1,707	2,227	3,931	2,227	10,236	
Glass.....	No	1		1	408	409	7	415	14	
	H.P.	100		100	6,339	6,430	163	6,502	1,163	
Lime.....	No	14	5	3	22	138	29	167	23	
	H.P.	549	132	37	718	2,719	3,437	859	1,400	
Petroleum products.....	No	302	9	311	421	732	57	478	93	
	H.P.	11,946	1,038	12,984	8,868	21,852	1,702	10,570	20,569	
Products from domestic clay.....	No	98	37	155	416	551	3	419	109	
	H.P.	7,941	956	8,897	15,548	24,445	69	16,617	8,637	
Products from imported clay.....	No	1		1	87	88	12	99	11	
	H.P.	35		35	656	691	127	783	755	
Salt.....	No	22	4	26	89	55	3	72	18	
	H.P.	567	440	1,007	878	1,885	88	966	2,900	
Sand-lime brick.....	No	2		2	47	49	8	55	2	
	H.P.	275		275	1,254	1,329	930	2,184	300	
Stone dressing.....	No	1	19	20	417	437		417	3	
	H.P.	15	221	236	5,790	6,026		5,790	68	
Miscellaneous.....	No	2		2	454	456	73	527	19	
	H.P.	150		150	9,765	9,915	273	10,038	3,708	
<b>Total 1927.....</b>	<b>No</b>	<b>624</b>	<b>163</b>	<b>8</b>	<b>795</b>	<b>4,822</b>	<b>5,617</b>	<b>414</b>	<b>5,236</b>	<b>550</b>
	<b>H.P.</b>	<b>27,503</b>	<b>3,515</b>	<b>47</b>	<b>31,065</b>	<b>129,131</b>	<b>160,196</b>	<b>11,039</b>	<b>140,170</b>	<b>59,622</b>
<b>Total 1926.....</b>	<b>No</b>	<b>649</b>	<b>190</b>	<b>7</b>	<b>846</b>	<b>4,528</b>	<b>5,374</b>	<b>433</b>	<b>4,961</b>	<b>614</b>
	<b>H.P.</b>	<b>25,384</b>	<b>3,667</b>	<b>45</b>	<b>29,096</b>	<b>121,864</b>	<b>150,960</b>	<b>9,796</b>	<b>131,660</b>	<b>60,552</b>

Table 12.—Alphabetical List of Materials Used in all Industries Classified under Manufactures of the Non-Metallic Minerals in Canada, 1927

Material	Index number (See list on page 28)	Unit of measure	Quantity	Cost at works
Abrasive grains, artificial, (alundum, aloxite, silicon carbide, etc.)	18	lb.	4,274,757	\$ 100,838
Abrasive grains, natural (corundum, silica, flint, garnet, etc.)	18	lb.	521,415	27,634
Acid, sulphuric, 86° Bé	5-11	lb.	78,675,104	648,872
Adhesives, not elsewhere specified	2	lb.	143,000	40,000
Asbestos cloth	2	lb.	63,091	27,526
Asbestos paper, corrugated and plain	2	lb.	8,484,658	180,460
Asbestos, crude	2	lb.	13,171,525	162,802
Asbestos yarn	2	lb.	256,849	90,597
Asphalt	2-10	lb.	7,860,000	88,828
Bauxite and alumina	18	lb.	77,731,623	835,937
Bonding and bushing materials, not elsewhere specified	18			2,519
Calcium carbide	6	lb.	293,090	13,004
Carbon dioxide (in cylinders)	1	lb.	1,124,266	120,249
Carbons, raw and scrap	19	lb.	9,612,954	148,043
Cement, Portland	2-4-13-15	brl.	260,604	541,650
Cinders	4-15			9,674
Clay, domestic	17	lb.	1,332,200	9,658
Clay, imported, flint and feldspar	13-21	ton	46,771	235,896
Coal, anthracite, for gas making (not for fuel)	8	short ton	225	3,130
Coal, anthracite, for foundry facings	21	ton	790	3,845
Coal, anthracite for manufacture of artificial abrasives	18	short ton	18,225	49,047
Coal, bituminous, for foundry facings	21	ton	1,345	7,390
Coal, bituminous, for gas making (not for fuel)—				
(a) Canadian	6	short ton	118,221	732,642
(b) Imported	6	short ton	506,608	3,035,897
Coal, bituminous, for coke making (not for fuel)—				
(a) Canadian	5	short ton	809,135	2,704,159
(b) Imported	5	short ton	1,431,345	7,420,374
Coke, for gas making (not for fuel)—				
(a) Purchased	6	short ton	6,729	72,957
(b) Companies' own make	6	short ton	144,834	870,423
Coke, for making artificial abrasives	18	short ton	39,082	299,487
Coke and coal, for manufacture of artificial graphite and electrodes	19	ton	12,549	209,543
Colouring	2	lb.	74,510	5,417
Compounding material	11			534,610
Cotton cloth and yarn	2-18			82,975
Containers, boxes, bags, barrels, packages, etc.	1-2-4-7-8-10-11-13-17-18-20-21			3,826,597
Electrodes	18	lb.	1,841,720	129,660
Extracts and essences for flavouring	1			307,271
Felt	2	lb.	80,180	19,081
Fullers' earth	11	lb.	8,304,713	80,611
Glass blanks	7			209,149
(Glass, figured and cathedral)	7	sq. ft.	305,198	55,846
Glass, plate	7	sq. ft.	3,524,999	1,254,445
Glass, sheet and window	7	sq. ft.	1,966,504	166,250
Glazing materials, not elsewhere specified	13			4,290
Glue	17-18	lb.	272,568	49,062
Graphite	10-21	lb.	198,000	6,685
Gravel	4	cu. yd.	81,544	134,534
Grease, petroleum	10	lb.	36,571	1,964
Grease, soap	10	lb.	42,267	5,072
Gypsum, crude	17	lb.	258,223	1,578
Hair	2-17	lb.	373,517	36,170
Hardware for insulators	13			147,362
Iron for manufacture of ferrosilicon	18	lb.	9,158,865	47,914
Lead	7	lb.	265,378	35,916
Lead, red	10	lb.	52,800	5,795
Lead, white, dry	13	lb.	6,443	695
Lime	4-5-6-15-17	short ton	16,618	166,111
Lime dust and aluminium sulphate	17	ton	266	8,239
Litharge	11	lb.	473,785	48,714
Magnesite	2	lb.	208,000	4,942
Materials used in pressed and blown glass industry	8			700,767
Mica, knife-trimmed and thumb-trimmed	20	lb.	499,923	117,370
Mica plate, block mica and uncut mica	20	lb.	5,051	6,246
Mica splittings, India	20	lb.	13,125	3,054
Oils, animal	10	gal.	21,031	21,470
Oil, crude, product of Canadian wells	10-11	Imp. gal.	15,635,271	1,784,013
Oil, crude, imported	11	Imp. gal.	700,737,619	47,376,673
Oil, gas oil (for gas making)	6	Imp. gal.	14,548,244	1,364,546
Oils, mineral	10	gal.	1,054,726	207,656
Oils, other	10-19-20	lb.	425,910	14,381
Oxide purifying materials	6	short ton	2,948	32,315

Table 12.—Alphabetical List of Materials Used in all Industries Classified under Manufactures of the Non-Metallic Minerals in Canada, 1927—Concluded

Material	Index number (See list on page 28)	Unit of measure	Quantity	Cost at works
Paper	17	lb.	10,340,029	\$ 281,545
Paper, kraft, and paper rope	18	lb.	144,201	17,191
Pitch	19-21	lb.	7,588,252	69,308
Plaster	13	brl.	1,262	2,584
Plaster of Paris	17	lb.	176,840,000	400,087
Polishing and grinding materials	7			36,639
Potassium hydroxide (caustic potash)	10	lb.	9,039	622
Rosin (gum)	10	casks	48	941
Rubber	2	lb.	20,056	6,905
Salt	18	lb.	891,500	4,515
Sand	2-4-13-15-19-21	ton	360,385	810,141
Sawdust and shavings	17	lb.	11,980,527	32,821
Silver nitrate	7	lb.	2,496	17,502
Soap, chip	10	lb.	17,500	3,500
Sodium carbonate (soda ash)	8-11	lb.	54,258,866	1,135,109
Sodium carbonate (sal soda)	13	lb.	6,900	123
Sodium hydroxide (caustic soda)	5-11	lb.	3,909,988	153,485
Sodium nitrate	5			1,874
Sodium silicate	2-13	lb.	17,426	472
Solder	7	lb.	24,042	6,494
Starch	7	lb.	824,703	32,989
Steel and wire re-inforcing	4-17			34,781
Stone	16			1,798,672
Stone, crushed	4	cu. yd.	20,647	50,186
Sugar	1	lb.	7,755,047	762,960
Sulphur	11	lb.	145,980	4,498
Syrups and fruit juices	1			944,523
Tallow	10-21	lb.	112,196	32,159
Tar	18-19	gal.	182,175	14,871
Water	6			7,012
Whiting	17	lb.	2,607,434	27,378
All other materials	All industries			1,924,945
<b>Total</b>				<b>86,312,529</b>



Table 13.—Alphabetical List of Products Made in all Industries, Classified under Manufactures of the Non-Metallic Minerals in Canada, 1927

Product	Index number (See list on page 28)	Unit of measure	Quantity	Value
				\$
<b>Abrasive cloth, abrasive paper</b> .....	18			156,291
Abrasive wheels.....	18			552,660
Alumina, fused.....	18	lb.	70,171,803	3,230,928
Ammonia liquor.....	5-6	lb. N H <sub>3</sub>	1,438,888	38,034
Ammonium sulphate.....	5-6	lb.	49,416,617	1,030,991
Asbestos boiler and pipe covering.....	2	feet	2,806,290	277,339
Asbestos brake linings.....	2	feet	1,854,898	326,072
Asbestos lumber, millboard, paper and shingles.....	2			242,774
Asbestos parkings.....	2			204,376
Asbestos products, other, including black boards, etc.....	2			35,995
Asphalt.....	11	Imp. gal.	21,803,479	2,287,404
<b>Brick from domestic clay—</b>				
Soft mud process—Face.....	12	No.	16,195,845	325,966
Common.....	12	No.	70,554,107	1,091,274
Soft mud (wire cut) process—Face.....	12	No.	95,479,983	2,024,064
Common.....	12	No.	150,232,385	2,230,180
Dry press—Face.....	12	No.	39,752,937	833,570
Common.....	12	No.	14,016,577	187,062
Fancy and ornamental.....	12	No.	619,474	29,372
Sewer.....	12	No.	12,997,240	210,643
Paving.....	12	No.	50,022	2,106
Bricks, cement.....	4	M	291,618	94,302
Brick, sand-lime.....	15	M	72,864	864,911
Building blocks, cement, hollow.....	4			941,104
<b>Cement, Portland</b> .....	3	brl.	10,065,865	14,391,937
Cement piles, posts, etc.....	4			116,201
Cement products, not elsewhere specified, including laundry trays, tubs, etc.....	4			92,120
Cider.....	1			143,796
Cinder blocks.....	4			69,145
Coke.....	5-6	short ton	1,050,228	12,801,656
Coke, breeze.....	5	short ton	76,210	162,559
Coke, petroleum.....	11	short ton	76,229	449,218
Compounds, cutting.....	10	lb.	27,143	2,475
Core compounds.....	21	ton	206	4,485
<b>Electrodes</b> .....	19	lb.	40,296,598	1,437,701
<b>Finings, foundry</b> .....	21	ton	2,685	59,540
Firebrick from domestic clay.....	12	No.	5,388,290	246,266
Firebrick, fireclay and stove lining, from imported clay.....	13			331,000
Fireclay.....	12	ton	5,094	38,081
Fireclay blocks and shapes from domestic clay.....	12			100,659
<b>Gas from gas plants—</b>				
Acetylene.....	6	M cu. ft.	1,294	
Carburetted water gas.....	6	M cu. ft.	6,539,116	
(Oil) gas.....	6	M cu. ft.	68,352	
Mixed coal and water gas.....	6	M cu. ft.	259,632	
Straight coal gas.....	6	M cu. ft.	7,890,534	
Gas sold.....	6	M cu. ft.	13,273,413	15,157,327
<b>Gas from coke plants—</b>				
Gas sold.....	5	M cu. ft.	1,385,082	496,264
Gas used in heating ovens or retorts.....	5	M cu. ft.	5,378,547	723,615
Gas used in plant or otherwise accounted for but not sold.....	5	M cu. ft.	11,333,612	1,681,401
<b>Gas from petroleum refineries (still gas)</b> .....	11	M cu. ft.	1,719,394	459,301
Gasoline.....	11	Imp. gal.	258,549,724	35,173,348
Glass, bent.....	7			805
Glass, bevelled and ground edge plates.....	7			1,211,838
Glass, cut.....	7			452,120
Glass, leaded.....	7			265,045
Glass, leaded, lights and domes.....	7			7,606
Glass, ornamental.....	7			68,443
Glass, plain sheet and window.....	7			155,630
Glass, plate.....	7			384,343
Glass, pressed and blown.....	8			10,104,846
Glass show cases.....	7			65,893
Glass, silvered mirror plate.....	7			643,277
Glass store fronts.....	7			249,777
Glass products, not elsewhere specified, including auto wind-shields, framed mirrors, lenses non-shatterable, cathedral and figured, show cases, signs, silvered electric reflectors, etc.....	7			277,129
Glass windows, memorial.....	7			93,672
Granite for building purposes.....	16			83,877
Grease, lubricating.....	10-11	lb.	11,525,490	307,486
Gypsum products, including blocks, wallboard, wallcoating, fireproof tile, etc.....	17			2,292,428
<b>Insulators, porcelain</b> .....	13			1,025,224
<b>Kerosene</b> .....	11	Imp. gal.	54,316,079	6,621,413

**Table 13.—Alphabetical List of Products Made in all Industries, Classified under Manufactures of the Non-Metallic Minerals in Canada, 1927—Concluded**

Product	Index number (See list on page 28)	Unit of measure	Quantity	Value
Lime, hydrated.....	9	ton	71,244	\$ 841,497
Lime, quick.....	9	bush.	10,671,678	3,081,891
Limestone for building purposes.....	16			1,713,445
Magnesite flooring and stucco.....	2			36,279
Marble for building purposes.....	16			673,126
Marble chips and dust.....	16			6,591
Mica, splittings.....	20			233,529
Mica products, not elsewhere specified, including cut and uncut mica, mica plates, micatubes, knife-trimmed mica, etc.....	20			46,862
Mineral water, natural (fortified or not).....	1			153,750
Monuments and bases, limestone.....	16			97,264
Monuments finished, lettered only.....	16			844,132
Monuments, granite, cut and polished.....	16			1,728,293
Monuments, marble, cut and polished.....	16			429,651
Oil, core.....	10	Imp. gal.	9,199	6,794
Oil, fuel and gas.....	11	Imp. gal.	286,525,733	13,584,412
Oils, light (toluol, benzol, drip oil, holder oil, etc.).....	6	Imp. gal.	2,019,456	139,394
Oil, lubricating.....	10-11	Imp. gal.	19,591,297	3,810,283
Petroleum spirits, including engine distillate, V.M.P., naphtha, etc.....	11	Imp. gal.	6,205,539	721,018
Pipe, blacking.....	21	ton	313	5,159
Pipe, drain, cement.....	4-16			210,433
Pipe, sewer, and culvert, cement.....	4			558,836
Pipe, sewer (including copings, etc), from domestic clay.....	12	ton	77,262	1,475,875
Pipe, sewer, from imported clay.....	13	ton	5,111	122,065
Pottery from imported clays.....	13			42,491
Pottery from domestic clay.....	12			307,057
Repairs and custom work.....	2-7			32,952
Salt.....	14	ton	268,672	1,614,667
Silicon carbide, crude.....	18	lb.	34,666,820	1,961,910
Soup and soap powder.....	10	lb.	419,839	58,344
Soda water and other carbonated beverages (non-alcoholic).....	1			7,062,967
Stone, artificial.....	4			473,051
Syrups and fruit juices.....	1			1,125,156
Tar and tar products.....	5	Imp. gal.	16,849,261	965,941
Tar and tar products—				
(a) from coal gas.....	6	gal.	6,964,305	536,260
(b) from water or gas oil.....	6	gal.	1,833,743	129,075
Tar, petroleum.....	11	lb.	33,250	1,662
Tile drain, from domestic clay.....	12	No.	22,258,628	598,098
Tile, structural, from domestic clay—				
Hollow blocks.....	12	ton	151,307	1,431,141
Roofing tile.....	12	No.	2,000	140
Floor tile.....	12	sq. ft.	135,285	32,559
Wax and candles.....	11	lb.	9,520,072	505,133
All other products including, artificial graphite, ornamental iron, ferrosilicon, motor fuel, electrical slate, ceramic floor tile, sanitaryware, and various other products.....	All industries			2,090,164
<b>Total.....</b>				<b>175,746,065</b>

**KEY TO THE NUMBERED INDUSTRIES**

Group	Industry number	Classification
I	1	AERATED WATERS.
II	2	ASBESTOS AND ALLIED PRODUCTS.
III	3	CEMENT.
IV	4	CEMENT PRODUCTS.
V	5	COKE.
VI	6	GAS, ILLUMINATING AND FUEL.
VII		GLASS—
	7	PLATE, CUT AND ORNAMENTAL.
	8	PRESSED AND BLOWN.
VIII	9	LIME.
IX		PETROLEUM PRODUCTS.
	10	LUBRICATING OILS AND GREASES.
	11	PETROLEUM REFINING.
X	12	PRODUCTS FROM DOMESTIC CLAYS.
XI	13	PRODUCTS FROM IMPORTED CLAYS.
XII	14	SALT.
XIII	15	SAND-LIME BRICK.
XIV	16	STONE, MONUMENTAL AND ORNAMENTAL.
XV		MISCELLANEOUS—
	17	PLASTER CASTINGS AND MODELS.
	18	GYPSUM PRODUCTS.
	18	ADHESIVE PRODUCTS.
	18	ARTIFICIAL ABRASIVES.
	19	GRAPHITE AND ITS PRODUCTS.
	20	MICA TRIMMING.
	21	NON-METALLIC MINERAL PRODUCTS, N.E.S.

Table 14.—Imports into Canada of the Non-Metallic Minerals and Their Products  
In 1926 and 1927

	Total		United Kingdom		United States	
	1926	1927	1926	1927	1926	1927
<b>NON-METALLIC MINERALS AND THEIR PRODUCTS (Except Chemicals)</b>						
<b>ASBESTOS</b>						
Asbestos packing..... lb.	186,700	228,311	44,416	71,554	142,334	156,468
Asbestos in any form other than crude, and all manufactures of, n.o.p..... \$	53,122	109,928	24,241	37,189	68,801	71,333
	<b>472,513</b>	<b>562,794</b>	<b>68,437</b>	<b>81,540</b>	<b>362,039</b>	<b>405,801</b>
<b>CLAY AND ITS PRODUCTS</b>						
<b>CLAYS</b>						
China clay, ground or unground..... cwt	366,516	423,822	192,632	234,681	168,456	185,795
	290,902	235,824	91,733	109,506	109,082	136,085
Fire clay, ground or unground..... cwt	937,187	984,326	36,361	33,559	901,224	950,247
	193,741	219,509	11,651	14,376	182,070	204,104
Pipe clay, ground or unground..... \$	1,323	2,258		42	1,323	2,216
Clays, all other, n.o.p..... \$	81,253	91,183	8,566	3,874	72,130	84,976
Zirconium silicate..... \$	2,704	2,548			2,434	2,548
<b>BRICKS AND TILES</b>						
Brick, building..... M	4,157	6,672	7	192	4,150	6,480
	83,337	142,438	200	8,730	93,137	133,708
Brick, fire, chrome..... \$	59,283	52,565			50,203	52,565
Brick, fire, magnesite..... \$	66,429	118,457			66,429	118,395
Brick, fire, containing not less than 90 per cent of silica..... \$	263,283	329,214	1,627	10,713	261,666	318,501
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 or other equipment of a manufacturing establishment..... \$	41,696	20,634	34		41,656	20,634
Brick, fire, n.o.p., for use exclusively in the construction or repair of a furnace, kiln or other equipment of a manufacturing establishment..... \$	1,023,850	1,152,277	174,400	150,078	848,462	990,582
Brick, fire, n.o.p..... \$	156,781	121,343	4,016	13,336	153,765	107,753
Brick, paving..... M	2,678	2,651		12	2,678	2,039
	72,989	51,561		642	72,989	53,519
Building blocks, partition hollow and fireproof building tile..... \$	77,230	42,365	1,658	852	75,572	41,513
Drain pipes, sewer pipes and earthenware fittings therefor, chimney linings or vents, chimney tops and inverted blocks, glazed or unglazed..... \$	65,487	77,274	2,649	8,429	60,471	67,916
Drain tiles, not glazed..... \$	2,547	2,655			2,547	2,059
Tiles or blocks of earthenware or stone, prepared for mosaic flooring..... \$	92,043	142,974	36,736	50,150	28,496	37,130
Tiles, earthenware, n.o.p..... \$	233,125	362,360	199,293	241,933	47,985	62,757
<b>POTTERY AND CHINAWARE</b>						
Brown or coloured earthen and stoneware, and Rockingham ware..... \$	49,649	53,477	15,358	25,750	33,698	26,661
G.C. or cream-coloured ware, decorated, printed or sponged, and all earthenware, n.o.p..... \$	497,229	511,842	291,149	299,613	72,515	94,415
China and porcelain ware, n.o.p..... \$	83,327	112,187	33,900	38,970	27,215	39,176
China ware to be silver mounted, imported by manufacturers of silverware..... \$	4,568	9,691	4,413	4,050		
Demijohns, churns or crocks..... \$	2,333	9,962	226	2,285	2,302	5,770
Tableware of china, porcelain, white granite or ironstone..... \$	3,491,365	4,172,496	2,195,968	2,522,804	74,072	86,722
Manufactures of earthenware, n.o.p..... \$	133,614	174,933	32,640	43,881	83,415	109,781
<b>OTHER CLAY PRODUCTS</b>						
Artificial teeth, not mounted..... \$	397,670	388,092	5,239	3,658	392,281	384,434
Baths, bath-tubs, basins, closets, lavatories, urinals, sinks and laundry tubs of earthenware, stone, cement or clay..... \$	371,260	501,338	299,404	389,655	71,743	111,633
Crucibles, clay or sand..... \$	26,202	23,910	13,207	17,823	12,602	5,046
Insulators, electric, porcelain..... \$	305,774	437,328	1,128	2,410	265,030	369,392
Manufactures of clay, n.o.p..... \$	54,049	74,721	2,912	18,503	50,940	55,566
Total clay and its products..... \$	<b>8,196,014</b>	<b>9,638,216</b>	<b>3,428,197</b>	<b>3,993,146</b>	<b>3,255,230</b>	<b>3,716,916</b>



Table 14.—Imports into Canada of the Non-Metallic Minerals and Their Products  
in 1926-1927—(Continued)

	Total		United Kingdom		United States	
	1926	1927	1926	1927	1926	1927
<b>COAL AND ITS PRODUCTS</b>						
COAL						
Anthracite coal, grate, egg, stove, nut and pea..... ton	3,880,155	3,758,695	273,055	783,605	3,527,219	2,965,117
\$	33,482,413	30,510,216	2,674,810	6,290,892	29,988,907	24,130,735
Anthracite coal, n.o.p., buckwheat, rice and barley..... ton	312,264	349,159		14,676	304,625	334,483
\$	719,753	782,165		77,640	650,181	704,525
Bituminous coal, and coal, n.o.p..... ton	12,376,616	14,065,142	14,244	108,939	12,362,138	13,956,005
\$	25,511,932	29,439,815	67,790	434,290	25,443,142	29,004,326
Coal, lignite, and lignite dust..... ton	10,423	10,823			10,423	10,829
\$	45,567	44,254			45,567	44,254
Coal, ex-warehoused, for ships' stores... ton		503,529				503,529
\$		1,018,069				1,018,069
Total coal..... ton	16,579,448	18,687,354	287,299	907,220	16,204,405	17,769,963
\$	59,759,665	61,781,509	2,742,610	6,802,822	56,127,797	54,901,909
COAL PRODUCTS						
Coal tar, crude, in packages of not less than 15 gallons; and coal pitch..... gal.	3,681,324	3,812,637	12,450	168,708	3,665,409	3,643,929
\$	256,061	286,307	2,034	10,891	253,047	275,416
Carbolic or heavy oil..... gal.	4,120,712	1,336,312	2,354,371	633	1,312,566	638,671
\$	664,744	276,518	352,482	412	243,210	128,962
Coke..... ton	988,034	772,235	2,952	12,508	962,024	742,284
\$	6,566,686	4,742,221	23,040	104,712	6,382,387	4,527,975
Coke, ground, when imported by manufacturers of electric batteries, for use in their own factories in the manufacture of such batteries..... cwt.	12,478	14,650			13,478	14,050
\$	33,942	38,211			33,942	38,211
Total coal and its products..... \$	67,281,098	67,127,769	3,120,166	6,918,837	63,040,413	59,872,473
GLASS AND GLASSWARE						
CUT, PRESSED OR BLOWN GLASS						
Glass plates or discs, rough cut or unwrought, for use in the manufacture of optical instruments, when imported by manufacturers of such optical instruments..... \$	82,752	81,332	3,844	1,702	74,460	70,580
Glass milk bottles..... \$	33,302	27,764			33,302	27,764
Glass carboys or demijohns, bottles, n.o.p., decanters, flasks, jars and phials..... \$	1,344,790	1,281,886	113,873	100,856	1,062,367	1,105,778
Glass tableware, cut, pressed, moulded or crystal, blown glass tableware, other cut glass ware and glass balls... \$	836,581	879,331	40,539	50,783	562,078	563,003
Incandescent lamp bulbs and glass tubing for use in the manufacture of incandescent lamps..... \$	566,395	529,162	360	25	519,445	455,790
Lamp chimneys, glass shades or globes... \$	391,300	365,090	1,052	1,250	337,709	313,499
Lenses, glass, unfinished..... \$	97,432	107,746	3,001	4,150	83,728	92,844
PLATE, SHEET AND WINDOW GLASS						
Common and colourless window glass, sq. ft.	41,874,498	41,752,878	4,251,735	2,518,882	225,778	100,892
\$	1,264,318	1,127,529	157,330	85,376	34,727	15,485
Glass, cut to size for the manufacture of dry plates for photographic purposes, when imported by the manufacturers of such dry plates, for use exclusively in the manufacture thereof in their own factories..... \$	8,265	4,635			2,305	80
Plate glass, not bevelled, in sheets or panes, not exceeding 7 sq. ft. each, n.o.p..... sq. ft.	3,756,968	3,779,673	1,174,662	1,365,076	317,380	1,040,517
\$	1,327,128	1,321,243	538,404	556,662	110,022	348,977
Plate glass, not bevelled, in sheets or panes, exceeding 7 sq. ft. each and not exceeding 25 sq. ft. each, n.o.p..... sq. ft.	672,197	666,861	224,012	235,505	59,302	135,072
\$	331,396	272,275	119,446	110,143	22,620	54,003
Plate glass, n.o.p..... sq. ft.	1,043,132	1,033,288	454,988	466,394	20,138	169,147
\$	551,005	462,317	249,325	220,267	11,431	73,132
Plate glass, bevelled, n.o.p..... sq. ft.	27,556	36,685	26,790	16,565	766	9,306
\$	12,547	17,643	11,895	8,137	652	4,740
German looking-glass (thin plate), un-silvered or for silvering.....						
Glass in sheets and bent plate glass, n.o.p..... \$	224,445	267,344	85,869	132,865	47,045	50,755

Table 14.—Imports into Canada of the Non-Metallic Minerals and Their Products  
in 1926 and 1927—Continued

	Total		United Kingdom		United States	
	1926	1927	1926	1927	1926	1927
<b>GLASS AND GLASSWARE—Concluded</b>						
<b>STAINED, ORNAMENTAL AND SILVERED GLASS</b>						
Lenses, silvered, for automobile lamps. \$	316	294		16	316	268
Ornamental figured and enamelled coloured glass, and memorial or other ornamental window glass, n.o.p. \$	5,753	9,346	3,717	8,950	623	67
Painted or vitrified, chipped, figured, enamelled and obscured white glass. \$	20,399	8,695	17,771	7,731		828
Plain, coloured, opaque, stained or tinted, or muffled glass in sheets. \$	16,301	4,512	9,094	3,770		342
Stained or ornamented glass windows. \$	13,128	16,333	8,126	9,811	1,410	1,776
Silvered glass, bevelled or not, framed or not framed. \$	211,042	204,070	67,526	62,451	97,660	81,672
<b>OTHER GLASS AND GLASSWARE</b>						
Articles of glass, not plate or sheet, designed to be cut or mounted. \$	186,683	184,948	3,219	2,721	117,482	115,310
Photographic dry plates. \$	21,980	33,362	13,289	16,993	6,423	8,301
Spectacles, eye glasses and ground or finished spectacle or eye-glass lenses. \$	96,361	23,329	2,626	3,717	86,374	85,054
Manufactures of glass, n.o.p. \$	674,616	733,944	34,220	38,530	448,003	488,435
Total glass and glassware. \$	8,515,395	8,146,638	1,484,556	1,432,912	3,660,614	3,958,559
<b>GRAPHITE AND ITS PRODUCTS</b>						
Plumbago, not ground or otherwise manufactured. \$	3,836	1,457	268		1,792	1,457
Plumbago crucibles. \$	60,782	69,783	31,095	38,978	29,687	24,805
Plumbago, ground, and manufactures of, n.o.p. \$	57,302	66,897	12,712	13,590	44,590	47,307
Total graphite and its products. \$	121,920	123,137	44,075	49,568	76,069	73,569
<b>PETROLEUM, ASPHALT AND THEIR PRODUCTS</b>						
<b>ASPHALT AND ITS PRODUCTS</b>						
Asphaltum or asphalt, solid. cwt. \$	393,283	954,733	105	1,067	389,798	948,046
Asphalt, not solid. \$	461,848	858,225	1,016	1,443	401,882	851,266
Asphaltum oil for paving purposes. \$	17,516	34,566	138	7,108	17,372	31,458
	21,998	70,986			21,998	70,986
<b>PETROLEUM OILS, CRUDE, FUEL AND GAS</b>						
Petroleum and other oils imported by miners or mining companies or concerns, for use in the concentration of ores of metals in their own concentrating establishments. gal. \$	133,439	206,332		25,565	133,439	179,253
	37,133	56,435		9,602	37,133	46,058
Petroleum, crude, gas oils, other than naphtha, benzine and gasoline, lighter than .8235 but not less than .775 specific gravity at 60 degrees temperature. gal. \$	66,562	398,046			60,562	398,046
	6,159	39,043			6,159	30,043
Petroleum, crude, in its natural state, .7900 specific gravity or heavier at 60 degrees temperature, when imported by oil refiners to be refined in their own factories. gal. \$	576,383,547	684,269,831			477,496,599	480,576,162
	31,338,734	31,643,186			24,831,341	20,697,962
Petroleum, crude, not in its natural state, .7900 specific gravity or heavier at 60 degrees temperature, when imported by oil refiners to be refined in their own factories. gal. \$		45,560				45,500
		4,226				4,226
Petroleum (not including crude petroleum imported to be refined, or illuminating or lubricating oils) .8235 specific gravity or heavier at 60 degrees temperature. gal. \$	97,056,028	81,343,133			89,958,050	62,090,723
	4,006,369	3,524,132			3,628,116	2,593,673
Fuel oil, ex-warehoused for ship's stores. gal. \$		37,870,909				23,004,384
		1,543,316				874,182

Table 14.—Imports into Canada of the Non-Metallic Minerals and Their Products  
in 1926 and 1927—Continued

	Total		United Kingdom		United States	
	1926	1927	1926	1927	1926	1927
<b>PETROLEUM, ASPHALT AND THEIR PRODUCTS—Concluded</b>						
<b>PETROLEUM OILS, REFINED</b>						
Illuminating oils, composed wholly or in part of the products of petroleum, coal, shale, or lignite, costing more than 30 cents per gallon..... gal.	6,210	8,389	295	73	5,406	4,998
\$	2,919	4,155	243	86	1,985	2,470
Coal oil and kerosene, distilled, known as "engine distillate," when .725 specific gravity and heavier, but not heavier than .770 specific gravity at 60 degrees temperature..... gal.	1,224,464	26,127			1,224,464	26,036
\$	139,404	2,523			139,404	2,509
Coal oil and kerosene, distilled, purified or refined, n.o.p..... gal.	3,611,778	4,602,839			3,611,723	4,001,404
\$	404,051	346,848			404,035	346,417
Gasoline under .725 specific gravity at 60 degrees temperature..... gal.	60,105,404	83,432,311			60,105,404	85,430,947
\$	8,670,438	8,794,898			8,670,438	8,794,391
Gasoline .725 specific gravity and heavier, but not heavier than .770 specific gravity at 60 degrees temperature.... gal.	22,666,298	22,503,294		1,840	22,665,523	22,490,934
\$	3,277,288	2,602,949		513	3,276,990	2,600,120
Gasoline, n.o.p..... gal.	67,996	232,727			67,936	232,727
\$	11,069	29,897			11,063	20,897
Lubricating oils, composed wholly or in part of petroleum, and costing less than 25 cents per gallon..... gal.	5,180,614	5,132,017	185	1,353	5,179,629	5,130,664
\$	959,311	858,483	166	551	959,175	857,932
Lubricating oils, n.o.p..... gal.	5,079,264	6,741,630	62,704	372,080	5,015,928	6,367,735
\$	2,009,214	2,792,435	51,031	280,513	1,957,522	2,515,399
Oils, all other, n.o.p..... gal.	215,337	855,293	22,600	10,414	192,872	844,868
\$	132,120	212,678	15,626	6,650	115,705	206,004
<b>PETROLEUM PRODUCTS, N.O.P.</b>						
Grease, axle..... lb.	4,556,607	4,923,965	48,656	48,206	4,507,901	4,872,759
\$	290,092	377,128	5,964	4,503	284,126	272,625
Vaseline and all similar preparations of petroleum, for toilet, medicinal or other purposes..... \$	205,463	198,501	7,589	14,244	189,553	174,101
Paraffine wax..... lb.	1,946,905	3,823,893	329,877	613,266	1,393,163	3,150,520
\$	141,241	182,725	21,234	29,613	106,079	150,255
Paraffine wax candles..... lb.	392,373	435,602	4,156	2,073	342,838	370,746
\$	82,213	96,183	1,109	507	70,504	81,534
Petroleum, products of, n.o.p..... gal.	2,247,183	1,745,896	504	50	2,246,679	1,745,846
\$	350,438	282,632	352	21	350,086	282,011
Total Petroleum, Asphalt and their Products..... \$	52,508,042	53,844,494	104,468	355,351	45,480,666	41,505,519
<b>STONE AND ITS PRODUCTS</b>						
<b>ABRASIVES</b>						
Artificial abrasives in bulk, crushed or ground, when imported for use in the manufacture of abrasive wheels and polishing composition..... \$	230,833	216,174	969	1,183	229,964	214,991
Carborundum wheels or stones not further manufactured than moulded and burned..... \$	963,141	131,428	19,256		930,850	131,428
Diamond dust or bort, and black diamonds for borers..... \$	158,448	1,396,122		56,593	158,448	1,304,976
Emery in bulk, crushed or ground..... \$	53,384	46,648	577	1,109	52,778	45,500
Emery wheels and carborundum wheels, n.o.p..... \$	77,331	54,916	903	446	76,372	56,452
Emery or carborundum, manufactures of, including carborundum stones, n.o.p. \$	67,710	76,987	423	229	66,910	76,292
Grindstones, not mounted, and not less than 36 inches in diameter..... \$	791,412	815,257	151,889	127,595	634,451	682,278
Grindstones, n.o.p..... \$	36,838	96,451	483	505	36,354	95,870
Pumice and pumice stone, lava and calcareous tufa, not further manufactured than ground..... \$	32,005	35,211	72	42	28,187	33,475
Sand paper, glass, flint and emery paper or emery cloth..... \$	344,987	348,652	25,847	25,578	316,264	310,435



Table 14.—Imports into Canada of the Non-Metallic Minerals and Their Products in 1926 and 1927—Continued

	Total		United Kingdom		United States	
	1926	1927	1926	1927	1926	1927
<b>STONE AND ITS PRODUCTS—</b>						
Concluded.						
<b>BUILDING AND PAVING STONE</b>						
Building stone, other than marble or granite, sawn on more than two sides, but not sawn on more than four sides. cwt.	5,233	10,000		320	5,235	9,680
\$	4,722	6,793		651	4,233	6,142
Building stone, other than marble or granite, planed, turned, cut or further manufactured than sawn on four sides. cwt.	11,831	3,804			11,834	3,804
\$	24,561	14,333			28,561	14,333
Flagstone, sandstone, and all building stone, not hammered, sawn or chiselled; granite, rough, not hammered or chiselled. . . . . \$	187,055	183,777	457		150,911	140,354
Flagstone, and building stone, other than marble or granite, sawn on not more than two sides. . . . . \$	95,790	101,006			95,790	101,006
Granite, sawn only. . . . . \$	6,189	5,250	1,459	2,014	4,635	3,236
Granite, manufactures of, n.o.p. . . . . \$	175,451	188,364	100,032	96,093	29,434	48,666
Paving blocks . . . . .						
<b>LIME, PLASTER AND CEMENT</b>						
Gypsum, crude (sulphate of lime). . . . . ton	933	1,092	7	33	923	1,059
\$	32,442	42,741	210	939	32,155	41,789
Lime. . . . . cwt.	77,356	115,679			77,356	115,646
\$	42,855	70,075			42,855	70,036
Plaster of Paris, or gypsum, ground, not calcined. . . . . cwt.	4,188	2,212	1,076	1,724	2,818	488
\$	6,846	2,996	1,514	1,794	5,092	1,202
Plaster of Paris, or gypsum, calcined, and prepared wall plaster. . . . . cwt.	103,130	149,318	362	257	102,768	129,082
\$	79,853	101,823	123	327	79,730	96,942
Cement, Portland, and hydraulic or waterlime. . . . . cwt.	73,901	67,739		560	54,199	64,999
\$	77,866	87,541		803	68,337	84,654
Cement, n.o.p., and manufactures of, n.o.p. . . . . \$	18,913	17,879	322	1,913	16,698	15,749
<b>MARBLE</b>						
Marble, rough, not hammered or chiselled. . . . . \$	91,039	92,077			62,155	63,328
Marble, sawn or sand rubbed, not polished. . . . . \$	186,462	151,288	17		145,088	120,266
Marble, manufactures of, n.o.p. . . . . \$	101,748	103,603	7,224	5,468	40,287	61,935
<b>SLATE</b>						
Roofing slate. . . . . square	4,963	6,427			4,963	6,427
\$	57,418	73,004			57,418	73,006
Slate pencils. . . . . \$	6,361	7,025	59		5,173	5,607
School writing slates. . . . . \$	92,766	72,101	136		90,432	71,071
Slate mantels and manufactures of slate, n.o.p. . . . . \$	61,597	53,934	2,591	678	55,292	49,832
<b>OTHER STONE PRODUCTS</b>						
Burrstones in blocks, rough or unmanufactured, not bound up or prepared for binding into mill-stones. . . . . No.	3	3			3	3
\$	450	450			450	450
Chalk, China or Cornwall stone, cliff stone and mica schist, ground or unground. . . . . \$	26,333	23,842	5,168	3,450	19,826	16,456
Chalk, prepared. . . . . \$	110,937	112,776	7,180	8,389	101,575	101,188
Curling stones and handles therefor. . . . . pair	1,195	1,295	1,195	1,293		2
\$	26,593	30,325	26,503	30,200		25
Feldspar. . . . . cwt.	48,828	60,808			48,828	60,809
\$	45,975	59,875			45,975	59,875
Flint and ground flint stones. . . . . cwt.	92,072	86,222	490		54,337	36,551
\$	46,700	46,551	245		28,184	20,612
Fluorspar. . . . . cwt.	199,365	91,326	140,080	48,102	58,956	41,717
\$	97,482	58,701	41,942	19,322	55,301	38,989
Ganister. . . . . cwt.	3,219	1,323	839	2,175	2,380	2,198
\$	1,538	2,643	582	1,800	956	843
Lithographic stones, not engraved. . . . . \$	3,348	3,115		42	3,321	3,073
Magnesite. . . . . cwt.	3,018	3,378		2,251	3,018	1,075
\$	6,746	5,865		3,553	6,746	2,252
Phosphate rock. . . . . cwt.	294,886	349,694		1,120	294,886	348,574
\$	65,607	94,758		1,004	65,607	93,764

Table 14.—Imports into Canada of the Non-Metallic Minerals and Their Products in 1926 and 1927.—Concluded

	Total		United Kingdom		United States		
	1926	1927	1926	1927	1926	1927	
<b>STONE AND ITS PRODUCTS—</b>							
Concluded.							
<b>OTHER STONE PRODUCTS—</b>							
Concluded							
Sand, silica, for glass and carborundum manufacture, and for use in steel foundries.....	cwt.	3,102,172	2,976,622	358	112	2,562,756	2,364,652
	\$	372,488	346,138	223	59	316,543	281,485
Sand and gravel, n.o.p.....	ton	254,885	289,741	12	313	254,472	289,169
	\$	212,038	230,470	745	588	210,291	198,942
Silex or crystallized quartz, ground or unground.....	cwt.	51,090	63,751	3	423	51,086	61,766
	\$	60,070	75,231	10	1,834	60,018	70,569
Stone refuse, not sawn, hammered or chiselled, nor fit for flagstone, building stone or paving.....	ton	334,832	352,467			178,248	195,248
	\$	22,177	213,665			118,871	116,941
Talc or soapstone, ground or unground.....	cwt.	84,262	98,146			73,731	78,028
	\$	89,026	86,858			70,810	69,539
Whiting, gilders' whiting and Paris white.....	cwt.	339,716	318,186	225,716	180,505	69,090	85,184
	\$	234,556	190,634	134,936	103,192	50,853	60,598
Manufactures of stone, n.o.p.....	\$	47,719	50,004	3,852	4,023	39,134	40,101
<b>Total stone and its products.....</b>	<b>\$</b>	<b>5,747,417</b>	<b>6,188,139</b>	<b>535,951</b>	<b>501,306</b>	<b>4,739,335</b>	<b>5,193,443</b>
<b>OTHER NON-METALLIC MINERAL PRODUCTS</b>							
Barytes.....	cwt.	48,432	56,821	1,804	2,369	24,568	26,886
	\$	48,011	58,504	2,069	2,353	26,979	30,727
Blast furnace slag.....	cwt.	29,253	5,071			29,253	5,071
	\$	2,304	378			2,304	378
Carbons over 3 inches in circumference, and not exceeding 35 inches.....	\$	762,369	642,555	4,110	834	758,259	641,721
Carbon electrodes over 35 inches in circumference.....	\$	258,508	365,218			258,508	365,218
Carbons, electric light and carbon points, of all kinds, n.o.p.....	\$	44,955	44,037	166	356	39,818	37,540
Diamonds, unset.....	\$	3,035,724	2,754,151	1,243,385	830,015	29,103	15,621
Earths, crude only.....	\$	1,494	4,566	49	1,779	1,182	2,476
Foundry facings of all kinds.....	\$	14,443	14,024	246	1,362	14,197	12,062
Fuller's earth in bulk only.....	\$	52,992	74,562	19,778	23,002	34,214	50,660
Gas for cooking, heating or illuminating, when imported by pipe line.....	M cu. ft.	119,310	104,001			119,310	104,001
	\$	74,942	65,759			74,942	65,759
Insulators, electric, n.o.p.....	\$	341,245	278,763	4,115	8,015	293,553	252,088
Magnesia pipe covering.....	\$	122,411	157,982	4,791	10,047	117,120	141,935
Meenschau, crude or raw.....	lb.	3	4			3	4
	\$	36	11			36	11
Mica and manufactures of, n.o.p.....	\$	137,347	97,000	9,949	17,530	94,283	65,042
Salt, table, made by an admixture of other ingredients, when containing not less than ninety per cent of pure salt.....	lb.	908,298	1,688,001	212,312	195,868	695,086	1,402,053
	\$	31,689	55,076	11,371	9,410	20,318	45,658
Salt, for use of the sea or gulf fisheries.....	cwt.	1,678,589	1,242,643	29,856	9,772	621,905	565,717
	\$	327,440	328,824	13,178	4,942	165,970	213,752
Salt, in bulk, n.o.p.....	cwt.	1,519,312	1,458,653	176,326	73,218	1,329,347	1,322,236
	\$	393,747	321,528	100,888	39,014	288,990	265,020
Salt, n.o.p., in bags, barrels and other coverings.....	cwt.	561,061	817,632	186,371	309,109	264,313	288,215
	\$	284,116	376,648	114,441	205,658	123,344	138,996
Sulphur and brimstone, crude, or in roll or flour.....	cwt.	3,682,513	3,553,725		33	3,680,004	3,551,193
	\$	2,945,651	2,918,047		90	2,940,138	2,911,986
Mineral and bituminous substances, n.o.p.....	\$	872,548	1,106,694	25,309	36,674	818,404	1,040,823
<b>Total non-metallic minerals and their products.....</b>		<b>152,687,995</b>	<b>155,404,666</b>	<b>10,364,182</b>	<b>14,567,830</b>	<b>126,804,919</b>	<b>121,155,686</b>

Table 15.—Exports of Non-Metallic Minerals and Their Products from Canada, 1926 and 1927

	Total		United Kingdom		United States		
	1926	1927	1926	1927	1926	1927	
<b>NON-METALLIC MINERALS AND THEIR PRODUCTS, (Except Chemicals)</b>							
<b>ASBESTOS</b>							
Asbestos.....	ton	141,760	133,225	7,710	11,673	92,897	75,930
	\$	8,669,810	8,697,376	675,896	918,858	5,295,108	4,706,247
Asbestos sand and waste.....	ton	136,231	139,065	1,594	2,623	131,437	120,378
	\$	1,992,480	2,037,935	35,767	65,479	1,889,003	1,830,728
Asbestos manufactures, including asbestos roofing.....	\$	43,011	66,334	4,793	7,479	19,118	18,599
Total asbestos.....	\$	10,705,301	10,801,645	616,426	891,816	7,203,289	6,555,574
<b>CLAY AND ITS PRODUCTS</b>							
Clays, unmanufactured.....	cwt.	14,537	15,454			14,433	15,245
	\$	3,898	3,940			3,366	2,583
Bricks, building.....	M	1,845	1,450			1,422	1,339
	\$	25,968	23,659			18,206	21,763
Porcelain insulators.....	\$	129,823	155,196	698	2,690	2,154	7,107
Earthenware and manufactures of.....	\$	12,764	14,771	2,750	1,706	4,980	9,613
Clay, manufactures of.....	\$	61,523	86,746	6		55,178	56,958
Total clay and its products.....	\$	231,916	282,712	3,454	4,396	83,884	98,024
<b>COAL AND ITS PRODUCTS</b>							
Coal, lignite.....	ton	15,249	27,782		11	15,249	27,771
	\$	49,667	83,902		23	49,657	83,879
Coal, n.o.p.....	ton	1,012,551	1,085,548	93,620	82,152	398,885	449,591
	\$	5,630,379	5,806,357	620,490	451,428	1,901,935	2,070,495
Cinders.....	\$	21,096	16,218			21,006	16,218
Coke.....	ton	61,215	91,533			80,667	90,373
	\$	788,166	892,641			783,649	884,063
Tar and pitch, coal.....	gal	642,453	2,914,642		1,281,786	657,542	573,248
	\$	374,395	277,793		134,872	59,134	40,475
Total coal and its products.....	\$	6,925,063	7,076,911	620,490	586,323	2,816,081	3,104,130
<b>GLASS AND GLASSWARE</b>							
Glass for lighting.....	\$	18,658	13,688	3,745	1,561	284	365
Glass and glassware, n.o.p.....	\$	196,838	115,270	58,269	38,813	25,953	17,560
<b>GRAPHITE AND ITS PRODUCTS</b>							
Graphite or plumbago, crude and refined.....	cwt.	51,276	33,989	9	213	51,263	33,767
	\$	180,851	102,476	275	2,212	180,505	100,164
<b>MICA AND ITS PRODUCTS</b>							
Mica, rough cobbed and thumb trimmed.....	cwt.	882	3,297		36	804	3,212
	\$	20,516	54,937	16	3,060	20,200	51,107
Mica, scrap and waste.....	cwt.	75,393	90,714	67	180	75,326	90,523
	\$	45,297	57,499	135	320	45,162	57,119
Mica splittings.....	cwt.	6,313	3,189	141	240	6,166	2,949
	\$	432,345	213,651	8,200	17,655	423,077	195,096
Mica plate and manufactures of (micanite).....	\$	1,084	759			423	559
Total mica and its products.....	\$	499,242	326,846	8,351	21,035	489,402	304,781
<b>PETROLEUM AND ITS PRODUCTS</b>							
Oil, petroleum, crude.....	gal.	21,043,135	18,293,254	4,418,413	5,335,423	16,565,646	13,205,340
	\$	851,759	923,948	252,005	320,125	593,234	581,452
Oil, coal and kerosene, refined.....	gal.	1,584,645	1,759,828	1,290		298,747	532,912
	\$	192,988	191,533	233		25,631	57,805
Oil, gasoline and naphtha.....	gal.	3,867,536	2,163,379			2,123,942	319,712
	\$	723,958	431,011			425,881	65,479
Oil, mineral, n.o.p.....	gal.	961,377	258,251	4,391	4,870	798,389	69,664
	\$	290,562	81,147	6,601	7,559	128,677	13,297
Wax, mineral.....	cwt.	10,682	3,609			10,496	3,376
	\$	62,329	21,327			61,095	19,683
Total petroleum and its products.....	\$	2,081,587	1,648,866	258,839	327,684	1,234,518	737,716

Table 15.—Exports of Non-Metallic Minerals and Their Products from Canada, 1926 and 1927—Concluded

