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## PRELIMINARY REPORT

ON THE

# MINERAL PRODUCTION OF CANADA

DURING THE SIX MONTHS ENDING

JUNE 30, 1927

(With Revised Statistics for the Calendar Year 1926)

AUGUST 22, 1927

Published by Authority of the Hon. J. S. Macdonald, M.P.,  
Minister of Trade and Commerce



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### DOMINION BUREAU OF STATISTICS

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#### MINERAL PRODUCTION (Mining and Metallurgy).

##### *General Reports—*

**Preliminary Reports (semi-annual) on the Mineral Production of Canada.**

**Annual Report on the Mineral Production of Canada.** (In one volume).

PART ONE—PRODUCTION STATISTICS—General Statistical Review of the Mineral Production of Canada.

*Metals.*—Aluminium—Antimony—Arsenic—Chromite—Cobalt—Copper—Gold—Iron Ore—Iron, Pig—Lead—Manganese—Mercury—Molybdenum—Nickel—Platinum and Palladium—Silver—Tin—Zinc.

*Non-Metals.*—Abrasives—Actinolite—Asbestos—Barytes—Coal—Coke—Feldspar—Fluorspar—Graphite—Gypsum—Iron Oxides—Magnesite—Magnesium Sulphate—Mica—Mineral Water—Natro-Alumite—Natural Gas—Peat—Petroleum—Phosphate—Pyrites—Quartz—Salt—Sodium Carbonate—Sodium Sulphate—Talc and Soapstone.

*Structural Materials and Clay Products.*—Cement—Clay and Clay Products—Lime—Sand and Gravel—Sand-Lime Brick—Slate—Stone.

PART TWO—GENERAL STATISTICS.—Text and tables presenting general reviews of the mineral industry in Canada (a) by provinces; (b) by industries.

PART THREE—DIRECTORY.—List showing the names, head office and mine or plant addresses of all concerns operating in the mineral industry in Canada, arranged in alphabetical order by industrial groups.

##### *Coal—*

**Monthly Report on Coal and Coke Statistics for Canada.**

General review for the month with tables showing comparative data for the month and year to date, output by coal-mining districts and by provinces, imports and exports by ports and by kinds of coal. In this report there is also a section showing statistics on production, imports and exports of coke for the month and year to date by provinces.

**Annual Report on Coal Statistics for Canada.**

Text and tables showing, for Canada, and for each of the coal-producing provinces, historical and current data on output, tonnage lost, disposition of coal from the mines, domestic and foreign shipments, exports and imports by ports, consumption of coal, prices, employment, salaries and wages paid, power equipment, capital investment, etc.

##### *Bulletins—*

(a) PRODUCTION—

*Metals.*—Arsenic—Cobalt—Copper—Gold—Iron Ore—Lead—Nickel—Metals of the Platinum Group—Silver—Zinc—Miscellaneous Non-Ferrous Metals including Aluminium, Antimony, Chromite, Manganese, Mercury, Molybdenum, Tin, Tungsten.

*Non-Metals.*—Asbestos—Coal—Feldspar—Gypsum—Iron Oxides—Mica—Natural Gas—Petroleum—Quartz—Salt—Talc and Soapstone—Miscellaneous Non-Metallic Minerals including Actinolite, Barytes, Corundum, Fluorspar, Graphite, Grindstones, Magnesite, Magnesium Sulphate, Mineral Waters, Natro-Alumite, Peat, Phosphate, Pyrites, Sodium Carbonate, Sodium Sulphate, Tripolite.

*Structural Materials.*—Cement—Clay and Clay Products—Lime—Sand and Gravel—Stone and Slate.

(b) ANNUAL INDUSTRIAL REVIEWS—

The Gold Industry—Copper-Gold-Silver Industry—Nickel-Copper Industry—Silver-Cobalt Industry—Silver-Lead-Zinc Industry.

(c) ANNUAL PROVINCIAL REVIEWS ON THE MINERAL INDUSTRY—

Nova Scotia—New Brunswick—Quebec—Ontario—Manitoba—Saskatchewan—Alberta—British Columbia—Yukon.

## PREFACE

To provide a more comprehensive survey of Canada's mineral industry than is usually made at the end of the half-year, the present report, specially prepared for distribution to the delegates attending the Second (Triennial) Empire Mining and Metallurgical Congress, being held this year in Canada, contains data on all products obtained from Canadian mines in 1926, with comparative figures for 1925. Supplementing this information, production statements, and imports and exports figures, show the progress made in metal and non-metal mining during the half-year, January 1 to June 30, 1927. Following the practice adopted in the preparation of half-yearly statements in previous years, the statistics of clay products and other structural materials, have been omitted from the record for the six months' period, as lime, stone, sand and gravel, brick and other clay products are produced, for the greater part, during the summer months.

With these modifications from the plan followed in other years, and with the limitations noted, the present report deals with the mineral production of Canada during the six months ended June 30, 1927. A review of the data therein presented shows that the growth of Canada's mining industry, so notable in recent years, is being continued without abatement. Metal mining in particular, because of the successes attained in development and production throughout the industry in Ontario and Quebec, through the progress of the mines and smelters in British Columbia, and as a natural sequence following the discovery of new ore-fields bearing copper and zinc, is attracting public attention to a greater extent in each successive year. Coal production shows steadiness and growth. Other non-metallic minerals reflect the increasing industrial and commercial activities of the nation and contribute in no small measure to the tonnages and values of Canada's foreign trade.

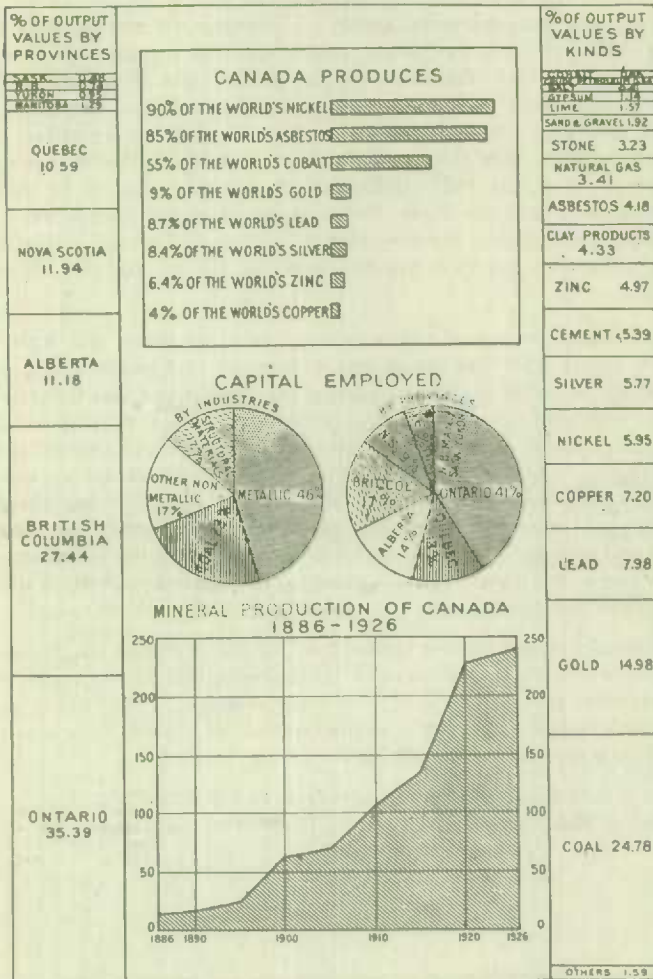
The cordial thanks of the Bureau are tendered to the mine and smelter operators, to the Mining Lands Branch of the Department of the Interior, and to the Dominion Department of Mines, for assistance given and information made available. The railway and other transportation companies as well as smelter operators outside of Canada have also furnished data, the receipt of which is gratefully acknowledged.

The report has been prepared 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 of the Bureau.

R. H. COATS,  
*Dominion Statistician.*

DOMINION BUREAU OF STATISTICS,  
August 22, 1927.

# MINERAL PRODUCTION OF CANADA



Drawn in R.R.I. Service Dept of Int.



# PRELIMINARY REPORT

## ON THE

# MINERAL PRODUCTION OF CANADA

### DURING THE SIX MONTHS ENDING JUNE 30, 1927

(With Revised Statistics for the Calendar Year, 1926)

### General Review

*Summary.*—Continuing the progress made in 1926, when the mineral output of Canada reached a new high record value of \$240,437,123, production of metals and non-metals in the first half of 1927 registered a further advance. While the output of gold during the half-year was slightly less than during the first six months of 1926, the production figures for all other metals were higher than they were in the corresponding period of the preceding year. Slightly lower prices reduced the values in a few instances. Production of arsenic, cobalt, copper, lead, nickel, platinum metals, silver and zinc showed definite improvement during the six months' period ending June 30, 1927.

Considered by groups and compared with the corresponding data for 1925 the output values of metals during the calendar year 1926 showed a loss of 1.6 per cent, but this was wholly due to modifications in the methods used in computing values of certain metals noted elsewhere in this report; in particular, the data for copper, lead and zinc are subject to these limitations. Among the non-metals the fuels, including coal, natural gas, peat and crude petroleum, advanced in value 19.8 per cent in 1926 as compared with the totals for 1925; other non-metallic minerals showed 13.7 per cent higher values in the aggregate than during the preceding calendar year. Clay products showed a gain of 8.6 per cent and other structural materials an advance of 5.2 per cent over the totals for 1925. In the aggregate, the mineral production of Canada in 1926 showed a gain of 6.1 per cent over the totals for the preceding calendar year.

For comparative purposes there are shown in the following table the values of production for metals, non-metals, fuels and structural materials from Canadian sources for the past twenty years.

**Values of Mineral Production of Canada by Classes 1907-1926**

Year	Metallic	Non-Metallic		Total
		Fuels and other non-metallics	Structural materials and clay products	
	\$	\$	\$	\$
1907.....	42,426,607	31,275,545	12,863,049	*86,465,202
1908.....	41,774,362	32,142,784	11,330,955	*85,557,101
1909.....	44,156,841	31,141,251	16,533,349	91,831,441
1910.....	49,438,873	37,757,158	19,627,592	106,823,623
1911.....	46,105,423	34,405,960	22,709,611	103,220,994
1912.....	61,172,753	45,080,674	28,794,869	135,048,296
1913.....	66,361,351	48,403,709	30,809,752	145,574,812
1914.....	59,386,619	43,467,229	26,009,227	128,863,075
1915.....	75,814,841	43,373,571	17,920,759	137,109,171
1916.....	106,319,355	53,414,983	17,467,186	177,201,524
1917.....	106,455,147	63,354,363	19,837,311	189,646,821
1918.....	114,549,152	77,621,046	19,130,799	211,301,997
1919.....	73,262,793	76,002,087	27,421,510	176,686,390
1920.....	77,939,630	108,027,947	41,892,088	227,859,665
1921.....	49,343,232	87,842,682	34,737,428	171,923,342
1922.....	61,785,707	82,076,704	39,534,741	184,297,242
1923.....	84,391,218	91,030,732	37,751,381	213,173,331
1924.....	102,436,528	71,796,009	35,380,869	209,613,406
1925.....	117,082,298	71,851,801	37,049,231	226,583,330
1926.....	115,237,581	85,240,144	39,959,398	240,437,123

\* Total includes \$300,000 allowed for products not reported.

In the half-year ended June 30, 1927, the value of the metals was \$56,468,412, as compared with a total for the first half of 1926 amounting to \$61,249,482, a loss of 7.8 per cent, but here again the loss was more apparent than real, due to the changes in methods of computation referred to above. Fuels at \$35,087,080 during the half-year showed an advance of 16 per cent in their aggregate value in comparison with the corresponding period of 1926. Other non-metals valued at \$7,482,322 showed an improvement of 8.3 per cent over the total for the first half of 1926. Including fuels, the value of the non-metals produced in the first half of 1927 was \$42,569,402, an advance of 14.6 per cent over the total of \$37,146,306 reported in the first half of 1926.

Advances among the non-metallic minerals were general throughout the list. Production during the half-year in comparison with the totals for the corresponding period of 1926, showed gains of 20.6 per cent in the tonnage of coal produced, 13.4 per cent more natural gas, 40.5 per cent more crude petroleum, 21.2 per cent advance in feldspar, 32.6 per cent more gypsum and 55.9 per cent more quartz. Greater outputs were also recorded in the cases of bituminous sands, magnesite, mica, pyrites and sodium sulphate. There was a loss of 6.7 per cent in the tonnage of asbestos produced in the half-year in comparison with the totals for the first half of 1926, but the output of 123,730 tons valued at \$4,685,706 was not much less than half of the 279,403 tons valued at \$10,099,423 produced during the calendar year 1926. While the tonnages both in the half-year and in the preceding calendar year were slightly less than the corresponding figures for the immediately preceding period the values in both cases were greater. In the half-year the value of the asbestos output showed an improvement of 3.8 per cent over the total for the first half of 1926, and in the calendar year 1926 the value showed a gain of 12.3 per cent over the totals for the calendar year 1925.

Graphite, which showed a gain in 1926 of 6.1 per cent in tonnage and 22.7 per cent in value over the figures for the preceding calendar year, dropped slightly behind this rate of production in the first half of 1927. Barytes, iron oxides, salt, sodium carbonate, talc and soapstone, while produced in fair tonnages during the half-year, were not produced in quite as great amounts as during the first half of 1926.

*The Metals in 1926.*—More arsenic was produced than in 1925, but the value of the production was restricted owing to the prevailing low prices for arsenic and the relatively high smelter charges for treatment.

Cobalt production was reduced due to the competition from producers in the Belgian Congo. The limited world market for this metal at the present time is fairly evenly divided between Canadian and African producers.

Copper statistics showed gains in every province, but more particularly in British Columbia. The improvement in Ontario figures as now reported, was not so noticeable as it would have been under the former method of computation. That is to say, production of converter copper at the refineries did not show as great improvement as did the output of matte from the smelters. Then, also the more conservative system of evaluation now adopted, whereby copper in matte exported is valued at 10 cents a pound, and the refinery production of copper either as blister or in other forms, is valued at the average price obtained by the producers, tends to reduce the aggregate value for the metal much below the totals recorded formerly, when the copper in matte produced, was valued on the basis of quotations for electrolytic copper.

More gold was produced in 1926 from Canadian ores than in any previous year. Ontario's gold mines continued to make wonderful progress. Mines reached greater depths, and mills, new production records.

The Hollinger, now one of the greatest gold mines in the world, grew steadily during the year. Tremendous tonnages from this, and other mines in the Porcupine and from the smaller but richer mines of the Kirkland Lake area, were put through the mills, to produce Ontario's contribution to the gold supply of the world. When the adjacent territory in Quebec, known as the Rouyn field, begins to produce, the output of copper and gold from this belt will be of great industrial importance. Prospecting and development work has been done in various parts of western and northern Ontario and throughout the new gold-copper area in Quebec with such good effect that many claims have been staked and not a few sold to development companies.

The building of the Noranda smelter in the Rouyn area and the completion of the railway extension to serve this smelter and the area generally, were features of the progress made during the year.

Production of gold from western deposits was only slightly in excess of the figures for 1925. Placer gold from the Yukon showed a marked drop from the total for the preceding year.

Ontario contributed nearly 86 per cent of Canada's output of gold; British Columbia added nearly 13 per cent; the Yukon yielded upwards of 1 per cent. Production from various other sources was very small, even in the aggregate.

Lead production, mostly from Trail, treating Sullivan mine ore chiefly but also ores in less quantities from other mines, reached a new tonnage record. Contributing to this new aggregate, in addition to Trail, and the silver-lead-zinc mines of British Columbia, were the Ontario lead mine at Galetta, the Quebec property at Notre Dame des Anges, and the properties in the Mayo district of the Yukon. Ontario's yield was 7.3 million pounds; Yukon added 5.8 million pounds; and Quebec's quota amounted to 3.7 million pounds. Production from British Columbia mines and smelters totalled 266.8 million pounds, thus far surpassing production from all other sources. Canada's output of lead is many times in excess of domestic requirements; as a consequence the exports of lead from Canada to the Orient and to Europe are rather large items in the country's foreign trade.

Exports of nickel in matte and speiss reached greater tonnages in 1926 than in the preceding year but the refinery production dropped below the totals for 1925 so that the aggregates, both for quantity and value, were less than in the preceding year. Despite this seeming setback the nickel-copper industry made very appreciable progress in 1926. Ambitious programs of extension and development were laid out and some of the work was undertaken. Production of high-grade sulphuric acid from the bessemer converter gases was carried on successfully at the Mond smelter and at the end of the year the plant was increased to double its previous capacity.

In 1926 silver provided students of the mineral industry with much food for thought. Disturbances in the Orient, the world's principal market for silver, had an unsettling effect on prices. In China, internal trading was disturbed by the influence of the insurgent element in the population; the necessity for silver for the settlement of foreign trade balances declined with the reduction in trade; the lack of demand in China was reflected in the Indian bazaars; and then came the announcement of the findings of the Royal Commission appointed to inquire into the Indian currency situation. This report was improperly understood at first to mean the abolition of silver as currency in India. As a result of these disturbing factors, the price of silver broke in September and declined still further in the following months to reach 51½ cents in New York in December, a lower level than had been recorded at any time in more than ten years. The drop in price must have cost many companies very considerable sums.

No change has been made in the method of computing quantities of zinc in making up the mineral production figures, but a slight change in the method of evaluation is to be noted. In former reports, it was customary to determine the value of the zinc production on the basis of prices quoted on the St. Louis market, which is the recognized trading centre for zinc in America. But, little Canadian zinc is sold either in the United States or on the basis of the markets in that country; most of Canada's exports of zinc are marketed in the Orient and in Europe, and in both cases settlement is made on London. So it seemed reasonable and indeed more accurate, to adopt London quotations in making up zinc values, and this has been done in the present report.

This change provides a slightly increased value for zinc as London quotations in 1926 were a little higher than the prices listed at St. Louis.

*The Non-Metals in 1926.*—Non-metallic minerals, including coal, showed a gain of 18.6 per cent in value over the totals for 1925. Most notable of the gains in this list was the increased tonnage of coal produced which showed an improvement of 25.4 per cent.

Feldspar production, too, showed an improvement of 25.3 per cent in tonnage and 31.5 per cent in value. Gypsum shipments were considerably greater in 1926 than in the preceding year and although slightly lower prices prevailed there was a marked increase in the total value. Magnesite showed a lower tonnage but a greater value due to the higher prices prevailing for this commodity. Noteworthy gains were made in the production of natural gas both in quantity and value. About 13.6 per cent more gas was produced and the value of the output was 10.5 per cent higher than the total for the preceding year. Crude petroleum production continued to increase. In fact gains were general throughout the list.



*The Structural Materials in 1926.*—Clay products and other structural materials reached a value of \$39,959,398, an advance of 6.1 per cent over the totals for the preceding year. Cement production showed an increased tonnage but a decreased total value. Lime, sand and gravel and stone showed decided gains. Most of the products of the clay-working industries were produced in larger quantities in 1926 than in the preceding year. Clay products as a whole showed a gain of 8.6 per cent in comparison with the totals for 1925.

*The Provinces in 1926.*—Ontario's production valued at \$84,702,296 made up 35.23 per cent of the Dominion total; British Columbia came second with an output valued at \$65,622,976 representing 27.29 per cent of the aggregate for the Dominion; Nova Scotia with an output valued at \$28,873,792 held third place and contributed 12.0 per cent of the total, closely followed by Alberta with a production of \$26,977,027 constituting 11.21 per cent of the total; Quebec followed with a production valued at \$25,956,193 or 10.80 per cent; Manitoba, Yukon, New Brunswick and Saskatchewan followed in the order named.

Gold, silver, nickel and copper were produced in abundance in Ontario and in addition there was a production of almost every other economic mineral with the exception of coal. British Columbia's output of lead, zinc, copper, gold and silver added greatly to Canada's mineral wealth. Quebec's asbestos fields continued to supply by far the greater part of the world's tonnage of this useful commodity; lead, zinc, gold and silver were also reported. Developments in the Rouyn field in Quebec were watched with interest by the mining world during the year. Much progress was made. Alberta, Nova Scotia and British Columbia produced large tonnages of coal in addition to other minerals. Manitoba's mines yielded gold and silver, but more important perhaps than the actual yield of metals was the fact that Manitoba's mineral area was made the subject of a more intense study during 1925 and 1926, than in any other years so that the prospects of production from this source were very considerably improved. Much money has been spent in the investigation of Manitoba's mineral resources; it seems as though the time is nearly at hand when profitable results may be expected. New Brunswick's coal and building materials added to the total for Canada. Interest in the oil-well developments in Alberta was very keen throughout the year; it is probable that very encouraging progress will be made in the mineral industry in this province in the early future.

*Employment.*—Employment in the mineral industry in Canada was maintained at about the same average rate throughout 1926 as that prevailing in 1925. The index of employment showed that about 3.5 per cent fewer persons were listed on the rolls of the operating companies in January, 1926, than were shown on the rolls of the same companies in January, 1920. Employment dropped off slightly in the first five months of the year, but beginning in June a gradual improvement set in which carried the index of employment in December, 1926, to 4.2 per cent above the number employed in January, 1920. Non-metal mining, including coal mining, showed greater gains than did the metal mining industries, but probably this was due to the fact that in the preceding year these industries were somewhat depressed while metal mining has been enjoying an era of prosperity for several years.

In the operating mines, quarries and smelters in Canada there are upwards of 65,000 persons employed. This number does not represent the total extent of employment in the mining industry as there are no records available of the numbers engaged in prospecting and general development work on properties that have not reached the producing stage, nor does it include any allowance for those persons who are engaged in the subsidiary industries directly dependent on the mining industry for their continuance, but in these operating mines, quarries and metallurgical works there are approximately 45,000 persons employed in Ontario, British Columbia and Nova Scotia alone. About 20,000 are employed in the metal mining industry and non-ferrous metallurgical works. About 34,000 people are employed in non-metal mining and approximately 11,000 in the production of structural materials and clay products. To all these, salaries and wages totalling approximately 85 million dollars are paid annually. The importance of the purchasing power represented by the employees of Canada's mining industry is sometimes not fully appreciated. Fuel and electricity constitute an expense item reaching a total of almost \$20,000,000 a year; much of the progress that has been possible in the mining industry in recent years has been due to the extensive development of hydro-electric power facilities.



*Capital Employed.*—Investment in Canadian mines amounts to approximately \$632,075,000; of which \$290,534,965 is invested in metal mining and metallurgical works treating Canadian ores; \$253,023,646 represents the investment in non-metal mines and \$88,516,534 the cost of properties and plants producing structural materials and clay products.

Investments in coal mining account for 23 per cent of the total capital employed in the mining industry. Gold quartz mines represent another 13 per cent of the capital; metallurgical works, 10 per cent; natural gas, 8 per cent; nickel-copper and silver-cobalt, 7 per cent each; cement, 6 per cent; clay products, 5 per cent, and stone, 2 per cent; the other mining industries account for the balance of the capital employed. Ontario mines account for 41 per cent of the total invested in the industry. For the other provinces the relative investments in mining expressed in percentages are as follows: British Columbia, 17 per cent; Alberta, 14 per cent; Quebec, 13 per cent; Nova Scotia, 9 per cent; Yukon, 4 per cent, and New Brunswick, Manitoba and Saskatchewan, the remaining 2 per cent.

• See text.

## Mineral Production in Canada, by Provinces, 1926

	Nova Scotia	New Brunswick	Quebec	Ontario	Mani- toba	Saskat- chewan	Alberta	British Columbia	Yukon
	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>METALLIC</b>									
Antimony..... lb.	-	-	-	1,596	-	-	-	-	-
\$	-	-	-	281	-	-	-	-	-
Arsenic..... lb.	-	-	-	4,055,477	-	-	-	1,019,200	-
\$	-	-	-	135,546	-	-	-	11,262	-
Bismuth..... lb.	-	-	-	6,440	-	-	-	-	-
\$	-	-	-	6,440	-	-	-	-	-
Cobalt..... lb.	-	-	-	864,778	-	-	-	-	-
\$	-	-	-	1,136,014	-	-	-	-	-
Copper..... lb.	-	-	2,674,058	41,312,867	-	-	-	89,108,017	-
\$	-	-	368,886	4,828,944	-	-	-	12,292,450	-
Gold..... fine oz.	1,678	-	3,680	1,497,215	188	-	-	225,806	25,601
\$	34,687	-	76,072	30,950,180	3,886	-	-	4,669,065	529,220
Iron ore sold for ex- port..... tons	-	-	200	-	-	-	-	-	-
\$	-	-	600	-	-	-	-	-	-
Lead..... lb.	-	-	3,729,636	7,398,795	-	-	-	266,812,461	5,860,373
\$	-	-	251,788	580,730	-	-	-	18,012,509	395,634
Manganese..... tons	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-
Molybdenite..... lb.	-	-	20,943	-	-	-	-	-	-
\$	-	-	10,472	-	-	-	-	-	-
Nickel..... lb.	-	-	-	65,714,204	-	-	-	-	-
\$	-	-	-	14,374,163	-	-	-	-	-
Palladium, Rhod- ium, etc..... fine oz.	-	-	-	10,024	-	-	-	-	-
\$	-	-	-	640,178	-	-	-	-	-
Platinum..... fine oz.	-	-	-	9,471	-	-	-	50	-
\$	-	-	-	919,349	-	-	-	4,258	-
Silver..... fine oz.	112	-	375,986	9,274,065	19	-	-	10,625,816	2,095,027
\$	70	-	233,513	5,760,402	11	-	-	6,599,374	1,301,159
Zinc..... lb.	-	-	12,904,176	-	-	-	-	137,033,929	-
\$	-	-	956,199	-	-	-	-	10,154,214	-
<b>Total..... \$</b>	<b>34,757</b>	<b>-</b>	<b>1,897,539</b>	<b>59,332,459</b>	<b>3,897</b>	<b>-</b>	<b>-</b>	<b>51,743,184</b>	<b>2,226,013</b>
<b>NON-METALLIC</b>									
Actinolite..... tons	-	-	-	80	-	-	-	-	-
\$	-	-	-	1,000	-	-	-	-	-
Asbestos..... tons	-	-	279,389	14	-	-	-	-	-
\$	-	-	10,095,488	3,935	-	-	-	-	-
Barytes..... tons	100	-	-	-	-	-	-	-	-
\$	2,307	-	-	-	-	-	-	-	-
Bituminous sands..... tons	-	-	-	-	-	-	528	-	-
\$	-	-	-	-	-	-	2,112	-	-
Coal..... tons	6,747,477	173,111	-	-	-	439,803	6,503,705	2,612,719	316
\$	26,845,226	710,245	-	-	-	819,805	20,886,103	10,612,915	800
Feldspar..... tons	-	-	13,168	22,783	-	-	-	-	-
\$	-	-	111,136	190,102	-	-	-	-	-
Fluorspar..... tons	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-
Garnets..... tons	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-
Graphite..... tons	-	-	326	2,401	-	-	-	-	-
\$	-	-	29,516	165,341	-	-	-	-	-
Grinding Pebbles..... tons	-	-	-	84	-	-	-	-	-
\$	-	-	-	576	-	-	-	-	-
Grindstones..... tons	311	1,681	-	-	-	-	-	700	-
\$	15,136	90,975	-	-	-	-	-	45,116	-
Gypsum..... tons	678,107	59,546	-	89,987	35,172	-	-	20,946	-
\$	1,187,918	468,411	-	496,059	461,461	-	-	156,964	-
Magnesite..... tons	-	-	4,571	-	-	-	-	-	-
\$	-	-	137,431	-	-	-	-	-	-
Mica..... tons	-	-	1,664	881	-	-	-	-	-
\$	-	-	170,118	59,086	-	-	-	-	-
Mineral water imp. gals.	-	-	6,956	208,400	-	-	-	-	-
\$	-	-	2,444	27,277	-	-	-	-	-
Natural gas..... M cu. ft.	-	648,316	-	7,764,990	200	-	10,794,697	-	-
\$	-	128,300	-	4,409,593	60	-	3,019,221	-	-
Iron oxides..... tons	-	-	6,518	-	-	-	-	108	-
\$	-	-	100,923	-	-	-	-	920	-
Petroleum, crude..... brls.	-	10,544	-	137,850	-	-	216,050	-	-
\$	-	29,940	-	379,221	-	-	902,504	-	-
Phosphate..... tons	-	-	40	-	-	-	-	-	-
\$	-	-	800	-	-	-	-	-	-
Pyrites..... tons	-	-	14,100	371	-	-	-	3,374	-
\$	-	-	42,117	4,912	-	-	-	16,870	-
Quartz..... tons	8,333	-	24,550	192,733	-	-	-	6,466	-
\$	20,018	-	107,779	330,304	-	-	-	77,060	-
Salt..... tons	8,165	-	-	252,345	-	-	2,037	-	-
\$	68,781	-	-	1,388,672	-	-	22,696	-	-
Sodium carbonate..... tons	-	-	-	-	-	-	-	595	-
\$	-	-	-	-	-	-	-	5,370	-
Sodium sulphate..... tons	-	-	-	-	-	6,775	-	-	-
\$	-	-	-	-	-	13,550	-	-	-