	Total		United Kingdom		United States	
	1926	1927	1926	1927	1926	1927
<b>STONE AND ITS PRODUCTS</b>						
<b>ABRASIVES</b>						
Abrasives, natural, n.o.p., in ore or bulk, crushed or ground, including infusorial earth, rotten stone, tripoli, etc.....	cwt. 860	5,516			860	5,494
	\$ 860	6,426			860	6,280
Abrasives, artificial, crude, including carborundum.....	cwt. 1,855,592	1,000,321	22,620	42,044	1,032,972	637,239
	\$ 2,968,320	2,645,347	72,255	140,853	2,836,065	2,424,506
Abrasives, artificial, made up into wheels, stones, etc.....	\$ 45,862	38,463	17,497	29,388	1,718	5,297
Corundum.....	ton					
Stone for the manufacture of grindstones, rough.....	\$					
Grindstones, manufactured.....	\$ 75,374	58,866			58,723	50,464
<b>BUILDING AND PAVING STONE</b>						
Freestone, limestone and other building stone, unwrought.....	ton 2,853	712			2,853	712
	\$ 3,915	7,437			3,915	7,437
Granite and marble, unwrought.....	ton 3,553	3,314			3,553	3,302
	\$ 38,828	33,289		95	38,828	32,956
Stone of all kinds, dressed.....	\$ 17,090	33,760	250	80	11,746	15,883
<b>LIME, PLASTER AND CEMENT.</b>						
Gypsum or plaster, crude.....	ton 668,064	588,808			668,064	588,808
	\$ 1,069,123	959,858			1,069,123	959,858
Lime.....	cwt. 374,233	421,382			361,283	410,590
	\$ 344,616	367,939			334,858	359,497
Plaster of Paris, ground, and prepared wall plaster.....	cwt. 201,241	131,129			110,907	45,454
	\$ 137,785	113,049			80,294	46,477
Cement, Portland.....	cwt. 1,000,762	873,929			267,883	81,801
	\$ 358,231	308,144			99,235	46,890
<b>OTHER STONE PRODUCTS</b>						
Crushed stone.....	ton 101,117	46,772			101,117	46,772
	\$ 134,755	66,820			134,755	66,820
Feldspar.....	ton 31,016	28,648	20	10	32,986	28,608
	\$ 251,581	225,955	565	300	250,076	224,815
Fluorspar.....	ton	1				1
	\$	15				15
Magnesite, crude.....	ton					
	\$					
Magnesite, calcined, dead burned, etc.....	cwt. 13,064	39,060	10,870	36,664	1,890	1,770
	\$ 19,587	47,487	16,607	44,057	2,532	2,667
Phosphate rock.....	ton 49				40	
	\$ 800	33			800	33
Sand and gravel.....	ton 907,935	637,627			907,779	637,627
	\$ 278,278	177,999			278,065	177,999
Talc, crude.....	ton	12			12	
	\$	154			154	
Talc, refined.....	cwt. 216,468	213,830	19,025	15,003	191,808	192,273
	\$ 125,633	125,123	11,454	8,976	110,069	112,421
Total stone and its products.....	\$ 5,810,548	5,278,174	118,629	223,903	5,311,662	4,540,305
<b>OTHER NON-METALLIC MINERAL PRODUCTS</b>						
Carbon and graphite electrodes.....	\$ 150,212	267,474	290		11,252	12,731
Sulphur contained in pyrites.....	ton 13,611					13,611
	\$	105,981				105,981
Salt.....	cwt. 23,291	24,244			14,356	883
	\$ 19,423	22,793			5,602	420
Other non-metallic minerals and products.....	\$ 283,304	430,023	94,302	137,210	98,091	90,449
Total non-metallic minerals and their products.....	\$ 27,095,283	26,343,349	1,783,069	2,234,953	17,461,483	15,668,200



Table 16.—Wholesale Prices of Non-Metallic Minerals and Their Products, 1913 and 1924-1927

(Prepared in the Internal Trade Branch)

Commodity	Unit	1913	1924	1925	1926	1927
		\$	\$	\$	\$	\$
Bricks, face pressed No. 1.....	M f.o.b. plant.....	16-68	30-40	30-40	30-40	30-40
Bricks, common plastic.....	M f.o.b. plant.....	10-00	16-63	16-62	16-62	17-42
Pottery—						
Cups and saucers No. 1 quality, English earthenware from open stock.....	Dozen.....	0-65	1-38	1-36	1-35	1-32
Dinner sets, printed.....	Set of 97 pieces.....	4-75	13-29	15-25	16-00	16-00
Coal and its products—						
Coal, anthracite, egg.....	Ton f.o.b. Toronto, carload lots.....	5-88	12-25	13-06	13-56	13-34
Coal, domestic, run of mine.....	Small lots per net ton f.o.b. N.S.....	2-75	6-25	6-25	6-08	6-00
Coal, domestic, run of mine.....	Net ton carload lots f.o.b. mine, B.C.....	2-58	5-45	4-35	4-27	4-27
Coke.....	Net ton f.o.b. mines, B.C.....	5-16	10-51	9-47	8-40	9-40
Glass and its Products—						
Glass, window, star under 26 inches.....	Box, Toronto.....	3-61	4-98	4-11	3-62	3-25
Tumblers, tank glass, open stock.....	Gross.....	4-00	4-70	4-77	4-55	4-44
Petroleum and its Products—						
Coal oil, water white.....	Gallon f.o.b. Toronto.....	0-1642	0-213	0-20	0-228	0-218
Motor gasoline.....	Gallon f.o.b. Toronto.....	0-25	0-2525	0-2366	0-2533	0-212
Lime and Cement—						
Lime high calcium, 95-97 per cent.....	Ton net f.o.b. works.....	5-05	8-83	8-08	7-58	7-50
Portland cement.....	Barrel of 350 pounds, Montreal.....	1-40	2-12	1-97	1-548	1-36
Miscellaneous—						
Salt, fine.....	Barrel, 280 pounds net.....	0-85	1-91	1-43	1-40	1-58
Sulphur, (crude brimstone).....	Gross ton ex-vessel, Three Rivers or Montreal.....	22-50	19-75	19-75	23-50	23-50

Table 17.—Index Numbers of Prices for Non-Metallic Minerals and Their Products, 1914 and 1924-1927

Prepared in the Internal Trade Branch  
(Average of 1913 Prices = 100)

Commodity	1914	1924	1925	1926	1927
Clay products.....	83-4	170-5	170-5	170-5	176-3
Bricks, pressed, No. 1.....	92-9	182-3	182-3	182-3	182-3
Bricks, plastic, common.....	80-0	166-3	166-3	166-3	174-2
Pottery.....	100-8	276-0	315-3	330-1	329-9
Cups and saucers, No. 1 quality.....	115-4	212-8	209-6	207-7	202-6
Dinner sets, printed.....	100-0	279-8	321-1	336-8	330-8
Coal and its products.....	97-4	216-7	210-8	209-7	207-3
Coal, anthracite, egg.....	98-0	208-3	222-2	230-7	226-9
Coal, run of mine.....	100-0	227-3	227-3	221-2	218-2
Coal, run of mine.....	103-6				
Coal, run of mine.....	90-9	210-9	168-6	165-2	165-2
Coke.....	88-3	203-6	183-5	182-1	182-1
Glass and its products.....	102-9	137-7	114-0	100-3	90-2
Glass, window, star.....	103-2	137-9	114-0	100-1	90-0
Tumblers, tank glass.....	75-0	117-5	119-4	113-8	110-9
Petroleum and its products.....	85-9	109-8	102-9	112-8	99-4
Coal oil, W.W.....	96-7	129-9	121-8	139-0	132-9
Gasoline.....	81-2	101-0	94-7	101-3	84-7
Lime, plaster and cement.....	100-0	153-5	142-7	114-1	102-4
Lime, high calcium.....	100-0	175-0	160-1	150-2	148-5
Cement, Portland.....	100-0	151-1	140-7	110-0	97-3
Miscellaneous non-metallic minerals.....	102-7	153-1	124-4	128-2	140-2
Salt, fine.....	104-7	190-8	151-3	147-4	166-6
Sulphur, refined.....	100-0	87-8	87-8	104-4	104-4
<b>Non-metallic minerals and their products.....</b>	<b>94-5</b>	<b>183-4</b>	<b>176-6</b>	<b>176-1</b>	<b>171-1</b>

CHAPTER TWO  
AERATED WATERS

Although the number of plants in the aerated waters industry in Canada during 1927 declined to 335 from 347 in the previous year, production value showed a substantial increase to \$8,712,427 from \$7,406,504, capital employed advanced a million dollars to \$11,665,086, and the number of employees was up to 1,802 from 1,691. Output in 1927 was the highest recorded since 1921 and marked a continuation of the improvement which commenced in 1925. The record value for the industry was attained in 1920 when 330 working plants produced commodities which sold for \$9,354,693, and the next highest year, in point of value, was 1921 when the value was \$9,176,868. The lowest output reported since the beginning of the present records, was in 1924 at \$6,354,358.

The industry is centred in Ontario and Quebec; in 1927, the former province had 139 active plants with a total production worth \$3,139,146 and the latter, 92 concerns with an output valued at \$3,500,478. New Brunswick had 20 factories; British Columbia, 20; Nova Scotia, 21; Saskatchewan, 16; Alberta, 15; Manitoba, 11; and Prince Edward Island, 1.

Employees for the whole group numbered 1,802 of which 711 were in Quebec factories, 591 in Ontario, 104 in Alberta, 85 in Manitoba, 83 in Saskatchewan, 80 in Nova Scotia and Prince Edward Island, and 74 in British Columbia. Salaried employees numbered 494 and wage-earners 1,308. Salaries amounted to \$760,753 and wages totalled \$1,292,290 over the yearly period.

Extent of seasonal trend in the business was indicated by the variation in the number of wage-earners employed each month. Records for 1927 showed the lowest point for the year was in January at 1,016 after which there was a steady increase to 1,631 in July. No appreciable change occurred in August but thereafter the decline was gradual to 1,110 in December.

Materials used in manufacture in 1927 cost \$3,461,311 at the works. Carbon dioxide, sugar and flavouring extracts were the principal commodities used; bottles, cases, etc., cost \$733,721.

Production was valued at \$8,712,427. Carbonated beverages of all kinds worth \$7,062,967 made up 81 per cent of the total output. Syrups and fruit juices were also of importance at \$1,125,156.

Imports of mineral and aerated waters were valued at \$216,793 in 1927 and exports were appraised at \$16,780.

**Table 18.—Principal Statistics of the Aerated Waters Industry in Canada,  
by Provinces, 1926 and 1927**

Province	Number of plants	Capital employed	Number of employees	Salaries and wages	Cost of fuel and electricity	Cost of materials	Selling value of products	Value added by manufacturing
		\$		\$	\$	\$	\$	\$
<b>1926</b>								
Prince Edward Island and Nova Scotia.....	23	168,330	65	45,994	4,368	60,277	177,432	117,155
New Brunswick.....	20	314,270	66	64,234	4,908	117,482	294,222	176,740
Quebec.....	97	3,572,619	652	742,576	60,409	1,081,166	2,777,310	1,696,144
Ontario.....	145	4,250,359	576	630,475	55,926	1,129,580	2,711,866	1,582,286
Manitoba.....	12	791,536	93	114,832	7,396	236,740	423,718	186,978
Saskatchewan.....	15	477,916	80	94,767	5,927	148,276	318,956	170,680
Alberta.....	14	576,876	79	95,967	7,058	138,201	369,887	231,686
British Columbia.....	21	543,621	80	90,476	10,458	141,755	333,113	191,358
<b>Canada.....</b>	<b>347</b>	<b>10,695,527</b>	<b>1,691</b>	<b>1,879,321</b>	<b>156,510</b>	<b>3,053,477</b>	<b>7,406,504</b>	<b>4,353,027</b>
<b>1927</b>								
Prince Edward Island and Nova Scotia.....	22	202,363	80	57,615	3,767	76,749	168,231	91,482
New Brunswick.....	20	337,063	74	79,417	5,426	147,406	367,107	219,701
Quebec.....	92	3,842,867	711	799,123	45,576	1,383,065	3,500,478	2,117,413
Ontario.....	139	4,661,091	591	687,479	42,074	1,232,301	3,139,146	1,906,845
Manitoba.....	11	918,094	85	109,534	6,762	225,597	464,815	230,218
Saskatchewan.....	16	586,410	83	113,451	8,291	118,601	358,050	239,449
Alberta.....	15	576,426	104	115,963	7,343	142,994	410,873	267,909
British Columbia.....	20	540,172	74	90,161	7,720	134,628	303,727	169,099
<b>Canada.....</b>	<b>335</b>	<b>11,665,086</b>	<b>1,802</b>	<b>2,053,043</b>	<b>126,959</b>	<b>3,461,311</b>	<b>8,712,427</b>	<b>5,251,116</b>

Table 19.—Capital Employed in the Aerated Waters Industry in Canada, by Classes and by Provinces, 1926 and 1927

Province	1926				1927			
	Capital employed as represented by				Capital employed as represented by			
	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash, trading, and operating accounts and bills receivable	Total	Lands, buildings, fixtures, machinery, and tools	Materials on hand and stocks in process	Cash, trading, and operating accounts and bills receivable	Total
\$	\$	\$	\$	\$	\$	\$	\$	
Prince Edward Island and Nova Scotia	104,027	27,249	37,054	168,330	139,290	26,050	37,023	202,363
New Brunswick	151,529	54,505	108,236	314,270	159,081	55,460	122,522	337,063
Quebec	2,395,617	452,550	724,452	3,572,619	2,632,960	446,077	763,821	3,842,867
Ontario	2,473,788	461,576	1,314,995	4,250,359	2,692,138	492,550	1,477,003	4,661,691
Manitoba	740,402	25,696	25,438	791,536	831,040	58,909	28,145	918,094
Saskatchewan	358,234	67,917	51,765	477,916	418,640	105,397	82,373	585,410
Alberta	434,271	90,134	52,471	576,876	410,165	94,691	71,570	576,426
British Columbia	268,545	96,256	178,820	543,621	283,995	69,464	186,713	540,172
<b>Canada</b>	<b>6,926,413</b>	<b>1,375,883</b>	<b>2,493,231</b>	<b>10,695,527</b>	<b>7,567,318</b>	<b>1,348,598</b>	<b>2,749,126</b>	<b>11,665,086</b>

Table 20.—Employees, Salaries and Wages, in the Aerated Waters Industry in Canada, by Provinces, 1926 and 1927

Province	Average number of employees				Total	Salaries and wages		
	Salaried employees		Wage-earners			Salaries	Wages	Total
	Male	Female	Male	Female				
					\$	\$	\$	
1926								
Prince Edward Island and Nova Scotia	12	2	47	4	65	10,997	34,997	45,994
New Brunswick	16	3	45	2	66	24,428	39,806	64,234
Quebec	129	20	477	26	652	265,917	476,659	742,576
Ontario	132	29	392	23	576	259,315	371,160	630,475
Manitoba	28	5	60		33	52,645	62,187	114,832
Saskatchewan	23	2	50	5	80	40,997	53,770	94,767
Alberta	22	5	42	10	79	49,024	46,943	95,967
British Columbia	19	2	56	3	80	27,769	62,707	90,476
<b>Canada</b>	<b>381</b>	<b>68</b>	<b>1,169</b>	<b>73</b>	<b>1,691</b>	<b>731,692</b>	<b>1,148,229</b>	<b>1,879,321</b>
1927								
Prince Edward Island and Nova Scotia	25	4	48	3	80	23,708	33,847	57,615
New Brunswick	22	4	46	2	74	34,095	45,322	79,417
Quebec	140	23	520	28	711	242,323	557,100	799,423
Ontario	141	17	413	20	591	270,610	416,890	687,479
Manitoba	29	5	50	1	85	47,098	62,436	109,534
Saskatchewan	29	1	51	2	83	50,816	62,035	112,851
Alberta	30	6	52	16	104	61,074	54,889	115,963
British Columbia	10	2	54	2	74	30,960	59,201	90,161
<b>Canada</b>	<b>432</b>	<b>62</b>	<b>1,214</b>	<b>74</b>	<b>1,802</b>	<b>766,753</b>	<b>1,292,290</b>	<b>2,053,043</b>

Table 21.—Wage-Earners in the Aerated Waters Industry in Canada, by Months, 1926 and 1927

Month	1926			1927		
	Male	Female	Total	Male	Female	Total
January.....	894	51	945	964	52	1,016
February.....	904	52	956	905	52	1,017
March.....	924	53	977	981	54	1,035
April.....	1,029	55	1,084	1,119	62	1,181
May.....	1,230	64	1,294	1,275	70	1,345
June.....	1,378	70	1,448	1,404	75	1,479
July.....	1,559	76	1,635	1,554	77	1,631
August.....	1,469	73	1,542	1,526	84	1,610
September.....	1,162	64	1,226	1,311	76	1,387
October.....	1,027	60	1,087	1,149	72	1,221
November.....	961	63	1,024	1,053	63	1,116
December.....	976	66	1,042	1,050	60	1,110
<b>Average*</b> .....	<b>1,169</b>	<b>73</b>	<b>1,242</b>	<b>1,234</b>	<b>74</b>	<b>1,308</b>

\*See note on page 20.

Table 22.—Hours of Labour in Month of Greatest Employment in the Aerated Waters Industry in Canada, by Provinces, 1927

Province	Average number of wage-earners working			
	8 hours or less per day	9 hours	10 hours	Over 10 hours
Prince Edward Island and Nova Scotia.....	30	20	10	.....
New Brunswick.....	22	35	15	.....
Quebec.....	74	78	488	66
Ontario.....	129	302	90	118
Manitoba.....	18	18	13	23
Saskatchewan.....	13	26	24	17
Alberta.....	55	8	.....	16
British Columbia.....	46	11	.....	11
<b>Canada.....</b>	<b>357</b>	<b>498</b>	<b>640</b>	<b>251</b>

Table 23.—Fuel and Electricity Used in the Aerated Waters Industry in Canada, 1926 and 1927

Kind	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Bituminous coal—Canadian.....	Short ton	5,609	40,363	2,938	26,014
Imported.....	Short ton	.....	.....	1,722	15,514
Anthracite coal.....	Short ton	1,116	15,825	890	12,188
Lignite coal—Canadian.....	Short ton	102	510	169	833
Imported.....	Short ton	.....	.....	24	288
Coke.....	Short ton	152	1,744	112	1,355
Gasoline.....	Imp. gal.	114,273	37,538	20,867	7,877
Kerosene or coal oil.....	Imp. gal.	.....	.....	751	315
Fuel oil.....	Imp. gal.	14,343	3,294	7,318	1,190
Wood.....	cords	1,172	7,383	1,058	5,849
Gas—Manufactured.....	M cu. ft.	11,391	7,136	179,001	4,156
Natural.....	M cu. ft.	.....	.....	50,859	3,847
Other fuel.....	.....	.....	391	.....	547
Electricity purchased.....	k.w.h.	1,521,806	42,326	1,453,492	40,986
<b>Total.....</b>			<b>156,510</b>		<b>126,959</b>



Table 24.—Power Employed in the Aerated Waters Industry in Canada, 1926 and 1927

Description	1926		1927	
	Number of units	Total h.p. according to manufacturers' rating	Number of units	Total h.p. according to manufacturers' rating
Steam engines and turbines.....	16	180	10	174
Gasoline, gas and oil engines.....	27	70	22	51
Hydraulic turbines or water wheels.....	4	8	4	7
<i>Total primary power</i> .....	47	258	36	232
Electric motors run by purchased power.....	639	1,967	649	2,074
<b>Total power employed</b> .....	<b>686</b>	<b>2,225</b>	<b>685</b>	<b>2,306</b>
Electric motors run by primary power in same plant.....			6	95
<i>Total electric motors</i> .....	639	1,967	655	2,169
Boilers.....	38	1,082	29	792

Table 25.—Materials Used in the Aerated Waters Industry in Canada, 1926 and 1927

Material	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
Carbon dioxide gas (in cylinders).....	Lb.		\$	1,124,266	\$ 120,249
Flavouring extracts and essences.....			2,289,678		307,271
Sugar.....	Lb.			7,755,047	762,960
Syrups and fruit juices.....					944,523
Boxes, cases, bottles, labels, corks, caps, etc.....			763,799		733,721
All other materials.....					592,587
<b>Total</b> .....			<b>3,653,477</b>		<b>3,461,311</b>

Table 26.—Products of the Aerated Waters Industry in Canada, 1926 and 1927

Product	Selling value at works	
	1926	1927
	\$	\$
Cider.....	80,277	143,796
Natural mineral water (fortified or not).....	223,690	163,750
Soda water and other carbonated beverages (non-alcoholic).....	6,257,658	7,062,967
Syrups and fruit juices.....	519,380	1,125,156
All other products.....	325,497	226,758
<b>Total</b> .....	<b>7,406,504</b>	<b>8,712,427</b>

**Primary Production of Mineral Waters.**—(From the Annual Report on the *Mineral Production of Canada, 1927*).—Mineral springs and wells in Canada produced 303,530 imperial gallons of mineral waters valued at \$14,624 in 1927 as compared with an output of 215,356 imperial gallons at \$29,721 in the preceding year. The 1927 shipments were made up of 10,330 imperial gallons from Quebec and 293,200 imperial gallons from Ontario.

Table 27.—Production in Canada, Imports and Exports of Mineral Waters, 1926 and 1927

	1926		1927	
	Imp. gal.	Value	Imp. gal.	Value
<b>PRODUCTION, BY PROVINCES—</b>		\$		\$
Quebec.....	6,956	2,444	10,330	1,813
Ontario.....	208,400	27,277	293,200	12,811
<b>Total</b> .....	<b>215,356</b>	<b>29,721</b>	<b>303,530</b>	<b>14,624</b>
IMPORTS—Mineral and aerated waters.....		187,353		216,793
EXPORTS—Mineral and aerated waters.....		47,597		16,780

## CHAPTER THREE

## ASBESTOS AND ALLIED PRODUCTS

Manufactures of asbestos and allied products in Canada were valued at \$1,663,300 in 1927, an increase of 9 per cent from the value of \$1,530,094 compiled for 1926. This figure covered outputs of 13 establishments of which 4 were in Quebec, 4 in Ontario, 3 in British Columbia, 1 in Nova Scotia and 1 in Manitoba; 3 of these made only magnesite flooring or stucco, and the other 10 manufactured asbestos packings, brake linings and similar products. Asbestos brake linings were made in 3 plants in Canada in 1927, boiler and pipe covering in 4, packings in 5, shingles in 2, while asbestos lumber, paper, and blackboards were made by only 1 concern.

Capital invested in the industry in 1927 was reported at \$2,860,945; the average number of employees was 300; payments for salaries and wages totalled \$358,959; materials cost \$797,975 and the value added by manufacturing was \$865,325. The 4 plants in Quebec accounted for 82 per cent of the capital investment and 74 per cent of the total production in Canada. In the previous year, 1926, there were 14 concerns included in this industry; the capital was given at \$2,773,433, employees numbered 270, and output was valued at \$1,530,094. The same factories were working in 1927 as in 1926 but one concern which worked chiefly with imported clays was transferred to another group.

Imports of asbestos manufactures in 1927 were worth \$671,882 as against \$565,635 in 1926, and exports of crude asbestos and manufactures were valued at \$10,801,645 as compared with \$10,705,301 in the previous year. Export shipments included 133,225 tons of asbestos worth \$8,697,376—130,065 tons of sand and waste valued at \$2,037,935 and manufactures worth only \$66,334.

Table 28.—Principal Statistics of the Asbestos and Allied Products Industry in Canada, by Provinces, 1926 and 1927

Province	Number of plants	Capital employed	Number of employees	Salaries and wages	Cost of fuel and electricity	Cost of materials	Selling value of products	Value added by manufacturing
1926								
Quebec.....	4	2,256,092	214	238,775	51,733	558,534	1,149,464	590,930
Ontario.....	5	464,608	43	70,913	7,079	174,554	343,822	160,208
British Columbia.....	3	18,029	5	8,223	188	10,067	21,898	11,831
<b>Canada*</b> .....	<b>14</b>	<b>2,773,433</b>	<b>270</b>	<b>321,865</b>	<b>61,288</b>	<b>759,907</b>	<b>1,530,094</b>	<b>779,187</b>
1927								
Quebec.....	4	2,346,749	242	269,635	64,801	591,430	1,229,658	638,228
Ontario.....	4	460,504	46	75,934	8,211	189,404	391,541	202,137
British Columbia.....	3	18,988	5	8,274	107	9,799	19,904	10,105
<b>Canada*</b> .....	<b>13</b>	<b>2,860,945</b>	<b>300</b>	<b>358,959</b>	<b>73,495</b>	<b>797,975</b>	<b>1,663,300</b>	<b>865,325</b>

\*Includes also data for 1 plant in Nova Scotia and 1 in Manitoba.

Table 29.—Capital Employed in the Asbestos and Allied Products Industry in Canada, by Classes and by Provinces, 1926 and 1927

Province	1926				1927			
	Capital employed as represented by				Capital employed as represented by			
	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash, trading and operating accounts and bills receivable	Total	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash, trading and operating accounts and bills receivable	Total
Quebec.....	\$ 1,621,823	\$ 367,717	\$ 268,552	\$ 2,256,092	\$ 1,654,269	\$ 407,613	\$ 284,867	\$ 2,346,749
Ontario.....	245,396	136,355	82,857	464,608	245,701	126,672	88,131	460,504
British Columbia.....	3,268	7,079	7,682	18,029	3,312	1,176	14,500	18,988
<b>Canada*</b> .....	<b>1,893,133</b>	<b>518,009</b>	<b>367,291</b>	<b>2,773,433</b>	<b>1,925,947</b>	<b>542,561</b>	<b>392,437</b>	<b>2,860,945</b>

\*See footnote to Table 28.

Table 30.—Employees, Salaries and Wages in the Asbestos and Allied Products Industry in Canada, by Provinces, 1926 and 1927

Province	Average number of employees				Salaries and wages			
	Salaried employees		Wage-earners		Total	Salaries	Wages	Total
	Male	Female	Male	Female				
						\$	\$	\$
<b>1926</b>								
Quebec .....	28	5	160	21	214	76,842	167,933	238,775
Ontario .....	14	6	21	2	43	40,828	30,085	70,913
British Columbia .....	2		3		5	2,936	3,293	6,223
<b>Canada*</b> .....	<b>46</b>	<b>11</b>	<b>189</b>	<b>24</b>	<b>270</b>	<b>117,606</b>	<b>211,265</b>	<b>321,865</b>
<b>1927</b>								
Quebec .....	29	4	190	19	242	71,550	198,085	269,635
Ontario .....	15	5	25	1	46	43,373	32,591	75,934
British Columbia .....	1		4		5	1,820	6,454	8,274
<b>Canada*</b> .....	<b>46</b>	<b>9</b>	<b>224</b>	<b>21</b>	<b>310</b>	<b>118,543</b>	<b>240,410</b>	<b>358,959</b>

\*See footnote to Table 28.

Table 31.—Wage-Earners in the Asbestos and Allied Products Industry in Canada, by Months, 1926 and 1927

Month	1926			1927		
	Male	Female	Total	Male	Female	Total
January .....	146	16	162	190	10	210
February .....	156	18	174	222	22	244
March .....	167	23	190	225	22	247
April .....	185	21	206	228	22	250
May .....	182	26	208	227	21	248
June .....	194	26	220	239	21	260
July .....	207	26	233	236	21	257
August .....	215	27	242	243	21	264
September .....	228	28	256	228	22	250
October .....	221	26	247	213	24	237
November .....	186	27	213	193	20	223
December .....	167	23	190	199	20	219
<b>Average*</b> .....	<b>189</b>	<b>24</b>	<b>213</b>	<b>224</b>	<b>21</b>	<b>245</b>

\*See note on page 20.

Table 32.—Hours of Labour in Month of Greatest Employment in the Asbestos and Allied Products Industry in Canada, 1927

Province	Average number of wage-earners working			
	8 hours or less per day	9 hours	10 hours	Over 10 hours
Nova Scotia .....	5			
Quebec .....	1	3	199	30
Ontario .....	3	27		
Manitoba .....		2		
British Columbia .....	4			
<b>Canada</b> .....	<b>13</b>	<b>32</b>	<b>199</b>	<b>30</b>

Table 33.—Fuel and Electricity Used in the Asbestos and Allied Products Industry in Canada, 1926 and 1927

Kind	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
Bituminous coal—Imported.....	Short ton	5,136	\$ 31,215	4,514	\$ 27,782
Canadian.....	Short ton			109	674
Anthracite coal.....	Short ton	93	729	111	901
Coke.....	Short ton	1	12		
Gasoline.....	Imp. gal.	140	39		
Fuel oil and diesel oil.....	Imp. gal.	43,770	3,534	165,430	15,371
Wood.....	Cord	17	83	5	35
Gas—Manufactured.....	M cu. ft.	270	396	270	433
Natural.....	M cu. ft.			20	35
Electricity purchased.....	K.W.H.	1,677,620	28,280	2,494,520	28,284
<b>Total.....</b>			<b>64,288</b>		<b>73,495</b>

Table 34.—Power Employed in the Asbestos and Allied Products Industry in Canada, 1926 and 1927

Description	1926		1927	
	Number of units	Total h.p. according to manufacturers' rating	Number of units	Total h.p. according to manufacturers' rating
Electric motors operated by purchased power.....	103	2,305	103	1,986
<b>Total power employed.....</b>	<b>103</b>	<b>2,305</b>	<b>103</b>	<b>1,986</b>
Boilers.....	7	766	6	758

Table 35.—Materials Used in the Asbestos and Allied Products Industry in Canada, 1926 and 1927

Material	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
Asbestos, crude, and fibre.....	Lb.	10,731,840	\$ 169,349	13,171,525	\$ 162,802
Asbestos cloth.....	Lb.	17,776	6,840	63,091	27,526
Asbestos paper, corrugated and plain.....	Lb.		9,640	8,484,658	160,460
Asbestos yarn.....	Lb.	174,938	65,627	256,849	90,597
Adhesives.....	Lb.		35,000	143,000	40,000
Asphalt.....	Lb.	8,200,000	96,000	7,800,000	88,000
Cement.....	Lb.	5,227,575	28,131	6,804,300	29,495
Cotton cloth and yarn.....	Lb.		32,771	257,527	56,955
Felt.....	Lb.	42,879	6,033	80,180	19,081
Hair.....	Lb.		27,800	360,000	25,000
Magnesite.....	Lb.	251,125	6,385	208,000	4,942
Rubber.....	Lb.	27,004	9,143	20,056	6,905
Silica sand.....	Lb.	1,018,000	4,160	1,080,000	1,518
Containers, boxes, etc.....			1,216		11,386
All other materials.....			252,812		73,308
<b>Total.....</b>			<b>750,907</b>		<b>797,975</b>

Table 36.—Products of the Asbestos and Allied Products Industry in Canada, 1926 and 1927

Product	Unit of measure	1926		1927	
		Quantity	Selling value at works	Quantity	Selling value at works
Asbestos brake linings.....	Ft.	1,860,500	\$ 279,783	1,854,898	\$ 326,072
Asbestos boiler and pipe covering.....	Lb.		232,963	2,866,290	277,339
Asbestos packings.....	Lb.	319,389	184,515	261,024	204,376
Magnesite stucco and flooring.....			26,682		36,279
*All other products.....			806,151		819,234
<b>Total.....</b>			<b>1,530,094</b>		<b>1,663,300</b>

\*Includes paper, shingles, lumber, wallboard, millboard and blackboards of asbestos.



**Primary Production of Asbestos** (From the Annual Report on the *Mineral Production of Canada, 1927*).—The production of asbestos in Canada during 1927 was slightly lower than in 1926, but the unit value was considerably higher, and this raised the total valuation to 5.1 per cent over the figures for the preceding year. Asbestos rock mined in 1927 totalled 4,822,756 tons, of which quantity 3,803,664 tons were milled.

Production of asbestos in South Africa and Cyprus continued to increase in 1927, but the Rhodesian output remained at approximately the same level as in 1926.

**Table 37.—Output and Shipments of Canadian Asbestos, 1926 and 1927**

Classification	1926				1927			
	Total output	Sold or shipped			Total output	Sold or shipped		
		Quantity	Total sales value at mill	Average value per ton		Quantity	Total sales value at mill	Average value per ton
	Tons	Tons	\$	\$ cts.	Tons	Tons	\$	\$ cts.
Crude No. 1.....	842	1,108	410,373	370 37	627	1,107	468,980	423 65
Crude No. 2.....	2,952	3,494	802,304	229 62	2,835	3,014	752,277	249 59
Other crudes.....	328	446	92,394	207 16	370	667	151,231	226 73
Spinning stocks.....	13,839	15,182	1,885,835	124 21	12,273	14,348	1,855,425	129 32
Shingle stocks.....	39,678	36,497	2,139,780	58 62	45,784	44,573	2,889,124	64 81
Mill board and paper stocks.....	101,293	86,746	2,940,675	33 89	59,490	60,396	2,284,021	37 82
Fillers, floats and other short fibres.....	141,272	135,930	1,828,062	13 44	148,430	150,673	2,219,955	14 73
<b>Total.....</b>	<b>390,204</b>	<b>279,403</b>	<b>10,099,423</b>	<b>36 15</b>	<b>269,709</b>	<b>274,778</b>	<b>10,621,013</b>	<b>38 65</b>
Sand and gravel.....	15,672	15,672	10,257	0 65	20,280	20,280	12,407	0 61

**Table 38.—Imports into Canada and Exports of Asbestos, 1926 and 1927**

	1926		1927	
	Tons	\$	Tons	\$
<b>IMPORTS—</b>				
Asbestos in any form other than crude, and all manufactures of, n.o.p.....		472,513		562,794
Asbestos packing.....	93	93,122	114	109,088
<b>Total.....</b>		<b>565,635</b>		<b>671,882</b>
<b>EXPORTS—</b>				
Asbestos.....	141,760	8,669,810	133,225	8,697,376
Asbestos sand and waste.....	136,231	1,992,480	130,065	2,037,935
Asbestos manufactures, including asbestos roofing.....		43,011		66,334
<b>Total.....</b>		<b>10,705,301</b>		<b>10,801,645</b>

**Table 39.—Exports of Canadian Asbestos by Countries of Destination, 1926 and 1927**

Commodity and Destination	1926		1927	
	Tons	\$	Tons	\$
<b>Asbestos—</b>				
United Kingdom.....	7,710	575,866	11,673	818,858
United States.....	92,897	5,295,168	75,930	4,706,247
Australia.....	1,605	116,250	1,697	119,965
Belgium.....	10,033	628,891	8,068	540,655
France.....	6,860	481,145	5,486	409,840
Germany.....	12,537	900,104	16,317	1,223,768
Italy.....	3,671	242,482	3,687	246,633
Japan.....	4,618	250,714	7,553	402,075
Netherlands.....	1,723	167,050	2,533	209,290
Other countries.....	206	12,140	281	20,045
<b>Total.....</b>	<b>141,760</b>	<b>8,669,810</b>	<b>133,225</b>	<b>8,697,376</b>
<b>Sand and waste—</b>				
United Kingdom.....	1,594	35,767	2,823	65,479
United States.....	131,437	1,889,003	120,378	1,830,728
Germany.....	1,656	34,718	3,512	73,173
Netherlands.....	720	15,850	2,203	46,939
Other countries.....	824	17,142	1,149	21,616
<b>Total.....</b>	<b>136,231</b>	<b>1,992,480</b>	<b>130,065</b>	<b>2,037,935</b>
<b>Asbestos manufactures, including asbestos roofing—</b>				
United Kingdom.....		4,793		7,479
United States.....		19,118		18,599
Newfoundland.....		6,371		5,383
Other countries.....		12,729		34,873
<b>Total.....</b>		<b>43,011</b>		<b>66,334</b>

## CHAPTER FOUR

## CEMENT

A further advance in cement production in Canada was recorded in 1927 resulting in a new high mark being set up for the industry. Shipments during the year reached a grand total of 10,065,865 barrels valued at \$14,391,937 as compared with 8,707,021 barrels at \$13,013,283 in 1926.

Cement was manufactured in Canada by 6 different companies which operated 12 plants. The Canada Cement Co. Ltd., operated plants at Hull and Montreal, in Quebec; Belleville, Port Colborne and Lakefield in Ontario; Fort Whyte, Manitoba, and Exshaw, Alberta. Other concerns were: National Cement Co., Montreal, P.Q.; St. Marys Cement Co., Ltd., St. Marys, Ont.; Commercial Cement Co., Babcock, Alta.; Marlboro Cement Co., Marlboro, Alta.; B.C. Cement Co., Ltd., Bamberton, B.C. The same number of factories was in operation in 1926 but La Cie de Ciment Unic. Ltd. at Montreal did not operate in 1927 while the Lakefield plant of the Canada Cement Co. went into production.

Total fixed and current assets of these concerns totalled \$40,509,319 in 1927. Employment was furnished 2,270 employees, including 125 on salary and 2,145 on wages; their combined earnings totalled \$3,143,932. Fuel and electricity costs amounted to \$3,546,000, of which \$1,350,933 was expended for Canadian coal; \$1,385,395 for imported coal; \$761,013 for electric power and minor sums for coke, gasoline and kerosene. Plant equipment included 1,145 electric motors with a total rating of 66,455 h.p. Seventy rotary and six vertical kilns were in operation during the year; the total capacity was 43,785 barrels of cement per day.

Figures on the number of wage-earners employed each month indicate quite a seasonal trend. Beginning with 1,735 in January, the number increased steadily to 2,545 in July; this number was maintained in August and September but then declined to 2,087 in December. The variation between the lowest and highest figures was 843 or about 49 per cent.

Quebec mills maintained their position as leading producers and accounted for 46 per cent of the total Canadian output in 1927; Ontario mills contributed 35 per cent of the total. Alberta's production advanced 42 per cent during the year, but slight declines were recorded in sales from Manitoba and British Columbia.

The average selling price per barrel, f.o.b., plant, was as follows:—Quebec, \$1.16; Ontario, \$1.37; Manitoba, \$2.50; Alberta, \$2.17; and British Columbia, \$2.26.

Imports of Portland cement into Canada in 1927 totalled 19,354 barrels averaging \$4.52 per barrel; in 1926, the average value was \$3.68. Portland cement exports were recorded at 249,694 barrels invoiced at \$308,144. The supply of cement made available for consumption in Canada in 1927 was the greatest on record and amounted to 9,835,525 barrels.

Table 40.—Principal Statistics of the Cement Industry in Canada, 1923-1927

Year	Number of plants	Capital employed	Number of employees	Salaries and wages	Cost of fuel and electricity	Miscellaneous expenses	Selling value of products
		\$		\$	\$	\$	\$
1923.....	10	38,284,494	1,842	2,551,784	2,809,414	2,947,242	15,064,661
1924.....	10	36,766,574	1,837	2,531,622	2,872,711	1,524,158	13,398,411
1925.....	11	38,081,583	1,926	2,511,400	2,848,904	1,177,103	14,046,704
1926.....	12	41,380,000	2,340	3,052,662	3,424,156	(a)	13,013,283
1927.....	12	40,509,319	2,270	3,143,932	3,546,000	(a)	14,391,937

(a) Data not available.

Table 41.—Capital Employed in the Cement Industry in Canada, by Classes, 1923-1927

Year	Cost of lands, buildings, fixtures, machinery and tools	Cost of supplies and stocks on hand	Cash trading and operating accounts and bills receivable	Total
	\$	\$	\$	\$
1923.....	33,922,549	2,931,641	1,430,304	38,284,494
1924.....	32,467,170	2,897,251	1,492,153	36,766,574
1925.....	33,545,100	2,857,507	1,678,076	38,081,583
1926.....	35,368,100	3,235,136	2,778,764	41,380,000
1927.....	34,405,477	3,114,415	2,899,427	40,509,319

Table 42.—Employees, Salaries and Wages, in the Cement Industry in Canada, 1923-1927

Year	Average number of employees				Total	Salaries and wages		
	Salaried employees		Wage-earners			Salaries	Wages	Total
	Male	Female	Male	Female				
					\$	\$	\$	
1923.....	103	9	1,684	46	1,842	195,748	2,356,036	2,551,784
1924.....	89	8	1,691	49	1,837	205,994	2,325,628	2,531,622
1925.....	97	8	1,782	39	1,926	218,666	2,297,734	2,511,400
1926.....	114	10	2,216	—	2,340	272,770	2,779,892	3,052,662
1927.....	113	12	2,145	.....	2,270	270,328	2,873,694	3,143,932

Table 43.—Wage-Earners in the Cement Industry in Canada, by Months, 1926-1927

Month	1926	1927	Month	1926	1927
	January.....	1,723		1,735	July.....
February.....	1,886	1,748	August.....	2,377	2,548
March.....	1,979	1,711	September.....	2,287	2,554
April.....	2,178	1,854	October.....	2,419	2,128
May.....	2,483	2,143	November.....	2,136	2,160
June.....	2,478	2,319	December.....	1,996	2,087
Average* for 1926.....				2,216	
Average* for 1927.....				2,145	

\*See note on page 20.

Table 44.—Fuel and Electricity Used in the Cement Industry in Canada, 1926 and 1927

Kind	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Bituminous coal—Canadian.....	Short ton	504,577	2,664,760	248,161	1,350,933
Imported.....	Short ton			250,182	1,385,395
Anthracite coal.....	Short ton	41	2,016		
Lignite coal (Canadian).....	Short ton			14,528	46,487
Coke.....	Short ton	49	548	69	661
Gasoline.....	Imp. gal.	8,539	2,220	5,592	1,140
Kerosene.....	Imp. gal.			1,752	371
Fuel oil.....	Imp. gal.	225	54		
Gas.....	M cu. ft.	9,274	5,604		
Electricity purchased.....	K.W.H.	169,280,187	748,994	180,083,257	761,013
<b>Total.....</b>			<b>3,424,156</b>		<b>3,548,000</b>

Table 45.—Power Employed in the Cement Industry in Canada, 1926 and 1927

Kind	1926		1927	
	Number of units	Total h.p. according to manufacturers' rating	Number of units	Total h.p. according to manufacturers' rating
Steam engines and turbines.....	5	418	3	158
Gasoline, gas and oil engines.....	11	283	9	273
Hydraulic turbines or water wheels.....				
<i>Total primary power</i> .....	<i>16</i>	<i>701</i>	<i>12</i>	<i>431</i>
Electric motors run by purchased power.....	1,122	65,800	1,101	64,555
<b>Total power employed</b> .....	<b>1,138</b>	<b>66,501</b>	<b>1,113</b>	<b>64,986</b>
Electric motors run by primary power in same plant.....	44	1,900	44	1,900
<i>Total electric motors</i> .....	<i>1,166</i>	<i>67,700</i>	<i>1,145</i>	<i>66,456</i>
Boilers.....	8	2,302	13	2,368

Table 46.—Production in Canada, Imports, Exports and Apparent Consumption of Cement, 1926 and 1927

	1926		1927	
	Barrels	Value	Barrels	Value
Output.....	9,041,311	\$	9,927,163	\$
Sold or used.....	8,707,021	13,013,283	10,065,865	14,391,937
Stocks, December 31.....	1,609,313		1,470,611	
Imports—				
Portland.....	21,114	77,866	19,354	87,541
Manufactures.....		18,813		17,879
Exports.....	285,932	358,231	249,694	308,144
Apparent consumption.....	8,442,203		9,835,525	

Table 47.—Sales of Cement in Canada by Provinces, 1926 and 1927

Province	1926		1927	
	Barrels	Value	Barrels	Value
Quebec.....	3,727,377	\$ 4,535,386	4,636,751	\$ 5,383,058
Ontario.....	3,398,860	4,792,857	3,751,786	5,144,326
Manitoba.....	612,155	1,572,401	551,698	1,378,121
Alberta.....	423,766	873,621	601,899	1,303,880
British Columbia.....	544,863	1,239,018	523,931	1,182,552
<b>Canada</b> .....	<b>8,707,021</b>	<b>13,013,283</b>	<b>10,065,865</b>	<b>14,391,937</b>

Table 48.—Production of Cement in Canada, 1887-1927

Year	Barrels	Value	Year	Barrels	Value	Year	Barrels	Value
1887.....	60,843	\$ 81,909	1901.....	450,304	\$ 660,030	1914.....	7,172,480	\$ 9,187,924
1888.....	50,868	35,503	1902.....	722,525	1,127,550	1915.....	5,681,032	6,977,024
1889.....	90,474	69,790	1903.....	719,993	1,225,247	1916.....	5,369,560	6,547,728
1890.....	102,216	92,405	1904.....	967,172	1,338,239	1917.....	4,768,488	7,724,246
1891.....	93,479	108,561	1905.....	1,360,732	1,924,014	1918.....	3,591,481	7,076,503
1892.....	117,408	147,663	1906.....	2,128,374	3,170,850	1919.....	4,995,257	9,802,433
1893.....	158,597	194,015	1907.....	2,441,868	3,781,371	1920.....	6,651,980	14,798,070
1894.....	108,142	144,637	1908.....	2,666,333	3,709,954	1921.....	5,752,885	14,195,143
1895.....	128,294	173,675	1909.....	4,067,709	5,345,802	1922.....	6,943,972	15,438,481
1896.....	149,090	201,651	1910.....	4,753,975	6,412,215	1923.....	7,543,589	15,064,661
1897.....	205,213	275,273	1911.....	5,892,915	7,644,937	1924.....	7,498,624	13,398,411
1898.....	250,209	307,580	1912.....	7,132,732	9,106,556	1925.....	8,116,597	14,046,704
1899.....	396,753	633,291	1913.....	8,658,805	11,019,418	1926.....	8,707,021	13,013,283
1900.....	417,552	662,910				1927.....	10,065,865	14,391,937
						<b>Total</b> .....	<b>136,960,296</b>	<b>221,347,693</b>



CHAPTER FIVE  
CEMENT PRODUCTS

Cement products made in Canada reached a new high level of values during 1927 at \$2,663,-065. This output represented an increase of 5 per cent over the total of \$2,544,242 for 1926 which in turn was 26 per cent over the production value of \$2,020,239 reported for 1925. The number of plants in operation in 1927, however, dropped to 151 from 185 in 1926; capital declined to \$2,671,273 from \$2,857,752, and the number of employees was only 872 as against 922 in the previous year. The value added by manufacturing was \$1,750,379 in 1927 and \$1,664,201 in 1926. Most of the concerns which went out of business were small. Many individuals or small concerns which made cement blocks, etc., as a part time or spare time occupation have not been included in this review.

Distribution of the operating units by provinces was as follows: Ontario, 109; Quebec, 31; British Columbia, 5; Saskatchewan and Alberta, 3; Nova Scotia and New Brunswick, 3. Ontario with 72 per cent of the operating establishments accounted for an output of \$1,685,050 or 63 per cent of the total. Quebec was next at \$682,765 or 26 per cent.

Employees numbered 872 including 128 salaried workers and 744 wage-earners. Salaries amounted to \$189,515 and wages to \$746,538. Fifty-seven per cent of the workers, or 497, were employed in Ontario and 33 per cent or 288 in Quebec.

Activity in this industry follows the trend in the building and construction trade. Seasonal fluctuation is apparent with greatest employment in the summer months. In fact, a large number of the smaller establishments work only during the summer. Data for 1927 show that in January, there were only 352 wage-earners on the rolls but by June the number had increased to 854 and reached the maximum of 862 in August. Declines were recorded in each succeeding month to 616 in December.

Materials used during the year cost \$912,686 and included 231,673 barrels of cement, 65,361 cubic yards of sand, 81,544 cubic yards of gravel, 20,647 cubic yards of crushed stone as well as quantities of cinders, lime and other materials.

Products sold for \$2,663,065 including hollow building blocks at \$941,194, sewer pipe and culvert tile at \$558,836, artificial stone at \$473,051, drain pipe at \$207,433 and other products, \$482,551.

Imports of cement manufactures during 1927 were valued at \$17,879 as compared with \$18,813 in 1926.

**Table 49.—Principal Statistics of the Cement Products Industry in Canada,  
by Provinces, 1926 and 1927**

Province	Number of plants	Capital employed	Number of employees	Salaries and wages	Cost of fuel and electricity	Cost of materials	Selling value of products	Value added by manufacturing
		\$		\$	\$	\$	\$	\$
<b>1926</b>								
Nova Scotia	4	23,068	6	1,591	110	2,556	7,920	5,364
New Brunswick	3	3,300	6	1,887	56	1,965	4,632	2,667
Quebec	35	515,565	293	144,084	34,781	206,737	650,264	443,527
Ontario	133	2,168,758	544	547,631	33,391	567,767	1,583,437	1,015,070
Saskatchewan and Alberta	4	70,220	27	37,787	816	65,752	137,920	72,168
British Columbia	6	76,841	46	45,672	1,661	35,264	160,069	124,805
<b>Canada</b>	<b>185</b>	<b>2,857,752</b>	<b>922</b>	<b>778,662</b>	<b>70,815</b>	<b>890,041</b>	<b>2,544,242</b>	<b>1,664,201</b>
<b>1927</b>								
Nova Scotia and New Brunswick	3	14,389	4	1,740	128	3,023	12,587	8,064
Quebec	31	559,037	288	270,203	24,428	228,334	682,765	454,431
Ontario	109	1,888,102	497	577,242	29,257	584,100	1,685,050	1,100,950
Saskatchewan and Alberta	3	97,498	23	31,132	732	44,498	121,905	77,407
British Columbia	5	112,247	60	65,736	2,031	52,131	160,758	108,627
<b>Canada</b>	<b>151</b>	<b>2,671,273</b>	<b>872</b>	<b>936,653</b>	<b>56,576</b>	<b>912,686</b>	<b>2,663,065</b>	<b>1,750,379</b>

Table 50.—Capital Employed in the Cement Products Industry in Canada, by Classes and by Provinces, 1926 and 1927

Province	1926				1927			
	Capital employed as represented by				Capital employed as represented by			
	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash, trading and operating accounts and bills receivable	Total	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash, trading and operating accounts and bills receivable	Total
\$	\$	\$	\$	\$	\$	\$	\$	
Nova Scotia.....	13,890	5,584	3,594	23,068	11,194	2,555	640	14,389
New Brunswick.....	2,400	700	200	3,300				
Quebec.....	288,296	81,800	145,469	515,565	294,221	91,097	173,119	559,037
Ontario.....	1,188,329	427,068	553,361	2,168,758	1,028,493	399,433	460,176	1,888,102
Saskatchewan and Alberta.....	56,895	12,085	1,240	70,220	67,513	9,067	20,918	97,498
British Columbia.....	28,040	12,948	35,853	76,841	64,286	19,983	27,978	112,247
<b>Canada.....</b>	<b>1,577,850</b>	<b>546,185</b>	<b>739,717</b>	<b>2,857,752</b>	<b>1,465,707</b>	<b>522,735</b>	<b>682,831</b>	<b>2,671,273</b>

Table 51.—Employees, Salaries and Wages, in the Cement Products Industry in Canada, by Provinces, 1926 and 1927

Province	Average number of employees				Salaries and wages			
	Salaried employees		Wage-earners		Total	Salaries	Wages	Total
	Male	Female	Male	Female				
					\$	\$	\$	
1926								
Nova Scotia.....			6		6		1,591	1,591
New Brunswick.....	2		4		6	1,500	387	1,887
Quebec.....	69	4	218	2	293	93,608	50,416	144,024
Ontario.....	63	7	471	3	544	108,144	439,487	547,631
Saskatchewan and Alberta.....	1	1	24	1	27	1,250	36,547	37,797
British Columbia.....	3		43		46	1,525	44,147	45,672
<b>Total.....</b>	<b>138</b>	<b>12</b>	<b>766</b>	<b>6</b>	<b>922</b>	<b>206,987</b>	<b>572,575</b>	<b>778,662</b>
1927								
Nova Scotia and New Brunswick.....			4		4		1,740	1,740
Quebec.....	53	2	231	2	288	70,156	200,047	270,203
Ontario.....	57	9	430	1	497	108,871	468,371	577,242
Saskatchewan and Alberta.....	2		21		23	5,600	25,532	31,132
British Columbia.....	5		55		60	4,888	50,848	55,736
<b>Total.....</b>	<b>117</b>	<b>11</b>	<b>741</b>	<b>3</b>	<b>872</b>	<b>189,515</b>	<b>746,538</b>	<b>936,053</b>

Table 52.—Wage-Earners in the Cement Products Industry in Canada, by Months, 1926 and 1927

Month	1926			1927		
	Male	Female	Total	Male	Female	Total
January.....	320	4	324	349	3	352
February.....	333	5	338	408	4	412
March.....	446	5	451	429	4	433
April.....	592	6	598	620	3	623
May.....	882	8	890	805	3	808
June.....	928	6	934	851	3	854
July.....	898	5	903	852	3	855
August.....	818	5	823	859	3	862
September.....	816	5	821	762	3	765
October.....	772	4	776	742	3	745
November.....	599	4	603	674	3	677
December.....	492	4	496	613	3	616
<b>Average*.....</b>	<b>766</b>	<b>6</b>	<b>772</b>	<b>741</b>	<b>3</b>	<b>744</b>

\*See note on page 20.

Table 53.—Hours of Labour in Month of Greatest Employment in the Cement Products Industry in Canada, by Provinces, 1927

Province	Average number of wage-earners working			
	8 hours or less per day	9 hours	10 hours	Over 10 hours
Nova Scotia and New Brunswick.....	3	3		
Quebec.....	66	214	103	85
Ontario.....	105	225	406	16
Saskatchewan and Alberta.....	1	4	35	
British Columbia.....	37	38	15	
<b>Canada</b> .....	<b>212</b>	<b>484</b>	<b>559</b>	<b>51</b>

Table 54.—Fuel and Electricity Used in the Cement Products Industry in Canada 1926 and 1927

Kind	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
		\$		\$	
Anthracite coal.....	Short ton	421	6,432	277	4,030
Bituminous coal—Canadian.....	Short ton	3,538	25,253	1,084	7,734
Imported.....	Short ton			2,249	15,779
Coke.....	Short ton	317	3,594	163	1,686
Fuel oil.....	Imp. gal.	2,662	504	30	29
Gasoline.....	Imp. gal.	32,358	9,817	18,758	6,068
Gas—Manufactured.....	M cu. ft.	696	470	375	188
Natural.....	M cu. ft.			423	209
Kerosene or coal oil.....	Imp. gal.			1,852	397
Wood.....	Cord	192	1,374	200	1,586
Other fuel.....			2,251		588
Electricity purchased.....	K.W.H.	624,996	21,120	460,050	18,282
<b>Total</b> .....			<b>79,815</b>		<b>56,876</b>

Table 55.—Power Employed in the Cement Products Industry in Canada, 1926 and 1927,

Kind	1926		1927	
	Number of units	Total h.p. according to manufacturer's rating	Number of units	Total h.p. according to manufacturers' rating
Steam engines and turbines.....	8	128	7	101
Gasoline, gas and oil engines.....	68	558	55	318
Hydraulic turbines or water wheels.....	1	4		
<i>Total primary power</i> .....	<i>77</i>	<i>688</i>	<i>62</i>	<i>419</i>
Electric motors run by purchased power.....	118	1,417	123	1,664
<b>Total power employed</b> .....	<b>195</b>	<b>2,105</b>	<b>185</b>	<b>2,083</b>
Electric motors run by primary power in the same plant.....			2	90
<i>Total electric motors</i> .....	<i>118</i>	<i>1,417</i>	<i>125</i>	<i>1,754</i>
Boilers.....	25	664	17	499

Table 56.—Materials Used in the Cement Products Industry in Canada, 1926 and 1927

Material	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
		\$		\$	
Portland cement.....	brl.	209,776	470,135	231,673	493,578
Quicklime.....	bush.	2,523	1,126	2,805	934
Sand.....	Cu. yd.	71,688	137,279	65,361	113,332
Gravel.....	Cu. yd.	106,494	147,726	81,544	134,534
Crushed stone.....	Cu. yd.	19,646	48,452	20,647	50,186
Cinders.....	Cu. yd.			6,995	3,974
Other materials.....			61,451		101,016
Boxes, crates, lumber, etc.....			13,872		15,132
<b>Total</b> .....			<b>880,041</b>		<b>912,686</b>

Table 57.—Products of the Cement Products Industry in Canada, 1926 and 1927

Product	Total selling value at works		
	1926	1927	
		\$	\$
Cement bricks.....		53,412	94,302
Hollow building blocks, etc.....		1,066,901	941,194
Drain pipe.....		138,928	207,433
Sewer pipe and culvert tile.....		508,870	558,836
Artificial stone.....		479,287	473,051
Cement posts, poles, piles, etc.....		166,418	116,201
Cinder blocks.....			69,145
Other products*.....		130,426	202,903
<b>Total</b> .....		<b>2,544,242</b>	<b>2,663,065</b>

\*Includes laundry tubs, sidewalks, cement laundry trays, concrete piles, etc.



## CHAPTER SIX

### COKE AND BY-PRODUCTS

Production of by-product and gas-house coke in Canada during 1927 totalled 2,026,438 tons as against 2,027,058 tons in 1926. Imports during the year amounted to 772,235 tons and exports aggregated 74,109 tons. In addition, petroleum coke was produced in Canada in 1927 to the amount of 76,229 tons of which 17,424 tons were exported. By-product or metallurgical coke was the principal product of 6 different plants in 1927; 4 of these concerns produced coke for use in their associated smelters and 2 made coke for sale. Gas coke was recovered in plants as a by-product in the manufacture of illuminating and fuel gas and was marketed as a domestic fuel. Petroleum coke was obtained as a residue in oil refineries and was used in the manufacture of carbon electrodes, as a fuel in the refineries, or was sold cheaply to employees for domestic fuel.

The coke and by-products industry for which statistics are given in the present chapter, includes only the factories which were engaged primarily in the manufacture of coke; that is, only by-product coke plants are included. Similar reviews on the artificial gas industry and the petroleum refining industry are given in other chapters of this report.

Six establishments were included in this group in 1927, the names and locations being as follows: Dominion Iron and Steel Company, Limited, Sydney, N.S.; Steel Company of Canada, Limited, Hamilton; Ont.: Algoma Steel Corporation, Limited, Sault Ste. Marie, Ont.; Hamilton By-Product Coke Ovens, Limited, Hamilton, Ont.; Crows Nest Pass Coal Company, Fernie, B.C.; and Granby Consolidated Mining, Smelting and Power Company, Anyox, B.C. All operated by-product ovens with the exception of the Crows Nest Pass Coal Company which still used the beehive type of ovens. The Winnipeg Electric Company, Winnipeg, Man., also operated by-product ovens but as artificial gas was the main product, it has been classified with the illuminating and fuel gas industry.

These 6 concerns represented an investment in plants, machinery and working capital of \$29,879,157, employed an average of 652 persons the year round and paid out \$1,118,538 in salaries and wages. Materials worth \$10,436,112 were converted into products having a selling value of \$15,318,880. The 3 establishments in Ontario alone employed 351 people and had a combined output valued at \$11,026,512.

Both imported and Canadian coal was used in coke making; during the year, 809,135 tons of Canadian coal and 1,431,345 tons of imported coal were converted into 1,582,662 tons of metallurgical coke giving thus an average yield of 1,414 pounds of coke for every ton of coal charged to the ovens. The 3 plants in Ontario procured their coal entirely from United States; the Nova Scotia plant used only Canadian coal; and 1 plant in British Columbia used only Canadian coal while the other used about 1½ tons of Canadian coal to every ton of imported coal. The total cost of bituminous coal was \$10,124,533; lime, sulphuric acid for making ammonium sulphate, and other materials brought the total cost of materials for the industry to \$10,436,112.

Production value in 1927 was \$15,318,880 which was a slight increase over the figure for 1926. The amount of coke made was 1,582,662 tons valued at \$10,165,035 as compared with an output of 1,555,962 tons worth \$10,232,755 in the previous year. Output for metallurgical plants was 956,907 tons as compared with 967,747 tons in 1926 and production for sale was 618,985 tons as against 580,593 tons in the previous year; only 6,670 tons were used in the reporting coke plants in 1927 and 7,622 tons in 1926. Production in Ontario amounted to 1,049,097 tons or 66 per cent of the total output in the industry, while in the previous year, Ontario's ovens made 929,828 tons of coke or 60 per cent of the total for Canada.

Most of the gas from the by-product coke ovens was used to heat the retorts or was delivered to the associated iron and steel plants; however, some gas was sold for domestic and industrial uses. The ammonia liquor recovered in the coke plants was nearly all made into ammonium sulphate which was marketed for fertilizer purposes. The total production of ammonium sulphate in Canada in 1927, including the output from 2 companies in the artificial gas industry, was 24,708 tons as against 23,655 tons in 1926. Tar and tar products and light oils were also recovered.

Data on the production of coke, including gas and by-product coke, is collected monthly by the Bureau. These figures show that for 1927, the highest monthly output was attained in December at 179,864 tons and the lowest was in September at 152,375 tons. Trend in output generally follows pig iron tonnage; considerable variation from month to month was recorded in 1927.

Imports of coke into Canada during the year totalled 772,235 tons, a decline of 22 per cent from the total of 988,034 tons brought in during the previous year. Imports into Ontario amounted to 649,165 tons or 84 per cent of the total for Canada; 105,068 tons were brought into the maritime provinces and the balance, 18,002 tons, was imported into the western provinces. During the previous year, 869,000 tons were brought in through Ontario ports of entry, 100,958 tons through the eastern provinces and 18,076 tons into the western provinces.

Exports of coke from Canada during the twelve months ending December amounted to 74,109 tons, an increase of 78 per cent as compared with 41,699 tons in the previous year. Ontario exported 46,578 tons; the western provinces, 25,297 tons; and the Maritime provinces, 2,234 tons. In 1926, Ontario accounted for 10,606 tons, the western provinces, 29,353 tons, and the maritime provinces only 1,740 tons.

The apparent consumption of coke in Canada, as computed by deducting the exports from the sum of the production and the imports, amounted to 2,724,564 tons in 1927. In the previous year the apparent consumption totalled 2,973,393 tons, and, in 1925, 2,373,588 tons.

Table 58.—Production of Coke in Canada, by Industries, 1926 and 1927

Industry	1926		1927	
	Quantity	Value	Quantity	Value
	Tons	\$	Tons	\$
Coke and its by-products industry.....	1,555,962	10,232,775	1,582,662	10,165,035
Illuminating and fuel gas industry.....	471,096	3,073,150	443,776	2,799,177
<b>Total by-product and gas-house coke.....</b>	<b>2,027,058</b>	<b>13,305,925</b>	<b>2,026,438</b>	<b>12,964,212</b>
Petroleum refining industry.....	51,545	307,443	76,229	449,218

Table 59.—Principal Statistics of the Coke and By-Products Industry in Canada, by Provinces, 1926 and 1927

Province	Number of plants	Capital employed	Number of employees	Salaries and wages	Cost of fuel and electricity	Cost of materials	Selling value of products	Value added by manufacturing
Ontario.....	3	\$ 11,440,775	307	\$ 570,190	\$ 833,955	\$ 6,389,751	\$ 10,136,689	\$ 3,746,938
<b>Canada*</b> .....	<b>6</b>	<b>24,769,899</b>	<b>615</b>	<b>1,013,752</b>	<b>1,063,122</b>	<b>9,744,081</b>	<b>15,261,474</b>	<b>5,517,393</b>
Ontario.....	3	13,681,603	351	640,553	952,170	7,510,807	11,026,512	3,515,705
<b>Canada*</b> .....	<b>6</b>	<b>29,879,157</b>	<b>652</b>	<b>1,118,538</b>	<b>1,156,344</b>	<b>10,436,112</b>	<b>15,318,880</b>	<b>4,882,768</b>

\*Includes also data for 1 plant in Nova Scotia and 2 plants in British Columbia.

Table 60.—Capital Employed in the Coke and By-Products Industry in Canada, by Classes and by Provinces, 1926 and 1927

Province	1926				1927			
	Capital employed as represented by				Capital employed as represented by			
	Lands, buildings, fixtures, machinery and tools	Materials on hand, and stocks in process	Cash, trading and operating accounts and bills receivable	Total	Lands, buildings, fixtures, machinery and tools	Materials on hand, and stocks in process	Cash, trading and operating accounts and bills receivable	Total
Ontario.....	\$ 9,182,464	\$ 1,861,168	\$ 406,143	\$ 11,449,775	\$ 10,878,598	\$ 2,384,467	\$ 418,538	\$ 12,681,603
<b>Canada*</b> .....	<b>22,442,081</b>	<b>1,875,413</b>	<b>452,465</b>	<b>24,769,899</b>	<b>24,123,215</b>	<b>3,690,116</b>	<b>2,050,826</b>	<b>29,879,157</b>

\*See footnote to Table 59.

Table 61.—Employees, Salaries and Wages, in the Coke and By-Products Industry in Canada, by Provinces, 1926 and 1927

Province	Average number of employees				Salaries and wages			
	Salaried employees		Wage-earners		Total	Salaries	Wages	Total
	Male	Female	Male	Female				
1926						\$	\$	\$
Ontario.....	21	1	285		307	67,454	502,736	570,190
<b>Canada*</b> .....	<b>24</b>	<b>1</b>	<b>580</b>		<b>615</b>	<b>99,590</b>	<b>914,162</b>	<b>1,013,752</b>
1927								
Ontario.....	23	1	326	1	351	75,127	565,426	640,553
<b>Canada*</b> .....	<b>22</b>	<b>1</b>	<b>618</b>	<b>1</b>	<b>652</b>	<b>99,724</b>	<b>1,020,314</b>	<b>1,118,538</b>

\*See footnote to Table 59.

Table 62.—Wage-Earners in the Coke and By-Products Industry in Canada, by Months 1926 and 1927

Month	1926			1927		
	Male	Female	Total	Male	Female	Total
January.....	542		542	637	1	638
February.....	588		588	625	1	626
March.....	568		568	615	1	616
April.....	596		596	620	1	621
May.....	592		592	608	1	609
June.....	586		586	629	1	630
July.....	562		562	627	1	628
August.....	581		581	621	1	622
September.....	594		594	594	1	595
October.....	616		616	598	1	599
November.....	613		613	613	1	614
December.....	607		607	620	1	621
<b>Average*</b> .....	<b>580</b>		<b>580</b>	<b>618</b>	<b>1</b>	<b>619</b>

\*See note on page 20.

Table 63.—Hours of Labour in Month of Greatest Employment in the Coke and Its By-Products Industry in Canada, 1927

Province	Average number of wage-earners working			
	8 hours or less per day	9 hours	10 hours	Over 10 hours
Ontario.....	128	1	12	215
<b>Canada*</b> .....	<b>234</b>	<b>1</b>	<b>12</b>	<b>413</b>

\*See footnote to Table 59.

Table 64.—Fuel and Electricity Used in the Coke and By-Products Industry in Canada, 1926 and 1927

Kind	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
Bituminous coal—Canadian.....	Short ton	1,573	\$ 8,447	2,865	\$ 8,533
Imported.....	Short ton			1,571	9,527
Coke.....	Short ton	5,857	33,922	1,232	2,894
Gas (manufactured).....	M cu. ft.	4,465,103	909,216	4,731,681	1,022,889
Other fuel.....			6,811		
Electricity purchased.....	K.W.H.	13,815,759	104,926	14,612,913	112,501
<b>Total</b> .....			<b>1,063,123</b>		<b>1,156,344</b>

**Table 65.—Power Employed in the Coke and By-Products Industry in Canada, 1926 and 1927**

Kind	1926		1927	
	Number of units	Total h.p. according to manufacturers' rating	Number of units	Total h.p. according to manufacturers' rating
Steam engines and turbines.....	98	3,831	101	3,874
<i>Total primary power.....</i>	<i>98</i>	<i>3,831</i>	<i>101</i>	<i>3,874</i>
Electric motors run by purchased power.....	196	4,576	219	4,808
<b>Total power employed.....</b>	<b>294</b>	<b>8,407</b>	<b>320</b>	<b>8,682</b>
Electric motors run by primary power in same plant.....	173	4,753	170	4,743
<i>Total electric motors.....</i>	<i>469</i>	<i>9,329</i>	<i>389</i>	<i>9,551</i>
Boilers.....	25	5,225	27	5,469

**Table 66.—Materials Used in the Coke and By-Products Industry in Canada, 1926 and 1927**

Material	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
Bituminous coal, for coke making—			\$		\$
Canadian.....	Short ton	938,134	3,041,854	809,135	2,704,159
Foreign.....	Short ton	1,254,866	6,379,663	1,431,345	7,420,374
<i>Total coal.....</i>	<i>Short ton</i>	<i>2,193,000</i>	<i>9,421,517</i>	<i>2,240,480</i>	<i>10,124,533</i>
Other materials—					
Lime.....	Short ton	1,728	20,460	1,068	12,264
Sodium nitrate.....	Lbs.	38,362	1,150		1,874
Sulphur.....	Short ton	208	4,480		
Sulphuric acid, 66° Be.....	Short ton	12,680	253,365	14,473	240,978
All other materials.....			42,869		50,463
<i>Total other materials.....</i>			<i>322,564</i>		<i>311,579</i>
<b>Total value of materials used.....</b>			<b>9,744,081</b>		<b>10,436,112</b>

**Table 67.—Products of the Coke and By-Products Industry in Canada, 1926 and 1927**

Product	Unit of measure	1926		1927	
		Quantity	Selling value	Quantity	Selling value
Made for Use in Coke Plant—			\$		\$
Coke.....	Short ton	5,687	33,922		
Coke breeze.....	Short ton	1,935	5,678	6,770	10,155
Gas used in heating ovens or retorts.....	M cu. ft.	6,410,009	1,064,809	5,085,684	684,079
Gas otherwise used in plant.....	M cu. ft.			1,066,082	452,737
Tar and tar products.....	Imp. gal.	7,310	731		
Light oils (toluol, benzol, drip oil, holder oil, etc.)..	Imp. gal.	1,967,637	130,332	2,002,509	137,002
<i>Total.....</i>			<i>1,235,472</i>		<i>1,283,973</i>
Made for Use in Metallurgical Works—					
Coke.....	Short ton	891,914	5,559,887	904,258	5,685,787
Coke breeze.....	Short ton	75,833	146,458	52,640	108,956
Gas used in heating ovens or retorts.....	M cu. ft.	364,375	50,651	292,863	39,536
Gas otherwise used in plant.....	M cu. ft.	9,890,961	1,160,103	10,267,530	1,228,664
Tar and tar products.....	Imp. gal.	3,064,336	179,587	2,289,004	131,509
Other products.....			2,068		
<i>Total.....</i>			<i>7,098,754</i>		<i>7,194,452</i>
Made for Sale—					
Coke.....	Short ton	567,724	4,420,810	602,194	4,316,692
Coke breeze.....	Short ton	12,869	66,020	16,791	43,445
Gas sold.....	M cu. ft.	1,225,801	518,419	1,385,082	496,264
Tar and tar products.....	Imp. gal.	13,841,732	676,310	14,560,257	834,432
Light oils (benzol, toluol, drip oil, holder oil, motor fuel, etc.)..	Imp. gal.	1,287,021	292,184	963,074	179,555
All other products.....			953,505		970,067
<i>Total.....</i>			<i>6,927,248</i>		<i>6,840,455</i>
<b>Total value of products for use and for sale.....</b>			<b>15,261,474</b>		<b>15,318,880</b>



Table 68.—Production\* of Metallurgical and Gas-House Coke in Canada, 1919-1927

Year	Metallurgical coke		Gas-house coke		Total	
	Quantity	Selling value at plants	Quantity	Selling value at plants	Quantity	Selling value at plants
	Short tons	\$	Short tons	\$	Short tons	\$
1919	1,276,443	9,821,998	398,589	2,251,744	1,675,032	12,073,742
1920	1,270,322	11,524,091	437,881	3,875,003	1,708,203	15,399,184
1921	1,011,847	11,049,369	452,152	3,061,814	1,463,999	14,111,183
1922	700,098	5,500,183	532,548	3,492,307	1,232,646	9,952,490
1923	1,160,989	10,230,524	498,309	3,695,060	1,668,298	13,932,484
1924	985,305	7,208,713	451,607	3,164,234	1,436,912	10,132,947
1925	1,079,526	7,442,103	467,213	3,040,738	1,546,739	10,482,841
1926	1,555,962	10,232,775	471,096	3,073,150	2,027,058	13,305,925
1927	1,582,662	10,165,015	443,776	2,799,177	2,026,438	12,964,212

\*Includes coke breeze.

Table 69.—Production of Metallurgical and Gas-House Coke in Canada, by Provinces, 1919-1927

Year	Nova Scotia, New Brunswick and Quebec		Ontario		Manitoba, Saskatchewan, Alberta and British Columbia		Canada	
	Quantity	Selling value at plants	Quantity	Selling value at plants	Quantity	Selling value at plants	Quantity	Selling value at plants
	Short tons	\$	Short tons	\$	Short tons	\$	Short tons	\$
1919	567,778	4,700,079	986,833	6,301,068	120,421	1,072,595	1,675,032	12,073,742
1920	604,642	6,053,226	882,257	6,834,357	221,304	2,511,601	1,708,203	15,399,184
1921	413,420	3,065,746	858,951	9,166,758	191,628	1,938,679	1,463,999	14,111,183
1922	454,678	2,439,591	603,219	4,893,672	174,749	1,719,227	1,232,646	9,952,490
1923	599,458	4,905,506	882,341	7,180,816	186,499	1,837,162	1,668,298	13,932,484
1924	420,535	2,753,384	857,528	6,161,144	158,849	1,518,410	1,436,912	10,432,947
1925	504,056	2,753,147	830,839	5,967,333	210,844	1,780,361	1,546,739	10,482,841
1926	646,829	3,265,348	1,144,493	8,208,124	235,630	1,832,453	2,027,058	13,305,925
1927	561,918	2,815,912	1,260,355	8,542,988	204,165	1,605,312	2,026,438	12,964,212

Table 70.—Bituminous Coal Used in the Production of Metallurgical and Gas-House Coke in Canada, 1919-1927

Year	Bituminous coal used in manufacture of				Total	
	Metallurgical coke		Gas-house coke		Quantity	Cost at works
	Quantity	Cost at works	Quantity	Cost at works		
	Short tons	\$	Short tons	\$	Short tons	\$
1919	1,866,101	0,028,737	581,750	3,532,044	2,447,851	12,560,781
1920	1,937,512	10,863,634	648,618	5,493,387	2,586,130	16,357,021
1921	1,497,030	10,657,350	655,789	5,887,380	2,152,819	16,514,730
1922	1,053,403	5,105,763	641,875	5,450,260	1,695,278	10,565,032
1923	1,707,024	9,191,864	728,011	5,660,184	2,435,035	14,832,018
1924	1,410,917	6,525,206	681,480	4,723,734	2,092,397	11,248,940
1925	1,529,018	6,793,453	723,394	4,395,445	2,252,412	11,488,898
1926	2,193,000	9,421,517	701,283	4,274,183	2,894,283	13,695,700
1927	2,240,480	10,124,533	624,829	3,768,539	2,865,309	13,893,072

Table 71.—Production of Metallurgical Coke in Canada, 1886-1927

Year	Production	Year	Production	Year	Production
1886	35,346	1900	157,134	1914	1,023,860
1887	40,428	1901	365,531	1915	1,170,473
1888	45,373	1902	502,043	1916	1,460,741
1889	54,339	1903	561,318	1917	1,215,862
1890	66,450	1904	554,083	1918	1,250,744
1891	57,084	1905	700,488	1919	1,276,443
1892	56,135	1906	782,055	1920	1,270,322
1893	61,078	1907	842,003	1921	1,011,847
1894	58,044	1908	858,257	1922	700,098
1895	53,356	1909	862,011	1923	1,169,989
1896	49,619	1910	902,715	1924	985,305
1897	60,686	1911	935,651	1925	1,079,526
1898	87,600	1912	1,411,220	1926	1,555,962
1899	100,820	1913	1,530,490	1927	1,582,662
<b>Total</b>					<b>28,574,459</b>

Table 72.—Production in Canada, Imports, Exports and Apparent Consumption of Coke\* by Provinces, 1926 and 1927

		Nova Scotia, New Brunswick and Quebec	Ontario	Manitoba, Saskatchewan, Alberta and British Columbia	Canada
Production.....	1926	646,929	1,144,493	235,636	2,027,058
	1927	561,918	1,260,355	204,165	2,026,438
Imports.....	1926	100,958	869,000	18,076	988,034
	1927	105,068	649,165	18,002	772,235
Exports.....	1926	1,740	10,606	29,353	41,699
	1927	2,234	46,578	25,297	74,109
Apparent consumption.....	1926	746,147	2,002,887	224,359	2,973,393
	1927	664,752	1,862,942	196,870	2,724,564

\*Exclusive of petroleum coke.

**Ammonium Sulphate.**—Production of ammonium sulphate in Canada during 1927 amounted to 24,708 tons valued at \$1,030,991 as compared with 23,655 tons worth \$1,015,578 in 1926. All of the ammonium sulphate made in Canada was produced as a by-product of the coke and artificial gas industries.

The bulk of the Canadian production was exported to foreign countries for use as fertilizer. In 1927 exports totalled 16,947 tons worth \$730,815 as compared with 16,382 tons valued at \$813,115 in 1926. The principal countries of destination with the quantities and values of Canadian export to each were as follows: Japan, 7,498 tons worth \$328,884; United States, 3,061 tons at \$126,482; Hong Kong, 2,990 tons at \$127,865; China, 1,283 tons at \$59,009; Barbados, 977 tons at \$41,099; British Guiana, 235 tons at \$10,146; French West Indies, 532 tons at \$21,512; and other British West Indies, 339 tons at \$14,471.

Considerable quantities of ammonium sulphate were imported into Canada. During 1927 about 3,181 tons worth \$160,150 were brought into the Dominion; the bulk of this came from the United States. In 1926 the imports were only 2,298 tons worth \$135,455.

Six companies in Canada made ammonium sulphate during 1927; one concern ceased manufacturing this commodity late in 1926 but another firm commenced to produce in 1927. The producing plants were located as follows:—

- Algoma Steel Corporation, Sault Ste. Marie, Ontario.
- Steel Company of Canada, Limited, Hamilton, Ontario.
- Hamilton By-Product Coke Ovens, Limited, 15 Main St., Hamilton, Ontario.
- Dominion Iron and Steel Co., Limited, Sydney, N.S.
- Montreal Light, Heat and Power Co., Limited, Montreal, P.Q.
- Ottawa Gas Company, Ottawa, Ontario.

Table 73.—Production in Canada, Imports and Exports of Ammonium Sulphate, 1919-1927

Year	Production		Imports		Exports	
	Quantity	Value	Quantity	Value	Quantity	Value
	Pounds	\$	Pounds	\$	Pounds	\$
1919.....	38,644,152	1,423,545	203,408	12,129	37,331,200	1,846,713
1920.....	39,912,723	1,475,542	624,659	31,495	36,658,500	1,896,660
1921.....	34,680,248	1,183,776	313,354	11,513	29,296,100	784,628
1922.....	27,201,332	667,934	825,326	24,659	20,570,000	532,983
1923.....	43,037,062	1,268,146	517,629	18,577	40,940,000	1,254,681
1924.....	34,685,134	865,538	1,376,643	27,111	26,714,100	681,809
1925.....	36,502,275	909,097	785,792	27,544	25,120,700	637,310
1926.....	47,310,666	1,015,578	4,596,953	135,455	32,764,400	813,115
1927.....	49,416,817	1,030,991	6,361,100	160,150	33,893,500	730,815

## CHAPTER SEVEN

### ILLUMINATING AND FUEL GAS

Statistics on the illuminating and fuel gas industry cover only those plants primarily engaged in manufacturing gas for domestic and industrial lighting and heating purposes. Concerns making coal gas, water gas, Pintsch gas, and acetylene gas for small town lighting plants come within the scope of this classification. Output of gas from these establishments in 1927 totalled 14,758,928 M cubic feet of which 13,273,413 M cubic feet were sold for \$15,157,327 and the remainder was used as fuel in the reporting plants or was unaccounted for. In addition, 18,097,241 M cubic feet of gas were recovered from by-product coke plants and 1,719,394 M cubic feet of still gas from petroleum refineries; most of the output from these sources was used as a fuel in the reporting plants or in associated smelters, but 2 companies in Ontario distributed coke-oven gas for domestic or industrial use.

In 1927, there were 42 plants included in the illuminating and fuel gas industry and the distribution by provinces was as follows: 1 in Nova Scotia, 2 in New Brunswick, 4 in Quebec, 20 in Ontario, 8 in Manitoba, 2 in Saskatchewan, 1 in Alberta, and 4 in British Columbia. Products and by-products from these establishments in 1927 were valued at \$18,725,869 an increase of almost 3 per cent over the corresponding figure for 1926. Capital employed amounted to \$54,131,873, the monthly average number of employees was 3,494, salaries and wages totalled \$4,750,581, and the cost of materials used was \$6,178,791. Ontario alone had 20 plants representing a capital of \$29,368,618 which employed 1,963 people and made products worth \$8,987,315.

Of the producing plants 11 made straight coal gas only, 8 produced carburetted water gas only; 5 made both coal and water gas; 3 manufactured mixed coal and water gas; 9 made oil gas; and 6 others made acetylene gas for small lighting plants.

In 1927, some 68,894 tons of Canadian coal and 555,935 tons of imported coal were charged to gas retorts. Plants in British Columbia used only Canadian coal; in Ontario only imported coal was used; in Quebec only a small amount of Canadian coal was used, the rest being imported; in New Brunswick the ratio was 10 tons of Canadian coal to every 1 ton of foreign coal; in Nova Scotia, the gas plants used 8 tons of imported coal to every 1 ton of Canadian coal, and in Manitoba all coal used in gas making was imported. For making oil gas a total of 14,548,244 gallons of oil were used, and for producing acetylene in this industry about 147 tons of calcium carbide were consumed. The total cost of materials was \$6,178,791.

Data on production were collected under two headings: (a) primary production of gas and its distribution, (b) by-products subdivided as to sales and for use in own plant. The reports showed a primary production of 7,890,534 M cubic feet of straight coal gas, 6,539,116 M cubic feet of carburetted water gas, 259,632 M cubic feet of mixed coal and water gas, 68,352 M cubic feet of oil gas and 1,294 M cubic feet of acetylene gas. Of this total of 14,758,928 M cubic feet made available for distribution, 13,273,413 M cubic feet were sold, 75,531 M cubic feet were used to heat ovens and retorts, 85,049 M were used for other purposes in the plants and 1,324,935 M cubic feet could not be accounted for by the reporting companies. By-products recovered included 234,173 tons of coke and 92,471 gallons of tar and tar products which were used chiefly as fuel in the reporting plants, and sales of 209,603 tons of coke, 8,705,577 gallons of tar, 1,184,760 pounds of ammonia liquor as well as quantities of ammonium sulphate and other products.

According to returns from the producers, the gas plants in operation in 1927 served 451,508 customers. It was not possible in all cases to make a separation as to quantities used for industrial purposes and for domestic purposes.

In most cities the sliding scale of rates were in effect, the unit cost varying with the quantities used. Rates per M cubic feet in the different cities were approximately as follows: in 1927: Halifax, N.S., \$1.00-1.90 net; Saint John, N.B., \$1.45-1.85 with service charge of 60 cents per month; Montreal, P.Q., 75c.-\$1.05 net; Quebec, P.Q., 90c.-\$1.50 net; Barrie, Ont., \$2.00 net with service charge of 75c. per month; Belleville, Ont., \$1.10-1.85; Brockville, Ont., \$1.70 net; Guelph, Ont., \$1.15 net; Kingston, Ont., \$1.44 net plus meter rent of 17 cents per month; London, Ont., 90c.-\$1.10; St. Thomas, Ont., \$1.50 net; Toronto, Ont., 75c.-85c. plus a service charge of 50 cents per month; Cobourg, Ont., \$2.50; Oshawa, Ont., \$1.90; Peterborough, Ont., \$1.40-\$1.90 net; Kitchener, Ont., \$1.00 plus 10 cents meter rent; Waterloo, 70c.; Ottawa, \$1.50 net; Port Hope,



\$2.50 plus \$1.20 per year meter rent; Owen Sound, 99c.-\$1.22 net; Stratford, Ont., \$1.85 net; Cornwall, Ont., \$1.76 net; Brandon, Man., \$2.10 net; Winnipeg, Man., \$1.00-1.20 net; Nelson, B.C., 90c.-\$2.00 net; Vancouver, B.C., 60c.-\$1.40 net; Victoria, 80c.-\$1.75 net.

**Table 74.—Principal Statistics of the Illuminating and Fuel Gas Industry in Canada, by Provinces, 1926 and 1927**

Province	Number of plants	Capital employed	Number of employees	Salaries and wages	Cost of fuel and electricity	Cost of materials	Selling value of products	Value added by manufacturing
<b>1926</b>								
Quebec.....	4	\$ 7,020,613	1,018	\$ 1,271,078	\$ 33,398	\$ 1,987,240	\$ 6,345,445	\$ 4,358,205
Ontario.....	21	28,772,890	2,018	2,770,977	426,328	3,248,312	9,057,735	5,809,423
Manitoba.....	8	5,433,683	171	244,833	36,043	504,819	1,199,555	694,736
British Columbia.....	5	6,668,905	355	459,607	55,204	381,137	1,267,630	880,493
<b>Canada*</b> .....	<b>44</b>	<b>49,573,267</b>	<b>3,678</b>	<b>4,883,521</b>	<b>589,476</b>	<b>6,226,100</b>	<b>18,264,860</b>	<b>12,038,760</b>
<b>1927</b>								
Quebec.....	4	6,883,966	800	1,108,607	31,061	2,065,794	6,663,667	4,507,873
Ontario.....	20	29,368,618	1,963	2,708,439	604,049	3,108,672	8,987,315	5,878,643
Manitoba.....	8	5,654,579	164	244,595	34,434	515,486	1,245,618	730,132
British Columbia.....	4	10,232,949	440	545,794	91,318	379,013	1,374,048	995,035
<b>Canada*</b> .....	<b>42</b>	<b>51,131,873</b>	<b>3,494</b>	<b>4,750,581</b>	<b>815,778</b>	<b>6,178,791</b>	<b>18,725,869</b>	<b>12,547,078</b>

\*Includes also data for 1 plant in Nova Scotia, 2 in New Brunswick, 2 in Saskatchewan and 1 in Alberta.

**Table 75.—Capital Employed in the Illuminating and Fuel Gas Industry in Canada, by Classes and by Provinces, 1926 and 1927**

Province	1926				1927			
	Capital employed as represented by				Capital employed as represented by			
	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash trading and operating accounts and bills receivable	Total	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash trading and operating accounts and bills receivable	Total
Quebec.....	\$ 4,741,582	\$ 668,292	\$ 1,610,739	\$ 7,020,613	\$ 4,853,278	\$ 622,139	\$ 1,409,549	\$ 6,883,966
Ontario.....	23,329,965	1,069,685	4,373,240	28,772,890	24,381,589	1,660,799	3,326,230	29,368,618
Manitoba.....	5,253,079	61,614	118,990	5,433,683	5,326,621	204,649	123,309	5,654,579
British Columbia.....	5,526,256	398,655	743,994	6,668,905	7,115,611	467,531	2,649,807	10,232,949
<b>Canada*</b> .....	<b>49,394,730</b>	<b>2,252,148</b>	<b>7,016,389</b>	<b>49,573,267</b>	<b>43,118,188</b>	<b>3,122,465</b>	<b>7,899,290</b>	<b>54,131,873</b>

\*See footnote to Table 74.

**Table 76.—Employees, Salaries and Wages, in the Illuminating and Fuel Gas Industry in Canada, by Provinces, 1926 and 1927**

Province	Average number of employees					Salaries and wages		
	Salaried employees		Wage-earners		Total	Salaries	Wages	Total
	Male	Female	Male	Female				
<b>1926</b>								
Quebec.....	288	75	655	.....	1,018	\$ 446,700	\$ 824,378	\$ 1,271,078
Ontario.....	335	179	1,502	2	2,018	792,269	2,068,708	2,770,977
Manitoba.....	34	24	113	.....	171	86,845	157,988	244,833
British Columbia.....	60	7	288	.....	355	115,914	343,693	459,607
<b>Canada*</b> .....	<b>743</b>	<b>293</b>	<b>2,632</b>	<b>9</b>	<b>3,678</b>	<b>1,390,861</b>	<b>3,492,660</b>	<b>4,883,521</b>
<b>1927</b>								
Quebec.....	202	76	522	.....	800	473,833	634,864	1,108,607
Ontario.....	362	199	1,401	2	1,963	750,997	1,957,442	2,708,439
Manitoba.....	34	24	104	2	164	90,405	154,190	244,595
British Columbia.....	66	9	365	.....	440	132,402	413,392	545,794
<b>Canada*</b> .....	<b>690</b>	<b>316</b>	<b>2,475</b>	<b>13</b>	<b>3,494</b>	<b>1,488,257</b>	<b>3,262,324</b>	<b>4,750,581</b>

\*See footnote to Table 74.



Table 77.—Wage-Earners in the Illuminating and Fuel Gas Industry in Canada, by Months, 1926 and 1927

Month	1926			1927		
	Male	Female	Total	Male	Female	Total
January	2,234	9	2,243	2,192	13	2,205
February	2,250	9	2,259	2,182	13	2,195
March	2,304	9	2,313	2,204	13	2,217
April	2,559	9	2,568	2,271	13	2,284
May	2,890	9	2,899	2,627	13	2,640
June	3,030	9	3,048	2,616	13	2,629
July	3,004	9	3,013	2,590	13	2,603
August	3,068	9	3,077	2,767	13	2,780
September	2,889	9	2,898	2,588	13	2,601
October	2,622	9	2,631	2,554	13	2,567
November	2,458	9	2,467	2,538	13	2,551
December	2,320	9	2,329	2,550	13	2,563
<b>Average*</b>	<b>2,633</b>	<b>9</b>	<b>2,642</b>	<b>2,475</b>	<b>13</b>	<b>2,488</b>

See note on page 20.

Table 78.—Hours of Labour in Month of Greatest Employment in the Illuminating and Fuel Gas Industry in Canada, by Provinces, 1927

Province	Average number of wage-earners working			
	8 hours or less per day	9 hours	10 hours	Over 10 hours
Nova Scotia	9	44	1	6
New Brunswick	6	20	1	19
Quebec	331	10	335	12
Ontario	512	977	44	21
Manitoba	86	21		
Saskatchewan	4			
Alberta	4			
British Columbia	424			
<b>Canada</b>	<b>1,376</b>	<b>1,072</b>	<b>351</b>	<b>37</b>

Table 79.—Fuel and Electricity Used in the Illuminating and Fuel Gas Industry in Canada, 1926 and 1927

	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
Bituminous coal—Canadian	Short ton	40,885	\$ 246,524	6,476	\$ 44,751
Imported	Short ton			43,784	284,022
Lignite coal (Canadian)	Short ton			5	60
Coke	Short ton	49,257	268,733	55,200	357,062
Gas (manufactured)	M cu. ft.	29,929	23,964	40,014	17,897
Fuel oil	Imp. gal.			187,815	18,452
Other fuel				97	6,455
Electricity purchased	K. W. H.	12,221,496	50,158	10,753,656	87,079
<b>Total</b>			<b>589,476</b>		<b>815,778</b>

Table 80.—Power Employed in the Illuminating and Fuel Gas Industry in Canada, 1926 and 1927

	1926		1927	
	Number of units	Total h.p. according to manufacturers' rating	Number of units	Total h.p. according to manufacturers' rating
Steam engines and turbines	49	702	60	1,618
Gasoline, gas and oil engines	4	96	3	86
Hydraulic turbines or water wheels	1	3	1	3
<i>Total primary power</i>	<i>54</i>	<i>801</i>	<i>64</i>	<i>1,707</i>
Electric motors run by purchased power	166	2,212	170	2,227
<b>Total power employed</b>	<b>220</b>	<b>3,013</b>	<b>234</b>	<b>3,934</b>
<i>Total electric motors</i>	<i>166</i>	<i>2,212</i>	<i>170</i>	<i>2,227</i>
Boilers	178	10,906	166	10,236

Table 81.—Materials Used in the Illuminating and Fuel Gas Industry in Canada, 1926 and 1927

Material	Unit of measure	1926		1927	
		Quantity	Value	Quantity	Value
Bituminous coal for gas making—			\$		\$
Canadian.....	Short ton	80,923	416,645	68,894	372,112
Imported.....	Short ton	620,360	3,857,538	555,935	3,396,427
Anthracite coal for gas making.....	Short ton	3,477	41,277	225	3,130
Coke for gas making—					
Purchased.....	Short ton	6,663	70,101	6,729	72,957
Companies' own make.....	Short ton	91,537	592,885	144,834	870,423
Oil (gas oil) for gas-making.....	Imp. gal.	12,155,649	1,133,157	14,548,244	1,364,546
Benzine, gasoline, naphtha, etc.....	Imp. gal.	75,587	9,443		
Calcium carbide.....	Pound	311,770	14,344	293,090	13,004
Lime.....	Pound	820,000	3,505	574,955	2,603
Water.....			10,334		7,012
Oxide or purifying materials.....	Short ton	4,995	48,692	2,948	32,315
All other materials.....			28,089		44,262
<b>Total.....</b>			<b>6,226,100</b>		<b>6,178,79</b>

Table 82.—Products of the Illuminating and Fuel Gas Industry in Canada, 1926 and 1927

Product	Unit of measure	1926		1927	
		Quantity	Value of products sold	Quantity	Value of products sold
<b>GAS PRODUCTION—</b>			\$		\$
Straight coal gas.....	M cu. ft.	8,352,129		7,800,534	
Carburetted water gas.....	M cu. ft.	5,408,725		6,539,116	
Mixed coal and water gas, not separately reported above.....	M cu. ft.	236,753		259,632	
Oil gas by vapourizing distillate.....	M cu. ft.	65,675		68,352	
Acetylene gas.....	M cu. ft.	1,394		1,294	
<b>Total gas made.....</b>	<b>M cu. ft.</b>	<b>14,067,676</b>		<b>14,758,928</b>	
<b>GAS DISTRIBUTION—</b>					
Gas used in heating ovens or retorts.....	M cu. ft.	54,838		75,531	
Gas otherwise used in plant or otherwise accounted for but not sold.....	M cu. ft.	86,554		85,049	
Gas not accounted for.....	M cu. ft.	1,352,392		1,324,935	
Gas sold.....	M cu. ft.	12,573,892	14,417,652	13,273,413	15,157,327
<b>BY-PRODUCTS—</b>					
<b>Made for use—</b>					
Coke.....	Short ton	217,802	1,188,472	234,173	1,201,711
Tar and tar products—					
From coal gas.....	Imp. gal.	58,823	5,293	64,471	3,868
From water or oil gas.....	Imp. gal.	157,485	11,426	28,000	1,120
Other products.....			537		1,253
<b>Made for sale—</b>					
Coke.....	Short ton	253,294	1,884,678	209,603	1,597,466
Tar and tar products—					
From coal gas.....	Imp. gal.	6,011,352	562,434	6,890,834	532,392
From water or oil gas.....	Imp. gal.	876,947	56,629	1,805,743	127,955
Ammonia liquor.....	lb. NH <sub>3</sub>	3,430,683	63,973	1,184,700	27,869
Light oils.....	Imp. gal.	6,300	1,260		
All other by-products.....			72,500		74,908
<b>Total by-products.....</b>			<b>3,847,208</b>		<b>3,568,542</b>
<b>Total value of gas sold and by-products made.....</b>			<b>18,264,860</b>		<b>18,725,569</b>

Table 83.—Total Production of Artificial Gas in Canada, 1926 and 1927

Industry	1926	1927
	Quantity	Quantity
<b>GAS MADE IN—</b>		
Illuminating and fuel gas industry (see Table 82).....	14,067,676	14,758,928
<b>Coke industry—</b>		
Gas used in heating ovens or retorts.....	6,774,384	5,378,547
Gas otherwise used in plant but not sold.....	9,890,961	11,333,612
Gas sold.....	1,225,801	1,385,082
<b>Total gas made in the coke industry.....</b>	<b>17,891,146</b>	<b>18,097,241</b>
Petroleum refining industry.....	1,532,430	1,719,394
<b>Total.....</b>	<b>33,491,252</b>	<b>34,575,563</b>

**Table 84.—Production and Sales of Artificial Gas from the Illuminating and Fuel Gas Industry of Canada, 1919-1927**

Year	Production	Sales	
		Quantity	Income from sales
		M cu. ft.	\$
1919.....	10,138,446	9,274,458	9,190,369
1920.....	12,701,733	12,087,374	13,385,951
1921.....	12,390,904	11,784,590	15,241,640
1922.....	12,613,567	11,962,619	15,041,864
1923.....	13,595,429	12,784,065	15,260,693
1924.....	13,227,402	11,879,111	14,268,315
1925.....	13,507,487	12,064,863	14,047,306
1926.....	14,067,776	12,573,892	14,417,652
1927.....	14,758,928	13,273,413	15,157,327

**Natural Gas.**—(From the annual report on *The Mineral Production of Canada*.)—Natural gas production in 1927 was up 11.3 per cent as compared with the previous year's output. The 1927 production was 21,376,791 thousand cubic feet valued at \$8,043,010; in 1926 the total was 19,208,209 thousand cubic feet worth \$7,557,174. Alberta once more held the position of premier producer with an output of 13,434,621 thousand cubic feet; Ontario was next with 7,311,215 thousand cubic feet; and New Brunswick followed with 630,755 thousand cubic feet. Average prices per thousand cubic feet were as follows: New Brunswick, 20 cents; Ontario, 59 cents; and Alberta, 27 cents.

Imports of mixed gas (natural and artificial) into Canada from the United States amounted to 104,001 thousand cubic feet valued at \$65,759.

Capital employed by the 172 firms operating in Canada during 1927 was \$56,777,091. Salaried employees and wage-earners numbered 1,342 whose combined earnings were \$1,535,498. Fuel and electricity costs were very small and amounted to \$11,181. Primary power employed during the year totalled 153 units rated at 2,684 h.p.

**Table 85.—Principal Statistics of the Natural Gas Industry in Canada, 1926 and 1927**

	1926	1927
Number of firms.....	*169	*172
Capital employed..... \$	57,231,281	56,777,091
Number of employees—On salary.....	507	484
On wages.....	747	858
<b>Total.....</b>	<b>1,254</b>	<b>1,342</b>
Salaries and wages—Salaries..... \$	674,811	665,047
Wages..... \$	773,967	870,451
<b>Total..... \$</b>	<b>1,448,778</b>	<b>1,535,498</b>
Cost of fuel and electricity..... \$	40,444	11,181
Selling value of products..... \$	7,557,174	8,043,010

\*Does not include operators of about 300 privately owned shallow wells.

**Table 86.—Production of Natural Gas in Canada, 1927**

Province	M cu. ft.	Value
		\$
New Brunswick.....	630,755	124,637
Ontario.....	7,311,215	4,331,780
Manitoba.....	200	60
Alberta.....	13,434,621	3,586,533
<b>Total.....</b>	<b>21,376,791</b>	<b>8,043,010</b>

## CHAPTER EIGHT

## GLASS

Production in the glass industry in Canada during 1927 was valued at \$14,164,086. This output was the highest reported since the Bureau commenced the collection of statistical data in 1917, being 21 per cent over the value of \$11,670,269 reported for 1926 and 2 per cent better than the previous high value of \$13,795,690 attained in 1920. The 54 plants engaged in the manufacture of glass products during 1927 represented a capital investment of \$12,736,057, employed an average of 3,120 people to whom \$3,876,959 was paid in salaries and wages, and by manufacturing processes added \$8,906,136 to the value of purchased materials which cost \$5,257,-950.

The glass industry covers two distinct groups of plants and includes all concerns engaged in (a) the manufacture of pressed and blown glass; and (b) the bevelling, cutting and bending of imported glass—there being no plate or sheet glass manufactured in Canada—to produce mirror plate, cut glass, etc., and the assembling or cutting of art glass, leaded glass, memorial windows, etc.

In 1927, pressed and blown glass was produced in only 7 plants as follows: at Montreal, P.Q., Hamilton, Ont., Wallaceburg, Ont., and Redcliff, Alta., by the Dominion Glass Company, Limited; at Ville St. Pierre, P.Q., by the Consumers Glass Co., Ltd.; at Toronto, Ont., by the Beaver Flint Glass Co. of Toronto, Ltd.; and at Toronto, Ont., by the Richards Glass Co. Ltd. The last two concerns manufactured vials and special apparatus from purchased tubing, rods, etc.; all other factories actually made the glass. Production from these concerns was valued at \$10,232,634 in 1927 as compared with \$8,390,035 in the previous year and \$11,010,352 in 1920.

In the plate, cut and ornamental glass industry which includes all plants engaged in bevelling and working of glass to make such commodities as bevelled plate, silvered mirror plate, plate glass, cut glass, leaded glass, window glass, memorial and ornamental glass, etc., the number of operating concerns totalled 47 distributed by provinces as follows: 30 in Ontario, 7 in Quebec, 5 in British Columbia, 3 in Manitoba and 1 in each of New Brunswick and Alberta. Production in this line of work was valued at \$3,931,452 against \$3,280,234 a year ago and \$2,785,338 in 1920.

Imports of glass and glassware into Canada during the calendar year 1927 were valued at \$8,146,698 as compared with \$8,515,395 in the previous year. Among the principal lines imported were about 42 million sq. ft. of common or colourless window glass valued at \$1,127,529; 5.5 million sq. ft. of plate glass worth \$2,073,478; glass carboys, demijohns, bottles, etc., valued at \$1,381,880, and many other kinds including stained, ornamental and silver glass; photographic dry plates; spectacles; lenses; lamp bulbs; milk bottles, etc. Exports were appraised at a value of \$128,958 in 1927 and \$214,896 in 1926.