## Mineral Production in Canada by Provinces, 1926—Concluded

	Nova Scotia	New Brunswick	Quebec	Ontario	Mani- toba	Saskat- chewan	Alberta	British Columbia	Yukon
	\$	\$	\$	\$	\$	\$	\$	\$	\$
Non-Metallic—Con.									
Talc and soapstone, tons	-	-	885	14,882	-	-	-	-	-
Volcanic dust, tons	-	-	38,209	178,986	-	90	-	-	-
Silica brick, M	1,358	-	-	1,307	-	630	-	-	-
	64,461	-	-	66,241	-	-	-	-	-
<b>Total.....</b>	<b>\$ 28,212,847</b>	<b>1,427,871</b>	<b>10,835,961</b>	<b>7,719,308</b>	<b>461,531</b>	<b>833,985</b>	<b>24,832,636</b>	<b>10,915,215</b>	<b>800</b>
CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS									
Brick—Soft mud process— Face, M	10	-	7,836	20,389	-	-	-	-	-
Clay Products—									
Common \$	200	-	196,829	359,544	-	-	-	-	-
M	826	-	25,833	35,474	9,775	765	2,022	3,463	-
\$	10,670	-	365,405	522,803	159,350	11,240	24,458	51,564	-
Stiff mud process (wire cut)—									
Face, M	1,262	-	17,156	76,078	3,181	1,252	651	1,148	-
\$	25,139	-	442,738	1,637,450	45,778	35,365	21,111	38,781	-
Common M	3,845	2,372	68,131	12,110	105	2,728	4,271	4,994	-
\$	50,002	34,258	1,247,875	206,242	1,050	31,428	45,208	7,992	-
Dry press—									
Face, M	-	-	-	26,462	-	593	2,070	1,298	-
\$	-	-	-	539,854	-	21,422	39,064	50,806	-
Common M	-	-	-	3,055	-	159	13,236	3,000	-
\$	-	-	-	39,689	-	2,138	164,771	54,000	-
Fancy or orna- mental brick M	-	-	88	374	-	-	-	-	-
\$	-	-	4,010	20,047	-	-	-	-	-
Sewer brick, M	-	-	-	6,397	-	-	-	149	-
\$	-	-	-	111,620	-	-	-	5,574	-
Paving brick M	-	-	-	-	-	-	-	122	-
\$	-	-	-	-	-	-	-	5,015	-
Firebrick, M	30	25	-	-	-	737	-	3,403	-
\$	1,901	1,372	-	-	-	39,456	-	149,547	-
Fireclay, tons	536	47	-	-	-	808	-	1,122	-
\$	2,123	1,819	-	-	-	5,103	-	14,213	-
Fireclay blocks and shapes, \$	675	-	-	-	-	23,361	-	30,028	-
Hollow blocks, tons	5,141	-	33,627	76,642	2,511	4,400	12,591	6,997	-
\$	60,615	-	281,342	799,652	29,132	44,000	115,008	73,958	-
Roofing tile, No.	-	-	-	17,018	-	-	-	-	-
\$	-	-	-	1,562	-	-	-	-	-
Floor tiles (quarries), sq. ft.	-	-	-	105,011	-	-	-	-	-
\$	-	-	-	43,854	-	-	-	-	-
Ceramic or glazed floor and wall tile \$	-	-	-	943	-	-	-	-	-
Drain tile, No.	53	-	224	12,788	275	20	132	766	-
\$	1,877	-	10,145	340,403	13,187	600	3,955	25,851	-
Sewer pipe, copings, flue linings, &c., tons	11,532	-	6,311	48,176	-	-	7,140	2,837	-
\$	209,465	-	153,954	835,206	-	-	197,225	84,926	-
Pottery, glazed or unglazed, \$	-	38,402	-	87,600	-	-	104,133	-	-
Other products— Bentonite, tons	-	-	-	-	-	-	-	30	-
\$	-	-	-	-	-	-	-	150	-
<b>Total.....</b>	<b>\$ 362,667</b>	<b>75,861</b>	<b>2,702,298</b>	<b>5,256,469</b>	<b>248,497</b>	<b>214,113</b>	<b>804,933</b>	<b>592,495</b>	<b>-</b>
OTHER STRUCTURAL MATERIALS									
Cement, brls.	-	-	3,727,377	3,398,860	612,155	-	423,766	544,863	-
\$	-	-	4,535,386	4,792,857	1,572,401	-	873,621	1,239,018	-
Lime, bush	453,797	477,226	2,849,635	6,522,747	685,389	-	108,309	728,633	-
\$	59,777	196,477	766,116	2,051,446	251,269	-	39,517	416,882	-
Sand and gravel, tons	230,307	70,931	5,233,696	6,483,163	989,581	863,901	1,754,965	1,486,354	-
\$	52,952	11,360	1,490,074	2,292,078	178,059	115,296	412,430	357,985	-
Stone, tons	92,315	19,108	2,305,734	3,622,042	101,571	-	3,759	253,061	-
\$	150,792	99,545	3,728,228	3,157,288	357,894	-	13,890	358,247	-
<b>Total.....</b>	<b>\$ 263,521</b>	<b>307,382</b>	<b>10,520,404</b>	<b>12,294,269</b>	<b>2,339,613</b>	<b>145,296</b>	<b>1,339,458</b>	<b>2,372,132</b>	<b>-</b>
<b>Grand total \$</b>	<b>28,873,292</b>	<b>1,811,104</b>	<b>25,956,193</b>	<b>84,702,296</b>	<b>3,673,528</b>	<b>1,193,394</b>	<b>26,977,027</b>	<b>65,622,976</b>	<b>2,226,813</b>



## Mineral Production of Canada, January 1 to June 30, 1926 and 1927

		1926 January 1 to June 30		1927 January 1 to June 30		Per cent Increase (+) or Decrease (-)	
		Quantity	Value	Quantity	Value	Quantity	Value
			\$		\$		\$
<b>METALLIC</b>							
Antimony.....	Lb.	1,596	281	-	-	-	-
Antimony ore.....	Tons	76	380	-	-	-	-
Arsenic (As <sub>2</sub> O <sub>3</sub> ).....	Lb.	2,287,801	66,093	3,667,004	131,514	+ 60.2	+ 98.9
Bismuth.....	"	6,440	-	-	-	-	-
Cobalt.....	"	384,034	895,730	392,837	765,748	+ 2.2	+ 10.0
Copper.....	"	70,843,426	9,757,205	73,619,657	9,075,634	+ 3.9	- 7.7
Gold.....	Fine oz.	885,813	18,311,378	863,031	17,840,434	- 2.5	- 2.5
Iron, pig, from Canadian ore.....	Tons	-	-	-	-	-	-
Iron ore sold for export.....	"	-	-	830	4,400	-	-
Lead.....	Lb.	138,397,755	11,453,798	152,275,563	8,803,676	+ 10.0	+
Molybdenite.....	"	3,530	1,765	-	-	-	-
Nickel.....	"	34,519,896	7,702,754	34,781,190	8,008,823	+ 0.8	+ 4.0
Palladium, Rhodium, Iridium, etc. Fine oz.	"	5,088	393,486	5,796	315,910	+ 13.9	- 19.7
Platinum.....	"	5,166	577,794	5,374	424,546	+ 4.0	- 26.5
Silver.....	"	11,108,310	7,320,509	11,723,218	6,612,833	+ 5.5	- 9.7
Zinc.....	Lb.	67,159,570	4,961,749	69,282,179	4,194,774	+ 3.2	- 9.6
<b>Total.....</b>			<b>61,249,482</b>		<b>56,468,412</b>		<b>- 7.8</b>
<b>NON-METALLIC</b>							
<i>Fuels</i>							
Coal.....	Tons	6,895,813	25,312,598	8,424,631	29,895,818	+ 20.6	+ 17.3
Natural gas.....	M. cu. ft.	10,010,079	4,226,859	11,347,648	4,614,438	+ 13.4	+ 9.2
Peat.....	Tons	-	-	-	-	-	-
Petroleum, crude.....	Brl.	173,890	697,551	244,217	776,824	+ 40.5	+ 11.4
<b>Total.....</b>			<b>31,237,008</b>		<b>35,087,080</b>		<b>+ 16.0</b>
<i>Other Non-Metallic Minerals</i>							
Actinolite.....	Tons	30	375	-	-	-	-
Asbestos.....	"	132,644	4,512,219	123,730	4,685,706	- 6.7	+ 3.8
Barytes.....	"	44	824	35	771	- 20.5	- 6.4
Bituminous sands.....	"	78	312	291	1,164	+ 273.1	+ 273.1
Feldspar.....	"	13,135	114,016	15,926	139,152	+ 21.2	+ 22.0
Fluorspar.....	"	-	-	-	-	-	-
Graphite.....	"	1,371	101,291	899	57,591	- 14.4	- 43.1
Grinding pebbles.....	"	32	288	-	-	-	-
Grindstones.....	"	-	-	-	-	-	-
Gypsum.....	"	250,369	964,638	331,893	1,175,850	+ 32.6	+ 21.9
Iron oxides.....	"	2,821	37,915	2,791	37,610	- 1.1	- 0.8
Magnesite.....	"	2,498	72,075	2,801	81,344	+ 12.1	+ 12.9
Mica.....	"	1,148	105,094	1,295	99,577	+ 5.0	- 5.2
Mineral water.....	Gals.	80,313	11,767	121,611	12,650	+ 51.4	+ 9.2
Natron-sulphate.....	Tons	-	-	-	-	-	-
Phosphate.....	"	-	-	69	893	-	-
Pyrites.....	"	7,615	30,645	21,418	78,931	+ 181.3	+ 157.6
Quartz.....	"	62,314	120,673	97,156	179,216	+ 55.9	+ 48.5
Salt.....	"	124,921	708,664	124,166	785,484	- 0.6	+ 10.8
Silica brick.....	M	-	-	466	23,250	-	-
Sodium carbonate.....	Tons	326	2,282	271	2,710	- 16.9	+ 18.8
Sodium sulphate.....	"	2,221	11,107	2,471	4,943	+ 11.3	- 55.5
Talc and soapstone.....	"	7,888	115,113	7,831	113,670	- 0.7	- 1.3
Volcanic ash.....	"	-	-	230	1,610	-	-
<b>Total.....</b>			<b>6,909,298</b>		<b>7,482,322</b>		<b>+ 8.3</b>
<b>Total non-metallics.....</b>			<b>37,146,306</b>		<b>42,569,402</b>		<b>+ 14.6</b>

\* See Text.

**Mineral Production of Canada (exclusive of Clay Products and Other Structural Materials) by Provinces, January 1 to June 30, 1927**

	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Yukon
<b>METALLIC</b>									
Antimony..... Lb.	-	-	-	-	-	-	-	-	-
Arsenic..... Lb.	-	-	-	3,275,214	-	-	-	391,790	-
Bismuth..... Lb.	-	-	-	127,185	-	-	-	4,329	-
Cobalt..... Lb.	-	-	-	392,837	-	-	-	-	-
Copper..... Lb.	-	-	2,125,899	21,808,467	-	-	-	49,685,321	-
Gold..... Fine oz.	1,357	-	271,218	2,465,563	-	-	-	6,338,853	-
Iron ore sold for export..... Tons	28,052	-	51,193	15,828,930	-	-	-	86,993	6,496
Lead..... Lb.	-	-	2,032,227	3,677,719	-	-	-	1,798,305	134,284
Manganese..... Tons	-	-	168,515	263,758	-	-	-	-	-
Molybdenite..... Lb.	-	-	-	-	-	-	-	-	-
Nickel..... Lb.	-	-	-	34,781,199	-	-	-	-	-
Palladium, Rhodi- um, etc..... Fine oz.	-	-	-	8,008,823	-	-	-	-	-
Platinum..... Fine oz.	-	-	-	5,796	-	-	-	-	-
Silver..... Fine oz.	73	-	285,461	4,948,888	-	-	-	315,940	-
Zinc..... Lb.	41	-	161,023	2,791,569	-	-	-	5,374	-
<b>Total..... \$</b>	<b>28,093</b>	<b>-</b>	<b>1,110,839</b>	<b>30,991,762</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>23,444,193</b>	<b>893,525</b>
<b>NON-METALLIC</b>									
Actinolite..... Tons	-	-	-	-	-	-	-	-	-
Asbestos..... Tons	-	-	123,730	-	-	-	-	-	-
Barytes..... Tons	35	-	4,685,706	-	-	-	-	-	-
Bituminous sands..... Tons	771	-	-	-	-	-	291	-	-
Coal..... Tons	3,572,122	110,510	-	-	-	195,398	1,164	-	-
Feldspar..... Tons	13,335,611	486,600	6,855	0,071	-	349,869	3,170,551	1,376,050	-
Fluorspar..... Tons	-	-	54,108	85,044	-	-	9,982,064	5,541,674	-
Garnets..... Tons	-	-	-	-	-	-	-	-	-
Graphite..... Tons	-	-	53	846	-	-	-	-	-
Grinding pebbles..... Tons	-	-	2,097	55,494	-	-	-	-	-
Grindstones..... Tons	-	-	-	-	-	-	-	-	-
Gypsum..... Tons	227,060	32,108	-	42,298	20,191	-	-	10,238	-
Magnesite..... Tons	428,901	244,257	-	142,820	272,923	-	-	86,949	-
Mica..... Lb.	-	-	81,344	-	-	-	-	-	-
Mineral waters, Imp gal.	-	-	1,454,192	955,860	-	-	-	-	-
Natural gas..... M cu. ft.	-	407,860	52,385	47,192	-	-	-	-	-
Iron, Oxides..... Tons	-	70,438	1,876	119,735	-	-	7,050,538	-	-
Petroleum, crude..... Brls.	-	-	504	12,346	100	30	2,007,022	-	-
Phosphate..... Tons	-	-	2,788	69,177	-	-	-	-	3
Pyrites..... Tons	-	15,598	37,520	145,645	-	-	159,442	-	90
Quartz..... Tons	-	32,361	-	-	-	-	598,918	-	-
Salt..... Tons	-	-	31	-	-	-	-	38	-
Silica brick..... Tons	-	-	399	-	-	-	-	494	-
Sodium carbonate..... Tons	-	-	8,533	109	-	-	-	12,686	-
Sodium sulphate..... Tons	-	-	25,599	2,588	-	-	-	50,744	-
Talc and soapstone..... Tons	1,013	-	10,567	85,237	-	-	-	339	-
Tripolite..... Tons	4,567	-	35,973	137,659	-	-	-	1,017	-
Volcanic dust..... Tons	6,189	-	-	117,877	-	-	100	-	-
<b>Total..... \$</b>	<b>39,894</b>	<b>92</b>	<b>3,676</b>	<b>744,290</b>	<b>374</b>	<b>19,574</b>	<b>1,300</b>	<b>2,710</b>	<b>-</b>
<b>Total..... \$</b>	<b>13,813,420</b>	<b>842,656</b>	<b>4,998,715</b>	<b>4,068,826</b>	<b>272,933</b>	<b>356,422</b>	<b>12,599,468</b>	<b>5,685,942</b>	<b>-</b>

*Method of Computing Values*

For statistical and comparative purposes it has always been customary to determine the value of the metals on the basis of the quantities recovered from Canadian ores smelted during the year either in Canada or abroad; in making up values the general practice is to use the average price of the refined metal in a recognized market. As some changes have been made in the methods in use, the following notes have been prepared so that the reader may know how the figures of quantity and value have been computed.

*Antimony*.—Recoverable metal in shipments made, valued at the average New York price for the fine metal.

*Arsenic*.—(a) The recoverable arsenic in concentrates exported at an arbitrary value;  
(b) White arsenic shipped from Canadian smelters at its sales value.

*Bismuth*.—The recoverable bismuth metal in the silver-lead-bismuth bullion shipped to foreign smelters for refining, at an arbitrary value.

*Cobalt*.—Cobalt content of the various cobalt products sold by south Ontario smelters added to the cobalt content of ores and residues exported for treatment in foreign smelters; the value given is the net amount received by the shippers.

*Copper*.—1. Dominion Bureau of Statistics practice up to the end of 1925 was to include as the production of copper, data obtained from the following sources:

- (a) Copper in matte made by the International Nickel Company and the Mond Nickel Company at their smelters in the Sudbury area;
- (b) Copper in cobalt-nickel and gold ores exported, deductions being made as follows:
  - (1) Copper in concentrates from gold ores less 26 pounds per ton of concentrates;
  - (2) Copper paid for in concentrates from silver-cobalt ores;
  - (3) Copper in concentrates exported (from Quebec) less 20 pounds per ton of concentrates;
  - (4) Blister copper produced at the Trail and Granby smelters;
  - (5) Copper in Britannia mine shipments of concentrates less 10 pounds per ton of concentrates;
  - (6) Copper in all other copper-bearing ores exported less 20 pounds per ton of concentrates.

2. The sum of production as thus determined was valued at the monthly average New York market price for electrolytic copper.

3. Consensus of opinion seems to be that the foregoing method results in a higher valuation being put on copper production from Ontario ores than is actually obtained by Canadian producers, and it is held that practice in Ontario would be improved by measuring the copper production at its most advanced state within the province. Thus, whereas formerly calculations were based on the copper content of matte made at the smelters in the Sudbury area, now it is proposed to compute in the item "Production," the copper produced at Port Colborne and the copper in matte and ores exported.

- (a) There has been no change in method either in respect to quantities or values except in the province of Ontario; while it may be suggested that the production of copper from Trail ought to be measured at the refinery rather than at the smelter it is not considered desirable to make this change at the present time owing to the fact that the copper refinery in question operates only intermittently whereas the copper smelter has a more continuous record. There may be some disposition to discuss the deductions that ought to be allowed in connection with shipments of copper ores for export, but it is thought this possible change in practice would not be of great moment and it is therefore passed over at the present time;

- (b) In computing Ontario's production of copper the procedure will be as follows:—

- (1) Copper content of converter copper made at Port Colborne, the value for this output being computed *pro rata* according to the income from sales of copper during the year (as reported by the International Nickel Company of Canada);
- (2) Copper in matte exported from the smelters of the Sudbury area valued at an arbitrary figure agreed upon between the Bureau of Statistics and the Ontario Department of Mines;

- (3) Copper in concentrates from gold ores less 26 pounds per ton of concentrates valued at the monthly average New York price for electrolytic copper;
- (4) Copper paid for in concentrates from silver-cobalt ores exported at its sales value as reported by the shippers;
- (5) The foregoing changes have been made in this report.

*Gold.*—Gold in bullion produced and the recoverable gold in all other Canadian mine products valued at the standard rate of \$20·671834 per fine ounce.

*Iron Ore.*—Export tonnages and sales values.

*Lead.*—1. Dominion Bureau of Statistics practice up to the end of 1925 was to evaluate the recoverable lead from all sources at the average price prevailing on the Montreal market during the year.

2. Examination of the returns made to the Bureau shows that sales of lead in ores from the province of Quebec and to the extent of about 80 per cent of the lead sold from Trail are made on the basis of London quotations; approximately 20 per cent of the lead sold from Trail is marketed in Canada.

3. Lead from Ontario ores finds its market in Canada.

4. Lead ores exported from British Columbia and from the Yukon to points in the United States are subject to a duty of  $1\frac{1}{2}$  cents per pound of lead content (lead in base bullion takes a rate of  $2\frac{1}{2}$  cents per pound.) The difference between the London and New York quotations is approximately equivalent to the duty charged on each pound of lead imported into the United States.

In view of the foregoing facts the following procedure for the evaluation of lead from Canadian ores has been adopted in this report:—

- (a) Ontario—Galletta sales, quantity and value.
- (b) Recoverable lead in ores exported from Quebec, Yukon and British Columbia as well as lead in base bullion made at Trail valued at the average London quotations during the year as given in the "*Engineering and Mining Journal*" the English quotations being converted to Canadian funds at par (\$4·86666).

*Molybdenite.*—Shipments in terms of  $\text{MoS}_2$  at their sales value.

*Nickel.*—Prior to 1925 it was customary in Dominion reports to compute the nickel production of Canada as the sum of the quantity of nickel contained in matte made at the Sudbury smelters and the nickel contained in smelter products from silver-cobalt ores; the value was computed at the average New York market price for virgin nickel. But as all Canada's nickel is derived from Ontario ores, and as the method used by the Ontario Department of Mines differed from Dominion practice, a conference was arranged during 1925, with a view to harmonizing the statistics on nickel. As a result of this conference it was agreed that both offices should compute the quantity and value of nickel production as follows:—

- (a) Nickel in matte exported from Canada valued at an arbitrary figure agreed upon between the two offices—(representative of the value of nickel in matte);
- (b) Refined and electrolytic nickel produced at Canadian refineries valued at the average price obtained for such products sold during the year;
- (c) Nickel in nickel oxide or salts sold from Canadian smelters and refineries at its total selling value in the form in which it was sold;
- (d) Nickel contained in speiss residues exported valued at the same price as allowed for nickel in matte.

This method has been followed in making up the nickel figures in this report.

*Precious Metals, including Platinum.*—Recoverable metals in smelter products at their sales value to the producer.

*Silver.*—Silver bullion produced and the recoverable silver in other smelter products, and the recoverable silver in Canadian ores exported, at the average New York price for the refined metal.

*Zinc.*—Refined zinc produced at Trail and the recoverable zinc in concentrates exported valued at the average monthly price quoted in London, exchange conversion being made at par.

*Coal.*—Output tonnage evaluated *pro rata* according to income from sales.

*Other Non-Metallic Minerals, Clay Products and Structural Materials.*—Shipments during the year at their respective sales values.



Exchange Table—Showing the amount paid in Canadian dollars for one United State dollar by months, 1922-1927

Month	1922	1923	1924	1925	1926	1927
	\$	\$	\$	\$	\$	\$
January.....	1-0553	1-0067	1-0275	1-0026	1-0020	1-0016
February.....	1-0351	1-0119	1-0322	1-0014	1-0134	1-0006
March.....	1-0297	1-0208	1-0294	1-0013	1-0137	1-0009
April.....	1-0208	1-0203	1-0184	1-0005	0-9996	0-9990
May.....	1-0125	1-0222	1-0166	1-0000	0-9992	0-9993
June.....	1-0138	1-0231	1-0141	1-0000	0-9989	1-0006
July.....	1-0091	1-0263	1-0064	0-9995	0-9987	
August.....	1-0023	1-0244	1-0011	0-9995	0-9985	
September.....	0-9998	1-0233	1-0078	1-0001	0-9986	
October.....	1-0011	1-0156	1-0016	0-9992	0-9993	
November.....	0-9998	1-0181	1-0000	0-9992	0-9996	
December.....	0-9966	1-0239	1-0015	1-0003	1-0006	
Average.....	1-0145	1-0197	1-0131	1-0003	1-0001	1-0003

Metal Prices, 1922-1927

Commodity	Market	Unit	1922	1923	1924	1925	1926	January 1 to June 30, 1927
			\$	\$	\$	\$	\$	\$
Antimony (ordinaries).....	New York.....	pound.....	0-08471	0-07897	0-10836	0-17494	0-15988	0-17498
Arsenic, white.....	".....	".....	0-08500	0-12050	0-09636	0-0460	0-0350	0-0375
Cobalt.....	".....	".....	3-25	2-85	2-75	2-50	2-50	2-50
Cobalt oxide.....	".....	".....	2-00	2-10	2-10	2-20	2-10	2-10
Copper.....	".....	".....	0-13382	0-14421	0-13024	0-14042	0-13795	0-12758
Lead.....	New York.....	".....	0-05734	0-07267	0-08067	0-09020	0-08417	0-07121
Lead.....	Montreal.....	".....	0-06219	0-07179	0-08104	0-0912	0-08154	0-07220
Lead.....	London*.....	".....				0-07914	0-06751	0-05747
Nickel.....	New York.....	".....	0-35	0-29353	0-28	0-31	35	0-39
Platinum.....	".....	ounce.....	97-818	116-537	118-817	119-093	113-269	97-272
Silver.....	".....	".....	0-67628	0-64873	0-66781	0-69065	0-62107	0-58408
Tin.....	".....	pound.....	0-31831	0-41799	0-39674	0-56790	0-63015	0-65563
Zinc.....	St. Louis.....	".....	0-05716	0-06807	0-06344	0-07622	0-07337	0-0-442
Zinc.....	London*.....	".....				0-0741	0-0741	0-08473

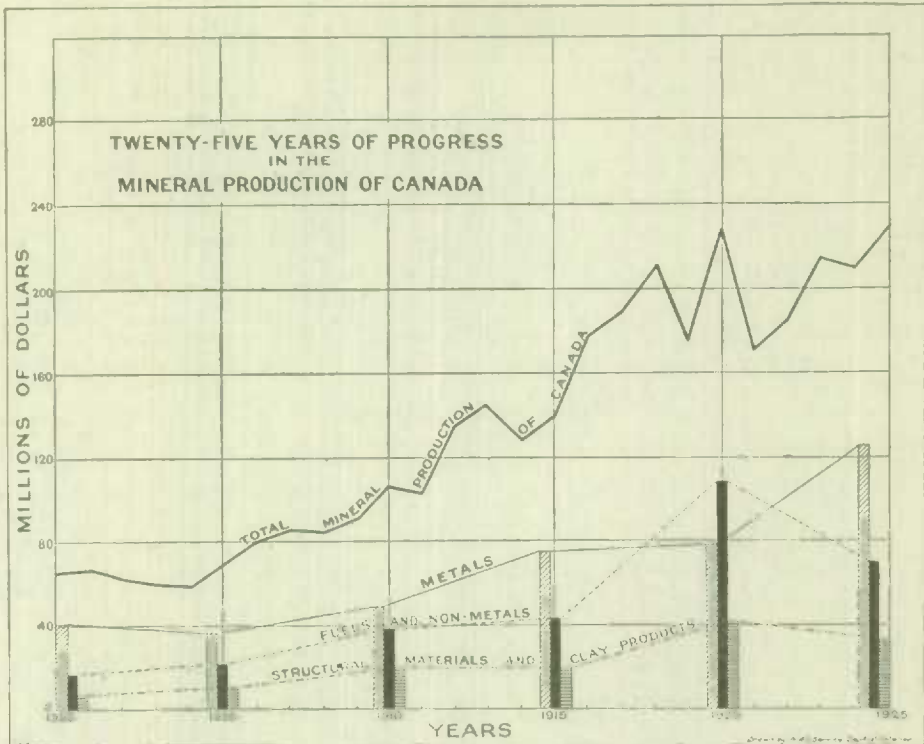
\* Quotations used in this report in computing value of mineral production.