Table 87.—Principal Statistics of the Glass Industry in Canada, 1926 and 1927

Province	Number of plants	Capital employed	Number of employees	Salaries and wages	Cost of fuel and electricity	Cost of materials	Selling value of products	Value added by manufacturing
		\$		\$	\$	\$	\$	\$
<b>1926</b>								
Quebec .....	9	5,117,751	1,174	1,283,519	575,737	1,652,861	4,326,650	2,673,789
Ontario .....	32	5,375,819	1,669	1,964,253	557,948	2,828,175	6,344,834	3,516,659
Manitoba .....	3	116,564	27	34,240	928	82,164	155,071	72,907
British Columbia .....	5	81,022	26	22,955	817	31,168	56,469	25,301
<b>Canada*</b>	<b>52</b>	<b>11,432,823</b>	<b>3,833</b>	<b>3,413,614</b>	<b>1,143,190</b>	<b>4,884,559</b>	<b>11,670,269</b>	<b>6,785,710</b>
<b>1927</b>								
Quebec .....	9	5,802,961	1,185	1,436,990	581,228	1,777,065	5,652,540	3,875,475
Ontario .....	34	5,927,590	1,731	2,200,085	646,432	3,005,122	7,468,917	4,463,795
Manitoba .....	3	114,724	22	34,089	951	72,576	127,867	55,291
British Columbia .....	5	85,317	30	32,199	1,131	53,876	77,041	33,165
<b>Canada*</b>	<b>54</b>	<b>12,736,057</b>	<b>3,120</b>	<b>3,876,959</b>	<b>1,243,311</b>	<b>5,257,950</b>	<b>14,164,086</b>	<b>8,906,136</b>

\*Includes also data for 1 plant in New Brunswick and 2 in Alberta.



**Table 88.—Capital Employed in the Glass Industry in Canada, by Classes and by Provinces, 1926 and 1927**

Province	1926				1927			
	Capital employed as represented by				Capital employed as represented by			
	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash trading and operating accounts and bills receivable	Total	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash trading and operating accounts and bills receivable	Total
	\$	\$	\$	\$	\$	\$	\$	\$
Quebec.....	3,054,223	1,300,565	672,963	5,117,751	3,525,457	1,579,890	697,624	5,803,961
Ontario.....	2,795,761	1,404,260	1,085,798	5,375,819	3,071,146	1,767,033	1,089,411	5,927,590
Manitoba.....	56,700	47,282	12,582	116,564	56,700	43,875	14,149	114,724
British Columbia.....	12,969	39,055	28,998	81,022	19,253	33,545	32,519	85,317
<b>Canada*</b> .....	<b>6,457,544</b>	<b>3,060,519</b>	<b>1,914,760</b>	<b>11,432,823</b>	<b>7,241,907</b>	<b>3,553,131</b>	<b>1,941,019</b>	<b>12,736,057</b>

\*See footnote to Table 86.

**Table 89.—Employees, Salaries and Wages, in the Glass Industry in Canada, by Provinces, 1926 and 1927**

Province	Average number of employees				Salaries and wages			
	Salaried employees		Wage-earners		Total	Salaries	Wages	Total
	Male	Female	Male	Female		\$	\$	\$
<b>1926</b>								
Quebec.....	87	26	912	149	1,174	109,657	1,093,862	1,263,519
Ontario.....	120	31	1,398	120	1,669	321,650	1,642,583	1,964,233
Manitoba.....	6	2	19		27	11,425	22,824	34,249
British Columbia.....	4	2	18	2	26	5,108	17,847	22,955
<b>Canada*</b> .....	<b>225</b>	<b>64</b>	<b>2,455</b>	<b>289</b>	<b>3,033</b>	<b>535,776</b>	<b>2,907,974</b>	<b>3,443,644</b>
<b>1927</b>								
Quebec.....	83	27	925	150	1,185	198,944	1,238,046	1,436,990
Ontario.....	116	36	1,449	130	1,731	322,277	1,877,818	2,200,095
Manitoba.....	7	2	13		22	14,450	19,639	34,089
British Columbia.....	5	3	19	3	30	9,447	22,752	32,199
<b>Canada*</b> .....	<b>219</b>	<b>71</b>	<b>2,527</b>	<b>303</b>	<b>3,120</b>	<b>574,599</b>	<b>3,302,360</b>	<b>3,876,959</b>

\*See footnote to Table 86.

**Table 90.—Wage-Earners in the Glass Industry in Canada, by Months, 1926 and 1927**

Month	1926			1927		
	Male	Female	Total	Male	Female	Total
January.....	2,025	127	2,152	2,616	330	2,946
February.....	2,239	148	2,387	2,635	335	2,990
March.....	2,256	161	2,417	2,673	321	2,994
April.....	2,279	177	2,456	2,411	203	2,614
May.....	2,437	263	2,700	2,436	311	2,747
June.....	2,448	322	2,770	2,612	337	2,949
July.....	2,500	278	2,778	2,665	310	2,975
August.....	2,608	311	2,919	2,335	302	2,637
September.....	2,528	288	2,816	2,301	278	2,577
October.....	2,533	309	2,842	2,534	258	2,792
November.....	2,573	324	2,897	2,592	350	2,942
December.....	2,594	312	2,906	2,535	298	2,833
<b>Average*</b> .....	<b>2,455</b>	<b>289</b>	<b>2,744</b>	<b>2,527</b>	<b>303</b>	<b>2,830</b>

\*See note on page 20.

**Table 91.—Hours of Labour in Month of Greatest Employment in the Glass Industry in Canada, by Provinces, 1927**

Province	Average number of wage-earners working			
	8 hours or less per day	9 hours	10 hours	Over 10 hours
Quebec.....	377	223	463	156
Ontario.....	621	567	138	518
Manitoba.....		3		
British Columbia.....	20			
<b>Canada*</b> .....	<b>1,146</b>	<b>837</b>	<b>611</b>	<b>674</b>

\*See footnote to Table 86.

Table 92.—Fuel and Electricity Used in the Glass Industry in Canada, 1926 and 1927

Kind	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Anthracite coal.....	Short ton	327	4,818	2,691	16,173
Bituminous coal—Canadian	Short ton	65,295	432,937	6,499	41,987
	Imported.....			60,387	470,647
Lignite coal.....	Short ton	15	131		
Coke.....	Short ton	193	2,154	218	2,498
Gasoline.....	Imp. gal.	20,827	6,368	2,555	756
Fuel oil.....	Imp. gal.	3,542,119	349,776	2,382,798	227,898
Wood.....	Cord	14	162	8	45
Gas—Manufactured.....	M cu. ft.	255,732	221,524	30,450	26,662
	Natural.....			443,282	309,639
Other fuel.....			59		
Electricity purchased.....	K. W. H.	15,864,075	125,251	18,954,778	147,906
<b>Total</b> .....			<b>1,143,180</b>		<b>1,243,311</b>

Table 93.—Power Employed in the Glass Industry in Canada, 1926 and 1927

Description	1926		1927	
	Number of units	Total h. p. according to manufacturers' rating	Number of units	Total h. p. according to manufacturers' rating
Steam engines and turbines.....	1	100	1	100
Gasoline, gas and oil engines.....	2	300		
<i>Total primary power</i> .....	<i>3</i>	<i>400</i>	<i>1</i>	<i>100</i>
Electric motors run by purchased power.....	440	6,045	408	6,339
<b>Total power employed</b> .....	<b>443</b>	<b>6,445</b>	<b>409</b>	<b>6,439</b>
Electric motors run by primary power in same plant.....			7	163
<i>Total electric power</i> .....	<i>440</i>	<i>6,045</i>	<i>415</i>	<i>6,502</i>
Boilers.....	26	1,254	14	1,163

Table 94.—Materials Used in the Glass Industry in Canada, 1926 and 1927

Material	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Plate, Cut and Ornamental Glass—					
Figured and cathedral glass.....	Sq. ft.	382,419	45,820	305,198	55,846
Glass blanks.....			174,921		209,149
Plate glass.....	Sq. ft.	2,255,091	1,104,977	3,524,999	1,254,445
Sheet and window glass.....	Sq. ft.	3,677,320	317,907	1,966,504	169,250
Grinding and polishing materials.....			16,567		36,639
Lead.....	Lb.	236,380	38,975	265,378	35,916
Solder.....	Lb.	24,113	6,380	24,042	6,494
Silver nitrate.....	Lb.	2,105	15,260	2,496	17,502
Containers, boxes, packages, etc.....			10,467		5,147
All other materials.....			46,799		102,851
<b>Total</b> .....			<b>1,778,073</b>		<b>1,890,239</b>
Pressed and Blown Glass—					
Silica sand.....	Ton			85,521	416,470
Soda ash.....	Lb.		2,623,811	55,846,371	1,126,515
Other manufacturing materials used.....			482,675		1,141,052
Boxes, cases, lumber, etc.....					683,674
<b>Total</b> .....			<b>3,106,486</b>		<b>3,367,711</b>
<b>Total</b> .....			<b>4,884,559</b>		<b>5,257,950</b>

Table 95.—Products of the Glass Industry in Canada, 1926 and 1927

Product	Total selling value at works	
	1926	1927
	\$	\$
<b>Plate, Cut and Ornamental Glass—</b>		
Bent glass.....	5,619	805
Bevelled and ground edge plates.....	950,136	1,211,838
Silvered mirror plate.....	652,511	843,277
Plate glass.....	250,936	384,343
Cut glass.....	420,006	452,126
Glass signs.....	2,515	2,384
Lensed glass.....	178,642	265,045
Leaded lights and domes.....	17,828	7,006
Memorial windows.....	110,407	93,672
Ornamental glass.....	118,206	68,443
Show cases.....	32,000	65,893
Store fronts.....	58,311	249,777
Plain sheet and window glass.....	370,000	155,630
All other products.....	86,101	299,661
Amount received from custom work and repairs.....	26,926	30,952
<b>Total.....</b>	<b>3,280,234</b>	<b>3,931,452</b>
<b>Pressed and Blown Glass—</b>		
Pressed and blown glass.....	8,266,628	10,104,846
All other products.....	123,409	127,788
<b>Total.....</b>	<b>8,390,035</b>	<b>10,232,634</b>
<b>Total.....</b>	<b>11,670,269</b>	<b>14,164,086</b>

## CHAPTER NINE

## LIME

Production of lime in Canada established a new high record in 1927, advancing 7.5 per cent in quantity and 3.8 per cent in value over the 1926 production. The 1927 shipments amounted to 12,707,221 bushels valued at \$3,923,388 as against 11,825,736 bushels at \$3,781,484. Canadian producers received an average of 28.9 cents per bushel for quicklime and \$11.81 per ton for hydrated lime.

Sixty different plants were in operation in this industry in 1927 and the distribution by provinces was as follows: Ontario, 29; Quebec, 15; New Brunswick, 5; Manitoba, 4; British Columbia, 3; Alberta and Nova Scotia, 2 each. The same number of establishments were in operation in 1926 but during the year Ontario gained one and New Brunswick lost 1 operator.

Lime producers reported shipments of 1,428,188 bushels of quicklime and 37,817 tons of hydrated lime to the building trades; 3,726,114 bushels of quicklime to chemical works; 2,536,096 bushels of quicklime and 6,457 tons of hydrated lime to pulp and paper works; smelters, sugar refineries, glassworks, tanneries and other industries took the remainder.

Lime importations into Canada increased 49.5 per cent in 1927 to a total of 165,243 bushels valued at \$70,075. Exports were recorded at 601,974 bushels appraised at \$367,939.

Capital employed in the 60 plants operating in the lime industry in 1927 was reported at \$6,200,481. Employment statistics showed 97 salaried employees and 1,035 wage-earners engaged in this industry during the year; their combined earnings were \$1,133,708. Fuel used in 1927 necessitated an expenditure of \$783,032, of which amount \$409,332 was spent for coal, \$282,855 for wood, \$71,814 for coke, and minor sums for gasoline, kerosene and gas. Electric power consumed necessitated a further outlay of \$43,404.

Table 96.—Principal Statistics of the Lime Industry in Canada, 1926 and 1927

Province	Number of plants	Capital employed	Number of employees	Salaries and wages	Cost of fuel and electricity	Selling value of products
		\$		\$	\$	\$
<b>1926</b>						
Nova Scotia and New Brunswick.....	8	292,125	92	97,784	70,961	256,254
Quebec.....	15	1,615,905	276	264,278	242,681	760,116
Ontario.....	28	2,012,922	445	485,715	396,503	2,051,446
Manitoba.....	4	564,032	91	73,776	47,450	251,269
Alberta.....	2	167,386	18	21,216	7,712	39,517
British Columbia.....	3	1,173,439	144	140,055	23,683	416,882
<b>Canada.....</b>	<b>60</b>	<b>5,825,809</b>	<b>1,106</b>	<b>1,082,854</b>	<b>788,990</b>	<b>3,781,484</b>
<b>1927</b>						
Nova Scotia and New Brunswick.....	7	249,865	111	111,700	73,110	248,575
Quebec.....	15	1,716,394	280	259,997	274,426	806,165
Ontario.....	29	2,227,399	454	504,102	390,937	2,198,239
Manitoba.....	4	565,740	121	83,360	48,001	246,279
Alberta.....	2	183,262	24	27,236	10,183	46,947
British Columbia.....	3	1,317,812	142	147,304	20,773	376,683
<b>Canada.....</b>	<b>60</b>	<b>6,200,481</b>	<b>1,132</b>	<b>1,133,708</b>	<b>826,436</b>	<b>3,923,388</b>



Table 97.—Capital Employed in the Lime Industry in Canada, by Provinces, 1926 and 1927

Province	1926				1927			
	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash, trading and operating accounts and bills receivable	Total	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash, trading and operating accounts and bills receivable	Total
	\$	\$	\$	\$	\$	\$	\$	\$
Nova Scotia and New Brunswick..	222,330	27,064	42,722	292,115	153,630	30,011	57,224	240,865
Quebec.....	1,194,764	168,214	252,927	1,615,905	1,176,779	179,793	359,822	1,716,394
Ontario.....	1,636,927	203,370	172,625	2,012,922	1,763,605	238,529	225,265	2,227,399
Manitoba.....	522,217	19,229	22,586	564,032	466,544	30,879	8,326	505,749
Alberta.....	134,328	14,965	18,063	167,356	139,578	22,981	20,703	193,262
British Columbia.....	1,002,481	51,598	119,360	1,173,439	1,102,043	86,227	129,542	1,317,812
<b>Canada.....</b>	<b>4,713,056</b>	<b>484,470</b>	<b>628,283</b>	<b>5,825,809</b>	<b>4,802,179</b>	<b>597,420</b>	<b>800,882</b>	<b>6,200,481</b>

Table 98.—Employees, Salaries and Wages, in the Lime Industry, by Provinces, in Canada, 1926 and 1927

Province	* Average number of employees				Salaries and wages			
	Salaried employees		Wage-earners		Total	Salaries	Wages	Total
	Male	Female	Male	Female				
					\$	\$	\$	
<b>1926</b>								
Nova Scotia and New Brunswick..	13		119		132	19,706	78,078	97,784
Quebec.....	15	1	260		276	32,920	231,358	264,278
Ontario.....	30	7	408		445	72,727	412,988	485,715
Manitoba.....	7		84		91	11,200	62,576	73,776
Alberta.....	3	1	14		18	4,900	16,316	21,216
British Columbia.....	9	3	132		144	16,497	123,588	140,085
<b>Canada.....</b>	<b>77</b>	<b>12</b>	<b>1,017</b>		<b>1,106</b>	<b>157,950</b>	<b>924,904</b>	<b>1,082,854</b>
<b>1927</b>								
Nova Scotia and New Brunswick..	10		101		111	16,400	95,300	111,709
Quebec.....	18		262		280	32,415	227,582	259,997
Ontario.....	34	10	410		454	82,005	422,097	504,102
Manitoba.....	8		113		121	14,166	69,191	83,357
Alberta.....	3	1	20		24	4,900	22,336	27,236
British Columbia.....	10	3	129		142	18,309	128,995	147,304
<b>Canada.....</b>	<b>83</b>	<b>14</b>	<b>1,035</b>		<b>1,132</b>	<b>168,195</b>	<b>965,513</b>	<b>1,133,708</b>

\* See note on page 20.

Table 99.—Wage-Earners in the Lime Industry in Canada, by Months, 1926 and 1927

Month	Total		Month	Total	
	1926	1927		1926	1927
	Male	Male		Male	Male
January.....	835	800	July.....	971	1,045
February.....	786	811	August.....	985	1,092
March.....	846	852	September.....	996	1,090
April.....	904	932	October.....	1,033	1,046
May.....	962	1,027	November.....	972	959
June.....	981	1,033	December.....	917	859
			<b>Average*</b> .....	<b>1,017</b>	<b>1,035</b>

\* See note on page 20.

Table 100.—Hours of Labour in Month of Greatest Employment in the Lime Industry in Canada, 1927

Province	Average number of wage-earners working			
	8 hours or less per day	9 hours	10 hours	Over 10 hours
Nova Scotia and New Brunswick.....	10	58	32	35
Quebec.....	27	44	260	10
Ontario.....	37	191	162	92
Manitoba.....	3		146	6
Alberta.....			27	
British Columbia.....	147			
<b>Canada.....</b>	<b>224</b>	<b>293</b>	<b>627</b>	<b>143</b>

Table 101.—Fuel and Electricity Used in the Lime Industry in Canada, 1926 and 1927

	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Anthracite coal.....	Short ton	1,226	5,687	1,307	6,425
Bituminous coal—Canadian.....	Short ton	63,760	392,279	22,232	157,829
—Imported.....	Short ton	35	327	45,318	245,078
Lignite coal.....	Short ton	9,948	72,810	9,982	71,814
Coke.....	Imp. gal.	1,088	339	4,552	1,114
Gasoline.....	Imp. gal.			150	34
Kerosene.....	Cord	58,932	258,133	60,058	282,855
Wood.....	M cu. ft.	32,613	9,343	174,736	13,979
Gas—Manufactured.....	M cu. ft.			6,500	3,900
Natural.....					4
Other fuel.....					4
Electricity purchased.....	K. W. H.	2,333,680	50,072	1,685,056	43,404
<b>Total.....</b>			<b>788,990</b>		<b>826,436</b>
Electricity generated for own use.....	K. W. H.			357,645	

Table 102.—Power Employed in the Lime Industry in Canada, 1926 and 1927

Description	1926		1927	
	Number of units	Total h.p. according to manufacturers' rating	Number of units	Total h.p. according to manufacturers' rating
Steam engines and turbines.....	23	1,034	14	549
Gasoline, gas and oil engines.....	7	79	5	132
Hydraulic turbines and water wheels.....	1	30	3	37
<i>Total primary power.....</i>	<i>31</i>	<i>1,143</i>	<i>22</i>	<i>718</i>
Electric motors run by purchased power.....	143	2,635	138	2,719
<b>Total power employed.....</b>	<b>174</b>	<b>3,778</b>	<b>160</b>	<b>3,437</b>
Electric motors run by primary power in same plant.....	34	615	29	859
<i>Total electric motors.....</i>	<i>177</i>	<i>3,850</i>	<i>187</i>	<i>3,578</i>
Boilers.....	20	1,078	23	1,400

Table 103.—Production of Lime in Canada, by Provinces, 1926 and 1927

Province	Quicklime sold or used		Hydrated lime sold or used		Total	
	Quantity	Selling value at kiln	Quantity	Selling value at kiln	Quantity	Selling value at kiln
<b>1926</b>	<b>Bushels</b>	<b>\$</b>	<b>Bushels</b>	<b>\$</b>	<b>Bushels</b>	<b>\$</b>
Nova Scotia.....	446,626	56,777	7,171	3,000	453,797	59,777
New Brunswick.....	477,226	196,477	.....	.....	477,226	196,477
Quebec.....	2,509,006	667,480	340,629	98,630	2,849,635	766,116
Ontario.....	5,402,261	1,593,468	1,120,496	457,978	6,522,747	2,051,446
Manitoba.....	498,875	147,401	186,514	103,868	685,389	251,269
Alberta.....	108,309	39,517	.....	.....	108,309	39,517
British Columbia.....	503,033	317,733	225,600	99,149	728,633	416,882
<b>Canada.....</b>	<b>9,945,336</b>	<b>3,018,863</b>	<b>1,880,400</b>	<b>762,631</b>	<b>11,825,736</b>	<b>3,781,484</b>
<b>1927</b>						
Nova Scotia.....	872,914	100,134	286	120	873,200	100,254
New Brunswick.....	343,111	148,321	.....	.....	343,111	148,321
Quebec.....	2,773,648	725,876	302,171	80,789	3,075,819	806,665
Ontario.....	5,668,087	1,657,552	1,278,543	540,687	6,946,630	2,198,239
Manitoba.....	421,175	123,831	227,800	122,448	648,975	246,279
Alberta.....	130,596	46,947	.....	.....	130,596	46,947
British Columbia.....	462,147	279,230	226,743	97,453	688,890	376,683
<b>Canada.....</b>	<b>10,671,678</b>	<b>3,081,891</b>	<b>2,035,543</b>	<b>811,497</b>	<b>12,707,221</b>	<b>3,923,388</b>

Table 104.—Production of Lime in Canada, 1926 and 1927, Showing Purposes for which Sold and Used

Purpose for which sold or used	1926				1927			
	Quicklime		Hydrated lime		Quicklime		Hydrated lime	
	Bushels	Value	Tons	Value	Bushels	Value	Tons	Value
		\$		\$		\$		\$
Building trades.....	1,206,425	432,813	37,386	454,261	1,428,188	490,395	37,817	483,528
Chemical works.....	3,425,760	1,022,796	501	3,507	3,720,114	1,082,085	.....	.....
Glass works.....	119,767	34,165	.....	.....	186,903	53,985	.....	.....
Smelters.....	663,359	124,250	.....	.....	895,818	110,983	.....	.....
Pulp and paper mills.....	2,527,255	622,440	5,382	39,757	2,536,096	606,752	6,457	49,698
Sugar refineries.....	298,561	100,394	.....	.....	213,766	74,876	.....	.....
Tanneries.....	56,437	17,399	225	1,850	77,728	24,396	229	1,900
Agricultural uses (fertilizers).....	7,243	2,150	890	7,007	16,649	7,899	1,744	14,982
Dealers (uses unspecified).....	899,078	289,597	13,222	153,419	806,741	259,058	15,856	181,705
Other consumers.....	741,451	373,049	8,208	102,830	783,675	371,462	9,141	109,594
<b>Total sold or used.....</b>	<b>9,945,336</b>	<b>3,018,863</b>	<b>65,814</b>	<b>762,631</b>	<b>10,671,678</b>	<b>3,081,891</b>	<b>71,244</b>	<b>841,497</b>

Table 105.—Production, Imports and Exports of Lime, 1926 and 1927

	1926		1927	
	Bushels	Value	Bushels	Value
Production.....	11,825,736	3,781,484	12,707,221	3,923,388
Imports.....	110,509	42,855	165,243	70,075
Exports.....	534,818	344,616	601,074	367,939

## CHAPTER TEN

### PETROLEUM PRODUCTS

Output of petroleum products from Canadian plants in 1927 was valued at the works at \$64,528,820, or 6.6 million dollars below the value reported for 1926. This production figure includes the output from 16 petroleum refineries valued at \$63,979,849 and the production from 7 plants which compounded lubricating oils and greases worth \$548,971.

(a) **Petroleum Refining.**—Of the 16 refineries in operation, 4 were in Ontario, 4 in Alberta, 3 in British Columbia, 2 in Quebec, and 1 in each of the provinces of Nova Scotia, Manitoba, and Saskatchewan. Capital employed was given at \$55,442,193; the average number of employees was 3,802; materials cost \$52,743,530 and the value added by manufacturing was \$11,236,319.

Most of the oil treated in Canadian refineries was imported; in 1927 the consumption of Canadian oil, including the crude naphtha from the Royalite Oil Co. wells in Alberta, was only 15,632,271 gallons, whereas the quantity of imported oil was 700,737,619 gallons. The latter figure included 483,315,672 gallons from the United States, 201,850,677 gallons from South America and 15,571,270 gallons from Mexico. Only 1 small refinery in Alberta operated entirely on crude from Canadian wells; the other plants in the prairie provinces brought in oil from the United States; establishments in British Columbia, Nova Scotia and Quebec obtained oil from Mexico, South America and United States; and the plants in Ontario used crude from United States as well as the small domestic production in the western section of the province. The crude naphtha from the Royalite wells in Alberta was delivered to the refineries in Regina, Calgary and Ioco where it was prepared for the market; in the present report this has been included as crude oil entering the refineries and as straight run gasoline on the production side.

The total cost of materials used in refineries in 1927 was \$52,743,530. The 716,369,890 gallons of crude oil cost \$49,160,086 or 89 per cent of the total; sulphuric acid, caustic soda, litharge, fullers' earth and compounding materials were among the other materials used. Shipping containers cost \$2,194,007.

Refinery production in 1927 was valued at \$63,979,849 of which \$61,232,150 represented the value of sales and \$2,747,699 the worth of products made and used chiefly as fuel in the reporting plants.

Production of gasoline during the year totalled 258,549,724 gallons of which 73,731,346 gallons were obtained by the cracking processes. Final output of fuel and gas oils totalled 286,525,733 gallons and of this total 47,253,487 gallons were used for fuel purposes in the reporting plants and 239,272,246 gallons were made for sale; it was reported that a further 206,639,272 gallons of fuel and gas oils were used in the cracking process. Other products included 54,316,079 gallons of kerosene; 18,532,072 gallons of lubricating oils; 11,101,247 pounds of grease; 9,526,072 pounds of wax and candles; and 76,229 tons of petroleum coke as well as asphalt, stove oil, residuum, etc.

Considerable quantities of casinghead gasoline are imported into Canada each year for use in blending with the refinery gasoline; the amounts are shown in the import figures and are not included with the figures of refinery output.

(b) **Lubricating Oils and Greases.**—Only 7 firms in Canada were included in the lubricating oils and greases section in 1927; 3 were located in Quebec and 4 in Ontario. These factories produced lubricating oil worth \$375,840, core oil valued at \$6,794; greases worth \$67,668; and other products worth \$98,664, a total output value of \$548,971 as against \$626,071 in the previous year. Capital invested was \$693,371; employees numbered 54; materials cost \$316,391, and the value added was \$232,580.

Imports of petroleum products of all kinds into Canada during 1927 were valued at \$52,878,717 as compared with a value of \$52,063,686 in 1926. Exports were appraised at \$1,648,966 in 1927 and at \$2,081,587 in 1926. Details are shown in Table 115.

An estimate of the apparent consumption of certain petroleum products in Canada is given in Table 116. By adding the imports to production in Canada and deducting the exports and re-exports the apparent consumption of gasoline in 1927 was estimated at 363,927,380 gallons; fuel and gas oils at 387,344,567 gallons; kerosene at 57,585,207 gallons; and lubricating oils at 31,464,944 gallons. Increase or decline of the stocks on hand at the refineries have not been taken into account in the computation and there may be, therefore, a considerable error in the figure for any one year; over a period of years, however, the estimate should be approximately correct.



Table 106.—Principal Statistics of the Petroleum Products Industry in Canada, by Provinces, 1926 and 1927

Province	Number of plants	Capital employed	Number of employees	Salaried and wages	Cost of fuel and electricity	Cost of materials	Selling value of products	Value added by manufacturing
		\$		\$	\$	\$	\$	\$
<b>1926</b>								
<b>Petroleum Refining—</b>								
Ontario.....	4	20,441,740	1,858	2,876,150	1,609,296	19,968,713	27,404,452	7,435,739
Alberta.....	5	5,993,102	324	531,919	203,375	4,738,289	8,374,671	3,036,382
British Columbia.....	3	5,614,909	367	613,639	218,449	4,700,742	4,981,574	280,832
Canada*.....	17	56,476,449	3,098	5,782,589	3,580,049	50,783,871	70,570,240	10,786,309
<b>Lubricating Oils and Greases—</b>								
Quebec.....	3	180,391	18	31,502	2,223	103,488	189,424	85,936
Ontario.....	3	521,285	37	78,308	2,523	284,800	436,047	151,847
Canada.....	6	701,676	55	109,810	4,746	388,288	626,071	237,783
<b>Total Petroleum Products—</b>								
Ontario.....	7	20,963,925	1,895	2,954,458	1,611,819	20,253,513	27,811,099	7,567,586
Alberta.....	5	5,993,102	324	531,919	203,375	4,738,289	8,374,671	3,036,382
British Columbia.....	3	5,614,909	367	613,639	218,449	4,700,742	4,981,574	280,832
Canada*.....	23	57,178,125	3,753	5,892,399	3,584,796	51,172,159	71,196,311	20,091,152
<b>1927</b>								
<b>Petroleum Refining—</b>								
Ontario.....	4	10,354,639	1,791	2,983,575	1,495,258	18,910,318	25,236,103	6,324,785
Alberta.....	4	5,632,534	302	498,550	210,987	4,380,392	6,758,782	2,378,390
British Columbia.....	3	5,002,593	248	458,599	233,718	5,109,570	5,880,000	717,036
Canada*.....	16	55,442,193	3,802	6,078,226	3,628,842	52,743,530	63,979,849	11,236,319
<b>Lubricating Oils and Greases—</b>								
Quebec.....	3	169,666	18	33,455	2,315	75,739	174,354	98,615
Ontario.....	4	523,705	36	76,545	2,299	240,652	374,617	133,965
Canada.....	7	693,371	54	110,000	4,614	316,391	548,971	232,580
<b>Total Petroleum Products—</b>								
Ontario.....	8	19,878,344	1,827	2,960,120	1,497,557	19,150,970	26,610,720	6,159,750
Alberta.....	4	5,632,534	302	498,550	219,987	4,380,392	6,758,782	2,378,390
British Columbia.....	3	5,002,593	248	458,599	233,718	5,169,570	5,886,606	717,036
Canada*.....	23	36,135,564	3,856	6,188,226	3,633,456	53,059,924	64,528,820	11,169,899

\*Includes also data for 2 plants in Quebec and 1 in each, Nova Scotia, Manitoba, Saskatchewan.

Table 107.—Capital Employed in the Petroleum Products Industry in Canada, by Provinces, 1926 and 1927

Province	1926 Capital employed as represented by				1927 Capital employed as represented by			
	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash, trading, and operating accounts and bills receivable	Total	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash, trading, and operating accounts and bills receivable	Total
<b>Petroleum Refining—</b>								
Ontario.....	11,739,488	7,986,878	715,371	20,441,740	12,017,114	6,873,020	464,505	19,354,639
Alberta.....	3,955,763	1,886,541	150,798	5,993,102	3,540,183	1,839,981	252,370	5,632,534
British Columbia.....	3,510,465	2,009,468	94,976	5,614,909	3,412,967	1,415,740	173,886	5,002,593
Canada*.....	34,022,808	21,131,638	1,322,003	56,476,449	35,104,135	18,868,337	1,400,721	55,442,193
<b>Lubricating Oils and Greases—</b>								
Quebec.....	95,671	34,269	50,451	180,391	93,410	34,157	42,099	169,666
Ontario.....	226,449	100,051	194,785	521,285	234,562	133,663	155,450	523,705
Canada.....	322,120	134,320	245,236	701,676	328,002	167,820	197,549	693,371
<b>Total—</b>								
Ontario.....	11,965,937	8,086,929	910,159	20,963,025	12,251,706	7,006,683	619,955	19,878,344
Alberta.....	3,955,763	1,886,541	150,798	5,993,102	3,540,183	1,839,981	252,370	5,632,534
British Columbia.....	3,510,465	2,009,468	94,976	5,614,909	3,412,967	1,415,740	173,886	5,002,593
Canada*.....	34,344,928	21,265,958	1,567,239	57,178,125	35,492,137	19,036,157	1,607,270	56,135,564

\*See footnote to Table 106.

Table 108.—Employees, Salaries and Wages, in the Petroleum Products Industry in Canada, by Provinces, 1926 and 1927

Province	Average number of employees					Salaries and wages		
	Salaried employees		Wage-earners		Total	Salaries	Wages	Total
	Male	Female	Male	Female				
1926								
Petroleum Refining—						\$	\$	\$
Ontario.....	177	36	1,627	18	1,858	446,110	2,430,040	2,876,150
Alberta.....	47	4	270	3	324	113,687	418,232	531,919
British Columbia.....	74	3	290		367	141,225	472,414	613,639
Canada*.....	426	65	3,184	23	3,698	1,028,346	4,754,243	5,782,589
Lubricating Oils and Greases—								
Quebec.....	6	3	7	2	18	22,226	9,276	31,502
Ontario.....	16	2	18	1	37	56,185	22,123	78,308
Canada.....	22	5	25	3	55	78,411	31,399	109,810
<b>Total—</b>								
Ontario.....	193	38	1,645	19	1,895	502,295	2,452,163	2,954,458
Alberta.....	47	4	270	3	324	113,687	418,232	531,919
British Columbia.....	74	3	290		367	141,225	472,414	613,639
Canada*.....	448	70	3,209	26	3,753	1,106,757	4,785,642	5,802,399
1927								
Petroleum Refining—								
Ontario.....	166	33	1,573	19	1,791	482,668	2,400,907	2,883,575
Alberta.....	38	4	258	2	302	101,342	397,208	498,550
British Columbia.....	61	3	184		248	151,009	307,590	458,599
Canada*.....	421	67	3,291	23	3,802	1,107,642	4,970,584	6,078,226
Lubricating Oils and Greases—								
Quebec.....	7	3	6	2	18	24,930	8,525	33,455
Ontario.....	19	2	14	1	36	60,894	15,651	76,545
Canada.....	26	5	20	3	54	85,824	24,176	110,000
<b>Total—</b>								
Ontario.....	185	35	1,587	20	1,827	543,562	2,416,558	2,960,120
Alberta.....	38	4	258	2	302	101,342	397,208	498,550
British Columbia.....	61	3	184		248	151,009	307,590	458,599
Canada*.....	447	72	3,311	26	3,856	1,193,466	4,994,760	6,188,226

\*See footnote to Table 106.

Table 109.—Wage-Earners in the Petroleum Products Industry, by Months, 1926 and 1927

Month	1926					1927				
	Petroleum refining		Lubricating oils and greases		Total	Petroleum refining		Lubricating oils and greases		Total
	Male	Female	Male	Female		Male	Female	Male	Female	
January.....	3,111	23	24	4	3,162	3,024	19	21	4	3,068
February.....	3,124	21	24	3	3,172	3,106	18	20	4	3,148
March.....	3,040	21	24	4	3,089	3,305	21	21	4	3,351
April.....	3,030	22	24	3	3,079	3,333	19	21	3	3,376
May.....	3,028	21	25	3	3,077	3,392	24	20	3	3,439
June.....	3,055	20	26	3	3,104	3,505	23	20	3	3,551
July.....	3,116	19	26	3	3,164	3,510	21	21	3	3,555
August.....	3,353	18	26	3	3,400	3,340	20	20	3	3,383
September.....	3,269	19	27	3	3,318	3,242	20	20	2	3,284
October.....	3,428	24	24	3	3,479	3,272	26	20	3	3,321
November.....	3,331	31	24	3	3,389	3,204	32	21	4	3,261
December.....	3,144	31	24	3	3,202	3,172	30	22	4	3,234
<b>Average*.....</b>	<b>3,184</b>	<b>23</b>	<b>25</b>	<b>3</b>	<b>3,235</b>	<b>3,291</b>	<b>23</b>	<b>20</b>	<b>3</b>	<b>3,337</b>

\*See note on page 20.

Table 110.—Hours of Labour in Month of Greatest Employment in the Petroleum Products Industry in Canada, 1927

Province	Average number of wage-earners working			
	8 hours or less per day	9 hours	10 hours	Over 10 hours
Ontario.....	1,490	187		
Alberta.....	329	6	10	
British Columbia.....	284			
<b>Canada*</b> .....	<b>3,577</b>	<b>225</b>	<b>35</b>	<b>6</b>

\*See footnote to Table 106.

Table 111.—Fuel and Electricity Used in the Petroleum Products Industry in Canada, 1926 and 1927

Kind	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Anthracite coal.....	Short ton	8	123	10	142
Bituminous coal—Canadian.....	Short ton	163,983	766,211	5,795	19,232
Imported.....	Short ton			197,642	664,554
Coke.....	Short ton	14,722	57,655	1,733	12,146
Fuel oil.....	Imp. gal.	40,848,001	1,931,454	46,537,277	2,085,333
Gasoline.....	Imp. gal.	1,602	272		
Wood.....	Cord	3	18	13	126
Gas—Manufactured.....	M cu. ft.	2,482,195	580,550	58	92
Natural.....	M cu. ft.			1,050,288	94,541
Other fuel.....			38,648		570,448
Electricity purchased.....	K.W.H.	17,696,772	209,864	17,047,621	186,842
<b>Total</b> .....			<b>3,584,795</b>		<b>3,633,456</b>

Table 112.—Power Employed in the Petroleum Products Industry in Canada, 1926 and 1927

	1926		1927	
	Number of units	Total h.p. according to manufacturers' rating	Number of units	Total h.p. according to manufacturers' rating
Steam engines and turbines.....	301	9,468	302	11,946
Gasoline, gas and oil engines.....	11	1,047	9	1,038
<i>Total primary power</i> .....	<i>312</i>	<i>10,515</i>	<i>311</i>	<i>12,984</i>
Electric motors run by purchased power.....	344	7,866	421	8,868
<b>Total power employed</b> .....	<b>656</b>	<b>18,381</b>	<b>732</b>	<b>21,852</b>
Electric motors run by primary power in same plant.....	66	1,662	57	1,702
<i>Total electric motors</i> .....	<i>410</i>	<i>9,528</i>	<i>478</i>	<i>10,570</i>
Boilers.....	95	20,227	93	20,569

Table 113.—Materials Used in the Petroleum Products Industry in Canada, 1926 and 1927

Material	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
<b>Petroleum Refining—</b>					
Crude oil (Canadian)*	Imp. gal.	12,203,286	1,673,632	15,632,271	1,783,413
Crude oil (imported)	Imp. gal.	573,263,043	45,396,649	700,737,619	47,376,673
Sulphuric acid, 66° Bé	Pound	53,919,554	423,229	49,728,504	407,894
Sulphur	Pound	155,076	4,283	145,980	4,498
Caustic soda	Pound	6,216,823	234,320	3,798,427	147,684
Litarge	Pound	697,417	72,269	473,785	48,714
Fullers' earth	Pound	4,784,069	50,460	8,304,713	80,611
Soda ash	Pound	249,172	4,841	412,489	8,594
Compounding material			700,063		534,610
All other materials			266,331		156,832
Shipping containers (boxes, barrels, cans, etc.)			1,957,788		2,194,007
<b>Total</b>			<b>50,783,871</b>		<b>52,743,530</b>
<b>Lubricating Oils and Greases—</b>					
Animal oils	Imp. gal.	28,084	32,848	21,031	21,470
Mineral oil	Imp. gal.	1,016,213	241,211	1,054,729	207,656
Lubricating oil	Imp. gal.			2,479	747
Raw linseed oil	Imp. gal.			5,217	4,671
Other oils	Imp. gal.	101,445	11,527	80,152	3,100
Tallow	Pound	182,400	51,840	111,224	32,034
Petroleum greases	Pound			36,571	1,864
Chip soap	Pound			17,500	3,500
Naphtha	Imp. gal.			3,000	600
Graphite	Pound			12,000	1,320
Soap grease	Pound	45,400	5,902	42,267	5,072
Hot lead	Pound	68,400	8,292	52,800	5,795
Caustic potash	Pound			9,039	622
Gasoline and kerosene	Imp. gal.		1,280	3,727	758
Resin (gum)	Casks			48	941
Containers, boxes, etc.			25,239		7,443
All other materials			10,149		18,798
<b>Total</b>			<b>388,288</b>		<b>316,391</b>
<b>Total</b>			<b>51,172,159</b>		<b>53,059,921</b>

\*Includes crude naphtha from Royalite Oil Co. wells in Alberta.

Table 114.—Products of the Petroleum Products Industry in Canada, 1926 and 1927

Product	Unit of measure	1926		1927	
		Quantity	Selling value at plant	Quantity	Selling value at plant
<b>PETROLEUM REFINING—Made for sale—</b>					
<b>Gasoline—</b>					
Straight run	Imp. gal.	152,275,438	27,862,303	184,793,169	24,553,479
By cracking process	Imp. gal.	69,839,231	12,600,163	73,722,859	10,614,360
Fuel and gas oils	Imp. gal.	190,000,871	10,219,900	239,272,246	11,394,422
V.M. & P. or solvent naphtha (engine distillates, etc.)	Imp. gal.	1,650,956	245,841	6,195,040	720,360
Kerosene	Imp. gal.	58,467,330	9,396,986	54,287,118	6,617,819
Lubricating oils	Imp. gal.	16,878,858	3,668,302	18,514,655	3,431,326
Grease	Pound	10,899,799	218,915	11,098,402	239,778
Petroleum coke	Short ton	49,672	297,021	69,379	403,555
Wax and candles	Pound	9,858,490	648,363	9,525,909	505,125
Other products*			3,016,422		3,751,920
<b>Total</b>			<b>68,174,456</b>		<b>61,232,150</b>
<b>Intermediate products made for use (chiefly as fuel)—</b>					
<b>Gasoline—</b>					
Straight run	Imp. gal.	32,035	5,402	25,209	3,514
By cracking process	Imp. gal.			8,487	1,995
Fuel and gas oils	Imp. gal.	38,473,344	1,787,420	47,253,487	2,189,900
V.M. & P. or solvent naphtha (engine distillates, etc.)	Imp. gal.			10,498	1,258
Kerosene	Imp. gal.	34,860	5,410	28,961	3,594
Lubricating oils	Imp. gal.	15,751	3,454	17,417	3,117
Petroleum coke	Short ton	1,873	10,422	0,850	45,063
Tar	Pound			33,250	1,662
Still gas	M cu. ft.	1,532,430	493,314	1,719,394	450,301
Acid coke	Short ton	11,802	39,904		
Acid oil and sludge acid	Imp. gal.	954,090	44,949		
Other products*			5,809		46,605
<b>Total</b>			<b>2,390,084</b>		<b>2,747,609</b>
<b>Total, made for sale and for use</b>			<b>70,570,240</b>		<b>63,979,849</b>
<b>LUBRICATING OILS AND GREASES—</b>					
Lubricating oils	Imp. gal.	1,028,244	442,491	1,059,225	375,840
Core oil	Imp. gal.	15,210	11,423	9,189	6,704
Soap			57,996		58,344
Greases	Pound	431,735	74,455	424,243	67,668
All other products			39,706		40,325
<b>Total</b>			<b>626,071</b>		<b>548,971</b>
<b>Total</b>			<b>71,196,311</b>		<b>64,528,820</b>

\*Includes black oil, asphalt, etc.



Table 115.—Production, Imports, Exports and Apparent Consumption of Certain Petroleum Products in Canada, 1920-1927

		Production	Imports	Exports	Re-exports	Apparent consumption
<b>Fuel and Gas Oils—</b>						
1920	Imp. gal.	96,462,792	122,929,391	2,694,427		216,707,656
	§	10,311,946	7,819,006	293,325		17,867,627
1921	Imp. gal.	129,716,045	61,308,671	5,384,751		185,729,965
	§	6,611,261	3,805,714	375,820		10,011,155
1922	Imp. gal.	106,975,976	72,805,012	7,036,627		172,744,361
	§	6,142,927	3,091,290	288,828		8,945,389
1923	Imp. gal.	139,682,570	108,982,780	2,384,899		246,280,451
	§	7,973,766	4,245,101	138,381		12,080,486
1924	Imp. gal.	177,123,232	94,244,271	18,263,236		253,104,267
	§	9,076,746	4,133,208	529,497		12,680,457
1925	Imp. gal.	172,387,242	107,849,209	7,375,163		272,861,288
	§	9,652,255	4,918,279	346,512		14,224,022
1926	Imp. gal.	228,474,212	91,658,340	21,043,135		290,069,417
	§	12,007,320	3,748,664	851,750		14,904,234
1927	Imp. gal.	286,525,733	119,612,088	18,793,254		387,344,567
	§	13,584,412	5,097,491	923,948		17,757,955
<b>Gasoline—</b>						
1920	Imp. gal.	86,193,664	8,515,545	160,433	214,634	94,324,133
	§	28,272,903	2,404,488	59,432	83,778	30,534,180
1921	Imp. gal.	119,887,613	40,264,707	762,680	10,492	159,379,748
	§	31,026,136	7,161,468	212,638	3,917	38,421,030
1922	Imp. gal.	143,959,893	42,112,248	1,976,244	27,620	184,008,277
	§	34,428,180	8,760,924	510,037	6,706	42,672,370
1923	Imp. gal.	124,156,380	49,950,660	1,217,298		173,889,742
	§	22,153,254	7,190,632	263,326		29,050,560
1924	Imp. gal.	160,045,739	73,757,441	1,403,716	75,223	232,324,241
	§	25,799,219	9,344,153	256,966	20,715	34,865,691
1925	Imp. gal.	164,670,072	83,927,751	1,568,855	42,594	246,986,374
	§	27,589,037	11,599,629	333,330	11,788	38,843,548
1926	Imp. gal.	222,146,704	82,839,688	3,867,536	169,476	300,949,380
	§	40,467,868	11,958,795	773,958	29,122	51,623,583
1927	Imp. gal.	258,549,724	108,168,328	2,463,370	327,293	363,027,380
	§	35,173,348	11,418,694	431,011	62,867	40,008,164
<b>Lubricating Oils—</b>						
1920	Imp. gal.	25,099,798	4,464,294			29,564,092
	§	6,327,134	2,443,089			8,770,223
1921	Imp. gal.	24,246,320	5,040,456			29,286,776
	§	5,221,487	1,934,561			7,156,048
1922	Imp. gal.	18,051,600	7,110,054			25,161,654
	§	3,551,478	2,132,695			5,684,173
1923	Imp. gal.	17,121,890	8,196,682			25,318,579
	§	3,237,526	2,310,950			5,548,476
1924	Imp. gal.	15,479,465	8,494,423			23,973,888
	§	3,061,110	2,142,653			5,503,769
1925	Imp. gal.	15,789,852	8,445,738			24,235,590
	§	3,131,634	2,493,589			5,615,223
1926	Imp. gal.	17,922,853	10,259,878			28,182,731
	§	4,114,247	2,998,555			7,082,802
1927	Imp. gal.	19,591,297	11,873,647			31,464,944
	§	3,810,283	3,655,914			7,466,197
<b>Kerosene—</b>						
1920	Imp. gal.	54,155,655	14,971,509	1,243,335		67,883,829
	§	10,887,972	2,359,621	205,999		13,041,594
1921	Imp. gal.	59,082,790	10,544,281	1,406,422		68,160,649
	§	7,537,470	790,468	209,282		8,118,656
1922	Imp. gal.	76,521,360	3,673,234	1,471,947		78,722,847
	§	9,628,804	314,514	136,834		9,806,484
1923	Imp. gal.	67,396,674	4,127,146	1,450,051		70,073,769
	§	8,774,371	323,396	139,294		8,957,843
1924	Imp. gal.	61,308,467	5,431,393	1,525,427		65,214,433
	§	7,486,042	447,588	165,520		7,768,110
1925	Imp. gal.	45,026,459	5,256,601	1,508,689		48,774,134
	§	5,966,913	455,125	155,783		6,206,255
1926	Imp. gal.	58,502,190	4,842,452	1,584,645		61,759,997
	§	9,402,396	546,374	192,988		9,735,782
1927	Imp. gal.	54,316,079	4,028,966	1,759,838		57,585,207
	§	6,621,413	349,371	191,533		6,779,251

Table 116.—Consumption of Crude Oil in Petroleum Refineries in Canada, 1898-1927

Year	Imp. gal.	Year	Imp. gal.	Year	Imp. gal.
1898	26,978,977	1908	34,675,120	1918	260,209,899
1899	23,615,967	1909	35,530,918	1919	301,006,553
1900	23,381,783	1910	36,171,032	1920	295,576,527
1901	17,745,182	1911	38,632,504	1921	373,409,418
1902	15,630,592	1912	46,270,701	1922	394,130,055
1903	14,464,248	1913	53,821,592	1923	408,810,739
1904	22,805,109	1914	73,239,403	1924	367,147,295
1905	33,821,998	1915	84,355,760	1925	445,118,001
1906	36,134,349	1916	139,670,200	1926	585,466,320
1907	34,961,706	1917	199,256,799	1927	716,369,890

**Primary Production of Petroleum.**—(From the annual report on the *Mineral Production of Canada*, 1927).—In point of value the petroleum output from Canadian wells in 1927 established a new high record for the industry, when production amounted to 476,591 barrels valued at \$1,516,043 as compared with 364,444 barrels worth \$1,311,665 produced in the previous year.

Alberta's production, mainly from the Turner Valley field, set up a new high mark for the province, reaching a total of 318,741 barrels. Ontario operators reported a slight increase in output, the production for the year being 139,606 barrels. A large increase was recorded in shipments of oil from New Brunswick wells in 1927 when 18,244 barrels were sold.

Conditions in the oil fields of Ontario showed little change in 1927. In Alberta 19 wells were in operation at the close of 1927 and 39 other wells were in the process of drilling. Drilling operations were continued during the year in Turner Valley, Wainwright, Ribstone and various other fields in Alberta; in the Sage Creek field, British Columbia, and in Manitoba and Saskatchewan.

Petroleum and its products imported into Canada in 1927 were valued at \$52,878,717, an increase of \$815,031 over the 1926 import value of \$52,063,686. Imports of asphalt and asphaltum oil are not included in the above total; in 1927 these importations increased 117 per cent to a value of \$965,777. Gasoline importations were recorded at 108,168,328 gallons invoiced at \$11,418,694; the Canadian production of refined gasoline was 258,549,724 gallons and the exports (Canadian and foreign) were 2,790,672 gallons, leaving 363,927,380 gallons available for use in Canada.

Capital employed in the operation of oil wells in Canada during 1927 totalled \$22,773,916. Salariat employees and wage-earners numbered 781; the earnings of these employees amounted to \$1,120,224. Fuel and electricity cost \$112,763. Primary power employed consisted of 111 units having a total rating of 3,364 h.p., in addition to which 81 electric motors rated at 768 h.p. were in use.

**Table 117.—Principal Statistics of the Crude Petroleum Industry in Canada, 1926 and 1927**

	1926	1927
Number of firms.....	210	206
Capital employed.....	\$ 17,639,142	22,773,916
Number of employees—On salary.....	90	110
On wages.....	544	671
Total.....	634	781
Salaries and wages—Salaries.....	\$ 108,136	172,759
Wages.....	680,707	947,465
Total.....	\$ 788,843	1,120,224
Cost of fuel and electricity.....	\$ 77,902	112,763
Selling value of products.....	\$ 1,311,665	1,516,048

**Table 118.—Production of Crude Petroleum in Canada, 1927**

	Barrels	Total value
New Brunswick.....	18,244	\$ 41,748
Ontario—		
Petrolia and Enniskillen.....	60,171	123,235
Oil Springs.....	37,282	78,749
Bothwell.....	25,184	51,437
Moza Township.....	7,456	15,219
Thamesville.....	4,139	8,420
Moore Township.....	2,014	4,116
Sarnia Township.....	1,679	3,433
Dover West.....	602	1,216
Plympton Township.....	493	1,008
Raleigh Township.....	276	575
Ononaga.....	210	736
Tilbury East.....	60	120
Euphemia.....	40	83
Total for Ontario.....	139,606	288,347
Alberta.....	318,741	1,185,948
<b>Canada.....</b>	<b>476,591</b>	<b>1,516,043</b>

## CHAPTER ELEVEN

## PRODUCTS FROM DOMESTIC CLAYS

An advance of 8 per cent was recorded in the production of clay and clay products in Canada during 1927 when sales were valued at \$11,173,189 as compared with a total of \$10,357,323 in 1926. Ontario producers accounted for 52.4 per cent of the Canadian total and Quebec operators 24.5 per cent. Increases in production were reported in all producing provinces except Manitoba.

Capital employed in the 194 plants in operation during the year was \$30,437,607. Salaries and wages paid to the 4,776 employees amounted to \$4,769,307. Fuel and electricity consumed during 1927 accounted for an outlay of \$2,088,724. Total power employed totalled 551 units with a manufacturers' rating of 24,445 h.p.

For statistical purposes the domestic-clay products industry has been divided into 5 main groups as follows: (a) brick and tile; (b) clay sewer pipe; (c) fire brick and fire clay; (d) stoneware and pottery; (e) kaolin and other clays. As there were only 2 very small concerns producing "kaolin and other clays" and as the greater part of the output was fireclay, the information for this group has been combined with "firebrick and fire clay" in the present report. Data on manufactures from imported clays are given in Chapter XII of this report. Historical tables and more detailed information of the clay products industry have been published in the Annual Report on *The Mineral Production of Canada* in 1927.

(a) **Brick and Tile.**—Brick and tile were the main products of 176 factories in Canada in 1927 and the total production was valued at \$8,995,741 as compared with an output worth \$8,146,514 from the 184 plants in operation in 1926. The industry was centred in Ontario and Quebec; the former province with 125 operating plants produced commodities worth \$4,734,638 while Quebec with only 17 establishments reported an output worth \$2,482,092, leaving only \$1,779,011 as the combined output value from the 34 concerns in other provinces. Capital employed in 1927 was reported at \$24,795,253; the number of employees was 3,977; salaries and wages aggregated \$3,828,106 for the year and fuel and electricity cost \$1,786,684.

Brick, structural tile and drain tile were the main products of this group. Details of production together with a small output of these materials from the other groups mentioned, are shown in Table 125. Imports and exports are also listed in the same table.

**Clay Sewer Pipe.**—Only 5 firms in Canada were primarily in this line of work in 1927 and production from these concerns was valued at \$1,137,284. There was also a small output of clay sewer pipe in other groups; the total output for Canada as shown in Table 129 was valued at \$1,475,875. There were 3 plants in Ontario, 1 in Quebec and 1 in Nova Scotia. Capital employed in 1927 was \$3,246,183; the average number of employees was 421; salaries and wages amounted to \$506,730; and the cost of fuel and electricity was \$214,068.

**Fire Brick and Fire Clay Products.**—This group includes 8 factories in Canada which were engaged chiefly in manufacturing from domestic clays such refractory materials as fire brick, fireproofing tile and flue lining, and also 3 small concerns in the kaolin group which produced chiefly fireclay. Ontario had 3 plants; Nova Scotia, 2; Quebec, 2; and British Columbia, 1. The total value of products made by these concerns was \$729,079; capital employed was \$2,036,253; employees numbered 226 to whom was paid \$283,506 for salaries and wages during the year; and fuel and power costs amounted to \$75,016. There was also an output of fire brick, fire clay, etc., from plants in the other groups; the total production in Canada from domestic clays, and imports of similar materials are shown in Table 125. Output of refractories from imported clays was valued at \$331,000 in 1927.

**Stoneware and Pottery.**—In 1927 there were 5 factories in Canada engaged primarily in making pottery, earthenware or stoneware from domestic clay; 2 were in Ontario, 1 in Alberta and 2 in New Brunswick. Production from these concerns in 1927 included pottery worth \$306,757 and fire brick and fire clay valued at \$4,328. There was also a small output of pottery amounting to \$300 from the brick and tile group, bringing the total output of this commodity in Canada to \$307,057. Concerns in this group employed a capital of \$359,918; gave work to 152 people, paid out \$150,956 for salaries and wages, and expended \$12,956 for fuel and electricity during the year. Manufactures of pottery from imported clay were worth \$42,491.

**Table 119.—Principal Statistics of the Domestic Clay Products Industry in Canada, by Groups, 1926 and 1927**

	Number of plants	Capital employed	Number of employees	Salaries and wages	Cost of fuel and electricity	Total selling value
		\$		\$	\$	\$
<b>1926</b>						
<b>Brick and Tile—</b>						
Nova Scotia and New Brunswick.....	8	477,961	136	70,583	46,092	183,756
Quebec.....	18	9,024,360	845	853,889	492,220	2,399,181
Ontario.....	127	10,495,655	1,826	1,849,254	1,007,143	4,215,886
Manitoba.....	6	233,592	171	115,070	41,569	248,497
Saskatchewan.....	7	739,650	161	88,445	40,884	214,113
Alberta.....	7	1,033,102	175	181,237	26,140	294,636
British Columbia.....	11	1,030,656	330	309,574	107,468	590,445
<b>Canada.....</b>	<b>184</b>	<b>23,034,976</b>	<b>3,044</b>	<b>3,468,052</b>	<b>1,781,516</b>	<b>8,146,514</b>
<b>Clay, Sewer Pipe—</b>						
Canada.....	5	3,026,076	407	497,512	227,456	1,177,247
<b>Fire Brick and Fire Clay Products*—</b>						
Canada.....	7	1,780,967	195	250,869	75,544	710,836
<b>Stoneware and Pottery—</b>						
Canada.....	4	310,043	149	130,254	15,638	322,726
<b>Canada.....</b>	<b>280</b>	<b>28,152,062</b>	<b>4,395</b>	<b>4,346,687</b>	<b>2,086,054</b>	<b>10,357,323</b>
<b>1927</b>						
<b>Brick and Tile,</b>						
Nova Scotia and New Brunswick.....	7	499,944	124	80,021	46,166	235,375
Quebec.....	17	9,889,087	966	933,001	518,037	2,482,092
Ontario.....	125	11,224,473	2,142	2,055,270	970,359	4,734,638
Manitoba.....	4	217,459	104	110,886	59,385	201,464
Saskatchewan.....	6	726,973	154	127,297	49,376	311,204
Alberta.....	8	1,075,312	175	186,681	31,517	355,930
British Columbia.....	9	1,162,005	312	334,950	111,744	675,038
<b>Canada.....</b>	<b>170</b>	<b>24,795,253</b>	<b>3,977</b>	<b>3,828,106</b>	<b>1,786,684</b>	<b>8,995,741</b>
<b>Clay, Sewer Pipe—</b>						
Canada.....	5	3,246,183	421	506,730	214,068	1,137,284
<b>Fire Brick and Fire Clay Products*—</b>						
Canada.....	8	2,036,253	226	283,506	75,016	729,079
<b>Stoneware and Pottery—</b>						
Canada.....	5	359,918	152	150,965	12,956	311,085
<b>Canada.....</b>	<b>194</b>	<b>30,437,607</b>	<b>4,776</b>	<b>4,769,307</b>	<b>2,085,724</b>	<b>11,173,189</b>

\*Also includes kaolin and other clays.



Table 120.—Capital Employed in the Domestic Clay Products Industry in Canada, by Provinces, and by Classes, 1926 and 1927

Province	1926 Capital employed as represented by				1927 Capital employed as represented by			
	Lands, buildings, fixtures, machinery and tools	Cost of supplies and stocks on hand	Cash, trading and operating accounts and bills receivable	Total	Lands, buildings, fixtures, machinery and tools	Cost of supplies and stocks on hand	Cash, trading and operating accounts and bills receivable	Total
Brick and Tile—	\$	\$	\$	\$	\$	\$	\$	\$
Nova Scotia and New Brunswick	354,487	49,489	73,985	477,961	351,977	38,400	109,507	499,944
Quebec	8,003,408	626,444	394,508	9,024,360	8,739,788	632,280	507,019	9,889,077
Ontario	8,070,982	1,163,568	1,261,105	10,495,655	9,076,418	1,014,006	1,133,149	11,224,473
Manitoba	116,884	62,308	54,400	233,592	85,895	90,257	41,337	217,459
Saskatchewan	620,880	77,153	41,617	739,650	604,684	67,458	54,831	726,973
Alberta	835,652	123,572	73,878	1,033,102	844,000	126,324	104,988	1,075,312
British Columbia	838,399	121,075	71,182	1,030,656	882,905	181,875	97,225	1,162,005
Canada	18,840,692	2,223,609	1,970,675	23,034,976	20,595,637	2,151,500	2,048,056	24,795,253
Clay, Sewer Pipe—								
Canada	2,356,077	355,813	314,186	3,026,076	2,394,988	514,806	336,389	3,246,183
Fire Brick and Fire Clay Products*								
Canada	1,147,633	255,220	378,114	1,780,967	1,276,513	257,042	502,898	2,036,253
Stoneware and Pottery—								
Canada	171,820	60,990	77,224	310,043	210,527	82,167	67,224	359,918
<b>Total Domestic Clay Products—</b>								
Nova Scotia	869,802	125,692	61,914	1,059,418	847,120	139,294	86,983	1,073,397
New Brunswick	75,700	23,127	21,818	120,645	70,700	24,092	34,240	129,002
Quebec	8,563,640	721,733	609,383	9,894,756	9,382,883	802,820	686,019	10,771,722
Ontario	10,150,773	1,406,165	1,593,036	13,149,974	11,164,519	1,398,446	1,488,325	14,051,320
Manitoba	116,884	62,308	54,400	233,592	85,865	90,257	41,337	217,459
Saskatchewan	620,880	77,153	41,617	739,650	604,684	67,458	54,831	726,973
Alberta	1,340,153	158,169	284,749	1,983,371	1,526,693	298,865	451,067	2,279,425
British Columbia	838,399	121,075	71,182	1,030,656	895,171	184,543	108,595	1,188,309
Canada	22,516,231	2,895,632	2,740,199	28,152,062	24,477,665	3,005,575	2,954,367	30,437,607

\*Also includes kaolin and other clay.

Table 121.—Employees, Salaries and Wages in the Domestic Clay Products Industry in Canada, by Provinces, 1926 and 1927

Province	1926				1927			
	Salaried employees	Wage-earners	Salaries	Wages	Salaried employees	Wage-earners	Salaries	Wages
Brick and Tile—			\$	\$			\$	\$
Nova Scotia	10	126	16,743	53,840	9	115	15,943	64,078
Quebec	60	785	108,041	745,848	69	897	122,088	810,013
Ontario	135	1,691	269,029	1,580,234	159	1,983	313,731	1,741,539
Manitoba	13	158	24,150	90,920	11	93	19,350	91,536
Saskatchewan	15	146	23,113	65,332	13	141	20,477	100,820
Alberta	16	159	27,169	154,077	17	158	27,831	158,850
British Columbia	23	307	43,142	266,432	20	292	45,963	288,987
Canada	272	3,372	511,369	2,956,683	298	3,679	571,383	3,256,723
Clay Sewer Pipe—								
Canada	24	383	82,161	415,351	26	395	87,336	419,394
Fire Brick and Fire Clay Products*								
Canada	23	172	66,513	184,356	25	201	69,400	214,106
Stoneware and Pottery—								
Canada	10	130	13,614	116,640	11	141	15,248	134,717
<b>Total Domestic Clay Products—</b>								
Nova Scotia	10	193	28,109	113,935	9	197	28,109	141,209
New Brunswick	8	57	9,811	29,237	8	51	9,811	32,184
Quebec	68	880	132,391	842,432	78	1,001	149,938	918,480
Ontario	161	2,010	348,174	1,967,764	189	2,315	398,917	2,129,687
Manitoba	13	158	24,150	90,920	11	93	19,350	91,536
Saskatchewan	15	146	23,113	65,332	13	141	26,477	100,820
Alberta	31	315	61,866	296,938	30	322	62,211	319,388
British Columbia	23	307	43,142	266,432	22	296	49,563	291,045
Canada	329	4,066	673,657	3,673,030	360	4,416	744,367	4,024,910

\*Includes kaolin and other clays.

Table 122.—Wage-Earners in the Domestic Clay Products Industry in Canada, by Months and by Industries, 1927

Month	Brick and tile	Clay sewer pipe	Fire brick and fire clay*	Stoneware and pottery	Total domestic clay products
January.....	1,715	402	128	131	2,376
February.....	1,599	388	131	133	2,251
March.....	2,045	391	184	134	2,754
April.....	2,693	373	191	143	3,400
May.....	3,695	388	188	150	4,421
June.....	4,071	398	194	145	4,808
July.....	4,178	403	200	139	4,920
August.....	3,994	408	225	138	4,763
September.....	3,687	411	209	136	4,443
October.....	3,319	403	214	139	4,075
November.....	2,914	402	218	130	3,664
December.....	2,292	385	180	133	2,990
*Average for 1927.....	3,679	395	201	141	4,416
†Average for 1926.....	3,372	383	172	139	4,066

\*See note on page 20.

†Includes kaolin and other clays.

Table 123.—Fuel and Electricity Used in the Domestic Clay Products Industry in Canada, 1926 and 1927

	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Bituminous coal—Canadian.....	Short ton	204,111	1,447,523	30,019	203,472
Imported.....	Short ton			187,496	1,176,044
Anthracite coal.....	Short ton	3,250	17,128	1,923	11,857
Lignite coal—Canadian.....	Short ton	12,186	29,057	16,257	40,161
Coke.....	Short ton	1,976	17,297	2,961	22,626
Gasoline.....	Imp. gal.	22,130	6,853	26,296	6,237
Kerosene.....	Imp. gal.			1,060	231
Fuel oil.....	Imp. gal.	272,410	29,160	204,336	22,811
Wood.....	Cord	57,967	263,881	62,951	302,027
Gas—Manufactured.....	M cu. ft.	555,136	15,223	1,927	154
Natural.....	M cu. ft.			408,323	28,591
Other fuel.....			51		378
Electricity purchased.....	K.W.H.	15,729,185	253,851	16,063,068	274,135
<b>Total.....</b>			<b>2,080,054</b>		<b>2,088,724</b>

Table 124.—Power Employed in the Domestic Clay Products Industry in Canada, 1926 and 1927

	1926		1927	
	Number of units	Total h.p. according to manufacturers' rating	Number of units	Total h.p. according to manufacturers' rating
Steam engines and turbines.....	110	8,365	98	7,941
Gasoline, gas and oil engines.....	38	987	37	956
<i>Total primary power.....</i>	<i>148</i>	<i>9,352</i>	<i>135</i>	<i>8,897</i>
Electric motors run by purchased power.....	367	14,213	416	15,548
<b>Total power employed.....</b>	<b>515</b>	<b>23,565</b>	<b>551</b>	<b>24,445</b>
Electric motors run by primary power in same plant.....	9	267	3	69
<i>Total electric motors.....</i>	<i>376</i>	<i>14,480</i>	<i>419</i>	<i>15,617</i>
Boilers.....	120	9,349	109	8,637

Table 125.—Production in Canada, Imports and Exports of Clay and Clay Products, 1926 and 1927

Kind	1926		1927	
	Quantity	Total selling value	Quantity	Total selling value
		\$		\$
<b>PRODUCTION (SALES)—</b>				
Brick:—Soft mud process/Face..... M	28,235	556,573	16,196	325,966
(Common)..... M	78,158	1,145,400	70,554	1,091,274
Stiff mud process/Face..... M	101,028	2,146,362	95,430	2,024,064
(wire cut)..... M	94,046	1,624,055	150,222	2,239,180
(Common)..... M	30,423	651,236	39,733	833,570
Dry press/Face..... M	19,450	260,598	14,617	187,062
(Common)..... M				
Fancy or ornamental brick (including special shapes, embossed and enameled brick)..... M	462	24,057	620	29,372
Sewer brick..... M	6,546	117,194	10,997	210,643
Paving brick..... M	132	5,015	50	2,106
Fire brick from domestic clay..... M	4,195	192,276	5,388	246,266
Fire clay..... tons	2,513	23,258	5,070	35,961
Kaolin..... "			24	120
Fire clay blocks and shapes.....		54,064		100,659
Structural tile: Hollow blocks (including fireproofing and load-bearing tile)..... tons	142,061	1,314,650	151,307	1,431,141
Roofing tile..... No.	17,018	1,562	2,000	140
Floor tile (quarries)..... sq. ft.	195,011	43,654	135,285	32,559
Drain tile..... M	14,258	396,018	22,259	598,098
Sewer pipe (including copings, flue linings, etc.)..... tons	75,996	1,480,776	77,202	1,475,875
Pottery, glazed or unglazed.....		320,135		307,057
Other products.....		150		2,076
<b>Total.....</b>		<b>10,357,323</b>		<b>11,173,189</b>
<b>IMPORTS—</b>				
Bath brick.....		97		
Building brick..... M	4,157	93,337	6,672	142,438
Building blocks.....		77,230		42,365
Clays—				
China..... cwt.	300,546	200,002	420,822	235,824
Fire..... cwt.	937,487	193,741	984,526	219,500
Pipe.....		1,323		2,258
Zirconium silicate.....		2,704		2,548
Other clays.....		81,253		90,183
Drain tile unglazed.....		2,547		2,050
Drain and sewer pipe.....		65,487		77,274
Insulators, electric, porcelain.....		305,774		437,328
Earthenware and chinaware.....		4,647,395		5,649,327
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 of repairs of a furnace, kiln, etc.....		41,690		20,634
Brick, fire, n.o.p., for use exclusively in the construction or repair of a furnace, kiln or other equipment of a manufacturing establishment.....		1,023,850		1,152,277
Fire brick, n.o.p.....		156,781		121,343
Fire brick, chrome.....		50,203		52,565
Magnesite brick.....		66,429		118,457
Silica brick.....		263,293		329,214
Paving brick..... M	2,678	72,980	2,051	54,561
Other clay manufactures.....		848,989		988,061
<b>Total.....</b>		<b>8,196,914</b>		<b>9,638,216</b>
<b>EXPORTS—</b>				
Building brick..... M	1,845	25,908	1,450	23,059
Clay—				
Unmanufactured..... cwt.	14,537	3,898	15,454	2,940
Manufactures.....		61,523		86,746
Earthenware.....		12,764		14,771
Porcelain insulators.....		120,823		155,196
<b>Total.....</b>		<b>231,916</b>		<b>282,712</b>

Table 126.—Production of Building Brick in Canada by Provinces, 1926 and 1927

		Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Canada
1926										
Soft mud process	Face.....	M 10		7,836	20,389					28,235
		\$ 290		196,829	359,544					556,573
Stiff mud process (wire cut)	Common.....	M 826		25,833	35,474	9,775	765	2,022	3,463	78,158
		\$ 10,670		365,405	522,893	159,350	11,240	24,458	51,561	1,145,490
Dry press	Face.....	M 1,262		17,156	76,078	3,181	1,252	951	1,148	101,028
		\$ 25,139		442,738	1,537,450	45,778	35,365	21,111	38,781	2,146,362
Fancy or ornamental brick	Common.....	M 3,845	2,372	68,131	12,110	105	2,728	4,271	484	91,016
		\$ 50,092	34,258	1,247,875	206,242	1,050	31,428	45,208	7,992	1,624,055
Sewer brick	Face.....	M		26,462			593	2,070	1,298	30,423
		\$		539,854			21,422	39,064	50,896	651,236
Total	Common.....	M		3,055			159	13,236	3,000	19,450
		\$		39,689			2,138	164,771	54,060	260,598
1927										
Soft mud process	Face.....	M 35		83	16,078					16,196
		\$ 735		1,243	323,988					325,966
Stiff mud process (wire cut)	Common.....	M 972	2,885	6,167	44,882	1,132	863	2,305	11,348	70,554
		\$ 12,893	44,100	63,353	740,684	18,100	10,592	28,461	173,111	1,091,274
Dry press	Face.....	M 1,345		24,762	65,894	143	1,419	1,545	372	95,480
		\$ 31,068		577,348	1,321,604	3,800	42,711	35,613	11,920	2,021,064
Fancy or ornamental bricks	Common.....	M 3,887		106,341	21,177	7,391	5,709	5,619	98	150,222
		\$ 47,549		1,627,330	310,344	122,019	66,654	62,892	2,392	2,219,180
Sewer brick	Face.....	M		2,134	32,690	947	576	2,448	949	39,753
		\$		63,047	641,903	21,921	19,197	48,467	39,035	833,570
Total	Common.....	M		1,147				13,470		14,617
		\$		12,716				174,346		187,062
1927										
Total	M	6,239	2,885	139,588	193,156	9,613	8,567	25,387	13,094	398,439
	\$	92,215	41,100	2,336,677	3,579,155	165,840	139,154	319,779	244,181	6,941,131

Table 127.—Production of Refractories, in Canada, from Domestic Clays, by Provinces, 1926 and 1927

Province	Fire clay		Fire brick		Fire clay blocks and shapes
	Sold or used		Sold or used		
	Quantity	Value	Quantity	Value	Sold or used
1926					
Nova Scotia.....	536	2,123	30	1,901	675
New Brunswick.....	47	1,819	25	1,372	
Saskatchewan.....	808	5,103	737	39,450	23,361
British Columbia.....	1,122	14,213	3,403	149,547	30,028
<b>Canada.....</b>	<b>2,513</b>	<b>23,258</b>	<b>4,195</b>	<b>192,276</b>	<b>54,064</b>
1927					
Nova Scotia.....	2,688	8,086	227	14,050	525
New Brunswick.....	53	2,112	40	2,216	
Saskatchewan.....	1,008	7,531	693	37,085	61,634
Alberta.....			107	5,850	
British Columbia.....	1,321	17,332	4,321	187,065	38,500
<b>Canada.....</b>	<b>5,070</b>	<b>33,961</b>	<b>5,388</b>	<b>246,266</b>	<b>100,659</b>



Table 128.—Production of Structural Tile in Canada by Provinces, 1926 and 1927

Province	Hollow blocks including fireproofing and load-bearing tile		Roofing tile		Floor tile (quarries)	
	Tons	Value	Number	Value	Sq. ft.	Value
		\$		\$		\$
<b>1926</b>						
Nova Scotia.....	5,141	60,615				
Quebec.....	53,627	281,342				
Ontario.....	76,794	710,595	17,018	1,562	195,011	43,854
Manitoba.....	2,511	20,132				
Saskatchewan.....	4,400	44,000				
Alberta.....	12,591	115,008				
British Columbia.....	6,997	73,958				
<b>Canada.....</b>	<b>142,061</b>	<b>1,314,650</b>	<b>17,018</b>	<b>1,562</b>	<b>195,011</b>	<b>43,854</b>
<b>1927</b>						
Nova Scotia.....	9,793	96,260				
Quebec.....	25,034	257,558				
Ontario.....	86,680	775,806	2,000	140	134,910	32,490
Manitoba.....	1,552	18,862				
Saskatchewan.....	6,500	65,000				
Alberta.....	15,345	142,155				
British Columbia.....	7,303	75,490			375	60
<b>Canada.....</b>	<b>151,307</b>	<b>1,431,141</b>	<b>2,000</b>	<b>140</b>	<b>135,285</b>	<b>32,559</b>

Table 129.—Production of Drain Tile and Sewer Pipe, in Canada, by Provinces, 1926 and 1927

Province	1926				1927			
	Drain tile		Sewer pipe		Drain tile		Sewer pipe	
	M	\$	Tons	\$	M	\$	Tons	\$
Nova Scotia.....	53	1,877	11,532	209,465	53	1,610	10,501	202,741
Quebec.....	224	10,145	6,311	153,954	323	13,336	5,286	126,035
Ontario.....	12,788	340,403	48,176	835,206	20,330	521,957	50,828	852,187
Manitoba.....	275	13,187			343	16,762		
Saskatchewan.....	20	600			25	800		
Alberta.....	132	3,955	7,140	197,225	157	8,992	7,852	205,581
British Columbia.....	766	25,851	2,837	84,926	1,028	34,641	2,795	89,331
<b>Canada.....</b>	<b>14,258</b>	<b>396,018</b>	<b>75,996</b>	<b>1,480,776</b>	<b>22,259</b>	<b>596,098</b>	<b>77,262</b>	<b>1,675,875</b>

CHAPTER TWELVE  
PRODUCTS FROM IMPORTED CLAYS

Output in Canada of commodities made from imported clays amounted in value to \$2,088,238 in 1927. This was a slight increase over the value of \$2,039,514 in the previous year which in turn was 18 per cent greater than the \$1,741,745 reported for 1925. Among the products made in Canada from clays imported for the purpose were insulators valued at \$1,025,224, firebrick and other refractories worth \$331,000 and other lines including sewer pipe, ceramic floor tile, sanitary wares, etc.

In 1927, returns were received from 13 plants, 8 of which were located in Ontario and 5 in Quebec. These concerns employed a capital of \$2,834,820, gave work to a monthly average of 652 people whose earnings for the year aggregated \$843,535 and by manufacturing processes added \$1,520,719 to the value of purchased materials which cost \$567,519. Production from plants in Ontario amounted in value to \$1,239,677; products from plants in Quebec were reported to be worth \$848,561.

At St. Johns, P.Q., 2 plants produced sanitary ware from imported ball or china clay, and another plant in the same city manufactured firebrick, stove linings and vitrified sewer pipe. Refractories were also made in plants at Toronto, Ont.; Montreal, P.Q.; and Hamilton, Ont.; the latter concern also made glazed earthenware. Butter crocks and other earthenware were made in Iberville, P.Q., and artware was manufactured by a concern in Oshawa, Ont. One concern in Toronto made boiler linings, and another at Kingston manufactured ceramic floor tile. Porcelain insulators were produced by plants at Toronto, Hamilton and Niagara Falls. A plant in Georgetown, Ont., also produced insulators but as other electrical supplies made up the bulk of their business, their output was included in the "Electrical Supplies Industry."

Only those factories which manufactured commodities from imported clays have been included in this industry. Statistics on the production from domestic clays are given in Chapter Eleven of this report.

**Table 130.—Principal Statistics of the Imported-Clay Products Industry in Canada, by Provinces, 1926 and 1927**

Province	Number of plants	Capital employed	Number of employees	Salaries and wages	Cost of fuel and electricity	Cost of materials	Selling value of products	Value added by manufacturing
1926								
Quebec.....	5	\$ 1,167,981	235	\$ 321,492	\$ 111,561	\$ 196,717	\$ 816,640	\$ 619,932
Ontario.....	7	1,081,577	362	461,956	83,342	323,501	1,222,865	899,364
<b>Canada.....</b>	<b>12</b>	<b>2,849,558</b>	<b>597</b>	<b>783,448</b>	<b>194,903</b>	<b>520,218</b>	<b>2,039,514</b>	<b>1,519,296</b>
1927								
Quebec.....	5	991,083	245	321,852	95,537	171,640	848,561	676,921
Ontario.....	8	1,843,737	407	521,683	90,242	395,879	1,239,677	843,798
<b>Canada.....</b>	<b>13</b>	<b>2,834,820</b>	<b>652</b>	<b>843,535</b>	<b>185,779</b>	<b>567,519</b>	<b>2,088,238</b>	<b>1,520,719</b>

**Table 131.—Capital Employed in the Imported-Clay Products Industry in Canada, by Classes and by Provinces, 1926 and 1927**

Province	1926				1927			
	Capital employed as represented by				Capital employed as represented by			
	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash, trading and operating accounts and bills receivable	Total	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash, trading and operating accounts and bills receivable	Total
Quebec.....	\$ 686,985	\$ 247,266	\$ 233,730	\$ 1,167,981	\$ 593,613	\$ 227,497	\$ 109,973	\$ 991,083
Ontario.....	1,064,084	364,431	312,162	1,681,577	1,064,715	495,096	283,926	1,843,737
<b>Canada.....</b>	<b>1,691,969</b>	<b>611,697</b>	<b>545,892</b>	<b>2,849,558</b>	<b>1,658,328</b>	<b>722,593</b>	<b>453,899</b>	<b>2,834,820</b>

**Table 132.—Employees, Salaries and Wages in the Imported-Clay Products Industry in Canada, by Provinces, 1926 and 1927**

Province	Average number of employees				Salaries and wages			
	Salaried employees		Wage-earners		Total	Salaries	Wages	Total
	Male	Female	Male	Female				
1926								
Quebec.....	26	4	200	5	235	\$ 69,401	\$ 252,091	\$ 321,492
Ontario.....	32	11	274	45	362	136,725	325,231	461,956
<b>Canada</b> .....	<b>58</b>	<b>15</b>	<b>474</b>	<b>50</b>	<b>597</b>	<b>206,126</b>	<b>577,322</b>	<b>783,448</b>
1927								
Quebec.....	29	3	207	6	245	68,824	253,028	321,852
Ontario.....	42	14	306	45	407	138,945	382,738	521,683
<b>Canada</b> .....	<b>71</b>	<b>17</b>	<b>513</b>	<b>51</b>	<b>652</b>	<b>207,769</b>	<b>635,766</b>	<b>843,535</b>

**Table 133.—Wage-Earners in the Imported-Clay Products Industry in Canada, by Months, 1926 and 1927**

Month	1926			1927		
	Male	Female	Total	Male	Female	Total
January.....	471	39	510	405	54	549
February.....	474	42	516	504	54	558
March.....	485	45	530	503	53	556
April.....	479	48	527	506	54	560
May.....	480	44	524	521	53	574
June.....	467	44	511	535	50	585
July.....	476	48	524	525	52	577
August.....	483	50	533	521	49	570
September.....	467	53	520	522	55	577
October.....	476	54	530	517	52	569
November.....	511	54	565	504	45	549
December.....	510	56	566	505	47	552
<b>Average*</b> .....	<b>474</b>	<b>50</b>	<b>524</b>	<b>513</b>	<b>51</b>	<b>564</b>

\*See note on page 20.

**Table 134.—Hours of Labour in Month of Greatest Employment in the Imported-Clay Products Industry in Canada, 1927**

Province	Average number of wage-earners working			
	8 hours or less per day	9 hours	10 hours	Over 10 hours
Quebec.....	39	123	58	7
Ontario.....	8	140	188	1
<b>Canada</b> .....	<b>47</b>	<b>263</b>	<b>246</b>	<b>8</b>

**Table 135.—Fuel and Electricity Used in the Imported-Clay Products Industry in Canada, 1926 and 1927**

Kind	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
Bituminous coal—Canadian	Short ton	17,899	\$ 138,395	10,655	\$ 82,566
Imported	Short ton			9,867	72,073
Anthracite coal.....	Short ton	900	9,161	53	824
Coke.....	Short ton	486	5,365	407	3,638
Kerosene.....	Imp. gal.			400	90
Fuel oil.....	Imp. gal.	230,807	17,064	4,337	421
Wood.....	Cord	265	2,418	212	1,243
Gas—Manufactured	M cu. ft.	10,768	5,499		
Natural	M cu. ft.				21,114
Other fuel.....			100		
Electricity purchased	K. W. H.	1,370,628	16,901	974,387	14,697
<b>Total</b> .....			<b>194,903</b>		<b>185,779</b>

Table 136.—Power Employed in the Imported-Clay Products Industry in Canada, 1926 and 1927

Description	1926		1927	
	Number of units	Total h.p. according to manufacturers' rating	Number of units	Total h.p. according to manufacturers' rating
Steam engines.....	1	35	1	35
<i>Total primary power</i> .....	1	35	1	35
Electric motors run by purchased power.....	99	792	87	656
<b>Total power employed</b> .....	<b>100</b>	<b>827</b>	<b>88</b>	<b>691</b>
Electric motors run by primary power in same plant.....			12	127
<i>Total electric motors</i> .....	99	792	99	783
Boilers.....	15	1,070	11	755

Table 137.—Materials Used in the Imported-Clay Products Industry in Canada, 1926 and 1927

Material	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Clay, flint and feldspar.....	Ton	28,473	278,800	55,102	298,844
Glazing materials.....			8,951		6,139
Plaster.....	Brl.			1,262	2,584
Sand.....	Ton			148	1,448
Hardware.....					147,362
Containers, boxes, bags, etc.....			46,661		59,343
All other materials.....			185,806		51,799
<b>Total</b> .....			<b>520,218</b>		<b>567,519</b>

Table 138.—Products of the Imported-Clay Products Industry in Canada, 1926 and 1927

Product	1926	1927
	Selling value at works	Selling value at works
	\$	\$
Fire brick, fire clay and stove linings.....	323,168	331,000
Porcelain insulators.....	1,027,280	1,025,224
Glazed ware, litter crocks, artware, etc.....	34,890	42,491
All other products (including floor and wall tile, sewer pipe, sanitary ware, etc.).....	654,176	689,523
<b>Total</b> .....	<b>2,039,514</b>	<b>2,088,238</b>



## CHAPTER THIRTEEN

## SALT

Salt production in Canada during 1927 amounted to 268,672 tons valued at \$1,614,667, an increase of 2.3 per cent in quantity and 9.1 per cent in value as compared with the 1926 shipments of 262,547 tons worth \$1,480,149. The average price for all grades advanced to \$6.01 per ton in 1927 as against \$5.63 per ton in the previous year.

Ten companies operating 11 salt works reported to the Bureau in 1927. Nine of these establishments were located in Ontario, and, of these, 2 were engaged primarily in the production of brine for use in the manufacture of caustic soda and soda ash in the chemical plants of the producing companies.

Ontario's production of salt in 1927 was 254,181 tons or 94.6 per cent of the Canadian total; Nova Scotia and Alberta contributed the remainder. The Nova Scotia production was obtained from the Malagash mine in Cumberland county; Alberta's production came from the Fort McMurray district.

Importations of salt into Canada were recorded at 176,761 tons appraised at \$1,082,080. Exports of Canadian salt totalled 1,212 tons worth \$22,793.

Capital employed by the 10 operating firms in this industry was \$3,194,802, the bulk of which represented investment in the plants in Ontario. Employment statistics showed an average of 54 salaried employees and 322 wage-earners on the payroll during the year; their earnings totalled \$499,967. Fuel and electricity used accounted for an outlay of \$287,260. Imported bituminous coal was the largest item among the fuels consumed amounting to 51,167 tons at \$263,009. Steam engines in use during the year numbered 22 with a rating of 567 h.p. Electric motors to a total of 72 units rated at 966 h.p. were also in use during 1927.

Table 139.—Principal Statistics of the Salt Industry in Canada, 1923-1927

Year	Number of plants	Capital employed	Number of employees	Salaries and wages	Cost of fuel and electricity	Miscellaneous expenses	Selling value of products
		\$		\$	\$	\$	
1923.....	12	2,406,992	368	412,597	356,794	404,016	1,713,510
1924.....	12	2,479,563	364	431,618	342,118	424,578	1,774,780
1925.....	13	2,563,508	402	467,487	315,368	(a)	1,440,697
1926.....	12	2,782,728	384	482,651	324,612	(a)	1,480,149
1927.....	11	3,194,802	376	499,967	287,260	(a)	1,614,667

(a) Data not available.

Table 140.—Capital Employed in the Salt Industry in Canada, 1923-1927

Year	Capital employed as represented by			
	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash, trading, and operating accounts and bills receivable	Total
	\$	\$	\$	\$
1923.....	1,545,576	278,466	583,310	2,406,992
1924.....	1,584,581	247,412	647,570	2,479,563
1925.....	1,787,023	262,831	513,654	2,563,508
1926.....	1,899,378	270,076	613,274	2,782,728
1927.....	2,330,112	321,007	543,683	3,194,802

Table 141.—Employees, Salaries and Wages in the Salt Industry in Canada, 1923-1927

Year	Average number of employees				Salaries and wages			
	Salaried employees		Wage-earners		Total	Salaries	Wages	Total
	Male	Female	Male	Female				
1923.....	37	15	292	24	368	103,227	309,370	412,597
1924.....	37	14	278	35	364	113,740	317,878	431,618
1925.....	45	12	310	35	402	114,960	352,527	467,487
1926.....	41	10	300	33	384	121,014	361,637	482,651
1927.....	40	14	285	37	376	121,100	378,867	499,967

Table 142.—Wage-Earners in the Salt Industry in Canada, by Months, 1926 and 1927

Month	1926			1927		
	Male	Female	Total	Male	Female	Total
January.....	280	27	307	247	36	283
February.....	279	30	309	268	39	307
March.....	303	32	337	280	37	317
April.....	327	32	359	293	36	329
May.....	317	30	347	291	36	327
June.....	294	33	327	290	38	328
July.....	306	34	340	285	35	320
August.....	306	33	339	293	34	327
September.....	286	33	319	286	35	321
October.....	283	37	320	295	37	332
November.....	296	42	338	291	44	335
December.....	270	35	305	284	32	316
<b>Average*</b> .....	<b>300</b>	<b>33</b>	<b>333</b>	<b>285</b>	<b>37</b>	<b>322</b>

\*See note on page 20.

Table 143.—Fuel and Electricity Used in the Salt Industry in Canada, 1926 and 1927

Kind	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
Bituminous coal—Imported.....	Short ton	54,177	\$ 280,249	51,167	\$ 263,009
Lignite coal.....	Short ton	2,703	19,065		
Gasoline.....	Imp. gal.	5,600	1,168		
Fuel oil.....	Imp. gal.			15,000	2,250
Wood.....	Cord	30	150	2	8
Other fuel.....			6,461		6,498
Electricity purchased.....	K.W.H.	1,131,352	17,519	1,361,491	15,485
<b>Total</b> .....			<b>324,612</b>		<b>287,260</b>

Table 144.—Power Employed in the Salt Industry in Canada, 1926 and 1927

Description	1926		1927	
	Number of units	Total h.p. according to manufacturers' rating	Number of units	Total h.p. according to manufacturers' rating
Steam engines and turbines.....	30	752	22	567
Gasoline, gas and oil engines.....	3	62	4	440
<b>Total primary power</b> .....	<b>33</b>	<b>814</b>	<b>26</b>	<b>1,007</b>
Electric motors run by purchased power.....	54	659	60	878
<b>Total power employed</b> .....	<b>87</b>	<b>1,473</b>	<b>95</b>	<b>1,885</b>
Electric motors run by primary power in same plant.....	2	52	3	88
<b>Total electric motors</b> .....	<b>66</b>	<b>711</b>	<b>73</b>	<b>966</b>
Boilers.....	26	4,100	18	2,900

Table 145.—Production of Salt in Canada, by Grades, 1926 and 1927

Grade	1926			1927		
	Manu- factured	Sold	Value of salt sold (not including packages)	Manu- factured	Sold	Value of salt sold (not including packages)
	Tons	Tons	\$	Tons	Tons	\$
Table and dairy.....	50,642	50,905	762,401	53,649	53,477	802,922
Common fine.....	46,131	47,202	241,320	46,808	47,183	297,824
Common coarse.....	30,937	32,785	228,395	41,754	39,617	300,667
Land salt.....	4,170	3,965	16,865	5,955	5,829	37,072
Other grades.....	15,178	14,670	118,058	6,740	6,569	51,187
Brine for chemical works (salt equivalent sold or used).....	133,020	113,020	113,020	115,995	115,995	115,995
<b>Total.....</b>	<b>260,078</b>	<b>262,547</b>	<b>1,480,149</b>	<b>270,001</b>	<b>268,672</b>	<b>1,614,667</b>
Value of packages.....			569,396			524,437
<b>Grand total.....</b>			<b>2,049,545</b>			<b>2,139,104</b>

Table 146.—Imports into Canada and Exports of Salt, 1926 and 1927

	1926		1927	
	Tons	Value	Tons	Value
		\$		\$
Imports—				
Salt, for the use of the sea or gulf fisheries.....	83,929	327,040	02,102	328,824
Salt, in bulk, n.o.p.....	75,965	393,747	72,933	321,538
Salt, n.o.p., in bags, barrels, etc.....	28,053	234,118	40,882	376,648
Salt, table, made by an admixture of other ingredients, when con- taining not less than 90 per cent of pure salt (From April 1, 1926)	434	31,689	844	55,070
<b>Total.....</b>	<b>188,401</b>	<b>1,036,594</b>	<b>176,761</b>	<b>1,082,080</b>
Exports.....	1,164	19,433	1,212	22,793

## CHAPTER FOURTEEN

## SAND-LIME BRICK

Production from the sand-lime brick industry in Canada in 1927 amounted in value to \$939,911 as compared with \$629,672 in the previous year and \$854,055 in 1925. This output included 72,864 M sand-lime brick valued at \$864,911 against a production of 50,282 M worth \$606,409 in 1926 and 68,869 M at \$854,055 in 1925. The balance of the output in each year consisted mainly of hollow building blocks.

Eleven plants were operating in Canada during 1927 of which 7 were located in Ontario, 2 in Quebec and 2 in Manitoba. Plants in Ontario were all in the neighbourhood of Toronto; Quebec's factories which only commenced operations in 1927 were in Montreal and the Manitoba plants were located in the city of Winnipeg.

These concerns employed a capital of \$1,586,064, and distributed \$300,318 in salaries and wages to an average of 254 workmen. Purchased materials cost \$258,777 and the value added by manufacturing was \$681,134. About 383,434 bushels of lime and 111,007 cubic yards of sand were used for making sand-lime brick in 1927.

Statistics relating to the production of clay brick are given in Chapter XI of this report.

**Table 147.—Principal Statistics of the Sand-Lime Brick Industry in Canada, by Provinces, 1926 and 1927**

Province	Number of plants	Capital employed	Number of employees	Salaries and wages	Cost of fuel and electricity	Cost of materials	Selling value of products	Value added by manufacturing
1926		\$		\$	\$	\$	\$	\$
Ontario.....	8	732,250	196	205,577	46,930	176,243	579,110	402,867
<b>Canada*</b> .....	<b>10</b>	<b>1,052,577</b>	<b>218</b>	<b>223,599</b>	<b>59,119</b>	<b>197,499</b>	<b>629,672</b>	<b>432,272</b>
1927								
Ontario.....	7	1,025,453	187	252,688	59,798	207,355	793,485	586,130
<b>Canada*</b> .....	<b>11</b>	<b>1,586,064</b>	<b>254</b>	<b>309,318</b>	<b>67,416</b>	<b>258,777</b>	<b>939,911</b>	<b>681,134</b>

\*Includes also data for 2 plants in Manitoba for 1926 and 2 plants in each of Quebec and Manitoba for 1927.

**Table 148.—Capital Employed in the Sand-Lime Brick Industry in Canada, by Classes and by Provinces, 1926 and 1927**

Province	1926				1927			
	Capital employed as represented by				Capital employed as represented by			
	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash trading and operating accounts and bills receivable	Total	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash trading and operating accounts and bills receivable	Total
	\$	\$	\$	\$	\$	\$	\$	\$
Ontario.....	594,231	40,342	97,686	732,259	797,856	58,099	169,498	1,025,453
<b>Canada*</b> .....	<b>937,115</b>	<b>42,796</b>	<b>102,666</b>	<b>1,082,577</b>	<b>1,338,303</b>	<b>70,152</b>	<b>177,609</b>	<b>1,586,064</b>

\*See footnote to Table 147.



Table 149.—Employees, Salaries and Wages in the Sand-Lime Brick Industry in Canada, by Provinces, 1926 and 1927

Province	Average number of employees					Salaries and wages		
	Salaried employees		Wage-earners		Total	Salaries	Wages	Total
	Male	Female	Male	Female				
						\$	\$	\$
1926								
Ontario	16	2	178		196	33,830	171,747	205,577
Canada*	19	2	197		218	42,330	181,269	223,599
1927								
Ontario	14	1	172		187	33,154	219,534	252,688
Canada*	22	2	230		254	47,354	252,964	300,318

\*See footnote to Table 147.

Table 150.—Wage-Earners in the Sand-Lime Brick Industry in Canada, by Months, 1926 and 1927

Month	1926	1927	Month	1926	1927
	Total	Total		Total	Total
	Male	Male		Male	Male
January	121	167	July	203	263
February	109	106	August	204	258
March	110	167	September	182	239
April	172	222	October	169	217
May	222	251	November	139	215
June	230	247	December	132	211
			Average*	197	230

\*See note on page 20.

Table 151.—Hours of Labour in Month of Greatest Employment in the Sand-Lime Brick Industry in Canada, 1927

Province	Average number of wage-earners working			
	8 hours or less per day	9 hours	10 hours	Over 10 hours
Quebec				44
Ontario	8	27		160
Manitoba	15			10
Canada	23	27	214	2

Table 152.—Fuel and Electricity Used in the Sand-Lime Brick Industry in Canada, 1926 and 1927

Kind	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Bituminous coal—Canadian	Short ton	5,802	37,438	613	4,441
Imported	Short ton			5,979	39,215
Anthracite coal	Short ton			1,260	7,876
Gasoline	Imp. gal.	417	123		
Wood	Cord	51	410	41	328
Electricity purchased	K. W. H.	618,904	12,148	973,296	15,556
<b>Total</b>			<b>50,119</b>		<b>67,416</b>

Table 153.—Power Employed in the Sand-Lime Brick Industry in Canada, 1926 and 1927

Description	1926		1927	
	Number of units	Total h.p. according to manufacturers' rating	Number of units	Total h.p. according to manufacturers' rating
Steam engines and turbines.....	4	265	2	275
<i>Total primary power.....</i>	<i>4</i>	<i>265</i>	<i>2</i>	<i>275</i>
Electric motors run by purchased power.....	27	637	47	1,254
<b>Total power employed.....</b>	<b>31</b>	<b>902</b>	<b>49</b>	<b>1,529</b>
Electric motors run by primary power in same plant.....	1	10	8	930
<i>Total electric motors.....</i>	<i>2</i>	<i>20</i>	<i>55</i>	<i>2,184</i>
Boilers.....	9	1,170	2	300

Table 154.—Materials Used in the Sand-Lime Brick Industry in Canada, 1926 and 1927

Material	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Portland cement.....	Brl.	8,057	12,071	9,490	18,306
Quicklime.....	Bush.	270,687	98,471	383,434	138,404
Sand.....	Cu. yd.	84,724	82,979	111,007	96,367
Gravel.....	Cu. yd.	3,489	2,722	.....	.....
Other materials.....			1,157	.....	5,700
<b>Total.....</b>			<b>197,400</b>		<b>258,777</b>

Table 155.—Products of the Sand-Lime Brick Industry in Canada, 1926 and 1927

Product	1926		1927	
	Quantity	Selling value	Quantity	Selling value
	M	\$	M	\$
Sand-lime brick.....	50,282	606,409	72,864	864,911
Other products*.....	.....	23,263	.....	75,000
<b>Total.....</b>		<b>629,672</b>		<b>939,911</b>

\*Includes cement drain pipe, hollow blocks, etc.

Table 156.—Production of Sand-Lime Brick in Canada, 1919-1927

Year	Production	
	Quantity	Value
	M	\$
1919.....	31,624	455,005
1920.....	39,264	693,641
1921.....	43,457	662,744
1922.....	52,749	851,007
1923.....	60,080	897,960
1924.....	55,873	618,946
1925.....	68,869	854,055
1926.....	50,282	606,409
1927.....	72,864	864,911

CHAPTER FIFTEEN  
MONUMENTAL AND ORNAMENTAL STONE

The stone industry in Canada includes two main divisions: (a) The Stone Quarrying Industry, including quarries and dressing works operated in conjunction with quarries; and (b) The Monumental and Ornamental Stone Industry, comprising the operations of firms which have no quarries, but who operate dressing works where stone for building and monumental purposes is cut, polished or otherwise finished.

In the industry as a whole in 1927 there were 450 concerns representing a capital investment of \$19,569,790. Including the quarry outputs and the value added by manufacturing in the secondary stone industry, production during the year was valued at \$13,073,616. Employment was afforded 6,585 persons, their total earnings being given as \$6,827,243.

However, in the statistical classification of the Bureau, the quarrying industry or primary production of stone, comes within the scope of mineral production and detailed data thereon are presented in the annual report on *The Mineral Production of Canada*. Only the secondary, or Monumental and Ornamental Stone Industry, comes within the scope of manufactures of non-metallic minerals. The present chapter therefore deals primarily with these secondary stone dressing works, but sufficient data on quarrying operations have been appended to enable the reader to obtain a perspective of the stone industry as a whole.

Firms in the monumental and ornamental stone industry in Canada reported a production of cut and polished stone for ornamental, monumental and building purposes amounting in value to \$5,606,984, as compared with a corresponding figure of \$5,799,690 in 1926. Reports in this industry were received by the Dominion Bureau of Statistics from 228 plants located as follows: 119 in Ontario, 49 in Quebec, 14 in Manitoba, 11 in each of New Brunswick and Nova Scotia, 9 in British Columbia, 8 in Saskatchewan, 5 in Alberta, and 2 in Prince Edward Island. These plants represented a capital investment of \$5,758,806 and employed a monthly average of 1,514 people throughout the year. Payments in salaries and wages amounted to \$2,255,638; the cost of stone was \$1,798,672 and \$112,895 was expended for fuel and electricity.