† Nickel Shot in 1926-1927.

### Finally Revised Statistics on the Mineral Production of Canada, by Provinces, 1926

Metal mining in Canada showed wonderful prosperity in 1926. In Ontario, gold, silver, nickel and copper were produced in abundance and in addition to these leading minerals there was a production of almost every other economic mineral with the exception of coal. British Columbia's output of lead, zinc, copper, gold and silver added greatly to Canada's mineral wealth. Quebec's asbestos fields continue to supply by far the greatest part of the world's tonnage of this useful commodity; lead, zinc, gold and silver, copper, molybdenite, and a small quantity of iron ore, were also reported. Developments in the Rouyn field in Quebec were watched with interest by the mining world during the year. Much progress was made. Alberta, Nova Scotia and British Columbia produced large tonnages of coal in addition to other minerals. Manitoba's mines yielded gold and silver, but more important perhaps than the actual yield of metals was the fact that Manitoba's mineral area has been made the subject of more intense study during recent years than formerly, so that the prospects of production from this source are very considerably improved. Much money has been spent in the investigation of Manitoba's mineral resources. New Brunswick's coal and building materials added to the total for Canada. Interest in the oil-well developments in Alberta was very keen throughout the year; it is probable that very encouraging developments will occur in the mineral industry in this province in the early future.

Finally revised statistics showing the production of minerals by provinces, during the calendar year 1926 are shown in the next following tables, and comparative data are given in each case for the two preceding years.



Mineral Production of Canada by Provinces, 1924, 1925 and 1926

Province	1924		1925		1926	
	Value of production	Per cent of total	Value of production	Per cent of total	Value of production	Per cent of total
	\$		\$		\$	
Nova Scotia.....	23,820,352	11.37	17,625,612	7.78	28,873,792	12.00
New Brunswick.....	1,969,260	0.94	1,743,858	0.77	1,811,104	0.76
Quebec.....	19,136,504	9.13	24,284,527	10.71	25,956,193	10.80
Ontario.....	86,398,656	41.23	87,980,436	38.83	84,702,296	35.23
Manitoba.....	1,534,240	0.73	2,276,769	1.01	3,073,528	1.29
Saskatchewan.....	1,128,100	0.54	1,076,392	0.48	1,193,394	0.50
Alberta.....	22,344,940	10.66	25,318,866	11.17	26,977,027	11.21
British Columbia.....	52,298,533	24.95	64,485,242	28.46	65,622,976	27.29
Yukon.....	952,812	0.45	1,701,641	0.79	2,226,813	0.92
<b>Total.....</b>	<b>209,583,406</b>	<b>100.00</b>	<b>226,583,333</b>	<b>100.00</b>	<b>240,437,123</b>	<b>100.00</b>

## Mineral Production of Nova Scotia, 1924, 1925 and 1926

Product	1924		1925		1926	
	Quantity	Value	Quantity	Value	Quantity	Value
<b>METALLIC—</b>		\$		\$		\$
Arsenic..... lb.	381,092	15,244	—	—	—	—
Gold..... fine oz.	1,047	21,643	1,626	33,612	1,678	34,687
Manganese..... tons	—	—	—	—	—	—
Silver..... fine oz.	44	29	86	59	112	70
<b>NON-METALLIC—</b>						
Barytes..... tons	151	3,308	95	2,259	100	2,307
Coal..... "	5,557,441	22,280,554	3,842,978	15,826,680	6,747,477	26,845,226
Grindstones..... "	338	12,525	439	16,723	311	15,136
Gypsum..... "	441,752	915,845	551,230	1,070,408	678,107	1,187,918
Quartz..... "	—	—	1,352	6,760	8,333	29,018
Salt..... "	4,551	37,469	6,598	49,889	8,165	68,781
Tripolite..... "	33	838	—	—	—	—
Silica brick..... M	—	—	—	—	1,358	64,461
<b>CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS—</b>						
Clay products..... "	—	359,288	—	*425,710	—	362,667
Lime..... bush. ‡	78	930	8,243	3,464	453,797	59,777
Stone..... tons	67,535	111,824	102,125	134,686	92,315	150,702
Sand and gravel..... "	—	† 60,849	286,614	55,362	230,307	52,952
<b>Total</b>	—	<b>23,820,352</b>	—	<b>17,625,612</b>	—	<b>28,873,792</b>

\* Includes clay products from P.E.I. valued at \$3,020.

† Includes railway ballast from P.E.I., valued at \$11,490 in 1924, \$5,475 in 1925.

‡ Tons.

## Mineral Production of New Brunswick, 1924, 1925 and 1926

Product	1924		1925		1926	
	Quantity	Value	Quantity	Value	Quantity	Value
<b>METALLIC—</b>		\$		\$		\$
Manganese ore..... tons	534	4,088	—	—	—	—
<b>NON-METALLIC—</b>						
Coal..... tons	217,121	932,185	208,012	815,367	173,111	710,245
Grindstones..... "	2,113	90,209	1,642	70,661	1,684	90,075
Gypsum..... "	86,738	476,804	71,745	408,917	59,546	468,411
Natural gas..... M cu. ft.	599,972	113,577	639,235	122,394	618,316	128,300
Petroleum..... bbl.	5,561	21,313	5,376	18,755	10,514	29,940
<b>CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS—</b>						
Clay products..... "	—	74,994	—	69,473	—	75,851
Lime..... bush.	208,180	108,890	202,106	92,216	477,226	106,477
Sand and gravel..... tons	141,897	23,999	70,156	12,331	70,031	11,360
Stone..... "	19,229	114,111	25,391	124,743	19,108	99,545
<b>Total</b>	—	<b>1,969,760</b>	—	<b>1,743,858</b>	—	<b>1,811,104</b>

## Mineral Production\* of Quebec, 1924, 1925 and 1926

Product	1924		1925		1926	
	Quantity	Value	Quantity	Value	Quantity	Value
<b>METALLIC—</b>		\$		\$		\$
Chromite..... tons	—	—	—	—	—	—
Copper..... lb.	1,893,008	240,546	2,510,141	352,474	2,674,058	368,886
Gold..... fine oz.	883	18,253	1,602	33,116	3,680	76,072
Iron ore, sold for export..... tons	1,408	3,771	3,978	11,934	200	600
Lead..... lb.	1,058,983	85,820	2,051,100	187,060	3,729,636	251,788
Molybdenite..... "	18,739	9,370	22,350	11,176	20,943	10,472
Silver..... fine oz.	83,814	55,972	214,943	148,451	375,986	233,513
Zinc..... lb.	2,909,008	184,547	9,936,000	757,322	12,904,176	956,109
<b>NON-METALLIC—</b>						
Asbestos..... tons	225,572	6,618,930	290,387	8,987,459	279,389	10,095,488
Feldspar..... "	16,147	142,118	11,287	94,730	13,168	111,136
Graphite..... "	46	3,275	359	30,900	326	29,516
Magnesite..... "	3,873	101,350	5,576	122,325	4,571	137,431
Mica..... "	1,077	185,020	2,415	178,800	1,664	170,118
Mineral water..... Imp. gal.	7,683	2,288	7,122	2,961	6,956	2,444
Iron oxides..... tons	7,140	88,540	6,985	89,173	6,518	100,923
Phosphates..... "	—	—	16	189	40	800
Pyrites..... "	4,032	10,618	12,250	36,750	14,100	42,117
Quartz..... "	17,893	87,267	6,459	30,064	24,550	107,779
Talc and soapstone..... "	449	20,273	704	30,130	885	38,209
<b>CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS—</b>						
Cement..... brl.	2,758,316	4,796,959	3,365,802	5,689,991	3,727,377	4,535,386
Clay products..... "	—	2,435,695	—	2,426,887	—	2,702,298
Line—						
Quicklime..... bush	2,219,350	640,990	2,272,751	601,081	2,509,006	667,480
Hydrated lime..... tons	5,848	58,947	9,432	72,249	11,922	98,636
Sand and gravel..... "	2,197,145	414,428	2,203,196	531,850	5,233,696	1,490,674
Stone..... "	1,592,080	2,925,520	2,242,916	3,855,455	2,305,734	3,728,228
<b>Total</b>	—	<b>19,136,504</b>	—	<b>24,241,527</b>	—	<b>25,956,193</b>

\* There is also in this province an important production of aluminium from imported ores.

## Mineral Production of Ontario, 1924, 1925 and 1926

Product	1924		1925		1926	
	Quantity	Value	Quantity	Value	Quantity	Value
<b>METALLIC—</b>		\$		\$		\$
Antimony..... lb.	—	—	1,751	206	1,506	281
Arsenic, (As <sub>2</sub> O <sub>3</sub> )..... "	3,745,225	313,281	2,159,441	113,324	4,055,477	135,549
Bismuth..... "	12,863	27,913	19,667	18,566	6,440	6,440
Cobalt..... "	948,704	1,682,395	1,116,492	2,328,517	664,778	1,130,014
Copper..... "	37,113,193	4,833,022	39,718,777	5,577,311	41,312,867	4,828,964
Gold..... fine oz.	1,241,728	25,668,795	1,461,039	30,202,357	1,497,215	30,950,180
Iron ore, sold for export..... tons	—	—	—	—	—	—
Lead..... lb.	5,055,308	409,687	7,209,534	657,510	7,398,795	589,730
Nickel..... "	69,536,350	19,470,178	73,857,114	15,946,672	65,714,294	14,374,163
Palladium..... fine oz.	9,181	1,090,858	8,692	1,027,477	10,024	610,178
Platinum..... "	8,923	811,993	8,288	648,069	9,471	919,349
Silver..... fine oz.	11,272,567	7,527,933	10,529,121	7,271,944	9,274,965	5,760,402
Zinc..... lb.	—	—	179,545	13,055	—	—
<b>NON-METALLIC—</b>						
Actinolite..... tons	90	1,225	40	500	80	1,000
Asbestos..... "	172	91,900	2	901	14	3,935
Barytes..... "	—	—	—	—	—	—
Feldspar..... "	28,657	216,422	17,394	141,059	22,783	199,102
Fluorspar..... "	70	1,343	12	200	—	—
Garnets..... "	300	7,200	—	—	—	—
Graphite..... "	1,288	72,842	2,210	127,863	2,401	165,344
Grinding pebbles..... "	—	—	105	945	64	576
Gypsum..... "	88,121	467,097	82,020	491,833	89,987	496,059
Mica..... "	2,414	172,252	1,605	82,663	881	59,086
Mineral water..... Imp. gal.	201,670	13,133	183,012	25,452	208,400	27,277
Natural gas..... M. cu. ft.	7,150,078	3,798,331	7,143,962	3,958,006	7,764,996	4,409,593
Peat..... tons	—	—	1,370	8,394	—	—
Petroleum..... brl.	154,368	441,952	143,134	386,555	137,850	379,221
Phosphates..... tons	—	—	—	—	—	—
Pyrites..... "	11,420	44,542	685	8,799	371	4,912
Quartz..... "	111,645	192,855	188,560	324,526	192,733	339,304
Salt..... "	203,428	1,337,311	226,315	1,352,504	252,345	1,388,672
Silica brick..... M	10,718	130,577	13,678	174,116	14,882	178,986
<b>CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS—</b>						
Cement..... brl.	3,564,499	5,668,671	3,462,358	5,253,911	3,398,860	4,792,857
Clay products..... "	—	5,089,299	—	5,195,084	—	5,350,469
Line—						
Quicklime..... bush	4,391,050	1,401,545	5,115,974	1,566,540	5,402,261	1,593,468
Hydrated lime..... tons	35,989	438,607	41,610	477,585	39,217	457,978
Sand and gravel..... "	6,174,284	2,041,959	5,201,604	1,779,129	6,483,163	2,292,678
Stone..... "	2,840,173	4,789,368	3,022,712	2,817,333	3,622,042	3,157,288
<b>Total</b>	—	<b>86,398,656</b>	—	<b>87,989,436</b>	—	<b>84,702,296</b>

(a) The total production of blast-furnace pig-iron in Ontario in 1924 was 415,971 tons valued at \$9,454,139, in 1925 it was 368,604 tons valued at \$7,873,816, and in 1926 it was 507,079 tons valued at \$11,106,738.



## Mineral Production of Manitoba, 1924, 1925 and 1926

Product	1924		1925		1926	
	Quantity	Value	Quantity	Value	Quantity	Value
		\$		\$		\$
<b>METALLIC—</b>						
Gold.....fine oz.	1,180	24,393	4,424	91,452	188	3,886
Silver....."	140	93	477	329	18	11
<b>NON-METALLIC—</b>						
Gypsum.....tons	20,375	348,212	35,088	417,868	35,172	401,461
Natural gas.....M cu. ft.	200	60	200	60	200	60
<b>CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS—</b>						
Cement.....	-	746,750	407,395	1,037,929	612,155	1,572,401
Clay products.....	-	117,450	-	173,794	-	248,497
Lime.....bush.	394,229	121,518	450,315	170,230	685,389	251,269
Sand and gravel.....tons	-	81,807	727,152	196,601	980,581	178,059
Stone.....tons	54,065	93,876	52,770	188,496	101,571	357,884
<b>Total.....</b>	-	<b>1,534,219</b>	-	<b>2,276,759</b>	-	<b>3,673,528</b>

## Mineral Production of Saskatchewan, 1924, 1925 and 1926

Product	1924		1925		1926	
	Quantity	Value	Quantity	Value	Quantity	Value
		\$		\$		\$
<b>NON-METALLIC—</b>						
Coal.....tons	479,118	886,668	471,065	870,875	439,803	819,805
Sodium sulphate....."	1,083	6,004	3,876	19,380	6,775	13,550
Volcanic ash....."	245	1,103	160	1,380	90	630
<b>CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS—</b>						
Clay products.....	-	132,280	-	95,952	-	214,113
Sand and gravel.....tons	702,713	97,045	579,901	88,805	863,901	145,296
<b>Total.....</b>	-	<b>1,128,100</b>	-	<b>1,076,392</b>	-	<b>1,193,394</b>

## Mineral Production of Alberta, 1924, 1925 and 1926

Product	1924		1925		1926	
	Quantity	Value	Quantity	Value	Quantity	Value
		\$		\$		\$
<b>NON-METALLIC—</b>						
Bituminous sands.....tons	531	2,127	1,148	4,594	528	2,112
Coal....."	5,189,729	18,884,318	5,869,031	20,021,484	6,503,705	20,886,103
Natural gas.....M cu. ft.	7,131,086	1,790,618	9,119,500	2,752,545	10,794,697	3,019,221
Petroleum.....bbl.	844	4,135	183,491	845,394	216,050	902,504
Salt.....tons	-	-	833	8,304	2,037	22,696
<b>CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS—</b>						
Cement.....	-	945,700	395,857	913,529	423,706	873,621
Clay products.....	-	540,477	-	618,860	-	804,933
Lime.....bush.	90,214	36,279	98,938	39,852	108,309	39,517
Sand and gravel.....tons	-	115,969	534,892	107,436	1,754,965	412,430
Stone.....tons	16,698	19,317	3,979	6,868	3,759	13,890
<b>Total.....</b>	-	<b>22,344,940</b>	-	<b>25,318,866</b>	-	<b>26,977,927</b>

## Mineral Production of British Columbia, 1924, 1925 and 1926

Product	1924		1925		1926	
	Quantity	Value	Quantity	Value	Quantity	Value
		\$		\$		\$
<b>METALLIC—</b>						
Arsenic..... lb.	495,250	19,768	1,277,696	16,978	1,019,200	11,262
Copper..... " 65,451,246	8,524,370	60,221,600	9,720,097	89,108,017	12,292,350	
Gold..... fine oz.	245,719	5,079,462	219,227	4,531,824	225,866	4,669,065
Iron ore sold for export..... tons	-	-	-	-	-	-
Iron, pig, from Canadian ore..... "	14	350	-	-	-	-
Lead..... lb.	168,467,628	13,652,617	242,454,502	22,111,85	266,812,461	18,012,509
Platinum..... fine oz.	5	599	6	715	50	4,258
Silver..... " 8,153,003	5,444,657	8,579,453	5,935,40	10,225,816	6,599,376	
Zinc..... lb.	96,000,000	6,090,244	99,152,806	7,557,439	137,033,929	10,154,214
<b>NON-METALLIC—</b>						
Coal..... tons	2,103,667	10,601,998	2,742,252	11,720,377	2,613,719	10,612,915
Fluorspar..... "	-	-	3,874	19,034	-	-
Grindstones, pulpstones..... "	240	19,000	431	27,78	700	45,116
Gypsum..... "	30	150	240	865	20,916	156,954
Magnesium sulphate..... "	-	-	-	-	-	-
Natro-alunite..... "	-	-	20	1,000	-	-
Oxides (iron)..... "	120	2,620	133	2,740	108	920
Pyrites..... "	8,091	40,459	2,670	13,350	3,374	16,870
Quartz..... "	21,358	43,054	553	2,26	6,460	77,060
Sodium carbonate..... "	519	5,173	1,120	8,140	595	5,370
Talc..... "	165	3,630	92	1,599	-	-
<b>CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS—</b>						
Cement..... brl	-	1,240,331	485,185	1,151,344	514,803	1,239,018
Clay products..... "	-	460,594	-	523,931	-	592,495
Lime—						
Quicklime..... bush.	517,577	320,312	515,058	304,223	503,033	317,733
Hydrated..... tons	4,157	50,517	4,718	60,212	7,896	99,149
Sand and gravel..... "	-	344,937	1,415,232	446,896	1,486,254	357,085
Stone..... "	178,225	353,741	256,226	337,196	253,061	358,247
<b>Total.....</b>	<b>-</b>	<b>52,298,533</b>	<b>-</b>	<b>64,485,242</b>	<b>-</b>	<b>65,622,976</b>

## Mineral Production of Yukon, 1924, 1925 and 1926

Product	1924		1925		1926	
	Quantity	Value	Quantity	Value	Quantity	Value
		\$		\$		\$
<b>METALLIC—</b>						
Gold..... fine oz.	34,825	719,897	47,817	988,465	25,601	520,220
Silver..... "	226,755	151,429	904,893	624,964	2,095,027	1,301,159
Lead..... lb.	903,530	73,221	1,875,442	171,040	5,890,373	395,034
<b>NON-METALLIC—</b>						
Coal..... tons	1,121	8,265	730	7,172	316	800
<b>Total.....</b>	<b>-</b>	<b>952,812</b>	<b>-</b>	<b>1,791,641</b>	<b>-</b>	<b>2,226,813</b>

## Antimony

Antimony ores occur in the provinces of Nova Scotia, New Brunswick, and British Columbia and in the Yukon Territory. It is understood that during 1926, a small quantity was shipped from the Lake George district of New Brunswick to the United States, for experimental purposes.

Antimony is also recovered in small quantities from the silver-lead-bismuth bullion obtained by smelters treating silver-cobalt ores. During the year 1926 there were 1,596 pounds of antimony valued at \$281 contained in such bullion exported for further treatment in American smelters.

Imports into Canada of antimony in 1926 amounted to 1,139,748 pounds valued at \$183,127 as against 879,298 pounds valued at \$124,394 in 1925. There were 34,768 pounds of antimony salts valued at \$7,744 imported during the same period as compared with 36,263 pounds worth \$6,838 during the previous year.

No production of antimony was reported during the first half of 1927.

### Arsenic

Arsenic production from Canadian ores amounted to 5,074,677 pounds including sales of white arsenic amounting to 3,984,217 pounds and the recoverable arsenic contained in export shipments of concentrates and residues, amounting to a further 1,090,460 pounds of white arsenic. The value of the total Canadian production was \$146,811 in 1926 compared with \$130,302 for 3,434,137 pounds sold in 1925. The average price of arsenic on the New York market in 1926 was 3.5 cents per pound as against 4.66 cents in 1925.

The greater part of the Canadian production of arsenic is obtained from the south Ontario smelters as a by-product from the ores of the Cobalt district. A small amount is contained in residues exported from these smelters. British Columbia's annual production of arsenic is contained in concentrates shipped from the Nickel Plate gold mine to the Tacoma smelter for further treatment. No production of arsenic from the arsenical gold ores of Nova Scotia was reported for 1926, or the first half of 1927.

#### Canada's Production, Imports and Exports of Arsenic, 1925, 1926 and January 1 to June 30, 1927

	1925		1926		January 1 to June 30, 1927	
	Quantity	Value	Quantity	Value	Quantity	Value
		\$		\$		\$
<b>PRODUCTION—</b>						
From arsenical concentrates and residues exported..... Lb.	1,428,885	21,513	1,090,460	12,687	415,133	4,796
White arsenic..... "	2,005,252	108,789	3,984,217	134,124	3,251,871	126,718
<b>Total .....</b>	<b>3,434,137</b>	<b>130,302</b>	<b>5,074,677</b>	<b>146,811</b>	<b>3,667,004</b>	<b>131,514</b>
<b>IMPORTS—</b>						
White arsenic..... Lb.	498,720	30,305	144,031	5,604	273,666	10,987
Sulphide of arsenic..... "	21,810	2,974	68,829	3,136	6,511	717
Arseniate of soda..... "	6,361	1,709	15,357	3,151	3,396	325
<b>EXPORTS—</b>						
White arsenic in arsenical concentrates..... Lb.	972,000	10,590	—	—	—	—
Arsenic, n.o.p..... "	1,762,000	97,748	3,344,000	108,120	2,897,200	91,443

### Bismuth

There is no metallic bismuth made in Canada but in the treatment of silver-cobalt ores by the smelter of the Deloro Smelting and Refining Company, small quantities of bismuth are accumulated in a bullion with lead and silver. While the percentage of bismuth in the material treated is small it has been found profitable to build up reserves of this bullion until a saleable product is obtained.

Bismuth contained in silver-lead-bismuth bullion exported during 1926 for further treatment in United States smelters amounted to 6,440 pounds valued at \$6,440. There was none exported during the first half of 1927.

### Chromite

Chromite is known to occur in the provinces of Quebec and British Columbia. During the war considerable amounts of chromite were mined in Quebec. Some shipments were reported in 1923 but there has been no production since.

### Cobalt

Cobalt production in 1926 showed a considerable decline from the previous year, the output amounting to 664,778 pounds valued at \$1,136,014 as against 1,116,492 pounds valued at \$2,328,517 in 1925. This decline in production was caused by the introduction into the world markets, of cobalt from central Africa where it occurs in association with copper in the ores mined by the Union Minière du Haut Katanga. This company now produces about 45 per cent of the world's output and the Canadian production makes up the remaining 55 per cent.

Production figures include the cobalt content of the various cobalt products sold by south Ontario smelters added to the cobalt content of the ores and residues exported for treatment in foreign smelters; the value given is the net amount received by the shippers.

In the first half of 1927 the output of cobalt amounted to 392,837 pounds valued at \$765,748. Exports during the same period reached a value of \$777,406.

# Production in Canada and Exports of Cobalt, 1925, 1926 and January 1 to June 30, 1927

	1925		1926		January 1 to June 30, 1927	
	Pounds	\$	Pounds	\$	Pounds	\$
PRODUCTION— Cobalt, computed as cobalt in metal, oxides and salts sold, and in ores and residues exported.....	1,116,492	2,328,517	664,778	1,136,014	392,837	765,748
EXPORTS— Cobalt alloys, cobalt metallies, cobalt oxides, cobalt salts and cobalt ore.	-	1,867,607	-	1,064,276	-	777,406

## Copper

Copper production from Canadian ores during 1926 amounted to 133,094,942 pounds valued at \$17,490,300. In 1925, production computed on a slightly different basis, as explained below, totalled 111,450,518 pounds valued at \$15,649,882. Copper is produced in the provinces of British Columbia, Ontario and Quebec. British Columbia accounts for about two-thirds of the total Canadian output and Ontario most of the remaining one-third. A smaller amount is produced in the province of Quebec from the Eustis mine, but large deposits are now being opened up in the new Rouyn district of this province and in the near future Quebec will enter the field as one of the large Canadian copper-producing provinces.

Considerable work has been done during the season on the copper ores of the Flin Flon mine in Northern Manitoba and it is understood that a pilot mill will be erected during the coming summer for further research on these ores.

British Columbia's production amounted to 89,108,017 pounds, including blister copper made at the Trail and Granby smelters and the recoverable copper in the copper ores and concentrates from the Britannia and Belmont Surf Inlet mines shipped to United States smelters. The Belmont Surf Inlet mine ceased operations in June 1926.

Ontario's production was obtained mainly from the nickel-copper mines of the Sudbury district where the ore is smelted to a nickel-copper matte. A small amount of copper was recovered from the silver-cobalt ores, and the Argonaut mine, originally a gold producer, shipped copper concentrates to United States smelters for refining. The matte made by the Mond Nickel Company was shipped to Wales for refining. There the copper was extracted in the form of copper sulphate, for sale to the vineyards in southern France and Italy. Some matte made by the International Nickel Company at Copper Cliff was exported to Huntington, West Virginia, U.S.A., for manufacture directly into monel metal; the remainder was shipped to the company's refinery at Port Colborne, Ontario, where converter and electrolytic copper are made.

As noted in the general review at the beginning of this report, changes have been made in the official method of computing copper production statistics and readers of this report should bear this fact in mind in making comparisons between data for 1926 and figures for 1925. To avoid confusion, production figures have been computed for both years according to the method formerly in use and also by the newly-adopted plan. It will be observed that the only difference in figures occurs in those for Ontario. The earlier method, which was very simple and easy, though less accurate than the plan now followed, measured production in terms of copper contained in matte produced at the Sudbury smelters and valued this metal at the monthly average price for the year for electrolytic copper in New York. The new method takes account of copper in matte only when this product is exported; the value of the copper too is taken at 10 cents a pound, which is believed to be a fair value for the copper when it leaves the country in the form of matte. This new method also takes account of copper produced at the refineries. The converter or electrolytic copper which constitute the final products at Port Colborne during the year, are included in production and the value assigned is proportional to the income to the company from similar products sold during the year. While the new method provides for a more conservative evaluation of Canada's copper production, the results are much more in accord with the actual facts than were the figures obtained by the simpler method formerly used.

During the first half of 1927 the production of copper amounted to 73,619,657 pounds valued at \$9,075,634, as compared with a total of 70,843,426 pounds valued at \$9,757,265 in the first half of 1926. There was thus an improvement of 3.9 per cent in the tonnage; as noted elsewhere the values are not comparable due to the change in the method of computation.



# Production of Copper in Canada, by Provinces, 1925, 1926, and January 1 to June 30, 1927

	1925		1926		January 1 to June 30, 1927	
	Pounds	Value	Pounds	Value	Pounds	Value
(a) Calculated as in previous reports:—		\$		\$		\$
British Columbia.....	60,221,600	9,720,097	89,108,017	12,292,450	49,685,321	6,338,853
Ontario.....	39,718,777	6,577,311	48,726,431	6,721,811	26,432,130	3,372,212
Quebec.....	2,510,141	352,474	2,674,058	368,886	2,125,809	271,218
<b>Total.....</b>	<b>111,450,518</b>	<b>15,649,882</b>	<b>140,508,506</b>	<b>19,383,147</b>	<b>78,243,260</b>	<b>9,982,283</b>
(b) Calculated according to new method adopted in present report:—						
British Columbia.....	60,221,600	9,720,097	89,108,017	12,292,450	49,685,321	6,338,853
Ontario.....	39,698,982	4,771,424	41,312,867	4,828,964	21,808,467	2,465,563
Quebec.....	2,510,141	352,474	2,674,058	368,886	2,125,809	271,218
<b>Total.....</b>	<b>111,430,723</b>	<b>14,843,995</b>	<b>133,094,942</b>	<b>17,490,300</b>	<b>73,619,657</b>	<b>9,075,634</b>

New York price of electrolytic copper 1925 was 14.042 cents per pound.

" " " " 1926 " 13.795 cents per pound.

January to June 1927 was 12.758 cents per pound.

## Imports into Canada and Exports of Copper, 1925, 1926 and, January 1 to June 30, 1927

	1925		1926		January 1 to June 30, 1927	
	Pounds	Value	Pounds	Value	Pounds	Value
<b>IMPORTS—</b>		\$		\$		
Copper in bars or rods, when imported by manufacturers of trolley, telegraph and telephone wires, electric wires and electric cables for use only in the manufacture of such articles in their own factories.....	26,385,300	3,857,482	15,131,400	2,212,715	13,470,600	1,956,791
Copper in bars or rods, in coil or otherwise, in lengths of not less than 6 feet, unmanufactured.....	482,500	95,563	2,627,900	490,222	309,000	54,492
Copper in blocks, pigs or ingots.....	7,934,779	1,138,740	8,599,699	1,231,422	2,248,491	302,376
Copper, old and scrap.....	4,174,100	572,656	3,039,400	408,999	3,882,600	493,543
Copper, ore and concentrates.....	300	269	1,700	927	290	220
Copper in strips, sheets or plates not polished or coated.....	1,971,300	400,229	1,882,400	406,988	1,181,400	246,408
Copper tubing in lengths of not less than 6 feet, and not polished, bent or otherwise manufactured.....	1,611,987	390,881	2,535,796	579,044	1,235,509	294,470
Copper wire, plain, tinned or plated.....	287,654	104,686	420,361	111,504	281,958	66,976
Copper wire cloth, or woven wire of copper..	-	4,379	-	51,390	-	8,616
Copper wire, single or several, covered with cotton, linen, silk, rubber or other material, including cable so covered.....	-	487,779	-	502,395	-	298,059
Copper, all other, manufactures of, n.o.p....	-	415,025	-	578,068	-	314,864
Copper, precipitate of, crude.....	5,678	691	-	-	-	-
Anodes of nickel, zinc, copper, silver or gold	-	4,084	-	4,896	-	5,333
Copper, subacetate of, or verdigris, dry....	4,083	812	31,755	2,260	445	104
Copper, sulphate of (blue vitriol).....	3,027,088	146,833	3,385,239	158,992	1,932,338	95,870
Copper, sulphate of, dehydrated, for agricultural or spraying purposes.....	150,808	7,602	229,228	11,896	400,346	23,767
Copper rollers adapted for use in calico printing.....	-	-	-	350	-	-
<b>Total.....</b>	<b>-</b>	<b>7,628,341</b>	<b>-</b>	<b>6,752,068</b>	<b>-</b>	<b>4,161,898</b>
<b>EXPORTS—</b>						
Copper, fine, contained in ore, matte regulus, etc.....	60,527,500	6,969,960	67,108,300	7,822,260	36,089,900	3,891,337
Copper, blister.....	48,558,500	6,547,397	45,256,300	6,055,286	27,644,600	3,394,055
Copper, old and scrap.....	5,601,700	658,458	5,972,400	614,108	1,903,800	191,675
Copper, pig.....	1,100	126	58,200	7,127	11,200	1,734
Copper in bars, rods, strips, sheets, plates and tubing.....	156,300	45,599	256,900	72,475	169,400	43,635
Copper wire and cable.....	-	404,600	-	380,311	-	150,924
Copper mfrs., n.o.p.....	-	59,792	-	57,312	-	17,986
<b>Total.....</b>	<b>-</b>	<b>14,685,932</b>	<b>-</b>	<b>15,098,839</b>	<b>-</b>	<b>7,691,346</b>

# Monthly Average Prices of Copper (Electrolytic), New York and London, 1925, 1926, and January 1 to June 30, 1927

(From the *Engineering and Mining Journal*)

	New York (In cents per pound)			London (£ Sterling per long ton)		
	1925	1926	1927	1925	1926	1927
January.....	14.700	13.822	12.900	70.607	65.325	62.375
February.....	14.403	13.999	12.682	69.525	66.375	61.119
March.....	14.004	13.859	13.079	67.739	65.480	62.641
April.....	13.252	13.706	12.808	64.104	64.600	61.526
May.....	13.347	13.599	12.621	63.500	64.313	60.881
June.....	13.399	13.656	12.370	63.309	64.591	59.881
July.....	13.946	13.924		65.750	65.625	
August.....	14.490	14.174		68.109	66.857	
September.....	14.376	14.063		67.693	66.528	
October.....	14.300	13.862		67.523	66.298	
November.....	14.353	13.576		67.893	65.551	
December.....	13.866	13.302		65.625	64.114	
<b>Average.....</b>	<b>14.042</b>	<b>13.795</b>	<b>12.758</b>	<b>66.804</b>	<b>65.472</b>	<b>61.404</b>

## Gold

Canada's gold production in 1926 again established a new high record with a total of 1,754,228 fine ounces which valued at the standard rate of \$20.671834 per ounce was worth \$36,263,110 as compared with \$35,880,826 in 1925. Ontario contributed 1,497,215 ounces as against 1,461,039 ounces for 1925, establishing a new high production mark for the province. The Porcupine field accounted for 1,145,564 fine ounces, comprising the outputs of the Hollinger mine at 713,000 ounces; the Dome at 190,000 ounces; the McIntyre with slightly more than 185,000 ounces; and a small remainder from other mines in the district. Production from the Kirkland Lake area amounted to 342,798 fine ounces, the leader in this camp being Lake Shore with a production of 134,000 ounces followed by the Wright-Hargreaves with 104,000 ounces; the Teck Hughes with 77,000 ounces, the remainder being made up by the Argonaut, Tough-Oakes-Burnside, and Kirkland Lake. The Barry Hollinger at Boston Creek and smaller mines in different parts of Ontario accounted for the remainder of the provincial output.

Gold was also recovered in the refining of the nickel-copper ores from the Sudbury district.

In British Columbia 16,730 fine ounces of gold were recovered from placer workings, 64,918 fine ounces from Canadian ores treated by the smelters of the province, 25,265 fine ounces in gold bullion, and 118,953 fine ounces estimated as recoverable from concentrates exported to foreign smelters; the principal exporting companies were Belmont Surf Inlet, Britannia and Premier.

In the Yukon 25,344 fine ounces were won from the placers and 257 ounces were contained in the silver-lead ores and concentrates exported.

A small amount of gold was recovered from ores mined in Nova Scotia and Manitoba and from the silver-lead-zinc ores of Quebec.

In the half-year under review the production of gold amounted to 863,031 fine ounces valued at \$17,840,434 or 2.5 per cent under the corresponding figures for the first half of 1926. Ontario's gold output during the half-year amounted to 765,710 fine ounces as compared with a total of 754,274 fine ounces produced by this province in the first half of 1926. Of this total 8 mines in the Porcupine camp produced 561,833 fine ounces and 8 mines in the Kirkland lake camp contributed 202,398 fine ounces. The balance was drawn from various other sources. In the Porcupine camp the Hollinger produced about 60 per cent followed by McIntyre and Dome. In the Kirkland lake camp, Lake Shore continued to be the leader followed by Teck-Hughes and Wright-Hargreaves. British Columbia's production during the half-year at 86,993 fine ounces was very considerably below the total of 123,816 fine ounces reported in the first half of 1926. More gold was produced in the Yukon, in Quebec and Nova Scotia in the half-year under review than in the corresponding period of 1926.

## Production of Gold in Canada by Provinces, 1925 and 1926

Province	1925			1926			Increase (+) or decrease (-)	
	Fine ozs	Value	Per cent of total production	Fine ozs	Value	Per cent of total production	Quantity	Per cent
		\$			\$			
Ontario.....	1,461,039	30,202,357	84.16	1,467,215	30,950,180	85.35	+36,176	+ 2.48
British Columbia.....	210,227	4,531,824	12.63	225,800	4,669,065	12.88	+ 6,639	+ 3.03
Yukon.....	47,817	988,465	2.76	25,601	529,220	1.45	-22,216	- 46.46
Quebec.....	1,602	33,116	0.10	3,680	76,072	0.21	+ 2,078	+129.71
Manitoba.....	4,424	91,452	0.25	188	3,886	0.01	- 4,236	- 95.75
Nova Scotia.....	1,026	33,612	0.10	1,678	34,687	0.10	+ 652	+ 3.20
<b>Canada.....</b>	<b>1,735,735</b>	<b>35,840,826</b>	<b>100.00</b>	<b>1,751,228</b>	<b>36,263,116</b>	<b>100.00</b>	<b>+15,493</b>	<b>+ 1.07</b>

## Production of Gold in Canada by Provinces, January 1 to June 30, 1926 and 1927

Province	1926		1927	
	Fine ounces	Value	Fine ounces	Value
		\$		\$
Ontario.....	754,274	15,592,220	765,710	15,828,630
British Columbia.....	123,816	2,559,509	89,993	1,798,395
Yukon.....	4,852	100,300	6,496	134,284
Manitoba.....	1	21		
Quebec.....	1,029	39,876	2,475	51,163
Nova Scotia.....	900	18,791	1,357	28,052
Saskatchewan.....	32	661		
<b>Total.....</b>	<b>885,813</b>	<b>18,311,378</b>	<b>863,631</b>	<b>17,840,434</b>

## Production of Placer Gold in the Yukon Territory,\* 1925 and 1926

(Quantities in crude ounces)

Month	Dawson		Whitehorse		Total	
	1925	1926	1925	1926	1925	1926
January.....	1,483.60	-	-	4.32	1,483.60	4.32
February.....	989.38	-	-	-	989.38	-
March.....	30.50	175.64	-	-	30.50	175.64
April.....	-	-	-	-	-	-
May.....	-	2,666.27	-	-	-	2,666.27
June.....	4,903.62	3,138.01	85.00	81.00	4,988.62	3,219.01
July.....	10,052.62	4,264.02	-	29.50	10,052.62	4,293.52
August.....	5,034.77	4,213.60	16.70	67.00	5,051.47	4,280.60
September.....	27,135.80	5,486.52	30.98	67.75	27,166.78	5,554.27
October.....	7,618.72	6,574.83	8.00	37.00	7,626.72	6,611.83
November.....	413.70	2,999.23	-	1.00	413.70	3,000.23
December.....	1,908.08	1,874.53	50.00	-	1,958.08	1,874.53
<b>Total.....</b>	<b>59,580.79</b>	<b>31,392.65</b>	<b>190.68</b>	<b>287.57</b>	<b>59,771.47</b>	<b>31,680.22</b>

## Production of placer gold in the Yukon Territory from January 1st to June 30th 1927

(Quantities in crude ounces)

Month	Dawson	Whitehorse	Total ounces
	Ounces	Ounces	
January.....	550.09	0.00	550.09
February.....	0.00	4.00	4.00
March.....	1,112.59	0.00	1,112.59
April.....	0.00	0.00	0.00
May.....	973.34	0.00	973.34
June.....	5,479.85	0.00	5,479.85
<b>Total.....</b>	<b>8,115.87</b>	<b>4.00</b>	<b>8,119.87</b>

\*Supplied by the Mining Lands Branch, Department of Interior.

## Receipts at the Royal Mint, Ottawa, Canada, 1925 and 1926

Source	1925			1926		
	Gross weight	Precious metal content		Gross weight	Precious metal content	
		Fine gold	Fine silver		Fine gold	Fine silver
	Ozs.	Ozs.	Ozs.	Ozs.	Ozs.	Ozs.
Nova Scotia.....	1,817.56	1,626.429	85.97	1,814.84	1,677.709	112.46
New Brunswick.....	-	-	-	-	-	-
Quebec.....	8.61	8.596	-	43.26	39.159	3.67
Ontario.....	139,130.21	105,888.118	19,129.98	1,610,194.93	1,256,570.437	224,105.60
Manitoba.....	5,448.61	4,651.355	576.81	152.51	128.553	18.68
Saskatchewan.....	46.49	37.578	5.20	73.98	55.306	8.81
Alberta.....	-	-	-	5.16	4.045	0.41
British Columbia.....	2.09	1.553	0.16	-	-	-
Dominion of Canada Assay Office, Vancouver*.....	-	-	-	124,477.87	104,252.882	16,658.25
Yukon.....	-	-	-	-	-	-
Jewellery and scrap, various sources.....	20,992.07	8,217.515	3,203.42	29,271.71	12,696.276	4,684.32
Foreign.....	192.35	138.863	43.75	104.93	78.133	18.09
<b>Total.....</b>	<b>167,567.99</b>	<b>129,570.097</b>	<b>23,645.29</b>	<b>1,766,139.19</b>	<b>1,375,592.499</b>	<b>245,610.29</b>

\*Gold from the Assay Office was shipped to the United States in 1925 instead of to the Royal Mint, Ottawa, as in former years.

## Receipts at the Royal Mint, Ottawa, Canada, January 1 to June 30, 1927

Source	1927		
	Gross weight	Precious metal content	
		Fine gold	Fine silver
	Oz.	Oz.	Oz.
Nova Scotia.....	1,452.82	1,356.669	73.07
New Brunswick.....	-	-	-
Quebec.....	-	-	-
Ontario.....	863,856.93	674,919.811	110,648.00
Manitoba.....	-	-	-
Saskatchewan.....	-	-	-
Alberta.....	-	-	-
British Columbia*.....	34,719.72	28,889.741	4,250.45
Yukon.....	-	-	-
Jewellery and scrap, various sources.....	16,785.27	8,943.687	2,075.91
Foreign.....	409.42	299.558	87.78
<b>Total.....</b>	<b>917,224.16</b>	<b>712,409.466</b>	<b>117,135.81</b>

\*Included shipments from the Dominion of Canada Assay Office, Vancouver.

## Gold Bullion Received at Dominion of Canada Assay Office, Vancouver, B.C., 1927

	Calendar Year 1926			
	No. of deposits	Weight before melting and assaying	Weight after melting and assaying	Net value of deposits
		Troy ounces	Troy ounces	\$
<b>BAR, NUGGET AND DUST, AMALGAM, ETC.—</b>				
British Columbia.....	690	121,827.30	105,995.60	1,925,122.21
Yukon Territory.....	412	32,686.16	32,010.41	537,821.66
Alaska.....	6	164.36	155.96	2,769.62
Alberta.....	1	85.10	84.99	1,468.35
<b>DENTAL AND JEWELLERY SCRAP—</b>				
British Columbia.....	508	6,323.79	5,707.71	45,024.91
Alberta.....	99	800.38	694.09	7,166.42
Saskatchewan.....	30	325.76	282.63	3,126.80
Manitoba.....	16	393.71	369.22	1,837.52
<b>Total.....</b>	<b>1,752</b>	<b>162,606.56</b>	<b>145,279.61</b>	<b>2,524,337.58</b>



## Imports into Canada and Exports of Gold, 1925, 1926, and January 1 to June 30, 1927.

	1925	1926	January 1 to June 30 1927
	\$	\$	\$
<b>IMPORTS—</b>			
Coin and bullion—			
Coins, British, Canadian and foreign gold coins	49,477,383	45,077,807	4,576,750
Gold bullion, in bars, blocks, ingots, drops, sheets or plates, unmanufactured	1,031,597	2,048,033	388,116
<b>Total</b>	50,508,980	47,125,840	4,963,866
Gold, other—			
Bullion or fringe gold	27,215	34,836	16,548
Manufactures of gold and silver—			
Loaf	76,364	87,597	55,893
Sweepings	2,282	2,676	236
Manufactures, n.o.p.	147,839		
Electroplated ware	707,726	846,216	453,632
Medals of gold, silver or copper, and other metallic articles, actually bestowed as trophies or prizes, and received and accepted as honorary distinctions, and cups or other metallic prizes won in bona fide competitions		21,006	9,496
<b>Total</b>	961,426	992,331	536,105
<b>EXPORTS—</b>			
Coin and bullion—			
Gold coin—			
Canadian		4,000,000	1,005
Foreign	3,026	24,010,603	41,002,000
Gold bullion—			
Canadian	333,090	41,812,356	2,011,391
Foreign			
<b>Total—Canadian</b>	<b>333,090</b>	<b>45,812,356</b>	<b>2,012,396</b>
<b>Foreign</b>	<b>3,026</b>	<b>24,010,603</b>	<b>41,002,000</b>
Gold-bearing quartz, dust, nuggets and bullion obtained direct from mining operations	31,432,647	7,340,451	3,459,742

\*Included with silver imports under manufactures of gold and silver, n.o.p.

## Iron Ore

Iron ore shipments from Canadian mines during 1926 were practically negligible. A small quantity of titanite ore amounting to 200 tons and valued at \$600 was shipped by the Manitou Iron Mining Company to England for experimental purposes.

Considerable research work is being done on the ilmenite ore of Quebec by the Research Laboratories of the Department of Mines at Ottawa with a view to making an economic recovery of both the titanium and the iron.

There was no production of pig iron from Canadian ores in Canada during 1926 or during the first half of 1927.

Shipments from the Wabana mines of Newfoundland while not included in the mineral production of Canada are always of interest to Canadian readers because of the volume of shipments to the steel plants of Nova Scotia. During 1926 shipments from Wabana mines totalled 969,601 short tons. Of this amount 503,640 tons were exported to Europe and the balance, 465,961 tons to Canada.

During the half-year ending June 30, 1927, shipments totalled 378,638 tons of which 119,920 tons were shipped to Sydney, N.S., and the balance was exported to Germany.

## Pig Iron, Steel Ingots and Castings

During 1926 Canada's primary iron and steel industry showed considerable improvement in quantity production over the previous year, largely because of the pronounced prosperity of the construction and automotive industries, and the improved condition of Canadian railways as reflected by large orders for rails and new equipment. Production of pig iron totalled 737,503 long tons, an increase of 29 per cent over the total for 1925, while steel ingots and direct steel castings at 776,888 tons showed little change from the 752,695 tons of 1925. While the greater tonnages indicated some general improvement in the iron and steel business in Canada the returns to the industry were restricted by the lower prices prevailing during the year. Imports of European steel into the Maritime provinces and foreign iron into the eastern United States, both at low valuations, tended to keep prices down.

*Pig Iron.*—During the twelve months of 1926 the cumulative production of pig iron was 737,503 tons or 29 per cent over the 570,397 tons of 1925, and 24 per cent more than the 593,024 tons of 1924. In 1923 production totalled 880,018 tons. During the year under review 461,028 tons, or 63 per cent of the total, were produced for the further use of the makers and the balance, 276,475 tons or 37 per cent, was intended for sale. Production for the year included 477,700 tons of basic iron, 218,155 tons of foundry iron and 41,648 tons of malleable iron.

Taking the population of Canada at 9,390,300 persons in 1926, the per capita production of coke pig iron amounted to 176 pounds, as against 136 pounds in the previous year, 144 pounds in 1924, an average of 216 pounds in 1923 and 96 pounds in 1922.

Ontario produced 488,000 tons of pig iron or 66 per cent of the year's output as against 65 per cent of the total in 1925; the balance was accounted for by Nova Scotia in both years. Plants in Ontario produced 32,000 tons in January and this rate was maintained until April when rail orders caused a sharp rise to 47,000 tons. The maximum of 51,000 tons was attained in May and production was maintained around this level until November when it fell off sharply to 30,000 tons; the year ended with production showing a slight upward trend at 31,000 tons in December. Nova Scotia started the year with an output of 25,000 tons in January, which proved to be the maximum for any month during the year. Production declined to 20,000 tons in February, remained around that figure until July, then dropped sharply in August to the low for the year of 14,000 tons, increased to 22,000 tons in October, when substantial rail orders were received, and closed the year at 23,000 tons in December.

For the whole of Canada furnace charges during the year totalled 1,313,011 long tons of imported iron ore, 822,278 short tons of coke and 400,540 short tons of limestone. For each long ton of iron made, the charge to the furnaces included 3,988 pounds of ore, 2,229 pounds of coke and 1,086 pounds of limestone.

Five furnaces, having a total daily capacity of 1,825 tons or about 36 per cent of the total capacity of all blast furnaces in Canada, were in blast on December 31st. The active furnaces were located as follows: 2 at Sydney, N.S.; 2 at Hamilton, Ont.; and 1 at Sault Ste. Marie, Ontario. There are 15 iron blast furnaces in Canada, which if operated at capacity the year round could produce 1.8 million tons of pig iron. Actual production in 1926 amounted to 737,503 tons so that about 41 per cent of the total possible output was produced during the year. In 1925, corresponding figures showed an output amounting to 32 per cent of the total possible production.

For the first six months of 1927 production of pig iron in Canada totalled 403,713 long tons, a gain of 9 per cent over the 370,864 tons produced in the first six months of last year and 39 per cent over the 290,892 tons made during the corresponding period of 1925. This year's output included 291,222 tons of basic iron, 85,979 tons of foundry iron and 26,512 tons of malleable iron. Most of the basic iron was produced for the further use of the makers but the bulk of the foundry iron and all the malleable iron were made for sale. Furnace charges for the six months' period totalled 723,038 long tons of ore, 448,741 short tons of coke and 221,481 short tons of limestone. On June 30, six furnaces having a daily capacity of 2,375 long tons or 47 per cent of the total capacity of all blast furnaces in Canada were in blast at the following points: 2 at Sydney, N.S.; 2 at Hamilton, Ont.; and 2 at Sault Ste. Marie, Ont.

*Prices.*—A review of the price trend for 1926 shows that iron and its products fluctuated within narrower limits and at lower levels than in 1925. Based on 1913 prices as 100, the Bureau's index was 147.5 in January, the high point of the year. It gradually declined to 143.5 in June, the low point of the year, and then rose slightly each month to 146.0 in December. In 1925, the highest point for the year was reached at 158.8 in February and the lowest at 147.1 in November.

A review of the six months' period ending June 30, 1927 shows that pig iron prices were highest in January. Due to restricted buying and a tendency to lower levels in the United States, prices declined in February and remained stable or slightly under the February level for the balance of the half-year. The Bureau's index numbers for iron and its products (1913 prices = 100) showed a narrow range varying from 145.5 in January, to 144.4 in February, 143.7 in April and thereafter remaining practically stationary closing the half-year at 143.5.

*Ferro-Alloys.*—During 1926 the total output of ferro-alloys in Canada was 57,416 tons. Over one-half of this year's output was high grade ferromanganese and the balance was ferro-silicon. Only 4 plants in Canada reported a production of ferro-alloys during 1926.

For the first six months of 1927 production totalled 28,734 tons, the same 4 plants were in operation and the output consisted of ferrosilicon of grades from 15 to 80 per cent and high grade ferromanganese.

*Steel Ingots and Direct Steel Castings.*—Production of steel ingots and castings during 1926 totalled 776,888 tons, an increase of 3 per cent over the 752,695 tons of the previous year. In 1924 the output was 650,690 tons and in 1925 amounted to 884,770 tons. In 1926 the figures included 743,550 tons of steel ingots and 33,338 tons of direct castings as compared with 733,855 tons of ingots and 18,840 tons of castings in 1925. Per capita production of ingots and castings amounted to 185 pounds during the year under review, 180 pounds in 1925, an average of 158 pounds in 1924 and 217 pounds in 1923.

Production of steel ingots and direct castings totalled 69,000 tons in January, dropped to 53,000 tons in February, then rose sharply until in May the maximum for the year was reached at 90,000 tons. Output in August reached the lowest point for the year at 46,000 tons and the output then averaged about 58,000 to 59,000 tons per month until December when a slight increase was recorded.

During 1926 four firms in Canada reported a production of steel ingots from basic open hearth furnaces, 3 concerns made basic open hearth castings, 3 made converter castings and 9 firms produced direct castings from electric furnaces.

For the six months ending June, 1927, the production of steel ingots and castings amounted to 487,310 tons as compared with 431,184 tons in the first half of 1926 and 423,697 tons in the corresponding period of 1925. This year's output included 462,393 tons of steel ingots and 24,917 tons of direct castings as compared with 410,603 tons of ingots and 20,581 tons of castings in 1926.

#### Production of Pig-Iron and Ferro-Alloys in Canada, 1925 and 1926

(Tons of 2,240 lbs.)

	1925				1926			
	In blast furnace		In electric furnace	Total	In blast furnace		In electric furnace	Total
	For own use	For sale	For sale		For own use	For sale	For sale	
Pig iron—								
Basic.....	422,805	1,710	—	424,515	458,726	18,974	—	477,700
Foundry.....	304	101,690	—	101,994	2,302	215,853	—	218,155
Malleable.....	936	42,952	—	43,888	—	41,648	—	41,648
<b>Total Pig Iron.....</b>	<b>424,045</b>	<b>146,352</b>	<b>—</b>	<b>570,397</b>	<b>461,028</b>	<b>276,475</b>	<b>—</b>	<b>737,503</b>
<b>Total Ferro-Alloys.....</b>	<b>—</b>	<b>—</b>	<b>25,709</b>	<b>25,709</b>	<b>—</b>	<b>—</b>	<b>37,954</b>	<b>37,954</b>

#### Production of Pig Iron, and Ferro-Alloys in Canada, January 1 to June 30, 1926 and 1927

(Tons of 2,240 lbs.)

	1926				1927			
	In blast furnace		In electric furnace	Total	In blast furnace		In electric furnace	Total
	For own use	For sale	For sale		For own use	For sale	For sale	
Pig Iron—								
Basic.....	250,147	7,312	—	257,459	282,687	8,535	—	291,222
Foundry.....	1,138	92,185	—	93,323	726	85,253	—	85,979
Malleable.....	—	20,082	—	20,082	—	26,512	—	26,512
<b>Total Pig-Iron.....</b>	<b>251,285</b>	<b>119,579</b>	<b>—</b>	<b>370,864</b>	<b>283,413</b>	<b>120,300</b>	<b>—</b>	<b>403,713</b>
<b>Total Ferro-Alloys.....</b>	<b>—</b>	<b>—</b>	<b>17,851</b>	<b>17,851</b>	<b>—</b>	<b>—</b>	<b>26,958</b>	<b>26,958</b>



### Production of Steel Ingots and Castings in Canada, 1925 and 1926

(Tons of 2,240 lbs.)

	1925			1926		
	For own use	For sale	Total	For own use	For sale	Total
Steel ingots—						
Open hearth—Basic.....	722,603	—	722,603	726,852	25	726,877
Bessemer.....	—	—	—	—	—	—
Other.....	11,252	—	11,252	—	—	—
Electric.....	—	—	—	16,673	—	16,673
<b>Total Steel Ingots.....</b>	<b>733,855</b>	<b>—</b>	<b>733,855</b>	<b>743,525</b>	<b>25</b>	<b>743,550</b>
Steel castings—						
Open hearth—Basic.....	1,540	7,471	9,011	1,902	17,553	19,455
Acid.....	—	—	—	—	—	—
Bessemer.....	78	1,674	1,752	87	1,551	1,638
Electric.....	34	8,043	8,077	85	12,160	12,245
<b>Total Direct Steel Castings.....</b>	<b>1,652</b>	<b>17,188</b>	<b>18,840</b>	<b>2,074</b>	<b>31,264</b>	<b>33,338</b>
<b>Grand Total.....</b>	<b>735,507</b>	<b>17,188</b>	<b>752,695</b>	<b>745,599</b>	<b>31,289</b>	<b>776,888</b>

### Production of Steel Ingots and Castings in Canada, January 1 to June 30, 1926 and 1927

(Tons of 2,240 lbs.)