Table 157.—Principal Statistics of the Monumental and Ornamental Stone Industry in Canada, by Provinces, 1926 and 1927

Province	Number of plants	Capital employed	Number of employees	Salaries and wages	Cost of fuel and electricity	Cost of materials	Selling value of products	Values added by manufacturing
		\$		\$	\$	\$	\$	\$
1926								
Prince Edward Island and Nova Scotia	14	116,558	45	40,052	3,161	52,541	154,768	102,227
New Brunswick	10	124,729	52	56,046	2,203	27,538	123,112	95,574
Quebec	50	763,561	272	351,504	18,595	241,300	800,935	559,635
Ontario	122	3,211,062	751	1,163,531	56,250	1,148,410	3,312,038	2,163,028
Manitoba	13	617,305	223	346,193	15,490	227,449	830,318	608,869
Saskatchewan	8	254,395	54	74,557	3,758	56,655	218,474	191,819
Alberta	5	247,740	47	61,458	2,062	63,368	182,491	119,123
British Columbia	10	108,417	47	81,882	4,973	42,703	171,554	128,651
<b>Canada</b>	<b>232</b>	<b>5,443,767</b>	<b>1,491</b>	<b>2,175,223</b>	<b>106,492</b>	<b>1,859,964</b>	<b>5,799,690</b>	<b>3,939,726</b>
1927								
Prince Edward Island and Nova Scotia	13	99,193	48	46,947	2,751	59,876	159,147	99,271
New Brunswick	11	159,483	60	66,777	2,455	31,371	150,134	118,763
Quebec	49	911,863	269	374,035	26,702	262,986	838,892	575,906
Ontario	119	3,394,983	774	1,243,083	55,519	1,072,215	3,217,742	2,145,527
Manitoba	14	589,417	210	311,963	16,003	195,710	659,452	463,742
Saskatchewan	8	247,161	48	67,418	3,602	82,132	232,848	150,716
Alberta	5	236,165	56	65,145	1,827	58,225	191,160	132,935
British Columbia	9	120,541	49	80,270	4,036	36,157	157,609	121,452
<b>Canada</b>	<b>228</b>	<b>5,758,806</b>	<b>1,514</b>	<b>2,255,638</b>	<b>112,895</b>	<b>1,798,672</b>	<b>5,606,984</b>	<b>3,908,312</b>

Table 158.—Capital Employed in the Monumental and Ornamental Stone Industry in Canada, by Classes and by Provinces, 1926 and 1927

Province	1926				1927			
	Capital employed as represented by				Capital employed as represented by			
	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash, trading and operating accounts and bills receivable	Total	Lands, buildings, fixtures, machinery and tools	Materials on hand and stocks in process	Cash, trading and operating accounts and bills receivable	Total
\$	\$	\$	\$	\$	\$	\$	\$	
Prince Edward Island and Nova Scotia.....	59,514	36,385	20,659	116,558	37,651	42,551	18,991	99,193
New Brunswick.....	53,716	48,910	22,103	124,729	74,040	60,035	24,808	159,483
Quebec.....	389,777	230,128	143,659	763,564	458,074	238,488	215,301	911,863
Ontario.....	1,571,203	746,539	893,320	3,211,062	1,788,137	776,011	830,835	3,394,983
Manitoba.....	217,050	102,194	298,061	617,305	217,343	112,562	259,512	589,417
Saskatchewan.....	77,785	74,624	101,986	254,395	64,480	74,589	108,092	247,161
Alberta.....	52,630	105,777	89,333	247,740	57,436	79,811	98,918	236,165
British Columbia.....	58,960	28,936	20,521	108,417	56,110	31,358	33,073	129,541
<b>Canada.....</b>	<b>3,480,635</b>	<b>1,373,493</b>	<b>1,589,639</b>	<b>5,443,767</b>	<b>2,753,271</b>	<b>1,416,005</b>	<b>1,589,530</b>	<b>5,758,806</b>

Table 159.—Employees, Salaries and Wages in the Monumental and Ornamental Stone Industry in Canada, by Provinces, 1926 and 1927

Province	Average number of employees				Salaries and wages			
	Salaried employees		Wage-earners		Total	Salaries	Wages	Total
	Male	Female	Male	Female		\$	\$	\$
1926								
Prince Edward Island and Nova Scotia.....	5		40		45	3,100	36,952	40,052
New Brunswick.....	7	1	44		52	10,420	45,626	56,046
Quebec.....	31	3	238		272	62,090	289,414	351,504
Ontario.....	127	13	608	3	751	267,696	895,835	1,163,531
Manitoba.....	24	4	195		223	51,558	294,635	346,193
Saskatchewan.....	15	3	36		54	23,219	51,338	74,557
Alberta.....	7	5	34	1	47	15,410	46,048	61,458
British Columbia.....	8		39		47	18,613	63,269	81,882
<b>Canada.....</b>	<b>224</b>	<b>29</b>	<b>1,234</b>	<b>4</b>	<b>1,491</b>	<b>452,106</b>	<b>1,723,117</b>	<b>2,175,223</b>
1927								
Prince Edward Island and Nova Scotia.....	3		45		48	4,200	42,747	46,947
New Brunswick.....	7	2	49	2	60	13,340	53,437	66,777
Quebec.....	32	1	236		269	68,219	305,816	374,035
Ontario.....	127	15	627	5	774	285,236	957,847	1,243,083
Manitoba.....	23	6	180	1	210	63,649	248,314	311,963
Saskatchewan.....	13	2	33		48	23,179	44,239	67,418
Alberta.....	5	4	40	7	56	14,060	50,185	65,145
British Columbia.....	7		42		49	14,437	65,833	80,270
<b>Canada.....</b>	<b>217</b>	<b>30</b>	<b>1,232</b>	<b>15</b>	<b>1,514</b>	<b>487,229</b>	<b>1,768,418</b>	<b>2,255,638</b>

Table 160.—Wage-Earners in the Monumental and Ornamental Stone Industry in Canada, by Months, 1926 and 1927

Month	1926			1927		
	Male	Female	Total	Male	Female	Total
January.....	917	4	921	920	10	939
February.....	962	4	966	907	12	919
March.....	1,028	4	1,032	1,048	13	1,061
April.....	1,125	4	1,129	1,178	14	1,192
May.....	1,186	4	1,190	1,234	15	1,249
June.....	1,343	4	1,347	1,335	15	1,350
July.....	1,375	4	1,379	1,394	15	1,409
August.....	1,368	4	1,372	1,375	16	1,391
September.....	1,369	4	1,373	1,393	16	1,409
October.....	1,376	4	1,380	1,328	14	1,342
November.....	1,235	4	1,239	1,284	14	1,298
December.....	1,080	4	1,084	1,191	15	1,206
<b>Average.....</b>	<b>1,234</b>	<b>4</b>	<b>1,238</b>	<b>1,252</b>	<b>15</b>	<b>1,267</b>

\*See note on page 20.



**Table 161.—Hours of Labour in Month of Greatest Employment in the Monumental and Ornamental Stone Industry in Canada, by Provinces, 1927**

Province	Average number of wage-earners working			
	8 hours or less per day	9 hours	10 hours	Over 10 hours
Prince Edward Island and Nova Scotia.....	22	32	7	.....
New Brunswick.....	51	1	3	.....
Quebec.....	156	174	28	1
Ontario.....	501	138	135	32
Manitoba.....	63	78	105	.....
Saskatchewan.....	8	.....	20	5
Alberta.....	59	.....	.....	.....
British Columbia.....	55	2	.....	.....
<b>Canada.....</b>	<b>915</b>	<b>425</b>	<b>307</b>	<b>38</b>

**Table 162.—Fuel and Electricity Used in the Monumental and Ornamental Stone Industry in Canada, 1926 and 1927**

Kind	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
Anthracite coal.....	Short ton	360	\$ 5,212	470	\$ 5,551
Bituminous coal—Canadian.....	Short ton	934	6,307	614	3,066
Imported.....	Short ton	4	46	498	4,239
Lignite coal.....	Short ton	906	2,082	105	1,200
Coke.....	Short ton	15,107	4,583	137	1,423
Gasoline.....	Imp. gal.	.....	.....	5,760	1,901
Kerosene.....	Imp. gal.	.....	.....	1,627	343
Fuel oil.....	Imp. gal.	14,771	1,692	9,565	1,296
Wood.....	Cord	323	2,557	327	2,192
Gas—Manufactured.....	M cu. ft.	854	898	37	45
Natural.....	M cu. ft.	.....	.....	80,690	765
Other fuel.....	.....	.....	190	.....	62
Electricity purchased.....	K.W.H.	2,968,090	83,125	3,876,417	90,912
<b>Total.....</b>			<b>106,492</b>		<b>112,895</b>

**Table 163.—Power Employed in the Monumental and Ornamental Stone Industry in Canada, 1926 and 1927**

Description	1926		1927	
	Number of units	Total h.p. according to manufacturers' rating	Number of units	Total h.p. according to manufacturers' rating
Steam engines and turbines.....	2	10	1	15
Gasoline, gas and oil engines.....	19	185	19	221
<i>Total primary power.....</i>	<i>21</i>	<i>195</i>	<i>20</i>	<i>236</i>
Electric motors run by purchased power.....	416	5,452	417	5,790
<b>Total power employed.....</b>	<b>437</b>	<b>5,647</b>	<b>437</b>	<b>6,026</b>
<i>Total electric motors.....</i>	<i>416</i>	<i>5,452</i>	<i>417</i>	<i>5,790</i>
Boilers.....	8	134	3	68

**Table 164.—Materials Used in the Monumental and Ornamental Stone Industry in Canada, 1926 and 1927**

	Cost at works	
	1926	1927
Cost of all stone used.....	\$ 1,859,964	\$ 1,798,672
<b>Total.....</b>	<b>1,859,964</b>	<b>1,798,672</b>

**Table 165.—Products of the Monumental and Ornamental Stone Industry in Canada, 1926 and 1927**

Product	Total selling value at works	
	1926	1927
	\$	\$
Granite cut and polished—(a) Monuments.....	1,619,206	1,728,293
(b) For building purposes.....	74,792	83,877
Marble cut and polished—(a) Monuments.....	376,859	420,651
(b) For building purposes.....	644,945	673,126
Marble chips and dust.....	19,085	6,591
Limestone—(a) Monuments and bases.....	94,446	97,264
(b) For building purposes.....	1,969,755	1,713,445
Finished monuments lettered only.....	925,681	844,132
Other products.....	74,921	39,605
<b>Total.....</b>	<b>5,799,690</b>	<b>5,606,984</b>

**Primary Production.—The Stone Quarrying Industry** including data on stone quarries and on dressing works operated in conjunction with quarries.—(From the annual report on the *Mineral Production of Canada, 1927*.)—Production of stone from Canadian quarries during 1927 advanced 14 per cent over the total for 1926. Shipments amounting to 7,306,436 tons valued at \$9,265,304 were recorded in 1927 as compared with 6,397,590 tons worth \$7,865,874 shipped in the previous year. Ontario was the leading producer with 58.2 per cent of the total output, Quebec followed with 34.7 per cent and the other provinces in order of tonnages produced, were British Columbia, Manitoba, Nova Scotia, New Brunswick, and Alberta.

The 222 firms operating in the stone quarrying industry in Canada during 1927 reported a capital investment of \$13,810,984. Salaried employees and wage-earners employed during the year totalled 5,071; their combined earnings amounted to \$4,571,605. Fuel and electricity consumed caused an outlay of \$496,503. Importations of stone into Canada during 1927 were valued at \$1,110,100 as compared with an import value of \$1,144,614 in 1926. Canadian stone exported in 1927 reached a total of \$141,306, including crushed stone to the value of \$66,820. During 1926 stone exports were appraised at \$194,588.

**Table 166.—Principal Statistics of the Stone Industry in Canada, 1926 and 1927**

	1926	1927
Number of firms.....	233	222
Capital employed.....\$	12,760,078	13,810,984
Number of employees—On salary.....	241	234
On wages.....	4,269	4,837
<b>Total.....</b>	<b>4,510</b>	<b>5,071</b>
Salaries and wages—Salaries.....\$	411,432	419,863
Wages.....\$	3,352,294	4,151,742
<b>Total.....\$</b>	<b>3,763,726</b>	<b>4,571,605</b>
Cost of fuel and electricity.....\$	514,374	496,503
Selling value of products.....\$	7,865,874	9,265,304

**Table 167.—Production of Stone in Canada, by Provinces, 1926 and 1927**

Province	1926		1927	
	Ton	Value	Ton	Value
		\$		\$
Nova Scotia.....	92,315	150,792	72,451	120,807
New Brunswick.....	19,108	69,545	29,908	121,091
Quebec.....	2,305,734	3,728,228	2,534,531	4,268,315
Ontario.....	3,622,042	3,157,288	4,254,960	4,060,709
Manitoba.....	101,571	357,884	154,666	318,556
Alberta.....	3,759	13,890	3,367	7,830
British Columbia.....	263,061	358,247	256,552	367,996
<b>Canada.....</b>	<b>6,397,590</b>	<b>7,865,874</b>	<b>7,306,436</b>	<b>9,265,304</b>

Table 168.—Production of Stone in Canada, by Kinds, Showing Purposes for Which Used, 1927

Purpose		Granite	Limestone	Marble	Sandstone	Total
Building stone—						
Rough.....	Tons	3,576	82,933		82,084	168,593
	\$	25,877	300,147		156,725	482,749
Dressed.....	Tons	15,241	41,146		310	56,697
	\$	267,194	716,929		8,784	992,907
Monumental and ornamental stone—						
Rough.....	Tons	9,744	130	1,042		10,916
	\$	136,763	1,036	45,186		182,985
Dressed.....	Tons	2,821	104	2,518		5,443
	\$	147,510	1,523	449,717		598,750
Flagstone.....	Tons		312		1,220	1,532
	\$		484		11,380	11,873
Curbstone.....	Tons	16,365	6			16,371
	\$	60,209	150			69,419
Paving blocks.....	Tons	21,761				21,761
	\$	135,201				135,201
Limestone for flux.....	Tons		345,744			345,744
	\$		296,993			296,993
Limestone for sugar factories, chemical works, carbide plants, etc.....	Tons		173,107			173,107
	\$		189,525			189,525
Poultry grit.....	Tons	5	179			184
	\$	200	1,061			1,261
Ground limestone for agricultural use.....	Tons		24,319			24,319
	\$		71,642			71,642
Rubble and riprap.....	Tons	48,054	204,931		7,604	350,619
	\$	41,524	191,839		12,538	245,921
Crushed stone.....	Tons	612,482	5,475,471	1,649	41,551	6,131,153
	\$	560,019	5,374,566	8,134	43,357	5,986,076
<b>Total.....</b>	<b>Tons</b>	<b>730,049</b>	<b>6,438,379</b>	<b>5,209</b>	<b>132,799</b>	<b>7,306,436</b>
	<b>\$</b>	<b>1,383,557</b>	<b>7,145,917</b>	<b>503,037</b>	<b>232,793</b>	<b>9,265,304</b>

Table 169.—Production of Stone in Canada, by Kinds and by Provinces, 1927

Province		Granite	Limestone	Marble	Sandstone	Total
Nova Scotia.....	Tons	611	88,294		3,546	72,451
	\$	36,770	75,292		8,745	120,807
New Brunswick.....	Tons	1,634	25,124		3,150	29,908
	\$	53,695	56,146		11,250	121,091
Quebec.....	Tons	162,180	2,251,499	4,609	116,243	2,534,531
	\$	757,582	2,863,690	484,437	162,606	4,268,315
Ontario.....	Tons	390,679	3,854,421		9,860	4,254,960
	\$	294,098	3,716,419		50,102	4,060,709
Manitoba.....	Tons		154,666			154,666
	\$		318,556			318,556
Alberta.....	Tons		3,307			3,307
	\$		7,830			7,830
British Columbia.....	Tons	174,945	81,008	600		256,553
	\$	241,412	107,984	18,600		367,996
<b>Canada.....</b>	<b>Tons</b>	<b>730,049</b>	<b>6,438,379</b>	<b>5,209</b>	<b>132,799</b>	<b>7,306,436</b>
	<b>\$</b>	<b>1,383,557</b>	<b>7,145,917</b>	<b>503,037</b>	<b>232,793</b>	<b>9,265,304</b>

## CHAPTER SIXTEEN

## MISCELLANEOUS NON-METALLIC MINERAL PRODUCTS

Under this heading there has been included all concerns which made (a) artificial abrasives and abrasive products; (b) artificial graphite and carbon electrodes; (c) gypsum products; (d) products of the mica trimming shops; (e) miscellaneous products such as foundry supplies, electrical slate, etc.

Production from the 31 plants in Canada classified under this industry in 1927 was valued at \$10,231,304, an increase of 19 per cent over the output value of \$8,612,658 in 1926. Eleven establishments manufactured artificial abrasives or abrasive products, 3 plants made electrodes, 4 factories produced gypsum products, 9 mica shops were in operation, and 4 plants made foundry facings and supplies and produced electrical slate.

(a) **Artificial Abrasives and Abrasive Products.**—Production of artificial abrasives such as fused alumina, crude silicon carbide, fusesand and abrasive products such as abrasive wheels, paper and cloth was valued at \$6,106,794 in 1927 as compared with \$6,081,822 in 1926. Capital employed in the 11 concerns amounted to \$6,563,669. Employees numbered 627 persons, and payments in salaries and wages totalled \$955,134. Raw materials cost \$1,999,148. Crude silicon carbide and ferrosilicon were made by: Canadian Carborundum Co., Ltd., at Shawinigan Falls, P.Q., and Niagara Falls, Ont.; Abrasive Company of Canada, Ltd., Hamilton, Ont.; Norton Company, Chippawa, Ont.; and the Exolon Company, Thorold, Ont. Abrasive wheels were made in the following plants: Dominion Abrasive Wheel Co., Ltd., Mimico, Ont.; Lion Grinding Wheels, Ltd., Brockville, Ont.; Brantford Grinding Wheels Ltd., Prescott, Ont., Norton Co. of Canada, Ltd., Hamilton, Ont. Abrasives Limited at Brantford, Ont., manufactured abrasive cloth and paper.

(b) **Artificial Graphite and Carbon Electrodes.**—In 1927 electrodes were manufactured by the Acheson Graphite Co., Niagara Falls, Ont.; Electro Metallurgical Co. of Canada, Welland, Ont.; and the Aluminium Co. of Canada, Arvida, P.Q. The last two mentioned companies make electrodes for use in their own metallurgical works while the first company produced for sale. Artificial graphite was made at the Niagara Falls plant. A total of 165 people were employed in these works and production was valued at \$1,457,722.

(c) **Gypsum Products.**—Plants for the manufacture of gypsum wallboard, gypsum blocks and similar products were operated in 1927 by the Canada Gypsum and Alabastine Ltd., at Montreal, P.Q., Paris, Ont., and Caledonia, Ont.; and by the Manitoba Gypsum Co., Ltd. at Winnipeg, Man. Production from these 4 factories was valued at \$2,292,428 in 1927. Capital employed totalled \$1,339,701; employees numbered 299; salaries and wages amounted to \$394,011, and materials cost \$968,804.

Some firms in Canada quarried gypsum and calcined their product to make hardwall plaster. In many cases, the latter operations could not be separated from the mining and therefore their output has been included in the mineral production group.

(d) **Mica Trimming.**—The mica trimming industry as reviewed under this heading, includes only those firms which bought knife-trimmed, thumb-trimmed or block mica and were engaged only in the splitting or trimming of same for the market. Some of the mica mining companies operated their own trimming shops but, as it was not possible to obtain a separation of data for the trimming operations, their output has been included with the primary production of mica as shown in the annual report on the *Mineral Production of Canada*. An extract from this latter review has been appended to this chapter so statistics on the whole industry may be readily available to the reader.

During 1927, the Mica Insulator Company operated trimming shops in Quebec at Manseau, Plessisville, St. Agapit, Victoriaville, and Daveluyville; the Loughborough Mining Co. Ltd., had shops at Sorel and St. Raymond in Quebec; Mica Company of Canada, Ltd., operated a plant at Hull, P.Q., and S. O. Filion ran a shop for part of the year at Ottawa, Ont. Production for the year was valued at \$285,555; employees numbered 479; salaries and wages reached \$119,002, and the materials used cost \$130,764.

(e) **Miscellaneous Non-Metallic Mineral Products, n.e.s.**—Four firms in Ontario were included under this classification in 1927; 3 produced foundry facings and the other was engaged in re-cutting and milling electrical slate. Output was valued at \$88,805, and employees numbered 22.



Table 170.—Principal Statistics of the Miscellaneous Non-Metallic Mineral Products Industry in Canada, by Provinces and by Groups, 1926 and 1927

Province and Group	Number of plants	Capital employed	Number of employees	Salaries and wages	Cost of fuel and electricity	Cost of materials	Value of products	Value added by manufacturing
<b>(a) BY PROVINCES</b>								
1926								
Quebec.....	12	2,429,611	632	337,905	156,090	515,188	1,139,683	624,495
Ontario.....	19	6,497,246	920	1,288,756	574,514	2,489,225	7,472,975	4,983,750
<b>Canada.....</b>	<b>31</b>	<b>8,926,857</b>	<b>1,552</b>	<b>1,626,661</b>	<b>730,604</b>	<b>3,004,413</b>	<b>8,612,658</b>	<b>5,608,245</b>
1927								
Quebec.....	12	6,974,657	754	521,950	455,509	1,204,031	2,665,152	1,461,121
Ontario.....	19	6,356,546	838	1,207,827	567,993	2,378,784	7,566,152	5,187,368
<b>Canada.....</b>	<b>31</b>	<b>13,331,203</b>	<b>1,592</b>	<b>1,729,777</b>	<b>1,023,502</b>	<b>3,582,815</b>	<b>10,231,304</b>	<b>6,648,489</b>
<b>(b) BY GROUPS</b>								
1926								
Artificial abrasives and abrasive products.....	11	0,398,369	622	929,755	599,744	2,093,434	6,081,822	3,988,388
Gypsum products.....	7	1,060,706	350	455,027	84,368	583,048	1,466,923	883,875
Mica trimming.....	9	366,139	493	132,864	4,770	185,361	358,609	173,248
Artificial graphite, carbon electrodes, foundry facings, etc.....	4	1,101,643	87	109,015	41,722	142,570	705,304	562,734
<b>Total.....</b>	<b>31</b>	<b>8,926,857</b>	<b>1,552</b>	<b>1,626,661</b>	<b>730,604</b>	<b>3,004,413</b>	<b>8,612,658</b>	<b>5,608,245</b>
1927								
Artificial abrasives and abrasive products.....	11	6,563,609	627	955,134	604,751	1,999,148	6,100,794	4,107,046
Gypsum products.....	4	1,339,701	299	394,011	133,051	908,804	2,292,428	1,321,624
Mica trimming.....	9	376,478	479	119,002	3,751	130,764	285,555	154,791
Artificial graphite and carbon electrodes.....	3	4,909,292	165	239,516	277,462	440,370	1,457,722	1,017,352
Miscellaneous non-metallic mineral products.....	4	142,063	22	22,114	3,587	43,729	88,805	45,076
<b>Total.....</b>	<b>31</b>	<b>13,331,203</b>	<b>1,592</b>	<b>1,729,777</b>	<b>1,023,502</b>	<b>3,582,815</b>	<b>10,231,304</b>	<b>6,648,489</b>

Table 171.—Capital Employed in the Miscellaneous Non-Metallic Mineral Products Industry in Canada, by Classes, 1926 and 1927

Province and Group	1926				1927			
	Capital employed as represented by				Capital employed as represented by			
	Lands, buildings, fixtures, machinery and tools	Cost of supplies and stocks on hand	Cash, trading and operating accounts and bills receivable	Total	Lands, buildings, fixtures, machinery and tools	Cost of supplies and stocks on hand	Cash, trading and operating accounts and bills receivable	Total
<b>(a) BY PROVINCES</b>								
Quebec.....	\$ 1,273,678	\$ 392,160	\$ 763,773	\$ 2,429,611	\$ 4,989,076	\$ 1,029,722	\$ 956,859	\$ 7,974,657
Ontario.....	3,212,678	1,235,454	2,019,114	6,497,246	3,230,221	1,284,069	1,852,316	6,356,546
<b>Canada.....</b>	<b>4,516,356</b>	<b>1,627,614</b>	<b>2,782,887</b>	<b>8,926,857</b>	<b>8,269,297</b>	<b>2,312,731</b>	<b>2,809,175</b>	<b>13,331,203</b>
<b>(b) BY GROUPS</b>								
Artificial abrasives and abrasive products.....	3,654,489	967,021	1,775,959	6,398,369	3,600,083	1,005,614	1,957,372	6,563,609
Gypsum products.....	382,267	215,235	463,204	1,060,706	909,151	314,233	116,317	1,339,701
Mica trimming.....	96,440	245,506	24,193	366,139	94,798	254,680	26,994	376,478
Artificial graphite and carbon electrodes, facings, etc.....	383,160	198,952	519,531	1,101,643	3,521,225	716,387	671,680	4,909,292
Miscellaneous non-metallic mineral products.....					83,440	21,811	36,812	142,063
<b>Total.....</b>	<b>4,516,356</b>	<b>1,627,614</b>	<b>2,782,887</b>	<b>8,926,857</b>	<b>8,269,297</b>	<b>2,312,731</b>	<b>2,809,175</b>	<b>13,331,203</b>

Table 172.—Employees, Salaries and Wages, in the Miscellaneous Non-Metallic Mineral Products Industry in Canada, by Groups, 1926 and 1927

Industry	Average number of employees					Salaries and wages		
	Salaried employees		Wage-earners		Total	Salaries	Wages	Total
	Male	Female	Male	Female				
1926								
Artificial abrasives and abrasive products.....	67	24	527	4	622	178,264	751,491	929,755
Gypsum products.....	27	4	306	13	350	79,486	375,541	455,027
Mica trimming.....	12	8	22	451	493	25,342	107,522	132,864
Artificial graphite, carbon electrodes, foundry facings, etc.....	18	4	64	1	87	27,109	81,906	109,015
<b>Total.....</b>	<b>124</b>	<b>40</b>	<b>919</b>	<b>469</b>	<b>1,552</b>	<b>310,201</b>	<b>1,316,460</b>	<b>1,626,661</b>
1927								
Artificial abrasives and abrasive products.....	64	24	534	5	627	203,065	752,060	955,134
Gypsum products.....	24	1	259	15	299	70,673	323,338	394,011
Mica trimming.....	12	8	26	433	479	23,003	95,999	119,002
Artificial graphite and carbon electrodes.....	21	3	141	.....	165	36,778	202,738	239,516
Miscellaneous non-metallic mineral products.....	8	2	11	1	22	11,999	10,115	22,114
<b>Total.....</b>	<b>129</b>	<b>38</b>	<b>971</b>	<b>454</b>	<b>1,592</b>	<b>345,518</b>	<b>1,384,259</b>	<b>1,729,777</b>

Table 173.—Wage-Earners in the Miscellaneous Non-Metallic Mineral Products Industry in Canada, by Months and by Groups, 1926 and 1927

Month	1926					1927				
	Artificial abrasives and abrasive products	Gypsum products	Mica trimming	Artificial graphite, carbon electrodes, foundry facings, etc.	Artificial abrasives and abrasive products	Gypsum products	Mica trimming	Artificial graphite and carbon electrodes	Miscellaneous non-metallic mineral products	
January.....	523	295	394	63	529	214	435	60	13	
February.....	528	321	395	63	542	220	456	112	15	
March.....	538	331	400	63	544	238	471	129	12	
April.....	537	334	418	66	552	279	358	130	11	
May.....	542	325	404	67	541	341	425	153	11	
June.....	538	309	428	68	536	311	434	104	11	
July.....	531	329	485	70	537	312	470	172	11	
August.....	515	319	445	67	542	262	405	151	10	
September.....	517	322	480	63	538	278	329	141	12	
October.....	531	321	435	63	536	278	259	157	12	
November.....	526	306	436	62	541	273	267	158	12	
December.....	524	293	404	62	524	286	195	154	12	
<b>Average*—Male.....</b>	<b>527</b>	<b>306</b>	<b>422</b>	<b>64</b>	<b>534</b>	<b>259</b>	<b>26</b>	<b>141</b>	<b>11</b>	
<b>Female.....</b>	<b>4</b>	<b>13</b>	<b>451</b>	<b>1</b>	<b>5</b>	<b>15</b>	<b>433</b>	<b>.....</b>	<b>1</b>	
<b>Total.....</b>	<b>531</b>	<b>319</b>	<b>473</b>	<b>65</b>	<b>539</b>	<b>274</b>	<b>459</b>	<b>141</b>	<b>12</b>	

\*See note on page 20.

Table 174.—Fuel and Electricity Used in the Miscellaneous Non-Metallic Mineral Products Industry in Canada, 1926 and 1927

Kind	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
Bituminous coal—Canadian.....	Short ton	13,350	\$ 89,812	23,187	\$ 176,378
Imported.....	Short ton	.....	.....	18,765	129,418
Anthracite.....	Short ton	307	4,016	257	3,346
Coke.....	Short ton	526	5,329	858	8,195
Kerosene.....	Imp. gal.	.....	.....	80	18
Fuel oil.....	Imp. gal.	3,127	321	3,898	345
Wood.....	Cord	111	419	68	255
Gas—Manufactured.....	M cu. ft.	5,991	2,118	215	189
Natural.....	M cu. ft.	.....	.....	1,347	986
Electricity purchased.....	K.W.H.	119,435,062	628,589	278,286,587	704,372
<b>Total.....</b>			<b>730,604</b>		<b>1,023,502</b>

Table 175.—Power Employed in the Miscellaneous Non-Metallic Mineral Products Industry in Canada, 1926 and 1927

Kind	1926		1927	
	Number of units	Total h.p. according to manufacturers' rating	Number of units	Total h.p. according to manufacturers' rating
Steam engines and turbines . . . . .	1	100	2	150
<i>Total primary power</i> . . . . .	1	100	2	150
Electric motors run by purchased power . . . . .	308	159,735	454	9,765
<b>Total power employed</b> . . . . .	<b>307</b>	<b>159,835</b>	<b>456</b>	<b>9,915</b>
Electric motors run by primary power in same plant . . . . .	62	411	73	273
<i>Total electric motors</i> . . . . .	<i>398</i>	<i>160,146</i>	<i>527</i>	<i>10,038</i>
Boilers . . . . .	14	1,225	19	3,708

Table 176.—Materials Used in the Miscellaneous Non-Metallic Mineral Products Industry in Canada, 1926 and 1927

Material	Unit of measure	1926		1927	
		Quantity	Cost at works	Quantity	Cost at works
<b>ARTIFICIAL ABRASIVES AND ABRASIVE PRODUCTS—</b>					
Bauxite and alumina . . . . .	Ton	40,178	\$ 872,831	38,865	\$ 835,037
Coal and coke (not for fuel) . . . . .	Ton	30,866	340,878	57,307	348,534
Electrodes . . . . .	Lb.	1,755,093	124,699	1,841,728	129,660
Iron . . . . .	Ton	4,603	53,052	4,579	47,914
Salt . . . . .	Lb.	694,780	3,478	891,500	4,515
Sawdust . . . . .	Lb.	9,104,968	27,360	10,422,380	26,679
Silica sand . . . . .	Ton	35,171	193,372	35,817	177,391
Artificial abrasive grains (alundum, aloxite, silicon carbide, etc.) . . . . .	Lb.	1,352,279	80,424	4,274,757	100,838
Natural abrasive grains (corundum, silica, flint, garnet, etc.) . . . . .	Lb.	1,045,135	43,676	521,415	27,634
Bonding and casing materials . . . . .			19,320		17,504
All other materials, including cotton cloth, kraft paper, rope paper, unfinished wheels, etc. . . . .			318,165		265,191
Containers, boxes, packages, etc. . . . .			10,170		17,351
<b>Total</b> . . . . .			<b>2,093,434</b>		<b>1,989,148</b>
<b>GYPSUM PRODUCTS—</b>					
Crude gypsum . . . . .	Lb.	275,920	1,891	258,223	1,578
Plaster of Paris . . . . .	Ton	53,111	221,655	88,420	400,057
Paper . . . . .	Lb.	3,081,000	79,263	10,340,029	281,545
Sawdust and shavings . . . . .			6,688		1,690
All other materials including whitening, clay, glue, starch, cement, re-inforcing, etc. . . . .			206,926		192,271
Containers, boxes, packages, etc. . . . .			66,825		91,663
<b>Total</b> . . . . .			<b>583,048</b>		<b>968,804</b>
<b>MICA TRIMMING—</b>					
Mica, knife-trimmed and thumb-trimmed . . . . .	Lb.	680,211	152,582	499,923	117,370
Mica splittings . . . . .	Lb.	30,906	17,217	13,125	3,054
Mica plate, block mica and uncut mica . . . . .	Lb.		12,712	5,051	6,246
Other materials . . . . .			2,850		3,610
Containers, boxes, packages, etc. . . . .					494
<b>Total</b> . . . . .			<b>185,361</b>		<b>130,764</b>
<b>ARTIFICIAL GRAPHITE AND CARBON ELECTRODES—</b>					
Coke and coal . . . . .	Ton			12,549	209,543
Scrap carbon and electrodes . . . . .	Lb.			9,812,954	148,043
Tar . . . . .	Gal.			154,986	11,028
Pitch . . . . .	Lb.			6,820,252	65,061
All other materials . . . . .					6,695
<b>Total</b> . . . . .					<b>440,370</b>
<b>MISCELLANEOUS NON-METALLIC MINERAL PRODUCTS—</b>					
Anthracite coal . . . . .	Ton		142,570	790	3,845
Bituminous coal . . . . .	Ton			1,345	7,390
Pitch . . . . .	Ton			384	4,247
Silica . . . . .	Ton			125	3,003
Graphite . . . . .	Ton			93	5,365
All other materials . . . . .					15,633
Containers, boxes, bags, packages, etc. . . . .					4,246
<b>Total</b> . . . . .					<b>43,729</b>
<b>Total</b> . . . . .			<b>3,094,413</b>		<b>3,582,815</b>

Table 177.—Products of the Miscellaneous Non-Metallic Mineral Products Industry in Canada, 1926 and 1927

Product	Unit of measure	1926		1927	
		Quantity	Selling value	Quantity	Selling value
			\$		\$
<b>ARTIFICIAL ABRASIVES AND ABRASIVE PRODUCTS—</b>					
Crude silicon carbide.....	Ton	20,285	1,779,492	17,333	1,961,910
Fused alumina.....	Ton	34,649	3,423,526	35,086	3,230,928
Abrasive wheels.....			619,124		552,660
Other products including abrasive cloth, abrasive paper, sharpening stones and ferrosilicon.....			259,680		361,296
Total.....			6,081,822		6,106,794
<b>GYPSUM PRODUCTS—</b>					
Gypsum blocks, wall coating, wall board, wall plasters, fireproof tile, etc.....			1,466,923		2,292,428
Total.....			1,466,923		2,292,428
<b>MICA TRIMMING—</b>					
Mica splittings.....	Lo.	374,604	262,167	146,410	233,529
All other products including mica tubes, cut and uncut mica, mica plate, knife-trimmed mica, etc.....			96,442		52,026
Total.....			358,609		285,555
<b>ARTIFICIAL GRAPHITE AND CARBON ELECTRODES—</b>					
Carbon electrodes and artificial graphite.....					1,457,722
Total.....			705,304		1,457,722
<b>MISCELLANEOUS NON-METALLIC MINERAL PRODUCTS—</b>					
Foundry facings.....	Ton			2,685	59,540
All other products.....					29,265
Total.....					88,805
<b>Total.....</b>			<b>8,612,658</b>		<b>10,231,394</b>

**Primary Production.**—(From the annual report on the *Mineral Production of Canada*, 1927).—**Natural Abrasives.**—Production data on corundum, diatomite, garnets, grinding pebbles, grindstones, pulpstones, scythestones, and volcanic dust in Canada during 1927, was reported as follows:—

**Corundum.**—Corundum is found in an area embracing several townships in Renfrew and Hastings counties in the province of Ontario. The industry made its appearance there in 1900 and production reached a maximum in 1906. In 1921, grain corundum amounting to 403 tons valued at \$55,965 was exported to the United States. Since that date no shipments of corundum have been reported.

**Diatomite.**—Shipments of diatomite amounting to 266 tons valued at \$6,650 were made during 1927. This production was obtained from a deposit at East New Annan, Nova Scotia.

Diatomite, sometimes called tripolite, is a silicious material closely related to quartz, and is used for heat and sound insulation, as an absorbent, a filtering medium, a filler, a mild abrasive, a structural material, etc. The Canadian material is usually given a preliminary calcine in rotary furnaces, before shipment.

**Garnets.**—In 1927 development work was done on a garnet deposit in Joly township, Labelle county, Quebec. Shipments from this property during the year amounted to 2 tons valued at \$150.

A deposit in Ashby township, Ontario, was operated during 1923 and 1,250 tons of garnet concentrates and crude garnets were shipped to Niagara Falls, New York, for use as an abrasive material. In 1924 a shipment of 360 tons of garnets was made but there has been no production from the Ashby deposit since that date.

**Grinding Pebbles.**—There was no production of grinding pebbles in Canada during 1927. Shipments from a deposit near Jackfish, Ontario, in 1926 amounted to 64 tons valued at \$576.



**Grindstones, Pulpstones and Scythestones.**—Production of grindstones, pulpstones and scythestones in Canada during 1927 was 2,251 tons valued at \$125,017 consisting of 11 tons from Nova Scotia deposits, 1,860 tons from New Brunswick, and 380 tons from British Columbia. In 1926 shipments were recorded at 2,695 tons worth \$151,227.

**Volcanic Dust.**—Operations in this industry are centred on deposits near Waldeck, Saskatchewan, where there has been an annual production during each of the past four years. In 1927, shipments totalled 105 tons with a valuation of \$735. The previous year's production was 90 tons worth \$630.

**Table 178.—Principal Statistics of the Natural Abrasives Industry in Canada, 1926 and 1927**

	1926	1927
Number of firms.....	9	9
Capital employed.....	\$ 358,342	433,810
Number of employees—On salary.....	8	10
On wages.....	94	122
Total.....	102	132
Salaries and wages—Salaries.....	\$ 21,190	21,200
Wages.....	68,879	86,403
Total.....	\$ 90,069	107,603
Cost of fuel and electricity.....	\$ 9,716	10,279
Selling value of products.....	\$ 152,433	132,552

### Gypsum

The 1927 shipments of gypsum from Canadian deposits totalled 1,063,117 tons valued at \$3,251,015 and established a new high record for the industry. In 1926, the production amounted to 883,728 tons worth \$2,770,813. Gypsum quarried during 1927 totalled 1,105,704 tons of which quantity 196,232 tons or 17.7 per cent was calcined in Canada.

Quarries in Hants, Inverness, and Victoria counties, Nova Scotia; Albert and Victoria counties, New Brunswick; near Paris, Ontario; Gypsumville, Manitoba; and Falkland and Mayook, British Columbia, were active during 1927.

Canadian crude gypsum exported amounted to 588,808 tons in 1927; this tonnage was shipped to the United States. Ground gypsum and prepared wall plaster exported during the year totalled 6,556 tons. The United States, New Zealand, Australia and Newfoundland were the principal importers of these materials.

**Table 179.—Principal Statistics of the Gypsum Mining Industry in Canada, 1926 and 1927**

	1926	1927
Number of firms.....	18	19
Capital employed.....	\$ 6,696,077	9,055,624
Number of employees—On salary.....	68	63
On wages.....	1,300	1,364
Total.....	1,368	1,427
Salaries and wages—Salaries.....	\$ 159,835	178,976
Wages.....	1,095,592	1,132,712
Total.....	\$ 1,255,427	1,311,688
Cost of fuel and electricity.....	\$ 241,414	198,199
Selling value of products.....	\$ 2,770,813	3,251,015

Table 180.—Production of Gypsum in Canada, 1926 and 1927

	1926		1927	
	Tons	Value \$	Tons	Value \$
<b>CRUDE—</b>				
Lump or mine run.....	151,906	225,749	225,264	371,488
Crushed.....	576,489	1,002,679	665,499	1,223,070
Fine ground.....	5,873	36,813	7,065	42,633
<b>CALCINED GYPSUM.....</b>	149,459	1,505,572	165,280	1,613,824
<b>Total.....</b>	<b>883,728</b>	<b>2,770,813</b>	<b>1,063,117</b>	<b>3,251,015</b>

**Graphite.**—Shipments of graphite from Canadian deposits in 1927 reached a total of 1,829 tons valued at \$111,656 as compared with 2,727 tons worth \$194,860 shipped in 1926. According to Customs' records, exports of graphite, crude or refined, in 1927 were 1,699 tons appraised at \$102,476. In 1926, these exports amounted to 2,564 tons at \$180,851.

### Mica

Shipments of Canadian mica during 1927 totalled 2,738 tons valued at \$174,377. The production in 1926 was 2,545 tons worth \$229,204. Increases were recorded in 1927 in shipments of rough-cobbed, thumb-trimmed and scrap mica; a considerable decrease was reported in shipments of mica splittings. Rough-cobbed and thumb-trimmed mica exported amounted to 165 tons; splittings, 159 tons; and scrap and waste, 4,536 tons. The total value of Canadian mica exported during 1927 was \$326,846, which included shipments worth \$304,781 to the United States and \$21,035 to the United Kingdom.

Table 181.—Principal Statistics of the Mica Industry in Canada, 1926 and 1927

	1926	1927
Number of firms.....	22	21
Capital employed.....	\$ 186,478	322,389
Number of employees—On salary.....	12	9
On wages.....	196	159
<b>Total.....</b>	<b>208</b>	<b>168</b>
Salaries and wages—Salaries.....	\$ 17,608	14,622
Wages.....	\$ 110,601	103,883
<b>Total.....</b>	<b>\$ 128,269</b>	<b>118,505</b>
Cost of fuel and electricity.....	\$ 5,353	4,400
Selling value of products.....	\$ 229,204	174,377

Table 182.—Production of Mica in Canada, 1926 and 1927

Grade	1926			1927		
	Quantity	Value f.o.b. shipping point	Price per pound	Quantity	Value f.o.b. shipping point	Price per pound
	Pound	\$	\$	Pound	\$	\$
Rough-cobbed.....	109,880	11,724	0.106	255,925	16,943	0.07
Thumb-trimmed.....	322,639	64,958	0.20	443,090	72,513	0.16
Splittings.....	180,603	120,503	0.667	81,919	54,048	0.66
Scrap.....	4,476,405	32,019	0.007	4,696,058	30,873	0.007
<b>Total.....</b>	<b>5,089,527</b>	<b>229,204</b>	<b>0.004</b>	<b>5,476,992</b>	<b>174,377</b>	<b>0.03</b>

**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE  
MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA**

Name	Address	Location
<b>Aerated Waters</b>		
<b>PRINCE EDWARD ISLAND—</b>		
Simmons, G. H.	Spring Pk. Rd., Charlottetown	Charlottetown.
<b>NOVA SCOTIA—</b>		
Acidia Beverage Co.	Margaretville	Margaretville.
Antigonish Aerated Waters	Main St., Antigonish	Antigonish.
Bridgewater Bottling Works	Box 366, Bridgewater	Bridgewater.
Clare Beverage Co., Ltd.	Meteghan River	Meteghan River.
Crystal Spring Mfg. Co.	281 Agricola St., Halifax	Halifax
Davono, Alfred N.	184 Argyle St., Halifax	Halifax
Donovan, W. H.	41-45 Granville St., Halifax	Halifax
Fenton & Day	89 Gerrish St., Halifax	Halifax
Fraser, James E.	Springhill	Springhill.
Greenhill Bottling Works	Main St., Trenton	Trenton.
Home Bottling Co., Ltd.	Drawer 814, Commercial St., North Sydney	North Sydney.
Kampton, T. S.	Milton	Milton.
Livers, John J.	15 Bilby St., Halifax	Halifax
McKinley & Sons	McKay's Corners, C.B.	McKay's Corners, C.B.
Meteghan Fruit Supply Co.	Meteghan Station	Meteghan Station.
New Glasgow Mineral Springs	New Glasgow	New Glasgow.
North Sydney Bottling Works, Ltd.	Regent St., North Sydney	North Sydney.
Orange Crush Co. of Truro, Ltd.	Truro	Truro.
Pink, Joseph	Main St., Yarmouth	Yarmouth.
Whelan & Ferguson, Ltd.	675-677 Barrington St., Halifax	Halifax.
Yarmouth Fruit Co.	Brown St., Yarmouth	Yarmouth.
<b>NEW BRUNSWICK—</b>		
Bathurst Ginger Ale Works, Ltd.	Bathurst	Bathurst.
Blue Ribbon Beverage Co.	80-82 Elm St., St. John	St. John.
Bosca & Burginla	Box 281 Bathurst	Bathurst.
Campbellton Ginger Ale Works	Campbellton	Campbellton.
Capital Bottling Co.	313 Queen St., Fredericton	Fredericton.
Cassidy, Charles	Church St., Chatham	Chatham.
Crown Beverages, Ltd.	502 Main St., St. John	St. John
Dolan Bros.	348 Haymarket Sq., St. John	St. John.
Driscoll, John J.	124 Prince Edward St., St. John	St. John
Dubo, Arsene	Water St., Campbellton	Campbellton.
Gallivan, Edward	Chatham	Chatham.
Havelock, Mineral Spring Co., Ltd.	Box 156, Botsford St., Moncton	Moncton.
Holzaki, R. E.	Queen St., Woodstock	Woodstock.
International Drug Co., The	King St., St. Stephen	St. Stephen.
Moncton Bottling Works	434 Main St., Moncton	Moncton.
Shediac Beverage Co.	Shediac	Shediac.
Sussex Beverage Co.	Court St., Sussex	Sussex.
Sussex Mineral Springs Co., Ltd.	Pleasant Ave., Sussex	Sussex
Torris, J. J.	51 City Rd., St. John	St. John.
Albert, V. H.	Church St., Edmundston	Edmundston.
<b>QUEBEC—</b>		
Allan's Ltd.	86 Dorchester St. West, Montreal	Montreal.
Alleghany's Spring Co.	1738 St. Jacques St., Montreal	Montreal.
Archambault & Frère	Bout de l'Isle, Montreal	Bout de l'Isle, Montreal.
Beaulieu, L. & Co.	5309 Carrière St., Montreal	Montreal.
Bonumont & Frère	Rue Rousseau, Montmagny	Montmagny.
Bédard, François	75 Frontenac, St. John's	St. John's.
Begin, Alex.	17 First Ave., Coteau St. Louis, Three Rivers	Three Rivers.
Blackburn, Henry	80 Papineau St., Hull	Hull.
Brissette, J. L.	17 rue St. Antoine, Ste. Agathe des Monts	Ste. Agathe des Monts.
Brodeur, Arthur	530 rue du Havre, Montreal	Montreal.
Brunelle & Méti vier	87 St. Jean Baptiste St., Victoriaville	Victoriaville.
Caisse, C. O.	151 rue du Roi, Sorel	Sorel.
Caledonia Springs Co., Ltd.	6380 St. Urbain, Montreal	Montreal.
Cherrio Bottling Works	1518 Papineau St., Montreal	Montreal.
Chevalier & Larose	60 Mercier St., Shawinigan Falls	Shawinigan Falls.
Christin, J. & Cie., Ltd.	21 Ste. Julie St., Montreal	Montreal.
Coca-Cola Co.	90 Broadview Ave., Toronto, Ont.	35 Vallée St., Montreal.
Coca-Cola Co., The	90 Broadview Ave., Toronto, Ont.	38 Fifth St., Quebec.
Côté, Roch.	Pierreville	Pierreville.
Coulombe, Alex.	50-56 rue Morin, Quebec	Quebec.
Crystal Soda Water Co.	431 St. Dominique St., Montreal	Montreal.
Crystal Spring Bottling Works, The	Waterloo	Waterloo.
De La Boissière	Box 325, Roberval	Roberval.