	1926			1927		
	For own use	For sale	Total production	For own use	For sale	Total production
Steel Ingots —						
Open Hearth—Basic.....	401,111	—	401,111	458,071	—	458,071
Other.....	9,492	—	9,492	4,322	—	4,322
<b>Total Steel Ingots.....</b>	<b>410,603</b>	<b>—</b>	<b>410,603</b>	<b>462,393</b>	<b>—</b>	<b>462,393</b>
Steel Castings —						
Open Hearth—Basic.....	991	12,394	13,385	1,003	11,497	12,500
Acid.....	—	—	—	—	—	—
Bessemer.....	38	754	792	47	1,117	1,164
Electric.....	14	6,390	6,404	186	11,067	11,253
<b>Total Direct Steel Castings.....</b>	<b>1,043</b>	<b>19,538</b>	<b>20,581</b>	<b>1,236</b>	<b>23,681</b>	<b>24,917</b>
<b>Grand Totals.....</b>	<b>411,646</b>	<b>19,538</b>	<b>431,184</b>	<b>463,629</b>	<b>23,681</b>	<b>487,310</b>

### Lead

Another new record for the output of lead from Canadian ores was established in 1926. The greater part of Canada's production was from the Trail smelter which received a large proportion of its lead ores from the Sullivan mine at Kimberley, B.C., but which also purchased silver-lead-zinc ores from the Kootenay district. The remainder of Canada's production comprised pig lead produced from Galetta, Ontario, and lead from lead ores and concentrates shipped from the Mayo district of the Yukon Territory and from the Tetreault mine in Quebec.

While the total production of the Galetta smelter is sold in Canada, the greater part of the production from the Trail smelter is sold in Europe and in the Orient, and since the latter sales are based on the London market rather than on Montreal, it was decided in 1926 to make the method of computation conform to this sales practice, and to use the London market quotations rather than those current in Montreal. Except for Ontario, where the sales value as given by the smelter was used, Canada's production in 1926, therefore, was valued at 6.751 cents per pound, the average of London quotations for the year, conversion to Canadian funds being made at par. Canada's total production of lead in 1926 amounted to 283,801,265 pounds and thus was worth \$19,240,661 as against 253,590,578 pounds produced in 1925 and valued at \$23,127,460, on the basis of 9.12 cents per pound, which was the average of the Montreal quotations for that year. The London price in 1925 was 7.914 cents per pound.



In the half-year under review the production of lead amounted to 152,275,563 pounds valued at \$8,803,676 marking an advance of 10 per cent in the quantities produced in comparison with the figures for the corresponding period of 1926. British Columbia contributed by far the greater part, the output for this province being 143,454,656 pounds valued at \$8,244,339. Ontario's output amounted to 3,677,719 pounds; Quebec produced 2,932,227 pounds; and the Yukon reported 2,210,961 pounds.

### Production of Lead in Canada 1925, 1926, and January 1 to June 30, 1927.

	1925		1926		January 1 to June 30, 1927	
	Pounds	Value	Pounds	Value	Pounds	Value
(a) Calculated at average Montreal price for the year, as in previous reports—		\$		\$		\$
Quebec.....	2,051,100	187,000	3,729,636	304,114	2,932,227	211,707
Ontario.....	7,209,534	657,510	7,307,830	595,880	3,677,719	265,531
British Columbia.....	242,454,502	22,111,850	266,812,461	21,755,888	143,454,656	10,357,426
Yukon.....	1,875,442	171,040	5,860,373	477,855	2,210,961	159,631
<b>Total.....</b>	<b>253,590,578</b>	<b>23,127,460</b>	<b>283,710,300</b>	<b>23,133,737</b>	<b>152,275,563</b>	<b>10,994,295</b>
(b) Calculated at average London price for the year except in Ontario (see text)—						
Quebec.....	2,051,100	162,324	3,729,636	251,788	2,932,227	168,515
Ontario.....	7,268,193	604,798	7,398,795	580,730	3,677,719	263,758
British Columbia.....	242,454,502	19,187,849	266,812,461	18,012,509	143,454,656	8,244,339
Yukon.....	1,875,442	148,422	5,860,373	395,634	2,210,961	127,064
<b>Total.....</b>	<b>253,649,237</b>	<b>20,163,393</b>	<b>283,801,265</b>	<b>19,240,661</b>	<b>152,275,563</b>	<b>8,803,676</b>

Note.—Montreal price of lead in 1925 was 9.12 cents per pound and in 1926 was 8.154 cents and in the first six months 1927—7.227 cents per pound. London price of lead in 1925 was 7.914 cents per pound and in 1926 was 6.751 cents per pound and in the first six months 1927 was 5.747 cents per pound.

### Imports into Canada and Exports of Lead, 1925, 1926, and January 1 to June 30, 1927

	1925		1926		January 1 to June 30, 1927	
	Quantity	Value	Quantity	Value	Quantity	Value
	lb.	\$	lb.	\$	lb.	\$
<b>IMPORTS—</b>						
Old and scrap, pig and block.....	505,555	50,600	766,939	67,671	215,995	18,701
Bars and sheets.....	194,814	10,554	116,846	11,887	52,526	4,346
Litharge.....	1,515,500	159,576	2,229,600	223,839	1,561,700	138,647
Axetite and nitrate of lead.....	222,535	20,516	140,046	13,462	168,137	14,078
Other manufactures.....	—	237,717	—	263,398	—	159,965
Pipe lead.....	42,592	4,099	116,344	11,011	59,515	4,836
Shots and bullets.....	6,040	923	12,316	1,543	12,344	1,181
Tea lead.....	131,402	16,260	83,531	10,362	29,568	3,084
Lead pigments—						
Dry white lead.....	47,540	4,749	60,600	5,539	116,032	10,385
White lead, ground in oil.....	127,916	14,795	73,468	7,539	151,068	11,502
Dry red lead and orange mineral.....	628,648	68,509	1,158,873	112,915	656,589	57,954
<b>Total.....</b>	<b>—</b>	<b>588,394</b>	<b>—</b>	<b>729,196</b>	<b>—</b>	<b>424,679</b>
<b>EXPORTS—</b>						
Lead, contained in ore.....	37,504,500	2,341,679	13,644,900	796,412	7,001,800	225,971
Pig lead.....	169,136,800	11,809,305	202,510,300	12,983,907	121,763,400	6,718,543
<b>Total.....</b>	<b>197,635,300</b>	<b>14,150,984</b>	<b>216,155,200</b>	<b>13,780,319</b>	<b>128,765,200</b>	<b>6,944,514</b>

**Monthly Average Prices of Pig Lead, Montreal\*, New York and London†, 1925, 1926 and January 1 to June 30, 1927**

Month	Montreal (Value in cents per pound)			New York (Value in cents per pound)			London‡ (Value in pounds sterling per long ton)		
	1925	1926	1927	1925	1926	1927	1925	1926	1927
January.....	10.04	9.07	7.52	10.169	9.255	7.577	41.443	34.778	27.485
February.....	9.56	8.92	7.48	9.428	9.154	7.420	37.944	33.903	27.344
March.....	9.29	8.54	7.62	8.914	8.386	7.577	36.804	31.625	27.845
April.....	8.29	7.79	7.22	8.005	7.971	7.126	32.791	28.775	26.546
May.....	8.14	7.53	6.82	7.985	7.751	6.616	32.283	28.253	25.054
June.....	8.46	7.81	6.65	8.321	8.033	6.414	33.479	29.986	24.438
July.....	8.74	8.07	-	8.151	8.499	-	34.698	31.710	-
August.....	9.40	8.30	-	9.192	8.908	-	38.188	32.756	-
September.....	9.53	8.23	-	9.508	8.790	-	38.884	32.085	-
October.....	9.55	8.00	-	9.513	8.402	-	39.017	30.821	-
November.....	9.40	7.82	-	9.739	8.005	-	36.872	29.270	-
December.....	9.02	7.77	-	9.310	7.855	-	34.739	28.932	-
<b>Average.....</b>	<b>9.12</b>	<b>8.15</b>	<b>7.22</b>	<b>9.020</b>	<b>8.417</b>	<b>7.123</b>	<b>36.429</b>	<b>31.075</b>	<b>26.452</b>

\*Producers' prices for car load quantities ex-cars Montreal, as furnished by the Consolidated Mining and Smelting Company.

†From the *Engineering and Mining Journal*.

‡Computed at par (\$4-8666), the London price of lead in 1925 was 7.914 cents per pound, and in 1926 was 6.751 cents per pound and during first six months of 1927 was 5.747 cents per pound.

**Statement of the Consolidated Mining and Smelting Company, Limited, Showing Ore, Concentrates, etc., received during the year 1926**

Name of Mine	Address	Dry tons ore	Dry tons concentrates
Allenby.....	Allenby, B.C.		31,844
Alameda.....	Nicola, B.C.	3	
Ames.....	Rock Creek, B.C.	3	
Alice.....	Creston, B.C.	131	
Alpha.....	Silverton, B.C.	56	
Atlin.....	Atlin, B.C.	155	
Aurora.....	Aldridge, B.C.	1,815	
Alamo.....	Alamo, B.C.	64	
Bluebell.....	Riondel, B.C.	14,638	3,262
Bell.....	Beaverdell, B.C.	1,034	
Beaver.....	Beaverdell, B.C.	32	
Black Colt.....	Sandon, B.C.	216	
Boulder City Group.....	Boulder City, B.C.	7	
Bosun.....	Boulder City, B.C.	538	
Brooklyn.....	Greenwood, B.C.	31	
Bounty.....	Beaverdell, B.C.	7	
Bluebird.....	Door Park, B.C.	6	
Boundary M. & E. Co.....	Greenwood, B.C.	50	
Cork-Provence.....	Zwicky, B.C.	1,982	184
Crescent.....	Greenwood, B.C.	14	
Charleston.....	Reinlack, B.C.	31	
Colonial.....	Sandon, B.C.	104	
Canadian Group.....	Sandon, B.C.	117	
Dunwell.....	Stewart, B.C.	201	
Duthie.....	Smithers, B.C.	1,646	
Daybreak.....	Kaslo, B.C.	80	
D-A.....	Greenwood, B.C.	1	
Dora.....	Three Forks, B.C.	1	
Daisy.....	Lake Windermere, B.C.	2	
Daugherty.....	Sandon, B.C.	7	
Discovery.....	Herb Lake, Man.	1	
Emerald.....	Salmo, B.C.		27
Esperanza.....	Alice Arm, B.C.	8	
Eureka.....	Nicola, B.C.	12	
Elkhorn.....	Greenwood, B.C.	12	
Enterprise.....	Enterprise, B.C.	686	
Enterprise.....	Eholt, B.C.	14	
Echo.....	Silverton, B.C.	26	
Galena Farm.....	Silverton, B.C.	1,361	
Gold Drop.....	Greenwood, B.C.	1	
Goodenough.....	Ymir, B.C.	473	
Galena.....	Williams Lake, B.C.	8	
Granite.....	Taghuru, B.C.	10	
Gold Pick.....	Greenwood, B.C.	3	
Hope.....	Sandon, B.C.	35	
Hewitt.....	Silverton, B.C.	128	
Hopp, J.....	Vancouver, B.C.	1	

Statement of the Consolidated Mining and Smelting Company, Limited, Showing Ore,  
Concentrates, etc., received during the year 1926—*Continued*

Name of Mine	Address	Dry tons ore	Dry tons concentrates
Hot Punch	Lake Windermere, B.C.	7	
Homestake	Louis Creek, B.C.	1,582	
Imperial	Imperial Spring, B.C.	326	
I.N.I.	Rossland, B.C.	4	
Jewell	Greenwood, B.C.	54	
Jeanette	Ainsworth, B.C.	11	
Knob Hill	Republic, Wash.	348	
Key	Lake Windermere, B.C.	27	
Lucky Jim	Zincton, B.C.	19,776	14
Luk Rose	Alice Arm, B.C.	42	
Logie, J. S.	W. Summerland, B.C.	1	
Lake Shore	Ainsworth, B.C.	14	
Lizard Creek	Wendel, B.C.	1	
Lend Queen	Briscoe, B.C.	35	
Last Chance	Republic, Wash.	5,932	
Manitoba Metals Co.	LePas, Man.	24	
Mastulon	Rivestake, B.C.	9	
Merritt Mines, Ltd.	Coyile, B.C.	42	
Monitor	Three Forks, B.C.	238	
Mammoth	Silverton, B.C.	41	
Metals Recovery	Retallack, B.C.	120	813
Multiplex	Arrowhead, B.C.	137	
Mountain Chief	Now Denver, B.C.	206	
Molly Gibson	Kittas Landing, B.C.	44	
Midnight	Rossland, B.C.	2	
Minion	Kotchikan, Alaska	1	
Metallic	Silverton, B.C.	112	
Molly Hughes	Now Denver, B.C.	64	
McAllister	Three Forks, B.C.	5,788	
Northland	Stewart, B.C.	1	
No. Seven	Boundary Falls, B.C.	15	
Noble Five	Sandon, B.C.	148	
Old Hickory	Republic, Wash.	30	
Ottawa	Slocan City, B.C.	26	
Paradise	Invermere, B.C.	737	
Province	Greenwood, B.C.	84	
Planet	Nicola, B.C.	29	
Penticton Mining Co.	Penticton, B.C.	5	
Prosperity	Stewart, B.C.	29	
Porcupine	Ymir, B.C.	18	
Porter-Idaho	Stewart, B.C.	174	
Princess	Laurier, B.C.	22	
Quilp	Republic, Wash.	8,705	
Queen Bess	Sandon, B.C.	44	
Queen Victoria	Beasley, B.C.	29	
Queen	Salmo, B.C.	24	
Richmond-Eureka	Sandon, B.C.	59	
Rainbow	Keen, B.C.	5	
Revenge	Beaverdell, B.C.	14	
Roseberry-Surprise	New Denver, B.C.	833	
Ruth	Sandon, B.C.	1,250	
Rhode-Island	Kamloops, B.C.	18	
Rambler-Cariboo	Rambler, B.C.	359	
Renfrew	Jellicoe, B.C.	28	
Silver Reef	Nelson, B.C.	4	
Silver Cup	Hazelton, B.C.	50	
Silver Star	Similkameen, B.C.	1	
Silver Spray	Lake Windermere, B.C.	6	
Sally	Beaverdell, B.C.	1,232	
Silver King	Lake Windermere, B.C.	22	
Surprise	Howser, B.C.	6	
Seel, Geo.	Wisteria, B.C.	1	
Submarine	Oroville, Wash.	4	
Silversmith	Sandon, B.C.		3,916
Star	Lake Windermere, B.C.	3	
Standard	Silverton, B.C.	89	
Sunmitt	Penticton, B.C.	1	
Surprise	Sandon, B.C.	172	
Simmons, J. D.	Galloway, B.C.	17	
Stenwinder	Kimberley, B.C.	19,058	
Smuggler	Birch Island, B.C.	15	
Starkey, P.A.	Nelson, B.C.	1	
Spokane Trinket	Ainsworth, B.C.	67	
Silver Hoard	Ainsworth, B.C.	24	
Sovereign	Sandon, B.C.	25	
Silver Hill	Crawford Bay, B.C.	25	
Surprise	Republic, Wash.	111	
Tariff	Ainsworth, B.C.	101	
Thelma	Merritt, B.C.	1	
Trevitt	Republic, Wash.	1,873	
Tredway	Dorreen, B.C.	97	
Trade Dollar	Sandon, B.C.	66	
Velvet	Rossland, B.C.	164	

**Statement of the Consolidated Mining and Smelting Company, Limited, Showing Ore, Concentrates, etc., received during the year 1926—concluded**

Name of Mine	Address	Dry tons ore	Dry tons concentrates
Van Rai.....	Silverton, B.C.....	33	97
Victor.....	Sandon, B.C.....	43	
Whitewater.....	Retallack, B.C.....	10,087	
Wonderful.....	Sandon, B.C.....	937	
Wellington.....	Beaverdell, B.C.....	211	
Widdowson, E.....	Nelson, B.C.....	2	
White Cat.....	Lake Windermere, B.C.....	34	
Yankee Girl.....	Ymir, B.C.....	17,571	
Yankee Girl.....	Grand Forks, B.C.....	11	
	Total Customs.....	125,501	40,157
	Total Company.....	57,130	307,320
	<b>Total.....</b>	<b>182,721</b>	<b>347,477</b>

### Manganese

No production of manganese has been reported since 1924 when 584 tons of ore valued at \$4,088 were produced in the province of New Brunswick. Deposits of manganese are also known to occur in Lunenburg County, Nova Scotia, and in British Columbia near the town of Kaslo.

### Mercury

There was no production of mercury reported during 1926 or during the first half of 1927.

### Molybdenum

Molybdenite is found in many sections of Canada. The Woods Molybdenum Company of Quyon, Quebec, was the only company to report any production for 1926. Several prospects were developed during the war when the demand for this metal for use in the manufacture of certain alloy steels was great. Since that time, with the one exception, these properties have been idle. Production in 1926 amounted to 25,168 pounds of molybdenum concentrates containing 20,943 pounds of molybdenum sulphide valued at \$10,472. In 1925 the production was 30,764 pounds of molybdenum concentrates containing 72.65 per cent  $\text{MoS}_2$  or 22,350 pounds of molybdenum sulphide valued at \$11,176. There was no production during the first half of 1927.

### Nickel

Nickel production in 1926 amounted to 65,714,294 pounds valued at \$14,374,163 as against the 1925 production of 73,857,114 pounds valued at \$15,946,672. This production was made up of nickel in matte and speiss exported from the Canadian smelters valued at 18 cents per pound; refined and electrolytic nickel produced, valued at the average price received for sales of metal during the year; and the nickel equivalent in oxides and salts sold, this nickel being valued at the sum obtained from the sale of the oxides and salts.

Mining and smelting of nickel-copper ores was carried on during the year by the two producing companies, the International Nickel Company of Canada at Copper Cliff and the Mond Nickel Company operating at Coniston. An extensive development program was launched during the year by the International Nickel Company to meet the growing demand for nickel that has arisen as the result of research work looking to the further commercial utilization of this important metal. Recovery of the sulphur in the waste gases from the converters, was continued by the Mond Company; the manufacture and sale of sulphuric acid of great purity and low cost by this company has been an appreciable factor in lowering the costs of production in many acid using industries.

Mining, smelting and refining are carried on by the International Nickel Company in Canada, the mines and smelter being at Coniston and the refinery at Port Colborne. The smelter produces a nickel-copper matte containing from 50 to 53 per cent nickel, and 27 to 30 per cent copper, the balance being mostly sulphur. Some of the matte is shipped to Port Colborne for refining,



the products there being, refined and electrolytic nickel, nickel oxide and salts, and blister or converter copper ready for further refining. For the manufacture of monel metal, some matte is shipped directly from the smelter to Huntington, W.Va., U.S.A., where it is introduced into the furnace charges for the direct production of the alloy "monel metal."

The Mond Nickel Company also operates mines and a smelter at Coniston, but as the Mond refining process uses a large amount of anthracite coal, it is necessary to ship the matte to the plant near Clydach, Wales (which is located in close proximity to a suitable coal mine.) There, the nickel-copper matte is treated, the products being a very pure nickel, and copper sulphate. The copper sulphate is marketed in the vineyard countries of France and Italy. Buyers in these areas are most discriminating in their purchases, and large sums of money have been spent in the cultivation of the trade; but for many years the needs of the most discerning buyers have been met and so the trade has been maintained.

In the half-year ending June 30, 1927, the output of nickel amounted to 34,781,199 pounds valued at \$8,008,823 marking gains of 0.8 per cent in tonnage and 4 per cent in value over the totals for the first half of 1926. Slightly less nickel was exported in the form of matte and speiss but the output of refined and electrolytic nickel was greater than in the first half of 1926. There were 34,781,199 pounds of nickel produced during the half-year; 15,108,124 pounds were contained in matte and speiss exported, 16,014,747 pounds were produced as refined and electrolytic nickel and 3,658,328 pounds were contained in oxides and salts sold.

#### Production in Canada and Exports of Nickel, 1925, 1926, and January 1 to June 30, 1927

	1925		1926		January 1 to June 30, 1927	
	Quantity	Value	Quantity	Value	Quantity	Value
	Pounds	\$	Pounds	\$	Pounds	\$
<b>PRODUCTION—</b>						
Nickel in matte and speiss exported*.....	32,787,846	5,901,812	34,028,211	6,125,078	15,108,124	2,719,462
Refined and electrolytic nickel produced.....	31,976,310	7,315,701	25,627,602	6,423,401	16,014,747	4,176,318
Nickel in oxides and salts sold.....	9,092,958	2,729,159	6,058,481	1,825,684	3,658,328	1,113,043
<b>Total.....</b>	<b>73,857,114</b>	<b>15,946,672</b>	<b>65,714,294</b>	<b>14,374,163</b>	<b>34,781,199</b>	<b>8,008,823</b>
<b>EXPORTS—</b>						
Nickel, fine.....	30,116,400	5,980,920	24,698,400	6,386,387	13,332,100	3,601,313
Nickel contained in matte.....	40,207,900	6,693,805	39,177,400	6,074,497	19,987,800	3,314,793
<b>Total.....</b>	<b>70,324,300</b>	<b>12,674,725</b>	<b>63,875,800</b>	<b>12,460,884</b>	<b>33,319,900</b>	<b>6,916,106</b>

\*Nickel in matte and speiss exported valued at 18 cents per pound.

#### Output from Nickel-Copper Mines and Smelters, 1923, 1924, 1925, 1926, and January 1 to June 30, 1927

	Unit	1923	1924	1925	1926	January 1 to June 30, 1927
Ore mined.....	Ton	1,187,355	1,411,978	1,264,748	1,322,050	639,657
Ore shipped.....	Ton	1,168,139	1,354,650	1,264,748	1,322,050	639,657
<b>Content of ores, etc., shipped—</b>						
Copper.....	Pound	35,635,726	42,349,039	44,007,830	55,096,719	26,605,592
Nickel.....	Pound	72,855,433	81,068,547	85,305,242	90,110,865	42,613,479
Ore and concentrates treated at smelters.....	Ton	1,140,160	1,307,693	1,258,849	1,309,782	665,306
Matte produced.....	Ton	58,084	65,944	70,286	78,643	40,993
<b>Content of matte,—</b>						
Copper.....	Pound	31,538,710	36,979,424	39,272,989	48,318,735	26,282,515
Nickel.....	Pound	62,057,835	69,276,313	73,191,202	78,076,003	39,460,960
Matte shipped to Canadian refineries.....	Ton	35,012	34,835	38,567	34,042	21,536
Matte exported to foreign refineries.....	Ton	21,450	26,565	32,397	34,908	16,237

#### Metals of the Platinum Group

Metals of the platinum group produced from Canadian ores in 1926 amounted to \$1,563,785 in value. This total includes values for the platinum group metals from the British Columbia placers and also the values obtained from the treatment of nickel-copper made at Port Colborne, Ontario, and at Clydach, Wales.

Canada stands third in the world's production of these metals, larger amounts coming from Russia, and Colombia, South America. In British Columbia small quantities are found in placer deposits with alluvial gold and black sands; in Ontario these rare metals occur with the nickel-copper-sulphide ores of the Sudbury district. Copper-nickel matte containing the precious metals is made at Coniston by the Mond Nickel Company Limited and at Coppercliff by the International Nickel Company Limited. The Mond matte is shipped to Clydach, Wales, for refining; International matte is shipped either to the United States, for manufacture into monel metal, or to Port Colborne, Ontario, for refining. When the copper and nickel are removed, the residues are further refined for the recovery of gold, silver, platinum and palladium with smaller amounts of rhodium and iridium.

For the half-year ending June 30, 1927, the price of platinum in New York averaged \$97.272 per ounce as against an average during the calendar year 1926 of \$113.269 and \$119.093 during the calendar year 1925. The decline in the price of platinum reduced the value during the half-year to a point 26.5 per cent below the aggregate value for the first half of 1926 while the production during that year was 4 per cent greater than in the corresponding period of the preceding year.

#### Canada's Production of Platinum Group Metals, 1925, 1926, and January 1 to June 30, 1927

	1925		1926		Jan. 1 to June 30, 1927	
	Platinum	Palladium, Rhodium, etc.	Platinum	Palladium, Rhodium, etc.	Platinum	Palladium, Rhodium, etc.
Produced by Canadian, United States and British refineries from Canadian mattes and residues.....	Fine oz. 8,692	8,288	9,471	10,024	5,374	5,796
	Value, \$ 1,027,477	648,069	919,349	640,178	424,546	315,940
British Columbia placers.....	Fine oz. 6	-	50	-	-	-
	Value, \$ 716	-	4,258	-	-	-
<b>Total.....</b>	<b>Fine oz. 8,698</b>	<b>8,288</b>	<b>9,521</b>	<b>10,024</b>	<b>5,374</b>	<b>5,796</b>
	<b>Value, \$ 1,028,192</b>	<b>648,069</b>	<b>923,607</b>	<b>640,178</b>	<b>424,546</b>	<b>315,940</b>

#### Imports into Canada and Exports of Platinum, 1925, 1926, and January 1 to June, 30, 1927

	1925		1926		Jan. 1 to June 30, 1927	
	Quantity	Value	Quantity	Value	Quantity	Value
	Oz.	\$	Oz.	\$	Oz.	\$
<b>IMPORTS—</b>						
Platinum retorts.....	-	41,006	-	40,028	-	96
Platinum wire, and in bars, strips, etc.....	-	157,914	-	138,433	-	47,113
Platinum crucibles.....	-	39,685	-	8,960	-	2,702
<b>Total.....</b>	<b>-</b>	<b>238,605</b>	<b>-</b>	<b>187,421</b>	<b>-</b>	<b>49,911</b>
<b>EXPORTS—</b>						
Contained in concentrates.....	404	42,489	520	54,747	48	4,239
Platinum, old and scrap.....	655	76,423	396	40,185	73	6,603
<b>Total.....</b>	<b>1,059</b>	<b>118,912</b>	<b>916</b>	<b>94,932</b>	<b>121</b>	<b>10,842</b>

#### Silver

Silver production in Canada in 1926 amounted to 22,371,924 ounces which valued at the New York price for the year (62.107 cents), was worth \$13,894,531. In 1925 the silver output amounted to 20,228,988 ounces valued at \$13,971,150 when the average price was 69.065 cents per ounce. Among the largest silver producers in Canada is the Sullivan mine which, although primarily a world-renowned lead and zinc mine, produced in 1926 more than 4.5 millions ounces of silver. The Premier mine in northern British Columbia produced more than 3 million ounces. In Ontario the largest producers were the Nipissing mine with 1.9 million ounces and the Keeley mine with 1.7 million ounces. The Frontier Lorraine Mines produced slightly more than a million ounces and the Castle Tretheway slightly less than a million ounces in 1926.

Canada's silver production is obtained principally from the silver-cobalt mines of northern Ontario, from the silver-lead-zinc mines and copper-gold mines of British Columbia, the high-grade silver-lead ores of the Mayo district of the Yukon while small amounts are recovered from the copper ores and silver-lead-zinc ores exported from the province of Quebec. The gold mines in northern Ontario all report silver with their gold production generally in the proportion of 7 or 8 ounces of gold to 1 ounce of silver.

Silver production during the half-year ending June 30, 1927, amounted to 11,723,218 fine ounces as compared with 11,108,310 fine ounces produced during the first half of 1926; this was a gain of 5.5 per cent in quantity. Lower prices for silver resulted in the aggregate value of the half year's output dropping to 9.7 per cent below the value of the output in the first half of 1926. Production in Ontario totalled 4,948,888 fine ounces as compared with 4,542,420 fine ounces in the first half of 1926. British Columbia mines yielded 5,368,074 fine ounces as against 5,150,853 fine ounces during the corresponding period of last year. The output from the Yukon at 1,120,722 fine ounces was slightly less than the total of 1,248,537 fine ounces in the first half of the preceding year. In Quebec production amounted to 285,461 fine ounces and 73 fine ounces were obtained from Nova Scotia ores.

British Columbia, which took first place among the silver producing provinces in 1926, continued to hold this position in the first half of 1927.

#### Production of Silver in Canada by Provinces, 1925 and 1926

Province	1925			1926		
	Quantity	Value	Per cent of total production	Quantity	Value	Per cent of total production
	Oz.	\$	Per cent	Oz.	\$	
Quebec.....	214,943	148,451	1.06	375,986	233,513	1.69
Ontario.....	10,529,131	7,271,944	52.28	9,274,965	5,700,402	41.45
Manitoba and Nova Scotia.....	563	388	—	130	81	—
British Columbia.....	8,579,458	5,025,403	42.40	10,625,818	6,599,376	47.49
Yukon Territory (contained in placer gold and in ores exported).....	904,893	624,064	4.26	2,095,027	1,301,159	9.37
<b>Total.....</b>	<b>20,228,988</b>	<b>13,971,150</b>	<b>100.00</b>	<b>22,371,924</b>	<b>13,894,531</b>	<b>100.00</b>

#### Production of Silver in Canada, by Provinces, January 1 to June 30, 1926 and 1927

	1926		1927	
	Quantity	Value	Quantity	Value
	Fine oz.	\$	Fine oz.	\$
Ontario.....	4,542,420	2,993,540	4,948,888	2,791,569
British Columbia.....	5,150,853	3,394,515	5,368,074	3,028,023
Yukon.....	1,248,537	822,811	1,120,722	632,177
Quebec.....	166,445	109,691	285,461	161,023
Manitoba and Saskatchewan.....	5	3	—	—
Nova Scotia.....	50	33	73	41
<b>Canada.....</b>	<b>11,108,310</b>	<b>7,320,599</b>	<b>11,723,218</b>	<b>6,612,833</b>

#### Imports into Canada and Exports of Silver, 1925, 1926 and January 1 to June 30, 1927

	1925		1926		January 1 to June 30, 1927	
	Oz.	\$	Oz.	\$	Oz.	\$
<b>Imports—</b>						
Silver bullion in bars.....	—	1,025,109	—	1,011,015	—	485,587
Sterling silver.....	—	210,384	—	440,079	—	167,520
Silver coin.....	—	61	—	55	—	—
<b>Total.....</b>	<b>—</b>	<b>1,235,554</b>	<b>—</b>	<b>1,451,149</b>	<b>—</b>	<b>653,107</b>
<b>Exports—</b>						
Silver contained in ore, concentrates, etc.....	4,754,915	3,021,418	5,890,280	3,546,952	1,651,776	816,246
Silver bullion.....	14,316,797	9,861,219	15,241,353	9,559,825	8,050,357	4,535,256
Silver coin.....	—	2,099	—	—	—	—
<b>Total.....</b>	<b>19,071,712</b>	<b>12,884,726</b>	<b>21,132,133</b>	<b>13,106,777</b>	<b>9,702,133</b>	<b>5,351,502</b>



# Monthly Average Prices of Silver,\* 1924, 1925, 1926 and January 1 to June 30, 1927

	New York				London			
	1924	1925	1926	1927	1924	1925	1926	1927
January.....	63.447	68.447	67.795	55.795	33.549	32.197	31.322	25.863
February.....	64.359	68.472	66.773	57.898	33.565	32.245	30.797	26.854
March.....	63.957	67.808	65.880	55.306	33.483	31.935	30.299	25.655
April.....	64.139	66.899	64.409	56.199	33.065	31.372	29.682	26.136
May.....	65.524	67.580	65.075	56.280	33.870	31.276	30.125	26.072
June.....	66.690	69.106	65.481	56.769	34.758	31.863	30.248	26.203
July.....	67.159	69.442	64.793	-	34.509	31.954	29.861	-
August.....	68.519	70.240	62.380	-	34.213	32.268	28.773	-
September.....	69.350	71.570	60.580	-	34.832	32.983	27.904	-
October.....	70.827	71.106	54.505	-	35.387	32.972	25.291	-
November.....	69.299	69.223	54.141	-	33.775	32.155	25.192	-
December.....	68.096	68.889	53.466	-	32.620	31.835	24.733	-
<b>Average.....</b>	<b>66.781</b>	<b>69.065</b>	<b>62.107</b>	<b>56.498</b>	<b>33.969</b>	<b>32.688</b>	<b>28.686</b>	<b>26.130</b>

\* New York quotations cents per ounce, troy, 999 fine, foreign silver.  
London, pence per ounce, sterling silver, 925 fine.

**\*Shipments by Mines, and destinations of Ores, Concentrates etc., shipped over Temiskaming and Northern Ontario Railway from the Districts of Cobalt, South Lorrain and Gowanda, 1926.**

Name of Mine	tons	Destination	tons
<b>SHIPMENTS FROM COBALT DISTRICT—</b>		<b>CANADIAN POINTS—</b>	
Agaunico.....	34.14	Deloro Smelting & Refining Co., Ltd.	4.727
Mining Corporation.....	3,615.60	Cobalt for milling.....	12.445
Coniagas.....	30.00	Timmins.....	49
McKinley-Darragh.....	526.99	West St. John, for export.....	349
Nipissing.....	888.43	Montreal, for export.....	521
O'Brien.....	1,773.59	Quebec, for export.....	108
Northern Extension.....	25.81		
Kerr Lake.....	23.00	<b>Total.....</b>	<b>18.199</b>
H. F. Strong.....	67.29		
Temiskaming Testing Laboratories	49.00	<b>UNITED STATES POINTS—</b>	
J. H. McLeod.....	1.70	American Smelting & Refining Co.,	
C. Reinhardt.....	30.55	Ltd., Tacoma.....	2.504
Wabi Iron Works.....	32.16	American Smelting & Refining Co.,	
Genesee.....	37.11	Perth, Amboy, N.J.....	34
<b>Total.....</b>	<b>7,135.37</b>	Cincinnati.....	30
<b>SHIPMENTS FROM SOUTH LORRAIN DISTRICT—</b>		Norwood, Ohio.....	98
Keeley.....	1,082.30	<b>Total.....</b>	<b>2,666</b>
Lorrain Consolidated.....	130.00		
Lorrain Trout Lake.....	5,750.00		
Mining Corporation.....	6,379.22		
<b>Total.....</b>	<b>13,341.52</b>		
<b>OTHER CAMPS—</b>			
Castle Tretheway.....	249.50		
Tonopah.....	108.00		
Miller Lake O'Brien.....	30.00		
<b>Total.....</b>	<b>387.50</b>		
<b>Grand total.....</b>	<b>20,864.39</b>	<b>Grand Total.....</b>	<b>20,865</b>

\*Supplied by Arthur A. Cole, Mining Engineer, T. & N.O. Railway, Cobalt, Ont.

## ZINC

Production of zinc from Canadian ores in 1926 established a new high record for this metal with a total of 149,938,105 pounds (74,969 tons) which valued at the average London price for the year of 7.41 cents per pound, was worth \$11,110,413. The 1925 output amounted to 109,268,511 pounds (54,634 tons) which valued at the average St. Louis price of 7.622 cents per pound was computed to be worth \$8,328,446.

Refined zinc is produced at Trail, B.C., from the silver-lead-zinc ores of the West Kootenay district and from the Sullivan mine at Kimberley, B.C. Zinc concentrates are exported to Belgium from the Tetraault silver-lead-zinc property in Quebec. No other provinces in Canada produced zinc in 1926 but development work on a zinc property was carried on in the Sudbury district near Chelmsford, Ontario, by the Treadwell Yukon Mining Company.



Figures for the Canadian total production of zinc are made up by adding the production of refined zinc at Trail to the amount of zinc estimated as recoverable from ores exported; the value of production is calculated at the monthly average price for zinc on the London market for the year, exchange conversion being made at par. In previous years the average price on the St. Louis market was used, but as the bulk of Canada's zinc output is exported and sold on the basis of London quotations, it was thought that a more accurate aggregate value would be obtained by using prices quoted in London, and in 1926 this change in practice was made. It may be noted that the present procedure is in conformity with the practice of the British Columbia Department of Mines.

In order that comparative figures may be had, the table below shows the production data by provinces, both on the basis of the St. Louis prices, and also as determined from London quotations.

Zinc production during the half-year ending June 30, 1927, showed a gain of 3.2 per cent over the figures for the first half of 1926. British Columbia produced 62,262,000 pounds and Quebec yielded 7,020,179 pounds, making a total of 69,282,179 pounds for the half-year as against 67,159,570 pounds produced during the first half of 1926 and as against 149,938,105 pounds during the calendar year 1926.

### Production of Zinc in Canada, 1925, 1926 and January 1 to June 30, 1927

	1925		1926		January 1 to June 30, 1927	
	Pounds	Value	Pounds	Value	Pounds	Value
		\$		\$		\$
(a) Calculated at the average St. Louis price for the Year (1)						
Quebec.....	9,936,000	757,322	12,904,176	946,779	7,020,179	452,240
Ontario.....	179,545	13,685	—	—	—	—
British Columbia.....	99,152,966	7,557,439	137,033,929	10,054,179	62,262,000	4,010,918
Total.....	109,268,511	8,328,446	149,938,105	11,000,958	69,282,179	4,463,158
(b) Calculated at the average London price for the Year (2)						
Quebec.....	9,936,000	790,508	12,904,176	950,199	7,020,179	454,430
Ontario.....	179,545	14,285	—	—	—	—
British Columbia.....	99,152,966	7,888,610	137,033,929	10,154,214	62,262,000	4,030,344
Total.....	109,268,511	8,693,403	149,938,105	11,110,413	69,282,179	4,484,774

(1) 1925—7.622 cts. per pound, 1926—7.337 cts per pound, 1927—6.442.

(2) 1925—7.956 cts. per pound, 1926—7.41 cts. per pound, 1927—6.4732.

### Imports into Canada and Exports of Zinc, 1925, 1926 and January 1 to June 30, 1927

	1925		1926		January 1 to June 30, 1927	
	Quantity	Value	Quantity	Value	Quantity	Value
		\$		\$		\$
IMPORTS—						
Zinc dust..... Lb.	315,440	28,664	435,440	46,800	158,550	15,850
Zinc in blocks, pigs and sheets..... "	4,322,335	407,236	5,797,282	582,784	2,813,779	251,397
Zinc spelter..... "	1,265,510	100,736	1,122,640	86,779	653,130	43,706
Zinc white 80% zn..... "	13,301,222	923,755	13,278,306	943,724	7,880,298	528,050
Zinc sulphate and chloride of (44% zn.)..... "	1,070,595	47,450	1,650,725	73,604	1,023,670	43,247
Zinc, manufactures of, n.o.p....	—	178,230	—	156,637	—	117,237
Total.....	—	1,686,071	—	1,890,325	—	999,547
EXPORTS—						
Zinc ore..... Ton	48,340	1,778,019	41,917	1,393,165	4,158	116,373
Zinc spelter..... Lb.	49,826,000	3,781,011	96,008,000	7,107,876	50,874,100	3,254,681
Total.....	—	5,559,030	—	8,501,041	—	3,371,054

**Monthly Average Prices of Zinc at Montreal, St. Louis and London, 1925, 1926 and January 1 to June 30, 1927**

Month	Montreal <sup>1</sup> (In cents per pound)			St. Louis <sup>2</sup> (In cents per pound)			London <sup>2</sup> (In pounds Sterling per long ton)		
	1925	1926	1927	1925	1926	1927	1925	1926	1927
January.....	9.22	9.80	8.18	7.738	8.304	6.661	37.917	38.059	30.979
February.....	8.93	9.31	8.17	7.480	7.759	6.673	36.528	36.053	29.931
March.....	8.75	8.82	8.16	7.319	7.332	6.682	35.741	34.090	30.649
April.....	8.44	8.49	7.80	6.985	7.001	6.338	34.044	32.503	29.579
May.....	8.40	8.31	7.53	6.951	6.821	6.075	34.223	32.038	29.034
June.....	8.45	8.58	7.68	6.990	7.112	6.213	34.140	33.244	28.598
July.....	8.65	8.87	.	7.206	7.411	.	34.894	34.045	.
August.....	9.01	8.85	.	7.576	7.376	.	36.691	34.173	.
September.....	9.18	8.89	.	7.753	7.413	.	37.435	34.389	.
October.....	9.71	8.76	.	8.282	7.296	.	39.884	34.256	.
November.....	10.10	8.70	.	8.614	7.199	.	39.039	33.491	.
December.....	9.91	8.51	.	8.565	7.018	.	38.327	32.915	.
<b>Average.....</b>	<b>9.06</b>	<b>8.83</b>	<b>7.92</b>	<b>7.622</b>	<b>7.337</b>	<b>6.442</b>	<b>36.624</b>	<b>34.105</b>	<b>29.795</b>

<sup>1</sup>Supplied by Consolidated Mining and Smelting Co., Montreal, P.Q.

<sup>2</sup>From the *Engineering and Mining Journal*.

Converted at par, the average London quotations in cents per pound were: In 1925=7.956 cents; in 1926=7.410 cents; and during first 6 months of 1927 were 6.473 cents.

## NON-METALLICS

### Abrasives

**Diatomite.**—Development work was carried on during 1926 in Canada in connection with a diatomite deposit at East New Annan, N.S., but no shipments were made. The Canadian production of this material was derived in previous years from a deposit located at Silica Lake, Colchester County, 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.

There were no shipments of diatomite during the six months ending June 30, 1927, however, development work has advanced to a point where shipments may be looked forward to during the latter part of the year.

**Grinding Pebbles.**—Grinding pebbles are obtained in Canada from a deposit near Jackfish, Ontario. Shipments during 1926 amounted to 64 tons valued at \$576 as compared with a total of 105 tons at \$945 shipped in the previous year.

No grinding pebbles were shipped during the first half of 1927.

**Grindstones, Pulpstones and Scythestones.**—The production of grindstones, pulpstones, and scythestones in Canada during 1926 reached a total of 2,695 tons worth \$151,227. In 1925 shipments were reported at 2,562 tons with a value of \$124,165.

Owing to the seasonal character of the work in connection with the production of grindstones, pulpstones and scythestones in Canada, no data were collected for this industry during the first six months of the current year.

**Volcanic Dust.**—The deposit of volcanic dust near Waldeck, Saskatchewan was operated in 1926 and the shipments made during the year were reported at 90 tons worth \$630. A total of 160 tons valued at \$1,380 was shipped from this deposit during 1925. This material is used as a base in the manufacture of cleansers.

The production of volcanic dust during the first six months of 1927 amounted to 230 tons valued at \$1,610.

### Imports into Canada and Exports of Abrasives, 1925, 1926 and January 1 to June 30, 1927

	1925		1926		January 1 to June 30, 1927	
	Quantity	Value	Quantity	Value	Quantity	Value
		\$		\$		\$
<b>IMPORTS—</b>						
<b>Abrasives—</b>						
Artificial abrasives in bulk, crushed or ground, when imported for use in the manufacture of abrasive wheels and polishing composition.....	-	123,651	-	230,933	-	126,905
Carborundum wheels or stones not further manufactured than moulded and burned.....	-	-	-	158,468	-	68,619
Diamond dust or bort, and black diamonds for borers.....	-	694,405	-	963,141	-	595,948
Emery in bulk, crushed or ground.....	-	223,598	-	53,384	-	26,348
Emery wheels and carborundum wheels, n.o.p.....	-	108,432	-	77,331	-	35,338
Emery or carborundum, manufactures of, including carborundum stones, n.o.p.....	-	59,775	-	67,710	-	45,041
Grindstones, not mounted, and not less than 36 inches in diameter.....	-	641,369	-	791,412	-	292,544
Grindstones, n.o.p.....	-	19,983	-	36,838	-	41,243
Pumice and pumice stone, lava and calcareous tufa, not further manufactured than ground.....	-	27,581	-	32,005	-	16,725
Sand paper, glass, flint and emery paper or emery cloth.....	-	365,042	-	344,987	-	191,091
Iron sand or globules for polishing and sawing.....	-	11,702	-	17,404	-	4,102
Burrstones in blocks, rough or unmanufactured, not bound up or prepared for binding into millstones..... No.	5	584	3	450	-	-
<b>Total.....</b>	-	<b>2,306,122</b>	-	<b>2,774,123</b>	-	<b>1,443,961</b>
<b>EXPORTS—</b>						
Grindstones, manufactured.....	-	61,429	-	75,374	-	18,181
Stone for the manufacture of grindstones..... tons	93	794	-	-	-	-
<b>Abrasives—</b>						
Natural, n.o.p..... cwt.	464	404	860	800	3,639	4,110
Artificial, crude, including carborundum..... "	955,184	2,078,639	1,055,592	2,908,320	503,994	1,299,160
Artificial, made up into wheels, stones, etc.....	-	32,030	-	45,802	-	16,053
<b>Total.....</b>	-	<b>3,073,356</b>	-	<b>3,030,356</b>	-	<b>1,337,504</b>

### Actinolite

Shipments of actinolite to the United States from Canadian deposits during 1926 were recorded at 80 tons valued at \$1,000, as against 40 tons at \$500 shipped in the previous year.

Actinolite, which is a calcium-magnesium-iron silicate, is used in the manufacture of coal-tar roofing compounds. The Canadian production has been derived from deposits located in Elzevir and Kaladar townships, in Hastings and Addington counties, Ontario, the centre of the industry being at Actinolite.

There were no shipments of actinolite during the first half of 1927; in the same period of 1926 the production was 30 tons valued at \$375.

### Asbestos

Asbestos production in Canada during 1926 reached the grand total of 279,403 tons with a valuation of \$10,099,423; an average value of \$36.15 per ton. In 1925, the shipments (exclusive of sand and gravel) amounted to 273,524 tons at \$8,977,546, or an average value of \$32.82 per ton.

Asbestos rock mined during 1926 totalled 4,483,375 tons, of which quantity 4,002,626 tons were handled by the mills.

Production of asbestos in South Africa and Cyprus increased in 1926; the former country shipping 14,096 tons and the latter 6,941 tons. The Rhodesian output declined from 34,349 tons in 1925 to 33,344 tons in 1926. Mine operators in the United States shipped 1,358 tons during the year under review.

Canada's deposits of asbestos continue to supply by far the greater part of the world's needs of this very important mineral. Situated in the province of Quebec, about equally distant from the cities of Montreal and Quebec, the asbestos mines provide the principal industry in an area represented by five towns which have grown up about the mines. Mining or quarrying is done mostly in large pits. Veins of chrysotile asbestos run in every direction through the rock and hand-cobbing is used to sort out the larger samples. Mechanical crushing, drying and screening are used extensively in the further treatment. Some 50 to 75 tons of asbestos are commonly obtained in the handling of 1,000 tons of rock.

Shipments of asbestos from Canadian mines during the first half of 1927 totalled 123,730 tons valued at \$4,685,706, as against 126,287 tons at \$4,508,143 produced in the first six months of 1926. Asbestos rock mined during the period was 2,181,353 tons, of which quantity 1,673,508 tons was milled while the total mill output was 123,912 tons.

### Output and Shipments of Canadian Asbestos, 1925 and 1926

Classification	1925				1926			
	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.....	806	1,040	381,926	365 13	842	1,108	410,373	370 37
Crude No. 2.....	2,701	3,777	778,895	206 22	2,952	3,494	802,304	229 62
Other crudes.....	260	348	49,030	140 90	328	446	92,394	207 16
Spinning stocks.....	13,500	16,070	1,710,379	106 43	13,839	15,182	1,885,835	124 21
Shingle stocks.....	25,301	30,010	1,523,080	50 78	39,678	30,497	2,139,780	58 62
Mill board and paper stocks.....	94,350	93,035	2,915,046	31 03	101,293	86,746	2,940,675	33 89
Fillers, floats and other short fibres.....	128,382	128,338	1,618,290	12 61	141,272	135,930	1,828,061	13 44
Total.....	265,309	273,524	8,977,546	32 82	300,204	279,403	10,099,423	36 15
Sand and gravel*.....	16,409	16,865	10,814	0 64	15,672	15,672	10,257	0 65
<b>Grand Total.....</b>	<b>281,718</b>	<b>290,389</b>	<b>8,988,360</b>	<b>30 95</b>	<b>315,876</b>	<b>295,075</b>	<b>10,109,680</b>	<b>-</b>

\*In 1926, this production has been included under the "Sand and Gravel Industry."

### Output and Shipments of Asbestos in Canada, January 1 to June 30, 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	\$	\$	Tons	Tons	\$	\$
Crude No. 1.....	480	621	232,193	373 90	301	534	204,430	382 83
Crude No. 2.....	1,556	1,810	344,511	190 33	1,513	1,450	333,238	229 82
Other crudes.....	156	80	15,303	191 28	169	472	99,621	211 06
Spinning stocks.....	7,849	6,904	812,464	116 17	5,289	6,469	833,611	128 86
Shingle stocks.....	36,531	38,466	1,265,399	32 90	20,354	17,712	1,138,424	64 27
Mill board and paper stocks.....	55,265	40,923	1,384,345	33 83	35,388	30,577	1,111,973	36 37
Fillers, floats and other short fibres.....	45,196	37,403	453,928	12 14	60,898	66,516	964,409	14 50
Total.....	147,042	126,287	4,508,143	35 70	123,912	123,730	4,685,706	37 87
Sand and gravel.....	6,457	6,357	4,076	0 64	8,196	8,196	5,428	0 66
<b>Grand total.....</b>	<b>153,499</b>	<b>132,644</b>	<b>4,512,219</b>	<b>-</b>	<b>132,108</b>	<b>131,926</b>	<b>4,691,134</b>	<b>-</b>



## Imports into Canada and Exports of Asbestos, 1925, 1926 and January 1 to June 30, 1927

—	1925		1926		January 1 to June 30, 1927	
	Tons	\$	Tons	\$	Tons	\$
<b>IMPORTS—</b>						
Asbestos in any form other than crude, and all manufactures of, n.o.p.	—	350,600	—	472,513	—	286,942
Asbestos packing	111	98,169	93	93,122	66	61,285
<b>Total</b>	—	<b>448,769</b>	—	<b>565,635</b>	—	<b>348,227</b>
<b>EXPORTS—</b>						
Asbestos	136,750	8,090,106	141,760	8,660,810	62,008	3,936,497
Asbestos sand and waste	121,267	1,592,286	136,231	1,992,480	57,514	886,454
Asbestos manufactures, including asbestos roofing	—	55,572	—	43,011	—	40,460
<b>Total</b>	—	<b>9,737,964</b>	—	<b>10,705,301</b>	—	<b>4,863,411</b>

## Monthly Average Prices of Asbestos by Grades, 1926 and 1927

(Per short ton)

(From the *Engineering and Mining Journal*)

Month	Crude No. 1	Crude No. 2	Spinning fibres	Magnesia and compressed sheet fibres	Shingle stock	Paper stock	Cement stock	Short fibres	Floats
<b>1926</b>									
January	\$ 500	\$ 300	\$ 190	\$ 125	\$ 73	\$ 42	\$ 25	\$ 15	\$ 15
February	525	313	183	137	70	43	25	15	15
March	525	300	190	137	70	43	25	15	15
April	525	300	190	137	70	43	25	15	15
May	525	300	190	137	70	43	25	15	15
June	525	300	190	137	70	43	25	15	15
July	525	300	190	137	70	43	25	15	15
August	525	300	190	137	70	43	25	15	15
September	525	300	190	137	70	43	25	15	15
October	525	300	190	137	70	43	25	15	15
November	525	300	190	137	70	43	25	15	15
December	525	300	190	137	80	43	25	15	15
<b>Average</b>	<b>523</b>	<b>301</b>	<b>190</b>	<b>136</b>	<b>71</b>	<b>43</b>	<b>25</b>	<b>15</b>	<b>15</b>
<b>1927</b>									
January	525	300	190	137	80	43	25	15	15
February	525	325	200	137	80	43	25	15	15
March	525	325	200	137	80	43	25	15	15
April	525	325	200	145	75	43	25	15	15
May	525	325	200	145	75	43	25	15	15
June	525	325	200	145	75	43	25	15	15
<b>Average</b>	<b>525</b>	<b>321</b>	<b>198</b>	<b>141</b>	<b>77</b>	<b>43</b>	<b>25</b>	<b>15</b>	<b>15</b>

## Barytes

Barytes shipped during 1926 amounted to 100 tons valued at \$2,307 as compared with 95 tons worth \$2,259 produced in 1925. As in previous years the total output was obtained from the deposit at Lake Ainslie, Inverness county, Nova Scotia.

Imports of barytes during the year were recorded at 2,422 tons evaluated at \$48,011; in the corresponding period of 1925 importations totalled 2,433 tons appraised at \$50,566.

Barytes shipped during the first six months of 1927 amounted to 35 tons, with a valuation of \$771, as against 44 tons at \$824 shipped during the first half of 1926. Imports of barytes during the half year were recorded at 1,220 tons, valued at \$25,515, while in the corresponding period of the preceding year 1,003 tons worth \$19,870 were brought into Canada.

## Bituminous Sands

Production of bituminous sands from the Fort McMurray district of the province of Alberta amounted to 528 tons, valued at \$2,112 in 1926. Shipments during the preceding year totalled 1,148 tons worth \$4,594. These shipments were made by the McMurray Asphaltum and Oil Limited, and the Federal Department of Mines. Operations in the bituminous sands industry are as yet only in the experimental stage, and considerable research work in regard thereto is being carried on by the Scientific and Industrial Research Council of Alberta, and the Dominion Department of Mines.

Shipments of bituminous sands during the first half of 1927 were reported at 291 tons worth \$1,164.

#### Imports of Asphalt into Canada, 1925, 1926 and January 1 to June 30, 1927

	1925		1926		January 1 to June 30, 1927	
	Tons	Value	Tons	Value	Tons	Value
		\$		\$		\$
Asphalt, solid.....	12,583	292,218	19,663	404,849	15,451	298,823
Asphalt, not solid.....	-	13,388	-	17,510	-	12,933
Asphaltum oil.....	-	12,147	-	21,998	-	7,370
<b>Total.....</b>	-	<b>317,653</b>	-	<b>444,356</b>	-	<b>319,126</b>

#### Coal

Probably no subject presents a problem of greater general public interest in Canada just now, than the topic of fuel supply. Two main causes have brought about this effect; limitation of supplies from other countries, and a growing national appreciation of the value and extent of Canada's own coal resources. Repeated shortages of coal supplies caused a widespread popular demand for the adoption of measures to prevent the recurrence of such situations. As a result, steps were taken to promote the by-product coking of Canadian coal to meet the need for domestic fuel; investigations were undertaken looking to the preparation of western lignites in such form as would permit their shipment for considerable distances; oil-burning equipment suitable for household heating made its appearance on the Canadian market; and, as a result of the educational program regarding household fuels, there arose a demand for a more extensive use of Canadian coals by railways and industrial concerns.

Canada's coal output in 1926 advanced to 16,478,131 tons valued at \$59,875,094 an increase of 3,343,163 tons in quantity and \$10,613,143 in value over the totals of 13,134,968 tons with a valuation of \$49,261,951 for the preceding year.

Nova Scotia mines produced 6,747,477 tons of coal in 1926 which was a greater tonnage from these mines than in any previous year with the exception of 1916 when the output amounted to 6,912,140 tons. These figures furnish a marked contrast to the output of 3,842,978 tons in 1925 but in that year a strike extending over about four months very materially reduced the output.

New Brunswick's coal mines produced 173,111 tons in the year marking a slight recession from the 208,012 tons produced in 1925.

Bituminous coal only is produced in Nova Scotia and New Brunswick. Employment in the coal mines of the maritime provinces was comparatively steady throughout the year, with a slightly upward trend.

In the western field the province of Alberta is the greatest producer and in 1926 the mines of this province yielded 6,503,705 tons of coal including 3·15 million tons of lignite, 2·86 million tons of bituminous coal and 0·49 million tons of sub-bituminous.

Saskatchewan produced 439,803 tons of lignite. In the prairie provinces there is a seasonal decline in the production of coal during the summer months when many of the small mines are shut down so that their owners may engage in the more profitable industry of growing wheat.