**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA—Continued**

Name	Address	Location
<b>Aerated Waters—Continued</b>		
<b>QUEBEC—Concluded</b>		
Desjardins, Léon	30 Rue St. Charles, Ste. Thérèse de Blainville	Ste. Thérèse de Blainville
Désormeaux & Frères	2 Richard St., Joliette, Box 100	Joliette
Désormeaux, S.	262 Devillemere St., St. Jérôme	St. Jérôme
Dominion Soda Water Co., Ltd.	1614 De Bullion St., Montreal	Montreal
Dorville, Hurvey	Murray Bay	Murray Bay
Dufresne & Frère	129 Bonaventure St., Three Rivers	Three Rivers
Ferland, J. H.	23 rue St. Laurent, Valleyfield	Valleyfield
Fluet, F. A.	65 Des Prairies, Quebec	Quebec
Fontaine, Émile	La Tuque	La Tuque
Forand, Hormidas	Eastern Ave., Waterloo	Waterloo
Fortier, Elzour, Ltée	123 St. Dominique, Quebec	Quebec
Fortier, J. F.	12 rue Niverville, Three Rivers	Three Rivers
Frisco Soda Water Co.	4398 Clarke St., Montreal	Montreal
Jacob & Cliche	Beauce Junction	Beauce Junction
Gaudreault, H. J.	Bagotville	Bagotville
Girouard, Ltd.	77 Quesnel St., Montreal	Montreal
Goulet, Calixte	2035 Goulet ave., Montreal	Montreal
Grenier, Arthur	St. George, Beauce	St. George, Beauce
Gurd, Chas. & Co., Ltd.	1016 Bleury St., Montreal	Montreal
Haines Ltd.	1229 Panet St., Montreal	Montreal
Hamel & Fils.	La Sarre	La Sarre
Houde & Trempe	Nicolet	Nicolet
Ideal Soda Water Co., Ltd.	4150a Parthenais St., Montreal	Montreal
Kel-Ola Co. Regd.	4266 Châteaubriand Ave., Montreal	Montreal
Lachapelle, Pierre	St. Barthélemi	St. Barthélemi
La Cie d'Eau Minérale	148 Concorde St., St. Hyacinthe	St. Hyacinthe
Lafontaine, Armand	Yamachiche	Yamachiche
Lafontaine & Fils	4530 Laval St., Montreal	Montreal
Lafontaine, Donat	1 St. Laurent, Louiseville	Louiseville
Lafontaine, M. Gustave	Berthierville	Berthierville
Lafranboise, Victor	St. Clot	St. Clot
Lafrance, Noël	3 St. Germain St., St. Hyacinthe	St. Hyacinthe
Jean Marie Paullus	Box 294 Sorel	Sorel
Laniel, Théophile	45 Ellice St., Valleyfield	Valleyfield
Lanquette, Albert	Ville-Marie	Ville-Marie
Oscar Latulippe	Thetford Mines	Thetford Mines
La Victoire, Moïse	Rigaud	Rigaud
Leclerc & Houde	54 Avenue du Pont, Jonquières	Jonquières
Leclerc, Joseph	St. Evariste Station	St. Evariste Station
Leroux, Leopold	Vaudreuil	Vaudreuil
Grégoire, Joseph	76-1 rue, Shawinigan Falls	Shawinigan Falls
Lévesque, Jos.	Cabano	Cabano
MacKimmie, J. P. & Son	Foundry St., Lachute	Lachute
Massicotte, J. E.	St. Tite	St. Tite
Ménard, Edouard	2 Jacques Cartier St., St. Jean	St. Jean
Milloy, P. A.	1027-1029 St. André, Montreal	Montreal
Monfette, J. B.	79 Laurier St., Asbestos	Asbestos
National Bottling Works	1434 Clarke St., Montreal	Montreal
Orange Crush Bottling Co., Ltd.	100 Claremont ave., Toronto, Ont.	6540 Park ave., Montreal
Parent, Léonard	5-7 Rue Didace, Sorel	Sorel
Paquet, Wilfrid	397 St. Catherine, Grand Mère	Grand Mère
Pellerin, Albert	Rue de l'église, St. Barnabé-Nord	St. Barnabé-Nord
Pelletier, Z.	Box 182, St. Jérôme	St. Jérôme
Péloquin, J. H. & Cie	Costicook	Costicook
Poulin, P.	Rouyn	Rouyn
Pye, M.	Windsor Mills	Windsor Mills
Regal Bottling Works	La Prairie	La Prairie
Reina Mineral Water Co., Ltd.	101 Duvernay St., Montreal	Montreal
Rivard, Alfred	Garthby Station	Garthby
Roillard & Cie, Ltée	9 Robillard Ave., Montreal	Montreal
Sherbrooke Bottling Works	Sherbrooke	Sherbrooke
Silver Spring Bottling Works	65 Dépôt St., Sherbrooke	Sherbrooke
Simon's Ginger Ale & Soda Water Works Regd.	3817 Rivard St., Montreal	Montreal
Stewart Bottling Co., Ltd.	297 William St., Montreal	Montreal
Thibault, J. A.	24-26 rue Fraser, Rivière-du-Loup	Rivière-du-Loup
Claire Fontaine, Ltd.	92 Cote d'Abraham, Quebec	Quebec
Tourangeau & Champagne	Buckingham	Buckingham
Trottier & Cie	St. Casimir	St. Casimir
Turnell, A. Irene	272 Wellington St., Sherbrooke	Sherbrooke
Union Soda Water Co.	1402 De Bullion St., Montreal	Montreal
Veillet D. & Co.	Ste. Geneviève de Batiscan	Ste. Geneviève de Batiscan
Whistle Co. of Eastern Canada	750 St. Paul St., W., Montreal	Montreal
White, The Robt. Co., Ltd.	638 Craig St. E., Montreal	Montreal
<b>ONTARIO—</b>		
Algoma Bottling Works	146 S. Algoma St., Port Arthur	Port Arthur
Barker Bros	65 McGill St., Smith Falls	Smith Falls
Best & Bennett, Ltd.	1750 King St., Hamilton	Hamilton
Boon & Nowell	Rear 509 Concord Ave., Toronto	Toronto
Foy & Irwin	354 Pinnacle St., Belleville	Belleville
Brant Soda Water Co.	257 Colborne St., Brantford	Brantford



**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE MANUFACTURES OF THE NON METALLIC MINERALS IN CANADA—Continued**

Name	Address	Location
<b>Aerated Waters—Continued</b>		
<b>ONTARIO—Continued.</b>		
Brighton Bottling Works.....	Main St., Brighton.....	Brighton.
British Bottling Co.....	201 Besserer St., Ottawa.....	Ottawa.
Brown, John D.....	5 Bay St., Gravenhurst.....	Gravenhurst.
Burke Mineral Water Co.....	17-21 Colborne St., Brantford.....	Brantford.
Burkholder, D. C.....	Sharpe St., New Liskeard.....	New Liskeard.
Caledonia Springs Co.....	2716 St. Urban St., Montreal, Quebec.....	Caledonia Springs.
Canadian Beverages Ltd.....	31 Terauley St., Toronto.....	Toronto.
Canadian Soda Water Mfg. Co.....	233 St. Catherine St. N., Hamilton.....	Hamilton.
Carrigun, Charles.....	58 Riddell St., Woodstock.....	Woodstock.
Chambers, F. S.....	Killarly St., Humberstone.....	Humberstone.
Clurinn, Jas.....	South Porcupine.....	South Porcupine.
Cobalt Aerated Water Co.....	45 Presley St., Cobalt.....	Cobalt.
Cobourg Bottling Works.....	Ontario St., Cobourg.....	Cobourg.
Coca-Cola Co.....	90 Broadview Ave., Toronto.....	118 Secord St., Port Arthur.
Coca-Cola Co.....	90 Broadview Ave., Toronto.....	Toronto.
Coca-Cola Co.....	90 Broadview Ave., Toronto.....	327-329 Church St., Belleville.
Coca-Cola Co.....	90 Broadview Ave., Toronto.....	340-2 Queen St., Ottawa.
Coca-Cola Co.....	90 Broadview Ave., Toronto.....	55 Vine St., Hamilton.
Coca-Cola Co.....	90 Broadview Ave., Toronto.....	430 McDougal St., Windsor.
Coca-Cola Co.....	90 Broadview Ave., Toronto.....	66 Rideau St., Kingston.
Coca-Cola Co.....	90 Broadview Ave., Toronto.....	1 Hamilton St., London.
Coca-Cola Co.....	90 Broadview Ave., Toronto.....	190 George St., Peterborough.
Colonial Bottling Works.....	19 Kent St., Simcoe.....	Simcoe.
Cornwall Bottling Works.....	113 Amelia St., Cornwall.....	Cornwall.
Crescent Bottling Works.....	847 St. Clair Ave., Niagara Falls.....	Niagara Falls.
Crown Bottling Works.....	Wallon St., Port Hope.....	Port Hope.
Crystal Water Works.....	362 Isabella St., Pembroke.....	Pembroke.
Cunningham, D. K.....	Russell St., Arnprior.....	Arnprior.
Davison, G. W.....	76 Fraser St., Port Colborne.....	Port Colborne.
Denault, Ferrier.....	Bourget.....	Bourget.
Day, Henry B.....	32 McAnnany St., Belleville.....	Belleville.
Dominion Bottling Works.....	Kirkland Lake.....	Kirkland Lake.
Dominion Soda Water Co.....	105 Manning Ave., Toronto 3.....	Toronto 3.
Dominion Soda Water Co.....	58 Rodman St., St. Catharines.....	St. Catharines.
Dominion Soda Water Mfg. Co.....	308 St. John St. W., Hamilton.....	Hamilton.
Dunfield, Samuel.....	78-82 Bridge St., Carleton Place.....	Carleton Place.
Essex Soda Water Works.....	Talbot St., Essex.....	Essex.
Finnish Bottling Works.....	326 Bloor St., South St. Marie.....	South Ste. Marie.
Ford City Bottling Works.....	223 Drouillard Road, Ford.....	Ford.
Fort William Bottling Works.....	131 N. Archibald St., Fort William.....	Fort William.
Goderich Mineral Water Co.....	West St., Goderich.....	Goderich.
Goode, Allan & Son.....	Box 251, Port Perry.....	Port Perry.
Grady, Patrick J.....	583 Water St., Peterboro.....	Peterboro.
Gray, W. J.....	Market St., Collingwood.....	Collingwood.
Haileybury Bottling Works.....	Macella St., Haileybury.....	Haileybury.
Hambly's Carbonated Beverage.....	42 Blvd., Oshawa.....	Oshawa.
Hanlon & Hicks.....	905 Tecumseh Road, Windsor.....	Windsor.
Hinds, F. P. & Son.....	20 Front St. S., Orillia.....	Orillia.
Hires, Charles E. Co., Ltd.....	47 Davies Ave., Toronto.....	Toronto.
Hoon's Bottling Works.....	43 Park St., Chatham.....	Chatham.
Horne, S. V.....	148 Ontario St., Kingston.....	Kingston.
Horsman, Chas. L.....	Palleser St., Campbellford.....	Campbellford.
Ideal Soda Works.....	266 Mitchell St., Port Colborne.....	Port Colborne.
Ingersoll Bottling Works.....	King St. E., Ingersoll.....	Ingersoll.
International Bottling Works.....	157 Machar Ave., Port Arthur.....	Port Arthur.
International Bottling Works, The.....	53 Cobalt St., North Cobalt.....	North Cobalt.
Jackson, J. A.....	Robinson St., Collingwood.....	Collingwood.
Jersey Crème Co.....	5-9 Van Horne St., Toronto.....	Toronto.
Kenora Bottling Works.....	Box 385, Kenora.....	Kenora.
King & Dalton.....	103 Duchess St., Toronto.....	Toronto.
Kingston Bottling Works.....	266 Princess St., Kingston.....	Kingston.
Kitchener Carbonating Co.....	1003 King St. E., Kitchener.....	Kitchener.
Lafontaine Bottling Works, Ltd.....	2nd and Railway Sts., Cochrane.....	Cochrane.
Lake Shore Bottling Works.....	54 Clark St., Leamington.....	Leamington.
La-Kola Co.....	22 Macaulay St., Hamilton.....	Hamilton.
Lane, J. S.....	Water St., Prescott.....	Prescott.
Leduc, Chas. A.....	39-41 Vaughan St., Ottawa.....	Ottawa.
Leslie, H.....	8 Queen St., Barrie.....	Barrie.
Lindsay Soda Water Works.....	67 King St., Lindsay.....	Lindsay.
Mack Mineral Springs Co.....	111 Welland Ave., St. Catharines.....	St. Catharines.
Maple Leaf Bottling Works.....	Timmins.....	Timmins.
McDonald & Son.....	198 First Ave. W., North Bay.....	North Bay.
McKeith, John.....	Kerr & Colbourne Sts., Oakville.....	Oakville.
McLaughlin, J. J., Ltd.....	145-155 Sherbourne St., Toronto.....	Toronto.
Murray Bottling Works.....	139 Market Sq., Windsor.....	Windsor.
New Ontario Bottling Works, Ltd.....	178 Minto St., Sudbury.....	Sudbury.
Niagara Falls Bottling Works.....	1043 Centre St., Niagara Falls.....	Niagara Falls.
Nipigon Bottling Works.....	Box 35, Nipigon.....	Nipigon.
Northern Springs.....	Ridgeway.....	Ridgeway.
O'Dair Beverages.....	16-3rd St. W., Cornwall.....	Cornwall.

**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA—Continued**

Name	Address	Location
<b>Aerated Waters—Continued</b>		
<b>ONTARIO—Concluded</b>		
Ontario Soda Water Mfg. Co.	10 Park St., Welland	Welland.
Ontario Soda Water Mfg. Co.	229 Manning Ave., Toronto	Toronto.
Orange Crush Ltd.	100 Claremont St., Toronto	982 Princess St., London
Orange Crush Ltd.	100 Claremont St., Toronto	253 Rideau St., Ottawa.
Orange Crush Ltd.	100 Claremont St., Toronto	Toronto.
Orange Crush Ltd.	100 Claremont St., Toronto	217 Cannon St. E., Hamilton.
Orange Crush Ltd.	100 Claremont St., Toronto	Rear 900 Howard Ave., Windsor.
Orange Dandy Co., Ltd.	183 Elm St., Toronto	Toronto.
Orange Juice (Toronto), Ltd.	157 Danforth Ave., Toronto	Toronto.
Orange Smash Bottling Works	61 Birch St. N. Timmins	Timmins.
Parisina Refreshment Co.	15 Sandwich St., Sandwich	Sandwich.
Penetang Bottling Co.	22 Robert St., Penetanguishene	Penetanguishene.
Perth Bottling Works	Cockburn St., Perth	Perth.
Peterborough Bottling Works	384 Queen St., Peterborough	Peterborough.
Pure Springs Co.	102 Baldwin St., Ottawa	Ottawa.
Reid, Henry W.	1 Bay St., Parry Sound	Parry Sound.
Renfrew Bottling Works	Raglan St., Renfrew	Renfrew.
Riverdale Bottling Works	34 Eaton Ave., Toronto	Toronto.
Robertson, Alex.	Homewood Ave., Mount Forest	Mount Forest.
Royal Bottling Works, The	130 First St. Fort Frances	Fort Frances.
Royal City Mineral Water Works	239 Dundas Road Guelph	Guelph.
Ryan, Joseph	413 Sandwich St. E. Windsor	Windsor.
Sunitaris Limited	Corner John and William Sts., Arnprior	Arnprior.
Sarnia Soda Water Works, Ltd.	118 Victoria St., N. Sarnia	Sarnia.
Seal Bottling Works	820 Mercer St., Windsor	Windsor.
Sioux Lookout Bottling Works	Box 208, Sioux Lookout	Sioux Lookout.
Simple Syrup Co. of Ontario, Ltd.	29-31 Terauley St., Toronto	Toronto.
Snider's Bottling Co.	126 Athens St. W., Kitchener	Kitchener.
Spring Water Bottling Works	1730 Ferry St., Niagara Falls	Niagara Falls.
Star Beverage Co., The	11 Federal St., Toronto	Toronto.
Star Bottling Works	256 Regent St., Sudbury	Sudbury.
Stinson, E. H. & Co.	St. Paul St., Alexandria	Alexandria.
St. Kitts Bottling Works	29 Vine St., St. Catharines	St. Catharines.
Stratford Soda Water Works	235 William St., Stratford	Stratford.
Sugarmen's Ginger Ale	51 Adelaide, London	London.
Sutherland Limited	12 and 14 Jarvis St., Hamilton	Hamilton.
Tally-Ho Pure Water Co.	610 Cooper St., Ottawa	Ottawa.
Taylor, Wm. & Son, Ltd.	857 Fourth Ave. E., Owen Sound	Owen Sound.
Thomas Bros. of Galt, Ltd.	45 Dickson St., Galt	Galt.
Thompson Bottling Works	294 Princess St., Kingston	Kingston.
1000 Islands Mineral Water Co.	58 Brock St. Brockville	Brockville.
Tune's Co., Ltd.	1 Hamilton Rd., London	London.
Twin City Bottling Works	819 Minnesota St., Ft. William	Ft. William.
Union Soda Water Co., Ltd.	30 St. Patrick St., Toronto	Toronto.
United Bottlers Limited	270 William St. London	London.
Vitality Aerated Water Co. (E. Gieschrecht)	Petawawa	Petawawa.
Walker & Co.	Mill St., Orangeville	Orangeville.
Wallaceburg Bottling Works	Nelson St., Wallaceburg	Wallaceburg.
Wentworth Mineral Water Co., Ltd., The	Rear 542 Main St. E., Hamilton	Hamilton.
Whistle Bottling Works	Rear of P.O., Sarnia	Sarnia.
Whistle Co. of Eastern Canada, Ltd.	208 Victoria St., Toronto	Toronto.
Wilson Charles, Limited	517-519 Sherbourne St., Toronto	Toronto.
Wilson, John T.	John St., Thorold	Thorold.
Wise, C. W.	66 Evans St., Welland	Welland.
Wright, A.	819 Arthur St., Windsor	Windsor.
<b>MANITOBA—</b>		
Aretie Drink Mfg. Co.	882 Selkirk Ave., Winnipeg	Winnipeg.
Bell Bottling Co.	1087 Selkirk Ave., Winnipeg	Winnipeg.
Bennet, H. E.	Fisher Ave., The Pas	The Pas.
City Bottling Works	Cor. Tupper & 5th Ave. N. Portage la Prairie	Portage la Prairie.
Coca-Cola Co.	90 Broadview Ave., Toronto, Ont.	Bannatyne & Dagmar, Winnipeg.
Coca-Cola Co.	90 Broadview Ave., Toronto, Ont.	20-12th St., Brandon.
Douglas & King, Ltd.	47 Higgins Ave., Winnipeg	Winnipeg.
Leo Bottling Works	19 Martha St., Winnipeg	Winnipeg.
Orange Crush Ltd.	100 Claremont St., Toronto, Ont.	Stradbroke Ave., Winnipeg.
Portage Soda Water Works	60 Tupper St., Portage la Prairie	Portage la Prairie.
Whistle Bottling Co. of Winnipeg	251 Jarvis Ave., Winnipeg	Winnipeg.
<b>SASKATCHEWAN—</b>		
Chippewa Water Co.	Fifth St., Estevan	Estevan.
Coca-Cola Co.	90 Broadview Ave., Toronto, Ont.	265 Third Ave. N., Saskatoon.
Coca-Cola Co.	90 Broadview Ave., Toronto, Ont.	1736 Cornwall St., Regina.
Currie & Hassett	415 Ave. "B", Saskatoon	Saskatoon.
Gold Seal Limited	Cor. Ave. C and 19 St. Saskatoon	Saskatoon.
Jeffs Products, Ltd.	Cor. Albert & Dewdney Sts., Regina	Regina.
Jitney Pop, The	78-80 Betts Ave., Yorkton	Yorkton.
Orange Crush Ltd.	100 Claremont St., Toronto, Ont.	311 ave 'B', S., Saskatoon.

**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA—Continued**

Name	Address	Location
<b>Aerated Waters—Concluded</b>		
<b>SASKATCHEWAN—Concluded</b>		
Pachal Bottling Works.....	Agricultural Ave., Yorkton.....	Yorkton.
Prince Albert Mineral Water Co., Ltd.....	1125—3rd Ave. W., Prince Albert.....	Prince Albert.
Regina Bottlers, Ltd.....	Montreal, 11th Ave., Regina.....	Regina.
Standard Mineral Water Works.....	1371 George St., North Battleford.....	North Battleford.
Swift Current Bottling Works.....	401 Railway St. E., Swift Current.....	Swift Current.
Thompson Bottling Co.....	561 Home St. W., Moose Jaw.....	Moose Jaw.
Watt, G. & J.....	2023 Ottawa St., Regina.....	Regina.
Weyburn Bottling Works.....	Box 514, Weyburn.....	Weyburn.
<b>ALBERTA—</b>		
Alberta Aerated Water.....	124 Lansdowne St., Wetaskiwin.....	Wetaskiwin.
Blue Label Bottling Co.....	508—3rd Ave. W., Calgary.....	Calgary.
Dominion Bottling Works.....	10172—94th St., Edmonton.....	Edmonton.
Coca-Cola Co.....	90 Broadview Ave., Toronto, Ont.....	120—4th Ave., W., Calgary.
Coca-Cola Co.....	90 Broadview Ave., Toronto, Ont.....	10345—102nd St., Edmonton.
Coca-Cola Co.....	90 Broadview Ave., Toronto, Ont.....	314—8th St. S., Lethbridge.
Ermon, R. W. Co., Ltd.....	514—11th Ave. W., Calgary.....	Calgary.
Gold Seal, Ltd.....	Saskatoon, Sask.....	807—11th Ave. W., Calgary.
McLaughlin, J. J. Ltd.....	Sherbourne St., Toronto, Ont.....	9641—102a Ave., Edmonton.
Orange Crush Ltd.....	100 Claremont St., Toronto, Ont.....	Public Market, Calgary.
Orange Crush Ltd.....	100 Claremont St., Toronto, Ont.....	10011—102nd Ave., Edmonton.
Polar Aerated Water Works.....	1301—11th Ave. E., Calgary.....	Calgary.
Prairie Rose Mfg. Co.....	9539—106 Ave., Edmonton.....	Edmonton.
Purity Bottling Works.....	518—5th St. S., Lethbridge.....	Lethbridge.
Quality Bottlers.....	1264—4th Ave. S., Lethbridge.....	Lethbridge.
Shamrock Bottling Works.....	Parke Drive, Medicine Hat.....	Medicine Hat.
<b>BRITISH COLUMBIA—</b>		
Beaver Botting Works.....	Box 577, Prince Rupert.....	Prince Rupert.
Bowness, A. C.....	Van Horn, Cranbrook.....	Cranbrook.
Coca-Cola Co.....	90 Broadview Ave., Toronto, Ont.....	808 Richard St., Vancouver.
Cross & Co., Ltd.....	38 Fourth Ave., E. Vancouver.....	Vancouver.
Crystal Spring Water Supply.....	1244 Richardson St., Victoria.....	Victoria.
Gassosa Co. Ltd.....	Rosland Ave., Trail.....	Trail.
Gold Star Bottling Works.....	Island Highway, Courtenay.....	Courtenay.
Harper, James.....	Columbia Ave., Rosland.....	Rosland.
Henley, Joseph.....	717 Princess St., New Westminster.....	New Westminster.
Kamloops Bottling Works.....	287 Victoria St., Kamloops.....	Kamloops.
MacLean Bottling Co.....	Hall St., Nelson.....	Nelson.
McCulloch, A. Co.....	201 Coldstream St., Vernon.....	Vernon.
Nanaimo Bottling Works.....	Mill St., Nanaimo.....	Nanaimo.
Old English Beverage Co., Ltd.....	625 David St., Victoria.....	Victoria.
Orange Crush Ltd.....	100 Claremont St., Toronto, Ont.....	1098 Mainland St., Vancouver.
Orange Crush Ltd.....	100 Claremont St., Toronto, Ont.....	Nelson.
Rumming, William E.....	199 Wallace St., Nanaimo.....	Nanaimo.
Salmon Arm Aerated Water Co.....	Box 40, Salmon Arm.....	Salmon Arm.
Tilley, Jas.....	Canston Ave., Kelowna.....	Kelowna.
Van Broe, Ltd.....	1955 Commercial Drive, Vancouver.....	Vancouver.



**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA—Continued**

Name	Address	Location
<b>Asbestos and Allied Products</b>		
<b>NOVA SCOTIA—</b>		
Guilford and Sons.....	649 Barrington St., Halifax.....	Halifax.
<b>QUEBEC—</b>		
Asbestos Co.....	East Broughton Station.....	East Broughton Station.
Asbestos Manufacturing Co., Ltd., The.....	17 St. James St., Quebec.....	Lachine.
Atlas Asbestos Co., Ltd.....	142 St. Peter St., Montreal.....	Montreal.
Canadian Johns-Manville Co., Ltd.....	Montreal.....	Asbestos.
<b>ONTARIO—</b>		
Canadian Raybestos Co., Ltd.....	280 Perry St., Peterborough.....	Peterborough.
Garlock Packing Co.....	Palmyra, New York, U.S.A.....	200 Queen St. N., Hamilton.
Hachmeister Lind Chemical Co.....	McKees Rocks, Penn.....	Vidil St., Sarnia.
Wild, A. C. & Co.....	38 Hiron St., Toronto 9.....	Toronto 9.
<b>MANTOBA—</b>		
Magnesite Stucco Co. of Canada, Ltd.....	417 Chalmer Ave., Winnipeg.....	Winnipeg.
<b>BRITISH COLUMBIA—</b>		
Baillie, Hugh.....	144 Alexander St., Vancouver.....	Vancouver.
R. C. Magnesite Flooring Co.....	3605 Union St., Vancouver.....	Vancouver.
Spicers Asbestos Ltd.....	140—4th Ave., W. Vancouver.....	Vancouver.

**The Cement Industry**

<b>QUEBEC—</b>		
Canada Cement Co. Ltd.....	Canada Cement Co. Bldg., Montreal.....	Hull. Montreal East.
National Cement Co.....	90 St. James St., Montreal.....	Montreal East.
<b>ONTARIO—</b>		
Canada Cement Co., Ltd.....	Canada Cement Co. Bldg., Montreal P.Q.....	Hanover. Lakefield. Belleville. Port Colborne.
St. Mary's Cement Co., Ltd.....	357 Bay St., Toronto.....	St. Mary's.
<b>MANTOBA—</b>		
Canada Cement Co. Ltd.....	Canada Cement Co. Bldg., Montreal P.Q.....	Fort Whyte.
Commercial Cement Co. Ltd.....	1002 McArthur Bldg., Winnipeg.....	Babcock.
<b>ALBERTA—</b>		
Canada Cement Co. Ltd.....	Canada Cement Co. Bldg., Montreal P.Q.....	Exshaw.
Marlboro Cement Co.....	12128—105th Ave., Edmonton.....	Marlboro.
<b>BRITISH COLUMBIA—</b>		
British Columbia Cement Co. Ltd.....	305 Belmont House, Victoria.....	Bamberton.

**Cement Products**

<b>NOVA SCOTIA—</b>		
Clory Bros.....	Stellarton.....	Stellarton.
Kentville Concrete Products Co.....	Centreville, Kings.....	Kentville.
La Have Concrete Co., Ltd.....	West La Have.....	West La Have.
<b>NEW BRUNSWICK—</b>		
Hanson, E. B.....	Main St., St. Stephen.....	St. Stephen.
Hartland Cement Block Co.....	Hartland.....	Hartland.
Scott Concrete Works.....	York St., Fredericton.....	Fredericton.
<b>QUEBEC—</b>		
Archambault, L.....	St. Ours.....	St. Ours.
Bilodeau, Ign.....	144 Ave. Renaud, Quebec.....	Quebec.
Canadian Benedict Stone, Ltd.....	420 Lexington Ave., New York City.....	Haig Ave., Montreal.
Castongay, Akléric.....	Des Erables, Montreal.....	Montreal.
Cloutier, Adélar.....	St. Rose de Laval.....	St. Rose de Laval.
Duigle, T.....	93 Galt St., Sherbrooke.....	Sherbrooke.
Desrosiers, A.....	1075 Courtrai Ave., Montreal.....	Montreal.
Duchesne, L.....	500 Hamilton St., Ville Emard, Montreal.....	Montreal.
Dugas, Isale.....	259 Jean Talon St., Montreal.....	Montreal.
Duntile Co. Ltd.....	734 Canada Cement Bldg., Montreal.....	Montreal.



**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA—Continued**

Name	Address	Location
<b>Cement Products—Continued</b>		
<b>QUEBEC—Concluded</b>		
Dutrisac, Alfred.....	305 Sir George Etienne Cartier, Montreal.....	Montreal.
Faille, G. A.....	5131 Bourbonnière, Rosemont, Montreal.....	Montreal.
Fournier, Frères Lté.....	37 Victoria, Lachine.....	Lachine.
Genest, Emile.....	St. Basile.....	St. Basile.
Guilbault Frères & Cie Inc.....	Ste. Elizabeth.....	Ste. Elizabeth.
Gignère & Patemont.....	828 Beaubien, St., Montreal.....	Montreal.
Hocloghan, J.....	604 Old Orchard Ave., Montreal.....	Montreal.
Jacques, Pierre.....	Rue St. Jacques, Grand'Mère.....	Grand'Mère.
Lafamme, C. E.....	St. Jérôme.....	St. Jérôme.
La Cie du Produit Ciment.....	St. Jérôme.....	St. Jérôme.
Larivière, Alex.....	583 St. Rémi, St., St. Henri, Montreal.....	Montreal.
La Société de Constructions Modernes.....	Chicoutimi.....	Chicoutimi.
Leberling, Jean.....	97 14ème rue Limoilou, Québec.....	Québec.
McArthur Concrete Pile and Foundation Co.....	10 Cathcart St., Montreal.....	Montreal.
Milard, L.....	5864 Delormier, Montreal.....	962 Des Carriers, Montreal.
Monette, G.....	3390 rue Notre-Dame E., Montreal.....	Montreal.
Panetta, J. B. & Co.....	5701 De Normanville, Montreal.....	Montreal.
Parand Construction Ltd.....	2 York St., Montreal.....	Montreal.
Pitt, Horace.....	17 St. Charles St., Montreal.....	Montreal.
Pizzagalli, Terrazo Co.....	105 Jean Talon St., Montreal.....	Montreal.
Raymond Cement Products Ltd.....	120 St. James St., Montreal.....	Montreal.
St. Louis, Nap.....	Ste. Ursule.....	Ste. Ursule.
Taillefer, Elie.....	St. Polycarpe.....	St. Polycarpe.
Trahan & Cie.....	5244—4th Ave., Rosemont, Montreal.....	Montreal.
<b>ONTARIO—</b>		
Artificial Stone.....	55 Albert St., Thorold.....	Thorold.
Andrews, S. J.....	Queen St., Clinton.....	Clinton.
Anthiste, W. J.....	309 Cromwell St., London.....	London.
Aristocrat Mfg. Co.....	35 Fraser Ave., Toronto.....	Toronto.
Art Granite Co.....	Box 311, Essex.....	Essex.
Ashman, T. J.....	520 Grosvenor St., London.....	London.
Banks, John.....	755 Queens Ave., London.....	London.
Barber, F.....	38 Kane Ave., Toronto.....	Toronto.
Bartonville Rock Stone, Ltd.....	Bartonville.....	Bartonville.
Bateman, Thomas.....	Leamington.....	Leamington.
Bell & Mottala.....	1757 Stanley St., Niagara Falls.....	Niagara Falls.
Bierwagen, Bros.....	88 Edward St., Kitchener.....	Kitchener.
Bodian, C. J.....	37 Bowie Ave., Fairbank, Toronto.....	Toronto.
Border Builders Supply Co., Ltd.....	1436 Howard Ave., Windsor.....	Windsor.
Boshnan, L. H.....	Bluevale.....	Bluevale.
Bowman's Builders Supplies.....	East Main St., Welland.....	Welland.
Boyd Bros.....	Osgoode.....	Osgoode.
Bridgen, Wm.....	Port Elgin.....	Port Elgin.
Brown, A. E.....	216 Oak St., Sudbury.....	Sudbury.
Brown, D. L.....	Box 364, Sudbury.....	Sudbury.
Burkholder, Geo.....	Whitevale.....	Whitevale.
Burwell, C. A.....	Tillsonburg.....	Tillsonburg.
Caldar, James.....	Fergus.....	Fergus.
Campbell, D. S.....	St. Marys.....	St. Marys.
Campbell, John.....	181 Emery St., London.....	London.
Canada Re-inforced Concrete Pipe Works Schulz, John.....	15 Sterling Ave., Kitchener.....	Kitchener.
Canadian Concrete Products Co., Ltd.....	122 S. Michigan Ave., Chicago, Ill.....	Belleville.
Cast Stone Blocks Co.....	Bridgeburg.....	Bridgeburg.
Cement Products Co.....	1877 Howard Ave., Windsor.....	Windsor.
Chatham Cement, Tile and Block Co., Ltd.....	Richmond St., Chatham.....	Chatham.
Chick Fuel & Supply Co., Ltd.....	951 McDougall St., Windsor.....	Windsor.
Clarkson Cement Tile & Block (Pinchin, J. H.).....	Clarkson.....	Clarkson.
Clemons & Miller.....	West Lincoln & Wilton Ave., Welland.....	Welland.
Corinthian Stone Co.....	20 Durham St., Guelph.....	Guelph.
Cross Builders Supply Co., Ltd.....	924 Windsor Ave., Windsor.....	Windsor.
Crystal Stone Works.....	580 Ontario St., Stratford.....	Stratford.
Devitt, W. J.....	Brooklin.....	Brooklin.
Dewar, James S.....	Paisley.....	Paisley.
Doidge, J. A.....	261 Ottawa St., N. Hamilton.....	Hamilton.
Dominion Concrete Co.....	Kempville.....	Kempville.
Duntile & Builders Supplies Ltd.....	65 York St., Hamilton.....	Bartonville.
Fairbank Block & Supply Co.....	208 Glenholm Ave., Toronto 10.....	Toronto.
Fletcher, J. H. & Sons.....	R. R. 1, Ridgeville.....	Ridgeville.
Fulton, John.....	Pakenham.....	Pakenham.
Garnett, Thos. & Sons.....	Barrett St., Port Hope.....	Port Hope.
Gendreau, W.....	925 Pierre Ave., Windsor.....	Windsor.
Gillie, Alfred.....	Hespeler Rd., Galt.....	Galt.
Grace, Thomas.....	291 S. Christina St., Sarnia.....	Sarnia.
Granite Concrete Block Co., Ltd.....	832 Weston Rd., Toronto.....	Toronto.
Hall, John Warren.....	677 Water St., Peterborough.....	Peterborough.
Hayley, Harry.....	Hurdman Road, Ottawa.....	Ottawa.
Henson & Co.....	405 Gorge Rd., Victoria.....	Victoria.
Hewitt, A. B. & Son.....	Princeton.....	Princeton.
Holbeck, B. A.....	Kingsville.....	Kingsville.
Hoyles, Arthur.....	St. George St., Dresden.....	Dresden.

**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA—Continued**

Name	Address	Location
<b>Cement Products—Concluded</b>		
<b>ONTARIO—Concluded</b>		
Hubbell, Charles.....	Thamesville	Thamesville.
Hyatt Brothers.....	290 Egerton St., London.....	London.
Hunt, J. W. & Sons.....	Mount Forest.....	Mount Forest.
Hyndman, John.....	Gorrie	Gorrie.
Independent Concrete Pipe Co., Ltd.....	198 Biddell St., Woodstock.....	Woodstock.
Ingroville, Stephen.....	Metcalfe St., Strathroy.....	Strathroy.
Jago Concrete Products Co.....	New Toronto	New Toronto.
Johnston, J. H.....	124 Holborne St., London.....	London.
Jones-Lockhart Ltd.....	2 Albert St., St. Catharines.....	St. Catharines.
Killbourne, H. & Son.....	145 1/2 Wharncliffe Road, London.....	London.
Kingsborough, Jas. C.....	51 Mellourne St. W., Lindsay.....	Lindsay.
Kingston Cement Products.....	69 Patrick St., Kingston.....	Kingston.
Lawrence Bros.....	Stoney Creek.....	Stoney Creek.
Lelebyre, Jos.....	710 Pierre Ave., Windsor.....	Windsor.
Legg, Stanley.....	712 Oxford, E. London.....	London.
Lushman, W. H.....	Box 100, Cayuga.....	Cayuga.
Lindley, E.....	11 Hillary Ave., Toronto.....	Toronto.
Lumber & Cement Products Co. Ltd.....	418 1/2 Talbot St., London.....	London.
Lyons Fuel & Supply Co., Ltd.....	Sault Ste. Marie	Sault Ste. Marie.
McClelland, R. J.....	378 Brock St., Kingston.....	Kingston.
Martyn, rt. J.....	48 Prince Edward Ave., Niagara Falls.....	Niagara Falls.
Miller, Albert.....	50 Harvey St., Chatham.....	Chatham.
Miller, Thomas.....	343 Peter St., Sandwich.....	Sandwich.
Mitchell, Ralph R.....	1420 Ferry St., Niagara Falls.....	Niagara Falls.
Moore, T. L.....	Box 275, Beausville.....	Beausville.
Mould, Arthur.....	44 Bouillie St., London.....	London.
Nicholson, J. B. Ltd.....	901 Excelsior Life Bldg., Toronto.....	Toronto.
Northwestern Cement Brick & Block Co.....	Timmins	Timmins.
North Oshawa Cement Works.....	775 Albert St., North Oshawa.....	North Oshawa.
Nuttall, Wm.....	Hamilton St., Preston.....	Preston.
Oil Springs Tile and Cement Co.....	Oil Springs	Oil Springs.
Ontario Cement Products Co.....	67a Gloucester St., Toronto.....	Toronto.
Osterhout, Peter.....	Room 203 Exchange Building, Windsor.....	Windsor.
Page George, Leslie.....	R. R. 3, Lucknow.....	Lucknow.
Pearless Artificial Stone Ltd.....	510 Rhodes Ave., Toronto.....	Toronto.
Petypiece, Limited.....	Amherstburg	Amherstburg.
Pfaff, W. E.....	Queen St., Hensall.....	Hensall.
Phante, E. F.....	801 Catarisqui St., Windsor.....	Windsor.
Posg, Geo.....	Albert Ave., Ridgetown.....	Ridgetown.
Proulx, A. A.....	1088 Somerset St. W., Ottawa.....	Ottawa.
Ratcliffe, E. B. Ltd.....	King St., Bartonville.....	Bartonville.
Ridgeville, Concrete Works.....	Ridgeville	Ridgeville.
Robidoux, Henry.....	Box 323 Amherstburg.....	Amherstburg.
Robinson, Ernest E.....	Mitchell	Mitchell.
Ross, Charles & Son.....	Dunnville	Dunnville.
Russello, Howard.....	Leamington	Leamington.
Sarnia Cement Products, Ltd.....	Point Edward	Point Edward.
St. Onge, Hormidas.....	157 Hall Ave., Windsor.....	Windsor.
Schmidt, J. T.....	R. R. 1, Waterloo.....	Waterloo.
Shoemaker, Allen.....	R. R. 4, Kitchener.....	Kitchener.
Sheel, Wm.....	214 Pierre St., Windsor.....	Windsor.
Somerville, W. G. & Son.....	Division St., Welland.....	Welland.
Stanley, J.....	Stanley's Corners.....	Stanley's Corners.
Swatman, G. W.....	1064 Lillian St., Windsor.....	Windsor.
Sydenham Block and Tile Co.....	Box 661, Wallaceburg.....	Wallaceburg.
Tambling, A. L.....	Dunnville	Dunnville.
Taylor, Fred.....	Fort Erie	Fort Erie.
Tigert, John.....	R. R. No. 3, Goderich.....	Goderich.
Ward, John.....	149 Simcoe St. E., Hamilton.....	Hamilton.
Watterworth, Chas. W.....	Beausville	Beausville.
Wells, Jas.....	449 Philip St., London.....	London.
Wessels, D. S., Co.....	1625 Euclid Ave., Detroit, Mich.....	109 Ottawa St., Walker-ville.
White, Homer & Co.....	Spring St., Picton.....	Picton.
White, Sydney.....	R. R. 4, St. Catharines.....	St. Catharines.
Williams, Geo. C.....	Wheatley	Wheatley.
Young, John & Son.....	Ridgeway	Ridgeway.
<b>SASKATCHEWAN—</b>		
Saskatchewan Concrete Culvert & Pipe Co.....	5 Banner Block, Regina.....	Regina.
Saskatoon Cement Block Works.....	127 Ave. C.N., Saskatoon.....	Saskatoon.
<b>ALBERTA—</b>		
Alberta Concrete Works.....	10356-105 St., Edmonton.....	Edmonton.
<b>BRITISH COLUMBIA—</b>		
Bennett, W. H.....	2314 Rock Bay Ave., Victoria.....	Victoria.
B. C. Concrete Co., Ltd.....	77th Ave. & Oak St., Vancouver.....	Vancouver.
Hull, William.....	Pleasant Valley Road, Vernon.....	Vernon.
Spokane Concrete Pipe Co.....	Box 1033 Spokane, Washington.....	Oliver.
Star Cement Laundry Tray Co.....	3895 Ontario St., Vancouver.....	Vancouver.
Whiting & McCleary.....	8699 Hudson St., Vancouver.....	Vancouver.

**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA—Continued**

Name	Address	Location
<b>Coke and By-Products</b>		
<b>NOVA SCOTIA—</b>		
Dominion Iron and Steel Co. ....	Sydney .....	Sydney.
<b>ONTARIO—</b>		
Alcona Steel Corporation, Ltd. ....	Sault Ste. Marie .....	Sault Ste. Marie.
Hamilton By-Product Coke Ovens Ltd. ....	15 Main St., Hamilton .....	Hamilton.
Steel Company of Canada, Ltd. ....	Hamilton .....	Harvey Lane, Hamilton
<b>BRITISH COLUMBIA—</b>		
Crow's Nest Pass Coal Co., Ltd. ....	Fernie .....	Fernie.
Granby Consolidated Mining, Smelting and Power Co. ....	Anyox .....	Anyox.
<b>Illuminating and Fuel Gas</b>		
<b>NOVA SCOTIA—</b>		
Nova Scotia Tramways & Power Co., Ltd., The. ....	603 Barrington St., Halifax .....	Halifax.
<b>NEW BRUNSWICK—</b>		
New Brunswick Power Co. ....	1 Dock St., St. John .....	St. John.
Pintsch Compressing Co. ....	New Haven, Conn., U.S.A. ....	McAdam Jct.
<b>QUEBEC—</b>		
Corporation of Sherbrooke .....	Wellington St., Sherbrooke .....	Sherbrooke.
Montreal Light, Heat & Power Consolidated .....	83 Craig St. W., Montreal .....	St. Patrick St., Lasalle.
Pintsch Compressing Co. ....	New Haven, Conn., U.S.A. ....	635 Lusignan St., Montreal.
Quebec Railway Light, Heat and Power Co., Ltd. ....	229 St. Joseph St., Quebec .....	St. Malo.
<b>ONTARIO—</b>		
Barrie Gas Co., Ltd. ....	16 Queen St., Barrie .....	Barrie.
Board of Light and Heat Commission .....	Guelph .....	Guelph.
Brockville Public Utilities Commission .....	Victoria Bldg., Brockville .....	Brockville.
City Gas Co. of London .....	215 Dundas St., London .....	Cor. Horton and Ridout, Sts., London.
City of St. Thomas Gas Dept. ....	St. Thomas .....	St. Thomas.
Consumers Gas Co. of Toronto .....	19 Toronto St., Toronto .....	Front St. E., East Ave. Toronto.
Corporation of the City of Belleville .....	Belleville .....	Belleville.
Hydro-Electric Power Commission of Ontario .....	190 University Ave., Toronto, 2 .....	Cobourg.
Hydro-Electric Power Commission of Ontario .....	190 University Ave., Toronto, 2 .....	122 Albert St., Oshawa.
Hydro-Electric Power Commission of Ontario .....	190 University Ave., Toronto, 2 .....	90 Simcoe St., Peterborough.
Ottawa Gas Co. ....	56 Sparks St., Ottawa .....	Ottawa.
Pintsch Compressing Co. ....	New Haven, Conn., U.S.A. ....	Fort William.
Pintsch Compressing Co. ....	New Haven, Conn., U.S.A. ....	21 Stanley St., North Bay.
Pintsch Compressing Co. ....	New Haven, Conn., U.S.A. ....	John St., Toronto.
Port Hope Gas Co. ....	John St., Port Hope .....	Port Hope.
Public Utility Commission .....	19 Queen St., Kingston .....	Kingston.
Public Utilities Commission of Kitchener .....	189 King St. W., Kitchener .....	Kitchener.
Public Utilities Commission of Owen Sound .....	Owen Sound .....	Owen Sound.
Public Utility Commission .....	7-9 Ontario St., Stratford .....	Stratford.
Stormont Electric and Power Co. ....	16-2nd St., Cornwall .....	Cornwall.
Waterloo Water and Light Commission Gas Dept. ....	Waterloo .....	Waterloo.
<b>MANITOBA—</b>		
Canada Carbide Co. ....	611 Power Bldg., Montreal, P.Q. ....	Morris.
Canada Carbide Co. ....	611 Power Bldg., Montreal, P.Q. ....	Deloraine.
Canada Carbide Co. ....	611 Power Bldg., Montreal, P.Q. ....	Hamiota.
Canada Carbide Co. ....	611 Power Bldg., Montreal, P.Q. ....	Munitou.
Canada Gas and Electric Corporation .....	235-10th St., Brandon .....	Park & Pacific Ave., Brandon.
Pintsch Compressing Co. ....	New Haven, Conn., U.S.A. ....	Sutherland Ave., Win- nipeg.
Souris Consumers Gas Co., Ltd. ....	Souris .....	Souris.
Winnipeg Electric Railway Co. ....	Electric Railway Chambers, Winnipeg .....	Winnipeg.
<b>SASKATCHEWAN—</b>		
Canada Carbide Co. ....	611 Power Bldg., Montreal, P.Q. ....	Moosomin.
Pintsch Compressing Co. ....	New Haven, Conn., U.S.A. ....	Moose Jaw.
<b>ALBERTA—</b>		
Pintsch Compressing Co. ....	New Haven, Conn., U.S.A. ....	10354-108th St., Ed- monton.
<b>BRITISH COLUMBIA—</b>		
British Columbia Electric Power & Gas Co., Ltd. ....	425 Corral St., Vancouver .....	Vancouver.
City of Nelson .....	Railway St., Box 1028, Nelson .....	Nelson.
Pintsch Compressing Co. ....	New Haven, Conn., U.S.A. ....	Drake & False Creek, Vancouver.
Vancouver Gas Co., Ltd. ....	425 Corral St., Vancouver .....	Vancouver
Victoria Gas Co. ....	1016 Langley St., Victoria .....	Victoria.



**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA—Continued**

Name	Address	Location
<b>Glass Products (including the bevelling, bending and cutting of plate and window glass, and the manufacturing of mirrors, art glass and cut glass)</b>		
<b>NEW BRUNSWICK—</b>		
Murray & Gregory, Ltd.	Douglas Ave., St. John	St. John.
<b>QUEBEC—</b>		
Consolidated Plate Glass Co.	241 Spadina Ave., Toronto, Ont.	413 St. Sulpice, Montreal.
Grimson, Geo.	336 Craig St. W., Montreal.	Montreal.
Hobbs Mfg. Co., Ltd.	London, Ont.	444 St. James St., Montreal.
Montreal Art Glass Works	5844 St. Lawrence Blvd., Montreal.	Montreal.
O'Shea, J. P. & Co.	929 Perrault Lane, Montreal.	Montreal.
Perfection Glass Co., Ltd.	2977 Hutchison St., Montreal.	Montreal.
Phillips, Geo. & Co., Ltd.	585 St. Timothée St., Montreal.	Montreal.
<b>ONTARIO—</b>		
Advance Glass Co.	175 King St., Stratford.	140 Euclid Ave., Toronto.
Advance Glass Co.	175 King St., Stratford.	Stratford.
American Optical Co. of Canada.	Toronto.	257 Coleman St., Belleville
Bullas, J., Glass Co.	Kitchener.	Kitchener.
Canadian Flood Lighting Co.	124 Adelaide St., Toronto.	Toronto.
Canadian Tumbler Co.	83-85 King St. E., Toronto.	Toronto.
Central Ornamental Glass Co.	83 McCaul St., Toronto.	Toronto.
Clappertons, Ltd.	Deseronto.	Deseronto.
Colonial Art Glass Co.	384 Bank St., Ottawa.	Ottawa.
Consolidated Plate Glass Co. of Canada, Ltd.	241 Spadina Ave., Toronto.	Toronto.
Dundas Plate Glass Co., Ltd.	Dundas.	Dundas.
Excelsior Plate Glass Co., Ltd.	189 Queen St. E., Toronto.	Toronto.
Federal Glass Co. Ltd.	66-8 Tecumseh St., E. Toronto 2.	Toronto 2.
Hill, Arthur E. & Co.	28 Keystone Ave., Toronto.	Toronto.
Hobbs Manufacturing Co., Ltd.	London.	304 Ridout St., London.
Hobbs Manufacturing Co., Ltd.	London.	121 Liberty St., Toronto.
Horwood Glass Mfg. Co., Ltd.	102 Bank St., Ottawa.	Ottawa.
Hughes, W. J.	212 Wychwood Ave., Toronto.	Toronto.
Imperial Optical Co.	21 Wilton Sq., Toronto 2.	Toronto 2.
London Art Glass and Mirror Works, Ltd.	226 Talbot St., London.	London.
Luxer Prism Co., Ltd.	162 Parliament St., Toronto.	Toronto.
Lyon, N. T. Glass Co., Ltd.	141 Church St., Toronto.	Toronto.
McCausland, Robt., Ltd.	141-143 Spadina Ave., Toronto.	Toronto.
Ontario Plate Glass, Ltd.	112 King St. W., Hamilton.	Hamilton.
Perfection Glass Co. Ltd.	91 Don Roadway, Toronto.	Toronto.
Phillips, W. E. & Co.	Oshawa.	Oshawa.
Pringle & London	149 Jarvis St., Toronto.	Toronto.
Sovereign Cut Glass Co.	34 St. Patrick St., Toronto.	Toronto.
Tait Plate Glass Window Glass Co.	Victoria and Edward Sts., Kitchener.	Kitchener.
Wallaceburg Cut Glass Works	Wallaceburg.	Wallaceburg.
<b>MANITOBA—</b>		
Canadian Cut Glass Ltd.	183 James St., Winnipeg.	Winnipeg.
Consolidated Plate Glass Co.	241 Spadina Ave., Toronto.	375 Balmoral St., Winnipeg.
Hobbs Mfg. Co., Ltd., The	London, Ont.	360 Princess St., Winnipeg.
<b>ALBERTA—</b>		
Capital Glass Bevelling Work Ltd.	9812 Jasper Ave., Edmonton.	Edmonton.
<b>BRITISH COLUMBIA—</b>		
Borgardus Wickens, Ltd.	1000 Homer St., Vancouver.	Vancouver.
Fraser J. Glass Works	2120 Granville, Vancouver.	Vancouver.
Holt, W. & Son	400-426 Second Ave., W. Vancouver.	Vancouver.
Kingsway Glass Co.	385 Kingsway, Vancouver.	Vancouver.
Regal Art Glass Co.	1471 Broadway, W. Vancouver.	Vancouver.
<b>Glass (Pressed and Blown)</b>		
<b>QUEBEC—</b>		
Consumers Glass Co., Ltd.	2nd Ave., Ville St. Pierre, Montreal.	Ville St. Pierre, Montreal.
Dominion Glass Co., Ltd.	1111 Beaver Hall Hill, Montreal.	900 Wellington St., Montreal.
Dominion Glass Co., Ltd.	1111 Beaver Hall Hill, Montreal.	Delormier Ave., Montreal.
<b>ONTARIO—</b>		
Beaver Flint Glass Co. of Toronto, Ltd.	547 Parliament St., Toronto.	Toronto.
Dominion Glass Co., Ltd.	1111 Beaver Hall Hill, Montreal, P.Q.	Chapelle St., Hamilton.
Dominion Glass Co., Ltd.	1111 Beaver Hall Hill, Montreal, P.Q.	Toronto.
Dominion Glass Co., Ltd.	1111 Beaver Hall Hill, Montreal, P.Q.	Wallaceburg.
Dominion Glass Co., Ltd.	1111 Beaver Hall Hill, Montreal, P.Q.	388 Carlaw Ave., Toronto.
Richards Glass Co., Ltd.	102 Atlantic Ave., Toronto.	Toronto.
<b>ALBERTA—</b>		
Dominion Glass Co., Ltd.	1111 Beaver Hall Hill, Montreal, P.Q.	Redcliffe.