British Columbia, mining bituminous coal only, produced about a quarter of a million tons per month, and in 1926 showed an output of 2,613,719 tons. A large part of British Columbia's coal output goes to export trade, and the balance is used within the province, very considerable quantities being consumed in the metallurgical works and other industrial enterprises.

Canada drew its supply of imported coal in 1926 largely from the United States but also imported 364,036 tons from other countries, including 276,113 tons from Great Britain and the balance, in almost equal amounts, from Germany and the Netherlands, together with a small quantity from Japan. The figures for the imports of coal mined in countries other than the United States may even be slightly higher than those quoted because during the year some European coal imported to United States points, and there warehoused for distribution, eventually found its way into Canada, but in a case like this the Custom's records only show the country of immediate origin so that coal thus imported would be credited to the United States.

Development of the coal trade between Canada and Great Britain had its inception during the strike at the anthracite mines in the United States, but the long drawn out strike in British coal mines in 1926 was a retarding factor in this newly developed trade. During the past five years, however, Canada has imported from Great Britain a total of 2.54 million tons of coal, including 1.54 million tons of anthracite and 1 million tons of bituminous coal.

A new feature of Canada's import trade in coal was the receipt of shipments from Germany and the Netherlands. This was nearly all classed as anthracite although it included some briquetted coal.

Exports of Canadian coal were about equally divided between the eastern and western coal fields. In all 1,028,200 tons were shipped to points outside the Dominion. Canada's chief customers are Newfoundland and the United Kingdom, Alaska, points in the United States, the Philippines, and Australia. Smaller quantities are exported each year to a great many other places.

Interest in the production of by-product coke as a domestic fuel has been cultivated in Canada as a part of the educational program inaugurated when a shortage of imported coal supplies became acute. Much more coke has been used for domestic heating during the past year than previously, and as the people became accustomed to burning this fuel many developed a preference for it.

Production of coal in Canada during the first six months of 1927 was 8,424,631 short tons valued at \$29,695,818, which was 20.6 per cent more in quantity and 17.3 per cent more in value than the output for the corresponding period of 1926 of 6,895,813 short tons valued at \$25,312,598. Increases in output were recorded in all the coal-producing provinces during the first half of 1927. By classes the Canadian production included: Bituminous coal, 6,664,060 short tons valued at \$24,961,692; sub-bituminous, 329,476 short tons at \$886,568, and lignite, 1,431,095 short tons worth \$3,847,558.

During the period 598,683 short tons were exported, which was 255,411 short tons higher than the quantity exported during the same months in 1926.

Imports stood higher at 9,578,679 short tons, of which 1,760,233 short tons were anthracite, 7,804,776 short tons bituminous, and 4,670 short tons lignite. The import figures for 1926 were: anthracite, 1,634,553 short tons; bituminous, 5,581,968 short tons, and lignite, 5,403 short tons; making a total of 7,221,924 short tons.

From January to June, inclusive, 1927, the amount of coal made available for consumption was 17,404,627 short tons, which was about 3.6 million tons higher than the amount available in the same months in the preceding year.

In January, 1927, more than 30,000 men were employed in Canada's coal mines—about 14,000 in the East and the balance in the West. This number gradually decreased till in June, there were 25,700 employees on the pay-rolls.

**Output and Value of Coal in Canada by Kinds and by Provinces, 1925, 1926 and  
January 1 to June 30, 1927**

(Short tons)

Province	1925		1926		January 1 to June 30, 1927	
	Quantity	Value	Quantity	Value	Quantity	Value
		\$		\$		
NOVA SCOTIA (Bituminous).....	3,842,978	15,826,680	6,747,477	26,845,226	3,572,122	13,335,611
NEW BRUNSWICK (Bituminous).....	208,012	815,367	173,111	710,245	110,510	486,600
SASKATCHEWAN (Lignite).....	471,965	870,875	439,803	819,805	105,398	349,869
ALBERTA—						
Bituminous.....	2,145,635	8,423,909	2,858,456	9,984,386	1,605,378	5,597,807
Sub-bituminous.....	570,654	1,731,267	489,736	1,458,116	329,476	886,568
Lignite.....	3,152,742	9,866,308	3,155,513	9,443,601	1,235,697	3,497,689
Total.....	5,869,031	20,021,484	6,503,705	20,886,103	3,170,551	9,982,064
BRITISH COLUMBIA (Bituminous).....	2,742,252	11,720,373	2,613,719	10,612,915	1,376,050	5,541,074
YUKON (Bituminous).....	730	7,172	316	800	—	—
CANADA—						
Bituminous.....	8,939,607	36,793,501	12,393,079	48,153,572	6,664,060	24,961,092
Sub-bituminous.....	570,654	1,731,267	489,736	1,458,116	329,476	886,568
Lignite.....	3,624,707	10,737,183	3,595,316	10,263,406	1,431,095	3,847,558
Total.....	13,134,968	49,261,951	16,478,131	59,875,094	8,424,631	29,695,218

**Shipments of Coal from Canadian Mines by Grades and Destinations, 1925 and 1926**

(Short tons)

Destination	1925				1926			
	Run-of-mine	Screened	Slack	Total	Run-of-mine	Screened	Slack	Total
Prince Edward Island.....	4,921	51,310	633	56,864	8,744	74,888	3,598	87,230
Nova Scotia.....	435,378	466,148	381,490	1,282,066	320,123	582,804	789,546	1,692,533
New Brunswick.....	238,132	197,807	73,854	509,793	294,068	207,457	124,609	626,134
Quebec.....	68,937	369,408	373,419	811,764	43,951	1,119,591	805,004	1,968,546
Ontario.....	765	31,245	743	32,753	68	60,737	18,484	77,289
Manitoba.....	142,724	515,274	80,571	744,569	163,482	451,619	185,954	891,055
Saskatchewan.....	218,545	1,185,712	116,921	1,521,178	290,890	930,498	353,131	1,514,477
Alberta.....	260,181	873,849	309,289	1,443,319	259,829	501,699	530,702	1,297,221
British Columbia.....	122,476	657,085	247,064	1,027,225	77,516	545,741	305,188	928,450
Yukon.....	—	335	302	637	—	156	—	156
Total domestic shipments.....	1,492,059	4,347,213	1,500,876	7,430,148	1,308,671	4,510,154	3,114,216	8,933,011
Railroads.....	2,969,598	360,054	133,632	3,463,194	3,769,089	392,136	270,832	4,431,857
Ships' bunkers.....	161,711	260,457	7,194	429,362	455,278	268,066	4,336	727,680
Total railroads and ships' bunkers.....	3,131,219	620,511	140,826	3,892,556	4,224,367	660,202	274,968	5,159,537
United States.....	41,332	165,285	33,362	239,979	15,874	128,052	55,583	197,509
Newfoundland.....	29,384	148,143	9,831	187,361	21,420	237,514	10,075	269,009
West Indies.....	—	—	—	—	6,736	—	—	6,736
Europe.....	—	—	—	—	10,687	2,779	—	13,466
United Kingdom and Irish Free State.....	—	—	—	—	139,085	11,829	—	150,914
Other places.....	1,463	3,232	—	4,695	7,733	3,864	—	11,597
Lost at sea.....	—	—	—	—	—	4,765	—	4,765
Total external shipments.....	72,179	316,660	43,196	432,035	201,535	386,803	65,658	653,996
Total.....	4,695,457	5,284,381	1,774,898	11,754,739	5,794,573	5,557,159	3,454,842	14,806,574



## Exports of Canadian Coal by Provinces, 1925, 1926 and January 1 to June 30, 1927

(Short tons)

Province	1925	1926	January 1 to June 30, 1927
Nova Scotia.....	240,539	559,546	265,493
New Brunswick.....	25,502	24,929	50,623
Quebec.....	11	675	51
Ontario.....	-	600	-
Manitoba.....	3,971	4,652	1,491
Saskatchewan.....	7,418	6,096	2,116
Alberta.....	926	631	181
British Columbia.....	507,543	431,071	278,727
Yukon.....	-	-	1
<b>Total.....</b>	<b>785,910</b>	<b>1,028,200</b>	<b>598,683</b>

## Coal Made Available for Consumption in Canada, 1925 and 1926

(Short tons)

Month	1925				1926			
	Output	Imports	Exports	Coal made available for use	Output	Imports	Exports	Coal made available for use
January.....	1,492,160	1,166,782	85,410	2,573,532	1,230,878	968,475	65,047	2,134,306
February.....	1,140,759	1,024,896	41,691	2,132,964	1,076,457	825,503	35,517	1,866,443
March.....	787,877	1,023,405	68,226	1,743,056	1,070,824	1,345,657	62,695	2,353,781
April.....	557,225	677,894	18,347	1,216,772	995,622	858,052	27,165	1,826,509
May.....	669,841	1,237,755	37,894	1,869,702	1,136,675	1,337,206	57,412	2,416,410
June.....	737,787	1,470,416	43,296	2,164,887	1,393,187	1,887,031	95,336	3,184,882
July.....	748,359	1,788,502	38,634	2,498,227	1,350,339	1,898,730	59,619	3,170,441
August.....	997,710	2,177,270	59,080	3,115,900	1,340,816	1,616,101	98,512	2,858,405
September.....	1,196,487	1,872,417	93,955	2,974,949	1,413,721	1,811,484	79,527	3,145,678
October.....	1,572,295	1,658,501	99,846	3,130,950	1,711,772	1,837,420	119,936	3,429,256
November.....	1,664,674	1,387,373	82,946	2,969,101	1,834,267	1,756,031	126,681	3,463,617
December.....	1,560,814	1,347,224	116,585	2,791,453	1,923,582	1,924,449	200,753	3,647,278
<b>Total.....</b>	<b>12,124,968</b>	<b>16,832,435</b>	<b>785,910</b>	<b>29,181,493</b>	<b>16,478,131</b>	<b>18,656,139</b>	<b>1,028,200</b>	<b>33,516,679</b>

## Coal Made Available for Consumption in Canada, January 1 to June 30, 1926 and 1927

(Short tons)

Month	1926				1927			
	Output	Imports	Exports	Coal made available for use	Output	Imports	Exports	Coal made available for use
January.....	1,230,878	968,475	65,047	2,134,306	1,570,235	1,460,659	223,772	2,807,122
February.....	1,076,457	825,503	35,517	1,866,443	1,383,942	1,307,588	88,893	2,602,637
March.....	1,070,824	1,345,657	62,695	2,353,786	1,407,448	1,609,410	110,905	2,905,953
April.....	995,622	858,025	27,165	1,826,509	1,314,562	1,120,086	25,220	2,409,428
May.....	1,136,675	1,337,206	57,412	2,416,469	1,305,359	1,719,425	84,755	2,940,029
June.....	1,393,187	1,887,031	95,336	3,184,882	1,443,085	2,361,511	65,138	3,739,458
<b>Total.....</b>	<b>6,903,643</b>	<b>7,221,924</b>	<b>343,172</b>	<b>13,782,395</b>	<b>8,424,631</b>	<b>9,578,679</b>	<b>598,683</b>	<b>17,404,627</b>

# Summary Statistics for 1926—Output, Exports, Interprovincial Shipments, Imports and Coal made Available for Consumption in Canada, by Provinces

(Short tons)

Province	Canadian coal				Imported from U.S.A.	Imported from Great Britain	Imported from Germany except as noted	Coal available for consumption
	Output	Received from other provinces	Shipped to other provinces	Exported				
<b>PRINCE EDWARD—</b>								
Island—								
Anthracite.....	—	—	—	—	5,344	—	—	5,344
Bituminous.....	—	87,230	—	—	1,622	—	—	88,852
Total.....	—	87,230	—	—	6,966	—	—	94,196
<b>NOVA SCOTIA—</b>								
Anthracite.....	—	—	—	—	39,194	11,523	2,240	52,957
Bituminous.....	6,747,477	—	2,536,796	559,546	23,921	—	(a) 100	3,675,156
Lignite.....	—	—	—	—	—	—	—	—
Total.....	6,747,477	—	2,536,796	559,546	63,115	11,523	2,340	3,728,113
<b>NEW BRUNSWICK—</b>								
Anthracite.....	—	—	—	—	61,704	35,197	—	96,901
Bituminous.....	173,111	483,995	2,754	24,929	97,548	110	—	727,081
Total.....	173,111	483,995	2,754	24,929	159,252	35,307	—	823,982
<b>QUEBEC—</b>								
Anthracite.....	—	—	—	—	1,253,246	207,869	(b) 83,475	1,544,590
Bituminous.....	—	1,968,325	—	675	1,793,990	3,005	—	3,764,705
Lignite.....	—	221	—	—	—	—	—	221
Total.....	—	1,968,546	—	675	3,047,236	210,934	83,475	5,309,516
<b>CENTRAL ONTARIO—</b>								
Anthracite.....	—	—	—	—	2,444,280	12,589	(c) 1,805	2,458,674
Bituminous.....	—	—	—	600	10,531,095	—	—	10,530,495
Sub-bituminous.....	—	*4,725	—	—	—	—	—	4,725
Lignite.....	—	*72,564	—	—	—	—	—	72,564
Total.....	—	77,289	—	600	12,975,375	12,589	1,805	13,066,458
<b>MANITOBA AND HEAD OF LAKES—</b>								
Anthracite.....	—	—	—	—	78,800	—	—	78,800
Bituminous.....	—	69,348	—	4,652	1,314,387	—	—	1,379,083
Sub-bituminous.....	—	68,409	—	—	—	—	—	68,409
Lignite.....	—	663,298	—	—	—	—	—	663,298
Total.....	—	801,055	—	4,652	1,393,187	—	—	2,189,590
<b>SASKATCHEWAN—</b>								
Anthracite.....	—	—	—	—	464	—	—	464
Bituminous.....	—	110,253	—	6,066	1,887	—	—	106,044
Sub-bituminous.....	—	54,515	—	—	—	—	—	54,515
Lignite.....	439,803	1,174,610	204,728	—	—	—	—	1,409,685
Total.....	439,803	1,339,378	204,728	6,066	2,351	—	—	1,570,708
<b>ALBERTA—</b>								
Anthracite.....	—	—	—	—	—	—	—	—
Bituminous.....	2,858,456	28,145	164,168	631	1,515	—	—	2,723,317
Sub-bituminous.....	489,736	—	149,486	—	—	—	—	340,250
Lignite.....	3,155,513	—	1,778,014	—	—	—	—	1,377,499
Total.....	6,503,705	28,145	2,091,668	631	1,515	—	—	4,441,066
<b>BRITISH COLUMBIA—</b>								
Anthracite.....	—	—	—	—	210	4,992	—	5,202
Bituminous.....	2,613,719	34,920	78,498	431,071	31,960	729	(d) 303	2,172,062
Sub-bituminous.....	—	21,837	—	—	—	—	—	21,837
Lignite.....	—	72,049	—	—	10,926	39	—	83,014
Total.....	2,613,719	128,806	78,498	431,071	43,096	5,760	303	2,282,115
<b>YUKON—</b>								
Bituminous.....	316	—	—	—	10	—	—	326
Total.....	316	—	—	—	10	—	—	326
<b>CANADA—</b>								
Anthracite.....	—	—	—	—	3,883,242	272,170	87,520	4,242,932
Bituminous.....	12,393,079	2,782,216	2,782,216	1,028,200	13,797,935	3,904	403	25,167,121
Sub-bituminous.....	489,736	149,486	149,486	—	—	—	—	489,736
Lignite.....	3,595,316	1,982,742	1,982,742	—	10,926	39	—	3,606,281
Total.....	16,478,136	4,914,441	4,914,441	1,028,200	17,692,103	276,113	(e) 87,923	33,506,070

(a) Imported from the Netherlands. (b) Includes 37,755 tons imported from the Netherlands. (c) Includes 47 tons imported from the Netherlands. (d) Imported from Japan. (e) Includes 37,902 tons imported from the Netherlands, also 303 tons from Japan. \*Includes all coal shipped to any point in Ontario from western mines.

# Imports of Anthracite, Bituminous and Lignite Coal into Canada by Countries, 1925 and 1926

(Short tons)

	Five year average for the month 1921-1925	1925			1926			
		United States	Great Britain	Total	United States	Great Britain	Germany	Total
<b>ANTHRACITE—</b>								
January.....	330,125	331,900	24,272	356,172	9,582	65,848	-	75,430
February.....	320,811	335,130	5,665	340,795	6,014	17,840	-	23,854
March.....	395,095	313,626	4,841	318,467	312,004	48,263	5,711	377,956
April.....	250,839	184,909	330	185,239	267,099	12,466	47	279,612
May.....	333,516	366,957	59,939	426,896	357,069	78,370	-	435,445
June.....	366,046	347,586	59,935	407,521	393,129	43,416	-	436,545
July.....	398,263	450,262	108,611	558,873	482,374	985	-	483,359
August.....	377,752	544,426	78,103	622,529	404,257	-	-	404,257
September.....	272,673	268,502	44,665	313,167	421,885	4,076	9,400	430,261
October.....	331,286	62,633	89,627	152,260	455,353	-	23,005	478,358
November.....	342,270	30,477	20,950	51,427	400,240	-	19,748	419,988
December.....	354,633	13,089	40,309	59,398	374,236	-	11,920	386,156
<b>Total.....</b>	<b>4,982,309</b>	<b>3,249,497</b>	<b>549,247</b>	<b>3,798,744</b>	<b>3,883,242</b>	<b>272,170</b>	(a) <b>87,529</b>	<b>4,242,932</b>
<b>BITUMINOUS—</b>								
January.....	975,881	806,983	-	806,983	890,345	1,111	-	891,456
February.....	848,702	681,918	-	681,918	794,806	-	-	794,806
March.....	1,051,815	703,003	-	703,003	966,461	-	-	966,461
April.....	572,732	491,704	-	491,704	578,188	-	-	578,188
May.....	848,002	809,926	-	809,926	899,162	1,862	-	901,024
June.....	1,217,797	1,057,083	5,002	1,062,085	1,449,405	628	-	1,450,033
July.....	1,250,039	1,222,330	7,002	1,229,332	1,404,671	303	303	1,405,277
August.....	1,380,973	1,544,638	9,314	1,553,952	1,211,539	-	-	1,211,539
September.....	1,330,706	1,538,483	19,150	1,557,633	1,374,554	-	-	1,374,554
October.....	1,519,636	1,498,441	6,123	1,504,564	1,357,238	-	100	1,357,338
November.....	1,415,870	1,320,093	8,059	1,328,152	1,335,091	-	-	1,335,091
December.....	1,241,317	1,283,163	2,908	1,286,071	1,536,475	-	-	1,536,475
<b>Total.....</b>	<b>13,659,560</b>	<b>12,957,765</b>	(b) <b>57,558</b>	<b>13,015,323</b>	<b>13,797,935</b>	<b>3,904</b>	(c) <b>403</b>	<b>13,802,242</b>
<b>LIGNITE—</b>								
January.....	-	3,627	-	3,627	1,589	-	-	1,589
February.....	-	2,183	-	2,183	1,132	-	-	1,132
March.....	-	1,935	-	1,935	1,240	-	-	1,240
April.....	-	951	-	951	252	-	-	252
May.....	-	933	-	933	737	-	-	737
June.....	-	810	-	810	453	-	-	453
July.....	-	297	-	297	94	-	-	94
August.....	-	789	-	789	305	-	-	305
September.....	-	1,617	-	1,617	669	-	-	669
October.....	-	1,677	-	1,677	1,685	39	-	1,724
November.....	-	1,794	-	1,794	952	-	-	952
December.....	-	1,755	-	1,755	1,818	-	-	1,818
<b>Total.....</b>	<b>-</b>	<b>18,368</b>	<b>-</b>	<b>18,368</b>	<b>10,926</b>	<b>39</b>	<b>-</b>	<b>10,965</b>

(a) Includes 37,802 tons imported from the Netherlands.

(b) Includes 736 tons imported from Japan.

(c) Includes 100 tons imported from the Netherlands, also 303 tons imported from Japan.

# Imports of Anthracite, Bituminous and Lignite Coal into Canada from the United States and Great Britain, January 1 to June 30, 1927

(Short tons)

	Anthracite			Bituminous			Lignite		
	United States	Great Britain	Total	United States	Great Britain	Total	United States	Great Britain	Total
January .....	234,631	7,096	242,327	1,217,201	-	1,217,201	1,131	-	1,131
February .....	216,149	18,730	234,879	1,071,517	-	1,071,517	1,192	-	1,192
March .....	182,542	10,928	193,470	1,414,818	-	1,414,818	1,122	-	1,122
April .....	174,615	7,521	182,136	937,631	25	937,656	294	-	294
May .....	279,285	96,545	375,830	1,318,849	24,489	1,343,338	257	-	257
June .....	402,312	138,279	540,591	1,799,437	20,809	1,820,246	674	-	674
<b>Total .....</b>	<b>1,489,534</b>	<b>279,699</b>	<b>1,769,233</b>	<b>7,759,453</b>	<b>45,323</b>	<b>7,804,776</b>	<b>4,670</b>	<b>-</b>	<b>4,670</b>

\*Includes 127 tons of coal imported from Japan in June.

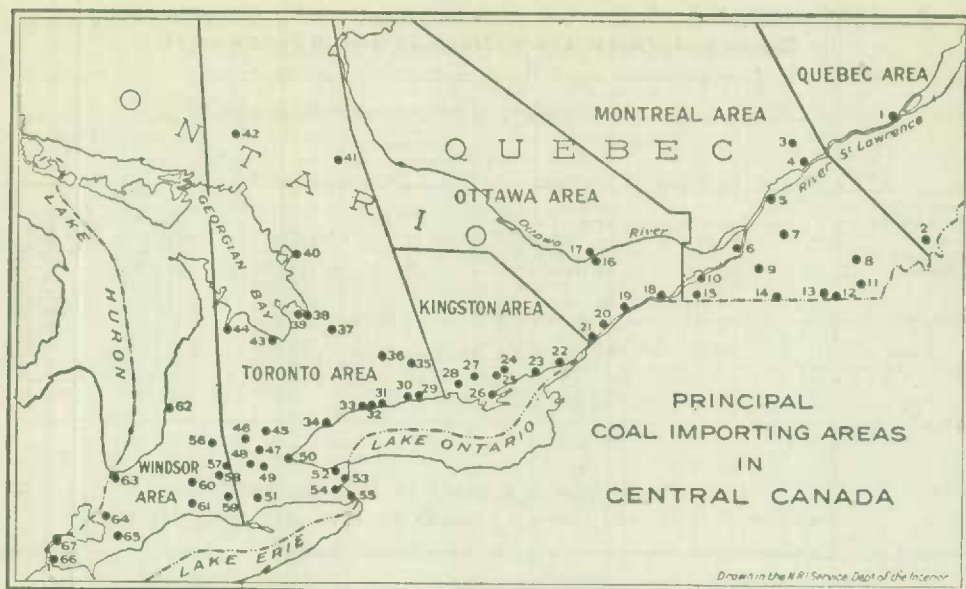
## Imports of Coal into Central Canada by Principal Areas, 1926

Area	Anthracite			Bituminous		
	(1) 12 months ending Dec. 31, 1926	(2) Five year average 1921-25	(3) Per cent of (1) to (2)	(4) 12 months ending Dec. 31, 1926	(5) Five year average 1921-25	(6) Per cent of (4) to (5)
Quebec .....	93,602	90,534	103	128,725	237,857	54
Montreal .....	1,403,242	1,248,663	112	1,553,867	2,088,712	74
Ottawa .....	330,738	275,287	120	809,877	702,130	115
Kingston .....	113,560	109,980	103	232,841	192,751	120
Toronto .....	1,689,476	1,748,503	97	5,032,273	4,841,195	103
Windsor .....	313,836	315,206	99	3,376,948	2,562,186	131
<b>Total .....</b>	<b>3,954,454</b>	<b>3,788,263</b>	<b>104</b>	<b>11,131,531</b>	<b>10,627,841</b>	<b>104</b>

## Imports of Coal into Central Canada by Principal Areas, January 1 to June 30, 1927

Areas	Anthracite			Bituminous		
	(1) 6 months ending June 30, 1927	(2) Five-year average for period 1922-24	(3) Per cent of (1) to (2)	(4) 6 months ending June 30, 1927	(5) Five-year average for period 1922-24	(6) Per cent of (4) to (5)
Quebec .....	26,510	29,618	90	42,630	48,004	88
Montreal .....	617,631	553,193	111	723,876	804,462	90
Ottawa .....	101,806	123,240	83	671,207	379,998	177
Kingston .....	38,853	41,374	94	75,517	80,052	94
Toronto .....	741,825	803,077	83	2,893,516	2,280,947	127
Windsor .....	117,895	159,057	74	1,750,618	1,198,315	146
<b>Total .....</b>	<b>1,644,525</b>	<b>1,804,564</b>	<b>91</b>	<b>6,157,364</b>	<b>4,792,378</b>	<b>128</b>





### Key to the Ports of Entry Shown on the Map

QUEBEC AREA—		OTTAWA AREA—		TORONTO AREA—CON.		TORONTO AREA—CON.	
1	Quebec City	16	Ottawa	32	Oshawa	51	Simcoe
2	Megantic	17	Hull	33	Whitby	52	St. Catharines
		18	Cornwall	34	Toronto	53	Ningara Falls
		19	Morrisburg	35	Peterboro	54	Welland
		20	Prescott	36	Lindsay	55	Bridgeburg
		21	Brookville	37	Orillia		
3	Shawinigan Falls			38	Port McNicoll		WINDSOR AREA—
4	Three Rivers		KINGSTON AREA—	39	Midland	56	Stratford
5	Sorel	22	Gananoque	40	Parry Sound	57	Woodstock
6	Montreal	23	Kingston	41	North Bay	58	Ingersoll
7	St. Hyacinthe	24	Napanee	42	Sudbury	59	Tillsonburg
8	Sherbrooke	25	Deseronto	43	Collingwood	60	London
9	St. John's	26	Pictou	44	Owen Sound	61	St. Thomas
10	Valleyfield	27	Belleville	45	Guelph	62	Goderich
11	Coaticook	28	Trenton	46	Kitchener	63	Sarnia
12	Beebe Junction		TORONTO AREA—	47	Galt	64	Wallaceburg
13	Mannonsville	29	Cobourg	48	Paris	65	Chatham
14	St. Armand	30	Port Hope	49	Brantford	66	Amherstburg
15	Athelstan	31	Bowmanville	50	Hamilton	67	Windsor

## Coke

The output of coke in Canada during 1926 totalled 2,027,058 tons as compared with 1,546,739 tons in 1925. Disposition of coke by the producing plants showed that during the year 225,424 tons were used in the coke plants, 967,747 tons were delivered to associated metallurgical works and the balance, 833,887 tons, was sold chiefly for domestic and foundry uses. Imports of coke into Canada during the year totalled 988,034 tons and represented an increase of 16 per cent over the total of 852,427 tons brought in during the previous year. Imports into Ontario amounted to 869,000 tons or 88 per cent of the total for Canada; 100,958 tons were brought into the maritime provinces and the balance 18,076 tons, was brought into the western provinces. Exports of coke from Canada, not including petroleum coke, during the twelve months ended December amounted to 41,778 tons, an increase of 63 per cent as compared with 25,578 tons in the previous year. Ontario exported 10,685 tons, the western provinces 29,353 tons and the maritime provinces 1,740 tons.

A review of the data for the six months ending June 30, 1927, shows a production of 1,016,715 short tons of coke, imports of 345,490 short tons and exports of 44,557 short tons, thus leaving 1,306,902 short tons available for consumption in Canada. The maximum output for the period was recorded in January when 176,445 short tons were produced. The low point for the six months was reached in February, when an output of 158,248 short tons was recorded. Bituminous coal carbonized during the half year totalled 1,474,551 short tons.