**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA—Continued**

Name	Address	Location
<b>The Lime Industry</b>		
<b>NOVA SCOTIA—</b>		
Dominion Iron and Steel Co. Ltd.	Sydney	Sydney.
Eastern Lime Co. (H. C. Burdell)	Windsor	Windsor.
<b>NEW BRUNSWICK—</b>		
Bathurst Co. Ltd.	Bathurst	Bathurst.
Peters, C. H. & Sons, Ltd.	Ward St., Saint John	Torryburn.
Provincial Lime Co., Ltd.	Box 986, Saint John	Lawlor's Lake.
Purdy and Green	323 Main St., Saint John	Saint John.
Randolph and Baker, Ltd.	Randolph	Randolph.
Stetson, Cutler & Co., Ltd.	Campbellton	Saint John.
<b>QUEBEC—</b>		
Arnaud & Beaudry	Joliette	Joliette.
Baron, A. & Frere	St. Dominique de Bagot	St. Dominique de Bagot
Boivin, Arthur	Pont Rouge	Pont Rouge.
Dominion Lime Co., The	East Angus	Lime Ridge.
Ducharme, C.	Guigues	Guigues.
Fortin, Octave	Val Brillant	Val Brillant.
Heron, Octave	St. Louis de Champlain	St. Louis de Champlain.
Lalumiere, Joseph	St. Dominique de Bagot	St. Dominique.
Laurentian Stone Co., Ltd.	250 Catherine St., Ottawa, Ontario	Hull.
Limoses Fils & Cie	552 rue Poupert, Montreal	Montreal.
Naud, Edouard	St. Marc des Carrieres	St. Marc des Carrieres.
St. Marc Lime Co., Ltd.	St. Marc des Carrieres	St. Marc des Carrieres.
Standard Lime Co., Ltd.	Joliette	St. Marc des Carrieres.
Stinson-Reeb Builders Supply Co., Ltd.	330 Dorchester St., W. Montreal	Montreal.
<b>ONTARIO—</b>		
American Cyanamid Co.	535—5th Ave., New York City, U.S.A.	Niagara Falls.
Beuchville White Lime Co.	Beuchville	Beuchville.
Bieslerman, Albert G.	Golden Lake	Golden Lake.
Brunner Mond (Canada), Ltd.	Amherstburg	Anderdon Tp.
Cameron, W. M.	Carleton Place	Carleton Place.
Canada Lime Co., Ltd.	465 Bay St., Toronto	Sand Point.
Canada Gypsum Alabastine Ltd.	Paris	Elova.
Chalmers Lime Works	689 Seventh St. West, Owen Sound	Teeswater.
Christie, Henderson & Co., Ltd.	201 Crown Office Bldg., Toronto 2	Owen Sound.
Dominion Rock Products Ltd.	1017 New Birks Bldg., Montreal, P.Q.	Hesper.
Dominion Sugar Co., Ltd.	Chatham	Kelso.
Gallagher Lime and Stone Co., Ltd.	James Street, Hamilton	Puslinch.
Harvey, E., Ltd.	15 Douglas St., Guelph	Eganville.
Jamieson, J. M.	Foresters Falls	(Chatham.
Jamieson Lime Co.	Hall St., Renfrew	Wallaceburg.
Kinkley, H.	Napanee	Hamilton.
Murshall, James	Hamilton	Rockwood.
Robertson, D., Co., Ltd.	26 Queen St., East Toronto	Foresters Falls
Shone Lime Co.	Eganville	Renfrew.
Standard White Lime Co., Ltd.	15 Douglas St., Guelph	Napanee.
Standard Chemical Co., Ltd.	200 Bay St., Toronto	Hamilton.
Toronto Brick Co., Ltd.	897 Bay St., Toronto	Milton.
Toronto Lime Co., Ltd.	26 Queen St., E. Toronto	Eganville.
Union Carbide Co. of Canada, Ltd.	46 King St. W., Toronto	(Beuchville.
Yogan, Samuel	Gould St., Warton	(Guelph.
Weppler, Henry	R.R. No. 2, Priceville	Eganville.
<b>MANITOBA—</b>		
Gillis Quarries, Ltd.	Spruce and Richard Sts., Winnipeg	Garson.
Manitoba Gypsum Co., Ltd.	Box 3057, Winnipeg	Winnipeg.
Moosehorn Lime Co., Ltd., The	214 Avenue Bldg., Winnipeg	Moosehorn.
Winnipeg Supply and Fuel Co., Ltd.	214 Avenue Bldg., Winnipeg	Stonewall.
<b>ALBERTA—</b>		
Loder's Lime Co., Ltd.	Kananaskis	Kananaskis.
Sunmit Lime Works	Box 273, Lethbridge	1½ miles east of Crow's Nest.
<b>BRITISH COLUMBIA—</b>		
Hedley Gold Mining Co., Ltd.	Hedley	Hedley.
Pacific Lime Co., Ltd.	744 Hastings St. W., Vancouver	Hubber Bay, Texada Island.
Rosebank Lime Co.	744 Hastings St. W., Vancouver	Esquimalt Harbour.

**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA—Continued**

Name	Address	Location
<b>Petroleum Products</b>		
<b>(a) Lubricating Oils</b>		
<b>QUEBEC—</b>		
Economic Products, Ltd.....	1040 Durocher St., Montreal.....	Outremont, Montreal.
Jaffe Co., Ltd.....	6346 Clarke St., Montreal.....	Montreal.
Three in One Oil Co.....	130 William St., New York, U.S.A.....	2 Ave. Ville St. Pierre, Montreal.
<b>ONTARIO—</b>		
Campbell Greased Oil Co.....	414 Eastern Ave., Toronto.....	Toronto.
Dominion Oil Co., Ltd.....	263 Wallace Ave., Toronto.....	Owen Sound.
Galena Signal Oil Co.....	134 Royce Ave., Toronto 9.....	Toronto 9.
Ontario Lubricating Co., Ltd.....	120 Chatham St., Hamilton.....	Hamilton.
Peterson Core Oil & Mfg. Co. of Canada, Ltd.....	Chicago, Ill., U.S.A.....	Harmony Ave., Hamilton.
<b>(b) Petroleum Refining</b>		
<b>NOVA SCOTIA—</b>		
Imperial Oil Refineries, Ltd.....	445 S. Christina St., Sarnia, Ont.....	Imperial.
<b>QUEBEC—</b>		
Frontenac Oil Refineries, Ltd.....	New Birks Bldg., Montreal.....	Montreal.
Imperial Oil Refineries, Ltd.....	445 S. Christina St., Sarnia, Ont.....	3250 Notre Dame St. E., Montreal.
<b>ONTARIO—</b>		
British American Oil Co., Ltd.....	1312 Royal Bank Bldg., Toronto.....	Toronto.
Canadian Oil Refineries, Ltd.....	Toronto.....	Petrolia.
Imperial Oil Refineries, Ltd.....	445 S. Christina St., Sarnia.....	Sarnia.
McColl Bros.....	114 Don Esplanade, Toronto.....	Toronto.
<b>MANITOBA—</b>		
North Star Oil & Refining Co.....	303 Scott Block, Winnipeg.....	St. Boniface.
<b>SASKATCHEWAN—</b>		
Imperial Oil Refineries, Ltd.....	445 S. Christina St., Sarnia, Ont.....	Regina.
<b>ALBERTA—</b>		
Alberta Refining Co., Ltd.....	Cor. 17th Ave. and 1st St. W., Calgary.....	Coalgate.
Alberta Refineries, Ltd.....	Edmonton.....	Edmonton.
Arctic Refineries, Ltd.....	Lethbridge.....	Lethbridge.
Canada Southern Oil & Refining Co., Ltd.....	Alberta Corners, Black Diamond.....	Black Diamond.
Imperial Oil Refineries, Ltd.....	445 S. Christina St., Sarnia, Ont.....	Calgary.
Maple Leaf Oil & Refining Co.....	Coultas.....	Coultas.
Regal Oil & Refining Co., Ltd.....	Manchester Subdivision, Calgary.....	Calgary.
<b>BRITISH COLUMBIA—</b>		
Imperial Oil Refineries, Ltd.....	445 S. Christina St., Sarnia, Ont.....	Lang.
Union Oil Co. of Canada, Ltd.....	617 W. 7th St., Los Angeles, Cal., U.S.A.....	Port Moody, North Vancouver.
Vancouver Oil Refining.....	567 Burrard St., Vancouver.....	

**Products from Domestic Clay**
**Brick and Tile**

<b>NOVA SCOTIA—</b>		
Brooks, Geo.....	New Glasgow.....	Plymouth.
Brooks, Stephen and Sons.....	Box 359, New Glasgow.....	New Glasgow.
Miller, Jas. B.....	Elmsdale.....	Barney's Brook.
Nova Scotia Clay Works, Ltd.....	Havelock St., Amherst.....	Elmsdale.
Shaw, L. E., Ltd.....	Avonport.....	Pugwash, Avonport.
<b>NEW BRUNSWICK—</b>		
Ryan, M. and Son, Ltd.....	Box 575, Fredericton.....	Woodstock Road, Fredericton.

**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA—Continued**

Name	Address	Location
<b>Domestic Clay Products Industry—Continued</b>		
<b>Brick and Tile—Continued</b>		
<b>QUEBEC—</b>		
Ascot Tile and Brick Co., Ltd.	Ascot Corner	Ascot Corner
Bell, W. and D.	1286 St. Valier St., Quebec	Little River Road.
Citadel Brick, Ltd.	14 St. Joseph St., Quebec	Boischatel.
Granby Clay Products, Ltd.	P.O. Box 266, Granby	Granby Tp.
Gravel, Joseph	Acton Vale	Acton Vale.
Hodgins, David G.	Shawville	Shawville.
La Brique de Chicoutimi Ltée.	Chicoutimi	Chicoutimi.
La Cie de Brique de L'Isle Ltée.	64 de la Gare, Montmagny	L'Isle Station, Clarendon.
Lennoxville Brick and Tile Co.	Lennoxville	Ascot Range.
L. Industrielle de St. Tite, Ltd.	St. Tite	St. Tite
Longpre, Emile	St. Felix de Valois	St. Felix de Valois.
McCrea Valley Brick Co., Ltd.	Oliver Bldg., Sherbrooke	Lennoxville.
National Brick Co. of Laprairie, Ltd.	Canada Cement Co., Bldg., Montreal	(Tolson)
Oliver, Frank	Ormstown	Laprairie
Proulx Freres	P.O. Box 384, Richmond	Ormstown.
St. Lawrence Brick Co., Ltd., The	71 St. James St., Montreal	Richmond.
Scott Brick Co., Ltd.	8 rue St. Joseph, Quebec	Laprairie.
Suddard, E. P.	Gaspé	Scott Junction.
		Douglas West Tp.
<b>ONTARIO—</b>		
Alvinston Brick & Tile Co., Ltd.	Box 26, Alvinston	Alvinston.
Bartonville Pressed Brick Co., Ltd.	620 Lister Block, Hamilton	Bartonville.
Batchelor, Samuel	Proton Station	Proton Station.
Booth Brick & Lumber Co., The	Drawer 61, New Toronto	Fulbrook Tp.
Brampton Pressed Brick Co., Ltd.	Brampton	Brampton.
Broadwell, B. and Son	Kingsville	Kingsville.
Butwell, Richard	107 Lake Shore Rd., Humber Bay, Toronto	Humber Bay.
Caledon Mountain Shale Products	600 Bay St., Toronto	Caledon.
Campbell, Neil F. & Sons	R.R. No. 1, West Lorne	West Lorne.
Canadian Fireclay Products, Ltd.	604 Adelaide St. E., Toronto	New Toronto.
Canadian Pressed Brick Co., Ltd.	195 Ottawa St. S., Hamilton	Hamilton.
Chapman, John	Napanee	Napanee.
Chapman Brick Co., Ltd.	104 Dawes Rd., Toronto	Toronto.
Cheeseman, Peter	670 King St. W., Hamilton	Hamilton.
Cooksville Shale Brick Co., Ltd.	120 St. James St., Montreal, P.Q.	Cooksville.
Cooper, W. H.	312 Gladys Block, Hamilton	Hamilton.
Corahill, James & Sons, Ltd.	Grand Ave. E., Chatham	Chatham.
Crang, Jethro	22 Thorne Crescent, Toronto	Toronto.
Crawford Bros.	451 King St. W., Hamilton	Hamilton.
Curtin, Frank	R.R. No. 4 Lindsay	Lindsay.
Curtis Bros.	Box 809, Peterboro	Peterboro.
DeLaplante, J. E.	Dawes Rd., Coleman P.O., Toronto	Toronto.
Deller, Albert and Son	Brownsville	Brownsville.
Deller Bros.	R.R. No. 2 Norwich	Near Norwich.
Deverall, T. S.	Whitby	Whitby.
Doehart Brick & Terra-Cotta Works	Arnprior	Arnprior.
Dolan, John	R.R. No. 2 Watford	Watford.
Dominion Sewer Pipes and Clay Industries, Ltd.	Swansea, Toronto 3	Aldershot.
Donaldson, S. E.	R.R. 4, Harriston	Harriston.
Donaldson, T.	Grasnoek	Gresnoch.
Don Valley Brick Works, Ltd.	114 Federal Bldg., Toronto	Toronto.
Douglas and Douglas	Wilkesport	Wilkesport.
Dublin Brick & Tile Yard	Dublin	Dublin S.
Dunn, David	New Liskeard	New Liskeard.
Elliott, Charles	Bluevale	Bluevale.
Elliott, Wm.	Glenannan	Glenannan.
Elliott, James, Jr.	519 Wellington St. W., Sault Ste Marie	E. Korak Tp.
Frid Bros.	Macklin St. & Dundas Road, Hamilton	Hamilton.
Gammage, C. R.	R.R. No. 2 Dresden	Dresden.
Gardiner, Wm.	Box 83, Glenheim	Glenheim.
Godfrey, Thomas & Co.	Carleton Place	Carleton Place.
Grimsby Brick and Tile Co.	Grimsby	Grimsby.
Hallatt, Herbert & Son	Box 93, Comber	Comber.
Hallatt, Wm.	Richard Block, Chatham	Merlin.
Halton Brick Co., Ltd.	28 Symes Rd., Toronto 9	Eggington Tp.
Hamilton Pressed Brick Co.	Kensington Ave. S., Hamilton	Hamilton.
Hill, A. W.	R.R. 1, Coatsworth	East Tilbury Tp.
Hill, Aaron	Essex	Essex.
Herock Bros	Box 83, Bowmanville	Bowmanville.
Hitch, D. A.	Erie St. N., Ridgetown	Ridgetown.
Hitch, Thomas	Box 254, St. Thomas	St. Thomas.
Hodder, Mrs. J. H. and Sons	Dutton	Dutton.
Houston Co., Ltd., The	Tweed	Tweed.
Howlett, Fred and Sons	Box 3, Petrolia	Petrolia.
Huntsville Brick and Tile Workers	Huntsville	Huntsville.
Inteprovincial Brick Co., Ltd.	30 Toronto St., Toronto	(Cheltenham)
Jackson, W. B.	290 Rawdon St. Brantford	Milton.
Janes, D. A.	R.R. No. 1, Mt. Brydges	Brantford.
		Mt. Brydges.



**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA—Continued**

Name	Address	Location
<b>Domestic Clay Products Industry—Continued</b>		
<b>Brick and Tile—Continued</b>		
<b>ONTARIO—Concluded</b>		
Jamieson Lime Co.	Renfrew	Renfrew.
Jasperson, B. Brick & Tile Yards.	Kingsville	Coatsworth.
Jervis, W. J.	R. R. No. 3 Dorchester Station.	Dorchester Station.
Kerr, Chas.	Goderich	Ben Miller.
Koebel Bros.	Box 54 St. Clements	St. Clements.
Kruse Bros.	Seaforth	Tuckersmith Tp.
Labe, Geo. A. and Son.	Foxboro	Foxboro.
Lindsay, Earl	R. R. No. 2 Wallaceburg	Wallaceburg.
Martin, Thos. E.	Thamesville	Thamesville.
McComb, Chester	R. R. No. 2, London	London.
McCormick Bros.	R. R. No. 5 Watford	Kings-court Junction.
McEachran, N.	Highgate	Highgate.
Melvor Bros.	Buchanan St., Cobourg	Cobourg.
McMalon, Robert	R. R. No. 2 Kerwood	Kerwood.
Middleton, C.	Wyoming	Wyoming.
Milton Brick Ltd.	Milton	Milton.
Milner, Maaly F.	Kingsville	Streetsville.
Missouri Tile Yard (W. H. Deller)	R. R. No. 4, Thorndale	Kingsville.
O'Dell, Wm. and Sons	R. R. No. 1, Ingersoll	Thorndale.
Olman Bros.	111 Macklin St. Hamilton	Ingersoll.
Ontario Denison Tile Co., Ltd.	24 Wyandotte St. E., Windsor	Hamilton.
O'Reilly, T. E.	320 Bay St., Ottawa	Tilbury.
Ottawa Brick Mfg. Co., Ltd., The	53 Queen St. Ottawa	Pletcher.
Ottawa Brick & Terra-Cotta Co., Ltd.	Billings Bridge	Hog's Back.
Ott Brick & Tile Mfg. Co., Ltd., The	33 King St. E., Kitchener	Ottawa
Owen Sound Brick Co., Ltd., The	928—2nd Ave. E., Owen Sound	Billings Bridge.
Parks, Henry W.	R. R. No. 2, Dresden	Kitchener.
Paxton, Fred. R.	230 Queenston St., St. Catharines	Owen Sound.
Pembroke Brick Co., The	Pembroke	Dresden.
Phillips, Thomas & Son	R. R. No. 2, Lucknow	St. Catharines.
Plinn Bros.	238 Briscoe St., London	Pembroke.
Phlippen & Field.	150 Dawes Road, Toronto	St. Helens.
Piggott, Geo. & Co.	72 Guestville Ave., Toronto 2	London.
Piper, Murphy & Piper	509 Victoria Ave., Fort William	Toronto.
Port Rowan Brick & Tile Co.	Port Rowan	Toronto 2
Price and Cumming	Salisbury Ave., Humber Bay	Fort William.
Price and Smith	458 Greenwood Ave., Toronto	Hog's Back.
Provincial Brick Plant	Parliament Bldg., Toronto	Humber Bay.
Red Star Brick & Tile Yard (W. H. Barnhardt)	Stratford	Toronto.
Richardson, Jas. & Son	Kerrwood	Mimico.
Risely Brick Co., Ltd.	Main St. W., Hamilton	Stratford.
Russell, Jos. Estate	40 Blake St., Toronto	Kerrwood.
Smith, Alex & Son	R. R. No. 2, Dutton	Hamilton.
Snelgrove, A.	Beaverton	Toronto.
Sproat, Wm. M.	R. R. No. 4, Seaforth	Dutton.
Standard Brick Co., Ltd.	500 Greenwood Ave., Toronto	Thorah Tp.
Steele, Edwin	Vankleek Hill	Tuckersmith Tp.
Stratford Brick, Tile and Lumber Co.	Mansion House, Stratford	Toronto.
Streetsville Brick Co., Ltd., The	410 Crown Office Bldg., Toronto 2	Toronto.
Stroth, M. C.	Conestogo	Streetsville.
Sun Brick Co., Ltd.	1104 Bay St., Toronto	Conestogo.
Superior Brick and Tile Co., Ltd.	426 Victoria Ave., Ft. William	Fednorden.
Sutherland, W. A.	Box 293, Parkhill	Roslyn.
Tope, Richard, Estate	945 King St. W., Hamilton	Parkhill.
Toronto Brick Co., Ltd.	897 Bay St., Toronto	Hamilton.
Wagstaff, Charles	R. R. No. 4, Lindsay	Milton.
Wagstaff, A. H. & Co.	348 Greenwood Ave., Toronto	Toronto.
Walker, Marley Brick Co.	114 Greenwood Ave., Toronto	Toronto.
Wallace, R. & Son	Imperial Bank Bldg., North Bay	North Bay.
Wein, Aaron	Crediton	Crediton.
Windsor Brick & Tile Co.	203 Exchange Bldg., Windsor	Near Kingsville.
Woodslee Brick & Tile Yards	Woodslee	Woodslee.
Wright, Geo. & Sons	Comber	Comber.
<b>MANITOBA—</b>		
Alsip Brick, Tile and Lumber Co., Ltd.	200 Tribune Bldg., Winnipeg	Winnipeg.
Marion Brick Co.	Box 30, St. Boniface	St. Boniface.
Sidney Brick & Clay Works, Ltd.	Sidney	Sidney.
Snyder, A. & Company, Ltd.	Box 1401, Portage La Prairie	Portage La Prairie.
Snyder, M. & Sons	Gilbert Plains	Gilbert Plains.
<b>SASKATCHEWAN—</b>		
Bruno Clay Works, Ltd.	Bruno	Near Bruno.
Dominion Fire Brick and Clay Products, Ltd., The	507 Scott Block, Moose Jaw	Claybank.
Elliott, W. H. & Son	1306—3rd Ave. N., Saskatoon	Saskatoon.
Excelsior Brick Co., Ltd. The	117 8th St. E. Prince Albert	Prince Albert.
International Clay Product, Ltd.	Estevan	Estevan.
Saskatchewan Penitentiary	Prince Albert	Prince Albert.
Shand Coal and Brick Co.	Shand	Shand.



**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA—Continued**

Name	Address	Location
<b>Domestic Clay Products Industry—Concluded</b>		
<b>Brick and Tile—Concluded</b>		
<b>ALBERTA—</b>		
Acme Brick Co. Ltd., The.....	125 Alberta Block, Edmonton.....	Cannell Siding.
Benson, Ole.....	Box 1751 Grande Prairie.....	Grande Prairie.
Crandell, E. H., Pressed Brick and Sandstone Co.....	607 MacLean Block, Calgary.....	Brickburn.
Little, J. B. & Sons.....	9120-190 Ave., Edmonton.....	Riverdale.
Redcliff Brick and Coal Co., Ltd.....	Box B 5, Redcliff.....	Redcliff.
Redcliff Pressed Brick Co. Ltd.....	Box 87, Redcliff.....	Redcliff.
Redcliff Premier Brick Co. Ltd.....	Box C 2, Redcliff.....	Redcliff.
<b>BRITISH COLUMBIA—</b>		
Baker Brick & Tile Co., Ltd.....	Cor. Douglas St. & Tolmie Ave., Victoria.	Victoria.
Christian Community of Universal Brotherhood The.....	Grand Forks.....	Grand Forks.
Clayburn Co., Ltd.....	302 Crédit Foncier Bldg., Vancouver.....	Clayburn, Kilgard.
Gabriola Shale Products Co., Ltd.....	106 Moody Block, Victoria.....	Gabriola Is.
Haug, Wm. and Son.....	Kelowna.....	Kelowna.
Port Haney Brick Co. Ltd., The.....	846 Howe St. Vancouver.....	Port Haney.
Vancouver Brick & Tile Co., Ltd.....	2065-10th Ave. W., Vancouver.....	Vancouver.
Victoria Brick Co., Ltd.....	3001 Douglas St., Victoria.....	Victoria.

**Clay Sewer Pipe**

<b>NOVA SCOTIA—</b>		
Standard Clay Products, Ltd.....	St. John's.....	New Glasgow.
<b>QUEBEC—</b>		
Standard Clay Products, Ltd.....	St. John's.....	St. John's.
<b>ONTARIO—</b>		
Dominion Sewer Pipe and Clay Industries, Ltd.....	Swansea.....	Swansea.
Hamilton and Toronto Sewer Pipe Co., Ltd., The.....	Wentworth St. N., Hamilton.....	Hamilton.
Ontario Sewer Pipe and Clay Products, Ltd.....	Mimico.....	Mimico.
<b>ALBERTA—</b>		
Alberta Clay Products Co., Ltd.....	Box 672, Medicine Hat.....	Medicine Hat.
<b>BRITISH COLUMBIA—</b>		
Clayburn Co., Ltd.....	302 Credit Foncier Bldg., Vancouver.....	Kilgard.

**Fire Brick, Fire Clay and Fire Clay Products**

<b>NOVA SCOTIA—</b>		
Dominion Iron and Steel Co., Ltd.....	Sydney.....	(Shubenacadie, Sydney).
Intercolonial Coal Co., Ltd.....	231 St. James St., Montreal.....	Westville.
<b>NEW BRUNSWICK—</b>		
Foley Pottery, Ltd.....	Saint John.....	Loch Lomond Rd., Saint John.
<b>QUEBEC—</b>		
Montreal Terra Cotta Co., Ltd.....	511 St. Catherine St. W., Montreal.....	La. eside.
<b>ONTARIO—</b>		
Algoma Steel Corporation, Ltd.....	Sault Ste. Marie.....	Sault Ste. Marie.
National Fire Proofing Co. of Canada, Ltd.....	601 Dominion Bank Building, Toronto.....	Aldershot.
<b>SASKATCHEWAN—</b>		
Dominion Fire Brick & Clay Products Ltd.....	421 Hammond Bldg., Moose Jaw.....	Claybank.
<b>ALBERTA—</b>		
Alberta Clay Products, Ltd.....	Box 672, Medicine Hat.....	Medicine Hat.
<b>BRITISH COLUMBIA—</b>		
B.C. Refractories Ltd.....	365 Water St., Vancouver.....	Vancouver.
Clayburn Co., Ltd.....	302 Crédit Foncier Bldg., Vancouver.....	Clayburn.

**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA—Continued**

Name	Address	Location
<b>Stoneware and Pottery</b>		
<b>NEW BRUNSWICK—</b> Foley Pottery, Ltd..... Mowat, G. H.....	Saint John..... St. Andrews.....	Saint John..... St. Andrews.....
<b>ONTARIO—</b> Davis, John and Sons..... Foster Pottery Co.....	60 Heath St. W., Toronto..... Main St. W., Hamilton.....	Toronto..... Hamilton.....
<b>ALBERTA—</b> Medalta Potteries, Ltd.....	Medicine Hat.....	Medicine Hat.....
<b>Products from Imported Clay</b>		
<b>NEW BRUNSWICK—</b> Foley Pottery Ltd., The.....	Marsh Bridge, Saint John.....	Saint John.....
<b>QUEBEC—</b> Canada Firebrick Co..... Canadian Potteries Ltd..... Canada Stoneware Works..... Dominion Sanitary Pottery Co..... Standard Clay Products, Ltd.....	399 St. Ambroise St., Montreal..... 2 Longueil, St. St. John's..... Iberville..... 1-9 St. James St., St. John's..... P.O. Box 819, St. John's.....	Montreal..... St. John's..... Iberville..... St. John's..... St. John's.....
<b>ONTARIO—</b> Bailey, G. & Co..... Campbells Sons, R. Hamilton Pottery..... Canadian General Electric Co..... Canadian Porcelain Co., Ltd..... Dominion Insulator Co., Ltd..... Frontenac Floor & Wall Tile Co., Ltd..... Smith Potteries..... Turner, C. B.....	331 Bay St., Toronto 2..... 100 Lock St., S. Hamilton..... 212 King St. W., Toronto..... Box 170, Paradise Road, Hamilton..... Mansfield, Ohio, U.S.A..... Box 178, Kingston..... Cor. King St. W. & Alexander Blvd., Oshawa..... 894 Bathurst St., Toronto.....	Toronto 2..... Hamilton..... Peterborough..... Hamilton..... Niagara Falls..... Kingston..... Oshawa..... Toronto.....
<b>Salt</b>		
<b>NOVA SCOTIA—</b> Malagash Salt Products, Ltd.....	New Glasgow.....	Malagash, Cumberland Co.
<b>ONTARIO—</b> Brunner-Mond, Canada, Ltd..... Canadian Salt Co., Ltd..... Dominion Salt Co., Ltd..... Elarton Salt Works Co., Ltd..... Exeter Salt Works Co., Ltd..... Goderich Salt Co., Ltd..... Kincairdine Salt Co., Ltd..... Western Canada Flour Mill Co., Ltd..... Western Salt Co., Ltd.....	Amherstburg..... Sandwich..... Sarnia..... Watford..... Exeter..... Goderich..... Kincairdine..... 287 Macpherson Ave., Toronto..... 411 Dominion Bank Bldg., Toronto.....	Amherstburg, Essex Co. Windsor and Sandwich, Essex Co. Sarnia, Lambton Co. Warwick, Lambton Co. Exeter, Huron Co. Goderich, Huron Co. Kincairdine..... Goderich, Huron Co. Coutright, Lambton Co.
<b>ALBERTA—</b> Alberta Salt Co., Ltd.....	Edmonton.....	Fort McMurray.....
<b>Sand-Lime Brick</b>		
<b>QUEBEC—</b> Lime Products Ltd..... Silico Ltd.....	Cor. Marquette & St. Grégoire Sts., Montreal..... 37 Mayor St., Montreal.....	Montreal..... Montreal.....
<b>ONTARIO—</b> Canada Sand-Lime Pressed Brick Co..... Harbour Brick Co., Ltd..... Hinde Bros..... Leaside Brick & Sand Co..... Shephard, J. G. & Co..... Toronto Brick Co., Ltd..... Toronto Brick Co., Ltd..... Willcox Lake Brick Co., Ltd..... York Sandstone Brick Co., Ltd.....	29 Symes Rd., Toronto 9..... Toronto, Fleet St..... 134 Northlands Ave., West Toronto..... Leaside..... Wellington..... 897 Bay St., Toronto..... 80 Victoria St., Toronto..... Richmond Hill..... 447 Victoria Park Ave., Toronto 13.....	Toronto 9..... Bathurst St. Dock, Toronto..... Toronto..... Mount Dennis..... Leaside..... Wellington..... Toronto..... Swansea..... Richmond Hill..... Toronto 13.....
<b>MANITOBA—</b> Winnipeg Brick Co., Ltd..... Wood & Sons, Ltd.....	320 Osborne St., Winnipeg..... 1038 Arlington St., Winnipeg.....	Winnipeg..... Winnipeg.....

**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA—Continued**

Name	Address	Location
<b>Monumental and Ornamental Stone</b>		
<b>PRINCE EDWARD ISLAND—</b>		
Beck Vere and Son.....	Montague	Montague.
Chandler & Bell.....	160 Kent St., Charlottetown	Charlottetown.
<b>NOVA SCOTIA—</b>		
Colonial Granite Co., Ltd.....	New Glasgow	New Glasgow.
Dauphinee, A. T.....	Shelburne	Shelburne.
Goudey, Robt. H.....	Horton St., Yarmouth	Yarmouth.
Hoyt, C. M.....	Middleton	Middleton.
Kelly, George J.....	Bridgewater	Bridgewater.
Maritime Monument Works.....	173 Rempst Road, Halifax	Halifax.
Myatt, Albert H.....	Oxford	Oxford.
Purvis, James.....	Windsor	Windsor.
Rottler, Albert A.....	Kentville	Kentville.
Steele, John D.....	Commercial St. N., Sydney	Norih Sydney.
Tingley Granite and Marble Works.....	3 Janslowne Ave., Amherst	Amherst.
Truro Granite and Marble Works (Co. & S.B.).....	Cor. Prince & Waddell Sts., Truro	Truro.
<b>NEW BRUNSWICK—</b>		
Kinsella, P. & Son.....	Kanes Corner E., St. John	St. John.
Lawlor & Williams.....	Chatham	Chatham.
Monting Epps Co., Ltd.....	St. George	St. George.
Milne Courts & Co., Ltd.....	St. George	St. George.
Moore, Michael.....	130 Ca-luton, Fredericton	Fredericton.
Nelson Bros.....	Lower Cape	Lower Cape.
Pellotier, Alfred B.....	St. Basile	St. Basile.
Price, Alfred, Estate (St. Stephens Granite Works).....	Queen St., St. Stephen	St. Stephen.
Sherrard, Thos. F. and Son.....	135 Victoria St., Moncton	Moncton.
Shields, J. A.....	St. Stephen	St. Stephen.
<b>QUEBEC—</b>		
Anglin-Norcross, Ltd.....	20-3 Victoria St., Montreal	Iberville.
Aberdeen Granite and Marble Works.....	1116 Bleury St., Montreal	Montreal.
Beebe Monument Co.....	Beebe	Beebe.
Brundford, John.....	Granby	Granby.
Braut, Z.....	3 Champlain St., Valleyfield	Valleyfield.
Brodies, Ltd.....	1070 Rue Bleury, Montreal	Iberville.
Brunet, A.....	Ormstown	Ormstown.
Brunet, J., Ltd.....	875 Chenin-de-la-Côte des-Neiges, Montreal	Montreal.
Chabot, Fred.....	Scotts Junction	Scotts Junction.
Chaussé, Edouard.....	St. Hyacinthe	St. Hyacinthe.
Côté, Victor.....	187-1st Ave., Quebec	Quebec.
Courtemanche Bros.....	Waterloo	Waterloo.
Dalecigno, François.....	726 Chemin Côte-des-Neiges, Montreal	Montreal.
Deaudelin, N.....	St. Hyacinthe	St. Hyacinthe.
Delwaide & Goffin.....	Chicoutimi	Chicoutimi.
Desroches, Charles.....	102 Rue de Delanaudière, Joliette	Joliette.
Ducharme, Z.....	41 Notre-Dame, Victoriaville	Victoriaville.
Dussault, Theo. & Cie.....	Mont Laurier, Quebec	Quebec.
Gignac, Azarias.....	St. Alban	St. Alban.
Gingras, Roch.....	Sto. Foy	Sto. Foy.
Gosselin et Fils.....	Beauceville Est.	Beauceville Est.
Humbly, Richard.....	Coutcook	Coutcook.
Hazelton, Wm.....	Beebe	Beebe.
Hill, Clayton J.....	Richmond	Richmond.
Iberville Granite Works.....	95 9th Ave., Iberville	Iberville.
Jacques, Olivier.....	18 rue Shaw, Lévis	Lévis.
Jean, Xavier.....	117 Fabien	St. Fabien.
La Cie de Marbre et de Pierre de Québec.....	117 Abraham Hill, Quebec	Quebec.
Laforce & Frères.....	317 Rue St. François, St. Malo	St. Malo.
Lefebvre, J. A.....	78-3rd St., Limoulin, Québec	Québec.
L'Heureux, J. A.....	Sto. Geneviève de Batiscan	Sto. Geneviève de Batiscan.
Lemay, Alcide.....	Deschailions	Deschailions.
McKenney, V. B.....	Bedford	Bedford.
Norton, S. B.....	Beebe Junction	Beebe Junction.
Paquin, Laurent.....	181 rue Lejeune, Trois-Rivières	Trois-Rivières.
Perron, Godfroy.....	Coutcook	Coutcook.
Perusse, Alcide.....	St. Marc des Carrières	St. Marc des Carrières.
Poulin, P. A.....	724 Champlain St., St. John	St. John.
Roberge, T.....	69 Blvd., Langelier, Québec	Québec.
Robertson, Fred.....	Beebe Junction	Beebe Junction.
Rochon, T. & Fils.....	4577 St. Lawrence Blvd., Montreal	Montreal
Rolland, J. A.....	1285 Rue St. Valer, Québec	Québec.
Savari, J. Rte.....	Sto. Anne de la Pérade	Sto. Anne de la Pérade.
Shawville Marble and Granite Co.....	Box 182 Shawville	Shawville.
Smith Bros., of Montreal, Ltd.....	2110 Bleury St., Montreal	Montreal.
Smith, George.....	Beebe	Beebe.
Smith Marble and Construction Co., Ltd.....	145 Van Horne Ave., Montreal	Montreal.
Sutton Marble & Granite Co.....	Sutton	Sutton.
Thompson, T. C.....	270 Wellington St., S. Sherbrooke	Sherbrooke.
Wingender, G. E.....	St. Guillaume	St. Guillaume.

**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA—Continued**

Name	Address	Location
<b>Monumental and Ornamental Stone—Continued</b>		
<b>ONTARIO—</b>		
Adams, Geo.	561-563 Dundas St., Woodstock.	Woodstock.
Allan, Wm.	Brampton.	Brampton.
Alpaugh, J.	St. Andrews St., Fergus.	Fergus.
Ambroise, J. L. & Son.	58 Alma St., Guelph.	Guelph.
Arnprior Marble and Granite Works.	Arnprior.	Arnprior.
Austin, P. O.	44 Colborne St., Simcoe.	Simcoe.
Bayne, Daniel.	Kemptville.	Kemptville.
Beal, J. R. & Son.	Pembroke.	Pembroke.
Bounsall, E. R.	Division St., Bowmanville.	Bowmanville.
Bowden, D. W.	782 2nd Ave. E., Owen Sound.	Owen Sound.
Boyer, H. & Son.	Box 28, Bracebridge.	Bracebridge.
Brantford Monument Works.	Cor. Gray & Market St., Brantford.	Brantford.
Braun, Casper.	295 King St., W. Kitchener.	Kitchener.
Brown, W. H.	R. R. 4, St. Catharines.	St. Catharines.
Brown, Robert.	376 Sparks St., Ottawa.	Ottawa.
Central Canada Stone Co., Ltd.	278 Booth Ave., Toronto.	Point Edward.
Chapman, Wm. E.	Box 24, Seaforth.	Seaforth.
Cocker, John.	35 Market Square, Chatham.	Chatham.
Colby, C. H.	235 King St., W., Chatham.	Chatham.
Collingwood Granite and Marble Works.	Collingwood.	Collingwood.
Corbett, A. J.	Main St., Mt. Forest.	Mt. Forest.
Corley, A. C.	Main St., Brighton.	Brighton.
Coughlin Monumental Works.	214 Hunter St., Peterborough.	Peterborough.
Coughlin, Michael.	303 Erskine Ave., Toronto.	Toronto.
Creber Bros.	Acton.	Acton.
Creber Son & Company.	1333 St. Clair Ave., W. Toronto.	Toronto.
Cunningham & Pryde.	Exeter.	Exeter.
Davidson, Geo. J.	Paisley.	Paisley.
de Carle, Chas. W. and Victor.	R. R. 3, Brockville.	Brockville.
Delanty, Patrick E.	Cobourg.	Cobourg.
Dillon, Joseph.	Gananoque.	Gananoque.
Doan & Panthier.	20 Elgin St., St. Thomas.	St. Thomas.
Doyle, Jno. E.	269-8th St. East, Owen Sound.	Owen Sound.
Duvall, George R.	Main St., Alexandria.	Alexandria.
Edwards, W. R.	1283 Dundas St. W., Toronto.	Toronto.
Excelsior Marble and Granite Works.	123 Pitt St. E., Windsor.	Windsor.
Fallon Bros.	389-393 Princess St., Kingston.	Kingston.
Froats, Geo. H. & Co.	Renfrew.	Renfrew.
George, John J.	Pt. Elgin.	Pt. Elgin.
Gibson, J. G. Marble and Granite Co., Ltd.	539-547 Parliament St., Toronto.	Toronto.
Gibson, John F.	Winchester.	Winchester.
Goult, A. J.	Box 274, Uxbridge.	Uxbridge.
Gullett, R. M.	1650 Yonge St., Toronto.	Toronto.
Halladay, B. S.	Chesley.	Chesley.
Hamilton & Sons.	228 Woolwich St., Guelph.	Guelph.
Hayes Bros. Co.	Sudbury.	Sudbury.
Herbert, T. H.	60 Wentworth St., Hamilton.	Hamilton.
Hibberd, Arthur.	195 Melts Ave., Toronto.	Toronto.
Hodge Marble Co., Ltd.	34 Price St., Toronto.	Toronto.
Hutchinson, John W.	Aylmer.	Aylmer.
Hurst & Rogers.	1181-1189 Queen St., W. Toronto.	Toronto.
Isaac, Ins. & Son.	30 Dupont St., Toronto.	Toronto.
Jackson, J. H.	83 Woodlawn Ave., Toronto.	Toronto.
Johnston & Cranston.	1849 Yonge St., Toronto.	Toronto.
Jones & Stevens.	277 Rideau St., Ottawa.	Ottawa.
Jones, Thomas C.	Listowel.	Listowel.
Jones, W. A.	Main St., W. Picton.	Picton.
Kilvington Bros.	1357 St. Clair Ave., W. Toronto.	Toronto.
Lake Superior Granite & Marble Works.	111 Wellington St., W. Sault Ste. Marie.	Sault Ste. Marie.
Leamington Granite & Marble Works.	Erie St., N. Leamington.	Leamington.
Leeder, W. J.	Gananoque.	Gananoque.
Lindsey Monumental Works.	11 Cambridge St., Lindsay.	Lindsay.
Lippert, F. & Sons.	Carham St., Walkerton.	Walkerton.
Lloyd, T.	Main St., Prescott.	Prescott.
London Marble and Granite Co.	493 Richmond St., London.	London.
Luesby, George W.	Cor. Main & Queen St., Newmarket.	Newmarket.
Martel & Cummings.	Vankleek Hill.	Vankleek Hill.
McCollum Granite Co., Ltd.	397 Princess St., Kingston.	Kingston.
McIntosh Granite Co., Ltd., of Toronto.	1623 Yonge St., Toronto.	Toronto.
McKay, Alexander.	2 Browns Ave., Toronto.	Toronto.
McMillan Granite Co., Ltd.	105 Ontario St., Sarnia.	Sarnia.
Middleton Marble and Granite Co., Ltd.	122 Main St., E., Hamilton.	Hamilton.
Mims, Charles.	Wardsville.	Wardsville.
Moore Bros.	104 Front St., Belleville.	Belleville.
Moss, Jno. O.	Box 412, Newmarket.	Newmarket.
Napanee Marble and Granite Works.	Napanee.	Napanee.
Nicholson & Curtis.	1117 Yonge St., Toronto.	Toronto.
Nobbs, A. & E.	Cor. William and C.P.R., London.	London.
North Bay Marble Works.	Klock Ave., North Bay.	North Bay.
Onkley, Geo. & Son, Ltd.	278 Booth Ave., Toronto.	Toronto.
Ontario Marble Co., Ltd.	Main St., Peterborough.	Peterborough.
Ontario Marble & Granite Works.	187 Kent St. W., Lindsay.	Lindsay.
Ottawa Cut Stone Co.	7 & 9 Isabel St., Ottawa.	Ottawa.



**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA—Continued**

Name	Address	Location
<b>Monumental and Ornamental Stone—Concluded</b>		
<b>ONTARIO—continued.</b>		
Pollard, & Miller	715 Queen St., Sault Ste. Marie	Sault Ste. Marie.
Pollock & Ingham	153 Main St., E., Galt	Galt.
Porterfield & Colquhoun	Mitchell	Mitchell.
Rhodes, Thomas & Sons	Cayuga	Cayuga.
Richardson, Robt. Harvey	Hanover	Ottawa.
Ritchie, Jas.	51 Catharine St., Ottawa	Ottawa.
Ritchee Cut Stone Co., Ltd.	191 Grant Ave., Hamilton	Hamilton
Robson & Thompson	Alliston	Alliston.
Ruel, T. J. & Son	Wellington St., St. Marys.	St. Marys.
Rutledge, S. H.	Orangeville	Orangeville.
Rutter, Wm.	Ontario St., Port Hope	Port Hope.
Sanderson, R. J. Marble Co.	43 Peter St., Orillia	Orillia.
Sarnia Granite and Marble Works (Morris, Bro.)	156 Victoria St., Sarnia	Sarnia.
Scott Bros.	38 McGe St., Toronto	Toronto.
Select Cut Stone Co., Ltd.	1149 McDougall Ave., Windsor	Windsor.
Sherwood, J. H.	551 Bethune St., Peterborough	Peterborough.
Simeco Marble Works	20 Owen St., Barrie	Barrie.
Skelton, E. J. & Son	Walkerton	Walkerton.
Smith Monument Co.	1794 Yonge St. W., Toronto	Toronto.
Smith, R. B.	Merrickville	Merrickville.
Smyth, Frank W.	344 Wellington St., London	London.
Snider, L. R.	Humberstone	Humberstone.
Stead, Arthur	148 Central Ave., Hamilton	Hamilton.
Steiner, J.	409 Dundas St., Toronto	Toronto.
Standard Stone Co., Ltd.	1410 Howard Ave., Windsor	Windsor.
Stubbs, C. C.	Morrisburg	Farm's Point.
Superior Stone Ltd.	528 Victoria St., Kitchener	Kitchener.
Thiacke, H. W.	Westport	Westport.
Thomson Monument Co., Ltd.	462 Dupont St., Toronto	Toronto.
Trenton Marble & Granite Works	Front & Ford Sts., Trenton	Trenton.
Twin City Marble and Granite Co.	386 Brock St., E., Port William	Port William.
Vokes, John	384 Dupont St., Toronto	Toronto.
Wardell Monumental Works	2694 Dundas St. W., Toronto	Toronto.
Webb, George	148 Summerhill Ave., Toronto	Toronto.
Whitby Memorial Co.	Whitby	Whitby.
Wildcombe, Benjamin	5 Bond St., St. Catharines	St. Catharines.
Wideman, I. C. & Son	Stouffville	Stouffville.
Wilcox Granite Co.	Opposite Woodland Cemetery, Hamilton	Hamilton.
Williamson, W. A. & Son	Gananoque	Gananoque.
Willisroet, B. S.	868-3rd Ave. E., Owen Sound	Owen Sound.
<b>MANITOBA—</b>		
Allen & Grant	40 Youville St., St. Boniface	St. Boniface.
Billing, J.	Carman	Carman.
Brook, J. H. & Sons	266 Main St., Winnipeg	Winnipeg.
Campbell, R. M.	90 Hespeler St., Winnipeg	Winnipeg.
Gillis Quarries, Ltd.	Spruce and Richard Sts., Winnipeg	Winnipeg.
Guinn & Simpson Co., Ltd.	Box 511, Portage la Prairie	Portage la Prairie.
Hooper Marble and Granite Co., Ltd.	537 Portage Ave., Winnipeg	Winnipeg.
Johnston, James J.	525 Cordroy Ave., Winnipeg	Winnipeg.
Memorial Marble and Tile Co., Ltd.	71 Main St., Winnipeg	Winnipeg.
Pierson, C. H.	201 Sixth St., Brandon	Brandon.
Pirotton, N.	385 rue Du Bac, St. Boniface	St. Boniface.
Somerville & Co.	1417 Rosser Ave., Brandon	Brandon.
Western Stone Co.	400 Canada Bldg., Winnipeg	Carson.
Wheeldon & Sons	1055 Main St., Winnipeg	Winnipeg.
<b>SASKATCHEWAN—</b>		
Moose Jaw Marble and Granite Works, Ltd.	706 Athabasca St. E., Moose Jaw	Moose Jaw.
Regina Marble and Tile Ltd.	826 Dewdney Ave., Regina	Regina.
Regina Monumental Co.	1748 Hamilton St., Regina	Regina.
Sask. Marble and Construction Co., Ltd.	117 Eighth St. E., Prince Albert	Prince Albert.
Saskatoon Granite and Marble Co., Ltd.	137 Ave. A. North, Saskatoon	Saskatoon.
Western Granite Marble and Stone Co., Ltd.	714-716—2nd Ave. N., Saskatoon	Saskatoon.
Yorkton Monumental Works	20 Agricultural Ave., Yorkton	Yorkton.
Young, Alex., Ltd.	Cor. Fourth Ave. and Scarth St., Regina	Regina.
<b>ALBERTA—</b>		
Alberta Granite, Marble & Stone Co., Ltd.	10702—101st St., Edmonton	Edmonton.
Hart, Albert J.	1821—2nd St. East, Calgary	Calgary.
Lethbridge Monumental Works	325—8th St. S., Lethbridge	Lethbridge.
McDonald Granite Co., Ltd.	2313—2nd St. E., Calgary	Calgary.
North West Granite and Marble Co.	8537—109th St., Edmonton	Edmonton.
<b>BRITISH COLUMBIA—</b>		
Allan, A. S.	850 Beach Ave., Vancouver	Vancouver.
Art Monument Co., Ltd.	602 Kingsway, Vancouver	Vancouver.
Continental Marble Co., Ltd.	1404 Dominion Bldg., Vancouver	Vancouver.
Forster, J.	5528 Fraser, Vancouver	Vancouver.
Independent Monument Co.	965—20th Ave. E., Vancouver	Vancouver.
Millins, C. E. J.	Cor. Comox Rd. & Pine St., Nanaimo	Nanaimo.
Mortimer, John & Son	720 Courtenay St., Victoria	Victoria.
Newall, Ino. B.	Cor. Fraser and 36th Ave., Vancouver	Vancouver.
Stewart Monumental Works, Ltd.	1401 May St., Victoria	Victoria.
Vernon Granite and Marble Co.	Okanagan Landing	Okanagan Landing.

**DIRECTORY OF FIRMS IN THE INDUSTRIES CLASSIFIED UNDER THE MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA—Concluded**

Name	Address	Location
<b>Miscellaneous Non-Metallic Mineral Products</b>		
<b>(a) Artificial Abrasives</b>		
<b>QUEBEC—</b> Canadian Carborundum Co., Ltd.....	P.O. Box 337, Niagara Falls, N.Y.....	Niagara Falls.
<b>ONTARIO—</b> Abrasive Co. of Canada, Ltd.....	Burlington St. and Harvey Lane, Hamilton.	Hamilton.
Canadian Carborundum Co., Ltd.....	P.O. Box 337, Niagara Falls, N.Y.....	Niagara Falls.
Exolon Co.....	Blusdell, New York, U.S.A.....	Thorold.
Norton Company.....	New Bond St., Worcester, Mass., U.S.A.	Chippawa.
<b>(b) Abrasive Products</b>		
<b>ONTARIO—</b> Abrasives Ltd.....	Brantford.....	Brantford.
Brantford Grinding Wheel Co. of Canada, Ltd.....	186 Pearl St., Brantford.....	Brantford.
Dominion Abrasive Wheel Co., Ltd.....	49 Main St., Mimico.....	Mimico.
Lion Grinding Wheel Co.....	192 Pearl St., E., Brockville.....	Brockville.
Norton Company of Canada, Ltd.....	3 Beach Road, Hamilton.....	Hamilton.
Ontario Abrasive Wheels, Ltd.....	Water St., Prescott.....	Prescott.
<b>(c) Artificial Graphite and Electrodes</b>		
<b>ONTARIO—</b> Acheson Graphite Co.....	Niagara Falls, N.Y., U.S.A.....	Cor. Buttrey Ave. and Swinyard St., Niagara Falls.
Electro Metallurgical Company of Canada.....	46 King St. W., Toronto.....	Welland.
<b>(d) Gypsum Products</b>		
<b>QUEBEC—</b> Canada Gypsum & Alabastine, Ltd.....	Paris, Ont.....	Lakefield Ave., Montreal East.
<b>ONTARIO—</b> Canada Gypsum & Alabastine Co., Ltd.....	Paris.....	Paris.
Canada Gypsum & Alabastine Co., Ltd.....	Paris.....	Caledonia.
Nu-Art Kera Tile Co., Ltd.....	7 Hunter St. E., Peterborough.....	Peterborough.
<b>MANITOBA—</b> Manitoba Gypsum Co., Ltd.....	504 Trust & Loan Bldg., Winnipeg.....	Winnipeg.
<b>(e) Mica Trimming</b>		
<b>QUEBEC—</b> Loughborough Mining Co., Ltd.....	Sydenham, Ont.....	Sorel.
Loughborough Mining Co., Ltd.....	Sydenham, Ont.....	St. Raymond.
Mica Co. of Canada, Ltd.....	2 Lois St., Hull.....	Hull.
Mica Insulator Co.....	200 Varick St., New York City, U.S.A.	Mansau.
Mica Insulator Co.....	200 Varick St., New York City, U.S.A.	Plessisville.
Mica Insulator Co.....	200 Varick St., New York City, U.S.A.	St. Agapit.
Mica Insulator Co.....	200 Varick St., New York City, U.S.A.	Victoriaville.
Mica Insulator Co.....	200 Varick St., New York City, U.S.A.	Daveluyville.
<b>ONTARIO—</b> Filon, S. O.....	95-97 Duke St., Ottawa.....	Ottawa.
<b>(f) Miscellaneous Non-Metallic Mineral Products, n.e.s.</b>		
<b>QUEBEC—</b> Canadian Foundry Supplies and Equipment Co.....	185 Wellington St., Montreal.....	Montreal.
<b>ONTARIO—</b> Canadian Foundry Supply and Equipment Co.....	37 Niagara St., Toronto 2.....	Toronto 2.
Davis Slate & Mfg. of Canada, Ltd.....	131 Shaftesbury Ave., Toronto.....	Toronto.
Hamilton Facing Mill Co., Ltd.....	Hess St. N., Hamilton.....	Hamilton.
Maybank Foundry Supply Co.....	858 Dupont St., Toronto 4.....	Toronto 4.
Stevens, Frederick B. of Can., Ltd.....	426 McDougall St., Windsor.....	Windsor.
Wilkinson Foundry Facing Supply Co., Ltd.....	81 Florence St., Toronto 3.....	Toronto 3.



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