**Production in Canada, Imports, Exports and Apparent Consumption of Coke,  
by Provinces, Calendar Years 1925 and 1926 and First Half 1927**

		Nova Scotia New Brunswick and Quebec	Ontario	Manitoba, Saskatchewan, Alberta and British Columbia	Canada
Production.....	1925	504,956	830,839	210,944	1,546,739
	1926	646,929	1,144,493	235,636	2,027,058
	6 months.....	1927	268,320	638,014	1,016,715
Imports.....	1925	52,329	739,104	60,994	852,427
	1926	100,958	869,000	18,076	988,034
	6 months.....	1927	42,188	291,427	345,495
Exports.....	1925	1,025	24	23,929	25,578
	1926	1,740	10,685	29,353	41,778
	6 months.....	1927	993	30,248	44,557
Apparent consumption.....	1925	555,690	1,569,949	248,009	2,373,648
	1926	746,147	2,002,808	224,356	2,973,311
	6 months.....	1927	307,985	891,956	1,306,902

**Coke Production in Canada by Months, 1927**

(Short tons)

Month	Bituminous coal used for coke making			Coke made	Disposition of coke by makers			
	Canadian	Imported	Total		For use by maker		Sold	Total
					In coke plant	In own smelter		
January.....	77,868	173,223	251,091	176,445	21,304	73,195	90,970	185,568
February.....	72,348	153,761	226,109	158,248	19,351	65,621	78,976	163,948
March.....	79,990	176,289	256,269	171,804	20,704	87,064	60,872	168,640
April.....	78,034	175,150	253,184	170,405	19,909	97,432	47,604	164,945
May.....	74,853	173,869	248,722	173,727	20,700	101,523	36,372	158,595
June.....	71,257	167,919	239,176	165,996	19,945	95,792	39,513	155,250
Total.....	454,349	1,020,211	1,474,551	1,016,715	122,003	529,627	354,316	996,946

Coke used in iron blast furnaces during the period, 448,741 tons.

**Feldspar**

Feldspar production in Canada advanced 25.3 per cent in quantity in 1926 to a total of 35,951 tons as compared with 28,681 tons produced in 1925. The value of the shipments during the year was \$310,238 or \$8.63 per ton.

Exports of feldspar during 1926 were recorded at 33,016 tons invoiced at \$251,551. In 1925 exportations were considerably lower, amounting to 28,659 tons evaluated at \$209,164. Customs' records showed imports of feldspar at 2,314 tons, a 47.3 per cent increase over the figures of 1,570 tons for the previous year.

A resumé of the feldspar situation in the United States is quoted below from the *Engineering and Mining Journal*:—

Competition has increased. Price cutting continued throughout 1926, and the year throughout witnessed a "buyer's market." As a partial offset to this, an increasing number of consumers have seen the evils resulting from the sacrifice of quality to price and have been willing to pay for a better article. Some are now requiring an analysis and a screen test with each car. It is believed that this tendency will increase further. The average quality of spar sold has been improved. This seems to be a natural result in a highly competitive market.

Shipments of feldspar advanced appreciably during the first six months of 1927 and amounted to 15,926 tons valued at \$139,152, consisting of 6,855 tons shipped from Quebec deposits and 9,071 tons from Ontario. In the corresponding period of 1926 the total shipments were 13,135 tons worth \$114,016.

### Production, Imports and Exports of Feldspar, 1925, 1926 and January 1 to June 30, 1927

	1925		1926		January 1 to June 30, 1927	
	Tons	Value	Tons	Value	Tons	Value
PRODUCTION.....	28,681	\$ 235,789	35,951	\$ 310,238	15,926	\$ 139,152
IMPORTS.....	1,570	31,114	2,314	43,040	1,209	22,970
EXPORTS.....	28,659	209,164	33,016	251,551	15,443	115,963

### Fluorspar

The renewed activity in the fluorspar industry in Canada, which was apparent in 1925, was not sustained in 1926. No shipments of fluorspar were reported from Canadian deposits during the year under review. In the preceding twelve months, production amounted to 3,886 tons at \$19,234 and consisted principally of shipments from the Rock Candy mine and mill at Lynch Creek, British Columbia.

Fluorspar importations continue to increase; in 1926 shipments amounting to 9,968 tons worth \$97,482 were brought in from foreign countries. Customs' records for 1925 showed 5,111 tons appraised at \$60,458 imported into Canada. The customary small import of hydro-fluo-silicic acid, namely, 2 tons valued at \$565 was also recorded in 1926.

Although the present United States tariff on fluorspar is placed at \$5.40 per ton, producers in that country have requested an increase in the rate. An excerpt from the *Engineering and Mining Journal* covers this phase of the fluorspar situation.

The Tariff Commission, at the request of some producers, recently investigated the fluorspar situation in the United States. It will probably make a report to the Commission some time in January, 1927. It has been determined that abundant deposits of fluorspar are available in the United States both for the present and future. An increase in duty of \$2.50 per short ton is asked, which is all that can be obtained under the existing tariff law. Imports from France and Italy have been increasing, and Spain is beginning to ship, claiming a practically unlimited supply available for export.

### Production, Imports and Exports of Fluorspar, 1925, 1926 and January 1 to June 30, 1927

	1925		1926		January 1 to June 30, 1927	
	Tons	Value	Tons	Value	Tons	Value
PRODUCTION—		\$		\$		\$
Ontario.....	12	200	—	—	—	—
British Columbia.....	3,874	19,034	—	—	—	—
<b>Total</b> .....	<b>3,886</b>	<b>19,234</b>	<b>—</b>	<b>—</b>		
IMPORTS—						
Hydro fluo silicic acid.....	2.18	636	2	565	4	484
Fluorspar.....	5,111	60,458	9,968	97,482	739	17,815

### Graphite

The increase in shipments of graphite noted during the first half of 1926 was continued in the last six months and the total for the year was reported at 2,727 tons worth \$194,860. In the preceding year 2,569 tons valued at \$158,763 were shipped. The Canadian producers during the year were: The Crucible Graphite Company, the Canadian Graphite Corporation, and the Black Donald Graphite Company, Ltd.

Exports of graphite, crude or refined, in 1926, according to Customs' records, totalled 2,564 tons appraised at \$180,851 as compared with 2,484 tons at \$135,897 exported in 1925.

The following information, regarding prices and markets, has been abstracted from the *Engineering and Mining Journal*:—

Prices—F.O.B. New York, per pound—

Ceylon lump, 8 to 9 cents; chip, 7 to 8 cents; dust, 3 to 6 cents; Madagascar flake, 6½ to 7 cents. High-grade, finely ground, 12 cents up; medium grade, 8 cents up. No. 1 flake, 10 cents up; fine flake, 9 cents up. Foundry facings, 4 cents up. Amorphous, fine ground, 4 cents up; fine ground crystalline, 7 to 12 cents. Crude amorphous graphite, \$15 to \$35 per ton, according to grade.

In Ceylon the graphite industry has been declining; many mines have been closed down and others are marking time. The reason for this is the substitution of the electric furnace for the crucible both in steel and brass plants and also the use of larger amounts of Madagascar graphite and proportionally less Ceylon material in the manufacture of crucibles.

Madagascar and Ceylon continue to be the two chief sources outside of North America, although there are several countries where low-grade material is mined for local uses. The best examples of the minor regions are the Pinerolo district of north Italy and the nearby Briançon district of southern France. The product contains about 60 per cent carbon and is used mainly for foundry facings.

The production of graphite in Canada during the first half of 1927 amounted to 899 tons valued at \$57,591. In the corresponding period of the previous year 1,371 tons valued at \$101,291 were shipped. The producers during the period under review were: The Crucible Graphite Company, the Canadian Graphite Corporation, and the Black Donald Graphite Company, Limited. According to Customs' records, the exports of graphite during the half year totalled 842 tons.

#### Production, Imports and Exports of Graphite, 1925, 1926 and January 1 to June 30, 1927

	1925		1926		January 1 to June 30, 1927	
	Tons	Value	Tons	Value	Tons	Value
PRODUCTION.....	2,569	\$ 158,763	2,727	\$ 194,860	899	\$ 57,591
IMPORTS—						
Crucibles, plumbago.....	—	49,730	—	60,782	—	29,213
Plumbago not ground or otherwise manufactured.....	—	772	—	3,836	—	1,457
Plumbago ground and manufactures of, n.o.p.....	—	91,767	—	57,302	—	30,299
EXPORTS—						
Graphite or plumbago, crude or refined.....	2,484	135,997	2,564	180,851	842	\$2,618

#### Gypsum

Continuing the advance in gypsum production recorded in 1925, the shipments during 1926 created a new high mark for the industry in Canada. Increases in tonnages shipped were reported in all producing provinces except New Brunswick. The total production for the year amounted to 883,728 tons worth \$2,770,813 as compared with 740,323 tons at \$2,389,891 produced in 1925. The average values received by the operators were as follows: lump, \$1.49; crushed, \$1.74; fine ground, \$6.27; and calcined, \$10.07 per ton.

Importations of gypsum, all grades, into Canada were recorded at 6,298 tons worth \$119,141 as against 8,921 tons with a valuation of \$136,308 imported in 1925.

Canadian crude gypsum exported, principally, to the United States amounted to 668,064 tons in 1926. Ground gypsum and prepared wall plaster exported during the year totalled 10,062 tons. United States, Newfoundland, Australia and New Zealand were the principal importers of these materials.

The six months under review marked a considerable advance in the production of gypsum in Canada. Shipments totalled 331,893 tons valued at \$1,175,850 as compared with 250,369 tons worth \$964,638 shipped in the same period of 1926. The production by provinces was as follows: Nova Scotia, 227,060 tons; New Brunswick, 32,108 tons; Ontario, 42,298 tons; Manitoba, 20,191 tons, and British Columbia, 10,236 tons. Average values per ton received by operators follow: Lump, \$1.63; crushed, \$1.88; fine ground, \$6.37, and calcined, \$9.16. The total quantity of gypsum mined in Canada during the period was 364,774 tons, of which 80,479 tons, or 22 per cent, was calcined.



### Production of Gypsum in Canada, 1925, 1926 and January 1 to June 30, 1927

	1925		1926		January 1 to June 30, 1927	
	Tons	Value	Tons	Value	Tons	Value
		\$		\$		\$
<b>CRUDE—</b>						
Lump or mine run.....	131,612	198,806	151,906	225,740	69,922	114,290
Crushed.....	447,766	820,141	576,489	1,002,679	182,661	343,343
Fine ground.....	5,993	35,843	5,874	31,813	3,094	19,705
<b>CALCINED GYPSUM.....</b>	<b>154,952</b>	<b>1,335,101</b>	<b>149,459</b>	<b>1,505,572</b>	<b>76,216</b>	<b>698,512</b>
<b>Total.....</b>	<b>740,323</b>	<b>2,389,891</b>	<b>883,728</b>	<b>2,770,813</b>	<b>331,893</b>	<b>1,175,850</b>

### Imports into Canada and Exports of Gypsum, 1925, 1926 and January 1 to June 30, 1927

	1925		1926		January 1 to June 30, 1927	
	Tons	Value	Tons	Value	Tons	Value
		\$		\$		\$
<b>IMPORTS—</b>						
Gypsum, crude (sulphate of lime).....	4,433	66,064	933	32,442	464	18,881
Plaster of Paris or gypsum ground, not calcined.....	119	3,858	209	6,846	45	1,187
Plaster of Paris, calcined and prepared wall plaster.....	4,369	66,386	5,156	79,853	2,865	43,870
<b>Total.....</b>	<b>8,921</b>	<b>136,308</b>	<b>6,298</b>	<b>119,141</b>	<b>3,374</b>	<b>63,938</b>
<b>EXPORTS—</b>						
Gypsum or plaster, crude.....	533,646	861,468	668,064	1,069,123	93,385	147,194
Plaster of Paris ground, and prepared wall plaster.....	5,643	87,242	10,062	137,785	2,628	47,618
<b>Total.....</b>	<b>539,289</b>	<b>948,710</b>	<b>678,126</b>	<b>1,206,908</b>	<b>96,013</b>	<b>194,812</b>

### Iron Oxides

Shipments of iron oxides in 1926 from Canadian deposits totalled 6,626 tons valued at \$101,843. The previous year's production amounted to 7,118 tons with a valuation of \$91,913.

Iron oxides are marketed in two forms—crude and calcined. Crude oxides are dried before shipment, for use in the purification of illuminating gas, while the calcined product is ground, usually for consumption in the paint industry.

The total production of iron oxides in Canada during the six months ending June 30, 1927, was 2,791 tons valued at \$37,610. During the first half of 1926 shipments were reported at 2,821 tons worth \$37,915.

### Magnesite

While the tonnage of magnesite produced in Canada during 1926 decreased there was a considerable increase in value. The 1926 shipments were recorded at 4,571 tons evaluated at \$137,431; in 1925, shipments totalled 5,576 tons with a valuation of \$122,325. The International Magnesite Company and the Scottish Canadian Magnesite Company were the only producers in Canada.

Exports of calcined magnesite were somewhat lower at 653 tons worth \$19,587 as against a total of 834 tons at \$21,401 in 1925.

During the first six months of 1927 the production of calcined and dead-burned magnesite amounted to 2,801 tons valued at \$81,344. These figures showed a considerable advance over the sales reported during the first half of the preceding year, when 2,498 tons at \$72,075 were marketed. Exportations of calcined magnesite during this period were 413 tons with a valuation of \$10,229.

### Production, Imports and Exports of Magnesite, 1925, 1926 and January 1 to June 30, 1927

	1925		1926		January 1 to June 30, 1927	
	Tons	Value	Tons	Value	Tons	Value
		\$		\$		\$
Production—						
Calced.....	5,576	122,325	4,571	137,431	2,801	81,344
Clinkered.....						
<b>Total.....</b>	<b>5,576</b>	<b>122,325</b>	<b>4,571</b>	<b>137,431</b>	<b>2,801</b>	<b>81,344</b>
Imports—						
Magnesia pipe covering.....	—	108,631	—	122,411	—	80,473
Magnesite.....	111	4,528	150	6,746	44	1,765
Magnesite firebrick.....	—	75,161	—	66,429	—	66,016
Exports—						
Magnesite, calcined.....	834	21,401	653	19,587	413	10,229

### Magnesium Sulphate

No activities have been reported in this industry since 1923. In that year 121 tons of refined magnesium sulphate were shipped from a deposit near Ashcroft, B.C. The importations of magnesium sulphate or epsom salts during 1926 reached a total of 2,131 tons valued at \$39,016. The average value for this period's imports was somewhat lower than that reported for 1925, when 2,137 tons at \$45,181 were brought into Canada.

During the first six months of 1927 imports of magnesium sulphate were recorded at 1,180 tons appraised at \$19,640.

### Mica

Production of mica in Canada during 1926 totalled 2,545 tons valued at \$229,205, as against 4,020 tons worth \$261,463 produced in 1925. Customs' records for the year under review showed exports of rough-cobbed mica amounting to 44 tons appraised at \$20,516; splittings, 315 tons at \$432,345; and scrap and waste, 3,799 tons at \$45,297.

Mica shipments during the six months ending June 30, 1927, were reported at 1,205 tons valued at \$99,577 as compared with 1,148 tons at \$105,094 shipped in the first half of the preceding year.

### Production of Mica in Canada, 1925, 1926, and January 1 to June 30, 1927

Grade	1925			1926			January 1 to June 30, 1927		
	Quantity	Value f.o.b. shipping point	Price per pound	Quantity	Value f.o.b. shipping point	Price per pound	Quantity	Value f.o.b. shipping point	Price per pound
	lb.	\$	\$	lb.	\$	\$	lb.	\$	\$
Rough cobbed.....	413,500	23,471	0.056	109,880	11,724	0.10	58,333	6,200	0.10
Thumb trimmed.....	357,943	73,443	0.238	322,639	64,958	0.20	171,641	27,698	0.16
Splittings.....	188,265	129,454	0.69	180,603	120,503	0.67	76,583	50,323	0.66
Scrap.....	7,080,331	35,095	0.005	4,470,405	32,020	0.007	2,103,495	15,356	0.007
<b>Total.....</b>	<b>8,649,039</b>	<b>261,463</b>	<b>0.036</b>	<b>5,089,527</b>	<b>229,205</b>	<b>0.04</b>	<b>2,410,052</b>	<b>99,577</b>	<b>0.04</b>

### Exports of Mica from Canada, 1925, 1926, and January 1 to June 30, 1927

	1925		1926		Jan. 1 to June 30, 1927	
	Tons	Value	Tons	Value	Tons	Value
		\$		\$		\$
Rough cobbed and thumb trimmed.....	29	21,366	44	20,516	50	14,723
Mica splittings.....	230	324,967	315	432,345	114	151,694
Mica, scrap and waste.....	4,991	63,931	3,799	45,297	1,785	22,590
Mica, plate and manufactures of (micanite).....	—	1,046	—	1,084	—	527
<b>Total.....</b>	<b>—</b>	<b>411,310</b>	<b>—</b>	<b>499,242</b>	<b>—</b>	<b>189,534</b>

## Mineral Waters

Mineral springs and wells in Canada produced 215,356 imperial gallons of mineral waters valued at \$29,721 during 1926. In the preceding year the marketed output reached a total of 190,134 imperial gallons worth \$28,413. The 1926 shipments were made up of 6,956 imperial gallons from Quebec and 208,400 imperial gallons from Ontario.

The production of mineral waters during the half year ending June 30, 1927, totalled 121,611 imperial gallons worth \$12,850. Ontario springs and wells contributed 119,735 gallons valued at \$12,346, while the remainder was produced from Quebec wells.

## Natro-Alunite

There was no record of any production of natro-alunite in Canada during 1926 nor during the first six months of 1927. Shipments of natro-alunite during 1925 amounted to 20 tons valued at \$1,000. The Canadian output to date has been derived from a deposit at Kynuquot Sound, Vancouver Island, British Columbia.

## Natural Gas

The natural gas production in Canada during 1926 showed a substantial increase over the total for the preceding year. This year's production amounted to 19,208,209 thousand cubic feet valued at \$7,557,174; in 1925 the figures were 16,902,897 thousand feet worth \$6,833,005. The province of Alberta continues to hold the premier position with a total of 10,794,697 thousand cubic feet; Ontario was next in order with 7,764,996 thousand cubic feet; and New Brunswick followed with 648,316 thousand cubic feet. Average prices per thousand cubic feet were as follows: New Brunswick, 19 cents; Ontario, 56.8 cents; and Alberta, 28 cents.

Alberta's augmented production of natural gas was due in the main part to the increased output of wells in the Turner Valley field. The bringing in of these wells has insured a dependable supply of gas to the industrial area of Calgary.

A summary report by Col. R. B. Harkness, Commissioner of Gas for Ontario, concerning conditions in the natural gas industry in Ontario during 1926 is given below.

*Essex County.*—A new well was drilled on lot 7, con. Front Road with an open flow of 75,000 cu. ft. and rock pressure, 345 lb.

*Kent County.*—The Southern Ontario Gas Company has been working westerly along the shore of Lake Erie from the Tilbury field, and got a very good well just beyond the known western extension of this field in Romney township. There has been the usual drilling in the old Tilbury field, fitting in a well where the distance in between the wells permitted. In the Dover field the Union Natural Gas Company have drilled their twentieth well, lot 2, con. III, Dover West, a small gas well 600 M cubic feet to the north of No. 13, which was the largest gas well in the field. They completed a well last fall, some 200 or 300 yards northeast of No. 13; a dry hole. This field has been a great disappointment; it is a long narrow field and the production is pretty spotted; there is still plenty of room for exploration and no reason why another field should not be discovered.

In Howard township the Union Natural Gas Company has been purchasing a supply of gas from farmers who have drilled wells in the surface drift, a most surprising gas field. One well had an open flow of over 3,000,000 cubic feet; the average initial rock pressure of the field was about 15 lb.; gas was found at about 120 feet. The gas was put directly into the Ridgeway low pressure system. It has supplied that town during the years 1924-1925, 106,681 M cubic feet. There are about 50 more of these wells supplying gas to the owners for their houses only; they use a low average 200 M cubic feet each, a total of 10,000 additional per year.

*Lambton County.*—There have been quite a lot of shallow wells drilled in the north half of this county, and quite a number of small gas wells resulted, with two or three small oil wells. The location of these wells is near Aberarder and from there along the south shore of Lake Huron to the City of Sarnia. The deep test being drilled at Arkona is still incomplete; they no sooner got the well clear of obstruction than they lost their drilling tools again. They have been drilling here for nearly four years, and have not finished their well. There is no change in the situation elsewhere in Lambton county.

In Dawn township the Union Natural Gas Company has done some more drilling for gas, but although they have not succeeded in enlarging the field to any extent, they found two producing wells, one of which gave an excellent yield of gas.

*Norfolk County.*—The discovery of gas in Middleton Township field has been developed to the limits of the field; it is not as promising as it appeared to be at first; after the winter drain the rock pressure lowered over 50 per cent and the open flow about 60 per cent. It is apparently a very small field.

*Perth County.*—The well being drilled north of Mitchell, in Logan township, has been completed to the Precambrian; a dry hole.

*Brant County.*—A well has been drilled on lot 13, con. III, of Tuscarora, no gas or oil in commercial quantities was found in the Clinton or Medina-Cataract, and the test was carried to the Trenton; a dry hole.

*Westworth County.*—Near the village of Alberton, in Ancaster township, on lot 20-21, con. IX, a well was located by means of a divining rod and the test carried to the Precambrian; only a trace of oil was found, and this in the Trenton limestone.



**Haldimand County.**—The usual number of wells have been drilled throughout this county, in the old gas fields, they number about 60 per year. The townships of Dunn and South Cayuga have given the best results. An area along the line between these townships is apparently isolated from the remainder of the field, and gives some very good results. One well had a flow of slightly over 1,000,000 cubic feet.

**York County.**—A dry hole to the Precambrian was drilled on lot 14, con. III, York township. A small gas well was completed on lot 64, con. I, Whitechurch township; a small flow of gas was found at about 400 feet in the Trenton. The Trenton here is remarkably thin, about 520 feet, and the surface very deep. The surface deposits were 570 feet thick.

**Peel County.**—A well was drilled on lot 17, con. I, Albion township; it penetrated the Trenton a short distance when the hole was lost through the caving of the upper shales; the hole was full of water and it was not a good test.

The total production of natural gas in Canada during the six months ending June 30, 1927, was 11,347,648 thousand cubic feet valued at \$4,614,438, or an average of 40.6 cents a thousand cubic feet. Alberta in its role of principal producer accounted for 7,050,538 thousand cubic feet; Ontario followed with 3,889,150 thousand cubic feet, and New Brunswick was third with 407,860 thousand cubic feet. Average prices received per thousand cubic feet were, by provinces: New Brunswick, 19 cents; Ontario, 65 cents, and Alberta, 28 cents.

Alberta's greatly increased output of natural gas was largely obtained from the wells in the Turner Valley field. Bringing in of these wells has ensured a dependable supply of gas to the industrial area of Calgary.

#### Production of Natural Gas in Canada and Imports, 1925, 1926, and January 1 to June 30, 1927

Province	1925		1926		Jan. 1 to June 30, 1927	
	M cu. ft.	Value	M cu. ft.	Value	M cu. ft.	Value
		\$		\$		\$
Production—						
New Brunswick.....	639,235	122,394	648,316	128,300	407,860	79,438
Ontario.....	7,143,902	3,958,006	7,764,998	4,409,593	3,889,150	2,527,948
Manitoba.....	200	60	200	60	100	30
Alberta.....	9,119,500	2,752,545	10,794,697	3,019,221	7,050,538	2,007,022
<b>Total.....</b>	<b>16,902,897</b>	<b>6,833,005</b>	<b>19,208,209</b>	<b>7,557,174</b>	<b>11,347,648</b>	<b>4,614,438</b>
Imports—						
Gas for cooking, heating or illuminating, imported by pipe line.....	63,614	40,542	119,310	74,942	71,519	44,583

#### Peat

No operations were carried on in the peat industry in Canada during 1926. The Alfred bog in Ontario was operated during 1925 by the Peat Fuels, Limited, using the air-dried machine process developed by the Ontario-Federal Committee. The total shipments from this bog in 1925 amounted to 1,370 tons valued at \$8,394.

#### Petroleum

Crude petroleum production in Canada during 1926 showed an encouraging increase over the total for the preceding year. The year's production amounted to 364,444 barrels valued at \$1,311,665; in 1925 the total was 332,001 barrels worth \$1,250,705. Alberta's production, mainly from the Royalite No. 4 wet-gas well, topped the high mark of 1925, reaching a new record of 216,050 barrels. A decline was shown in the Ontario production for the year when 137,850 barrels were produced. Another feature of considerable worth was the proportionately large increase in the New Brunswick production, the 1926 figures being 10,544 barrels as against 5,376 barrels in the preceding year.

July 1, 1925, marked the cessation of payment by the Federal Government of bounty on crude petroleum produced in Canada.

Col. R. B. Harkness, Commissioner of Gas for Ontario, reviews the developments in the petroleum industry in Ontario during 1926 as follows:—

The conditions in the oil fields of Ontario are about the same as in past years. Wells continue to pump a few gallons daily so long as the casing withstands the spring freshets. This spring flood water takes its annual toll of wells, by collapsing the casing which has become too thin, through corrosion, to withstand the strain. Wells which do not produce a sufficient revenue to make it profitable to replace this casing with new material, or any available second-hand material are abandoned. In this manner the oil fields of Ontario are gradually passing into history.



In Zone township the deep test at Thamesville, lot 5, con. III, was finished to the Precambrian with no flow; the well is abandoned. Oil and gas occurred at the base of the sediments. In the easterly part of the same lot, and just over into the northern portion of lot 4, an extension of the old shallow oil field has been found; some of the wells have been pumping 10 barrels for several months. The old Klondike field in lot 6, con. I, has been revived; one well has been producing 10 barrels of oil steadily, since the accumulation of water has been pumped off. A small extension of the field, in a northwesterly direction, has been found by drilling. In lot 5, con. XIII, Gore of Camden, a small flow of gas and some oil was found in 1926, but the operators did not consider it worthy of any further expenditure. During the past month, however, a well was drilled near the northern boundary of lot 5 which had a production of 12 barrels per hour. A second well has been drilled that appears to be quite as good, and a well drilled in 1926 has the appearance of being quite as good as either one of these, but requires a larger pump to get the best results. It looks very much as if they are going to find a pool of oil in that vicinity, but no estimate can be made of the extent of the field at the present time.

Oil and gas developments in western Canada during 1926 have been summed up in the following report by C. C. Ross, Supervisory Engineer of the Northwest Territories and Yukon Branch, Department of the Interior:—

**Turner Valley.**—At the end of the year the wells drilling and nearing completion in this area totalled twenty-two rigs, of these sixteen were spudded in during the year. This impetus to prospecting operations was no doubt solely due to the fact that Royaltite No. 4, contrary to all expectation, still maintained, at the beginning of the year, after fifteen months uninterrupted flow, a gas pressure fluctuating in the neighbourhood of 700 pounds per square inch and delivering daily between 17 and 18 million cubic feet of wet gas from which were extracted increasing quantities of high grade naphtha. Up to the end of 1925 the quantity of the latter extracted amounted to 156,766 barrels; during 1926 the extraction figures, although showing slight variations from month to month, showed that this well was still holding up in a manner unprecedented on any of the known oil or gas fields of the world, the total naphtha extraction figures for 1926 being 194,127 barrels.

The naphtha has a high market value—\$4.72½ per barrel. The return from this one well was phenomenal—approximating close on one million dollars—the effect on the local investing public was instantaneous and increased efforts were at once made to complete the wells in drilling at the commencement of 1926. Also many new companies were formed to operate in this and other areas in Alberta. In the Turner valley alone sixteen wells were started during the year and a total of 42,779 feet of drilling work was accomplished in these wells and exclusive of the amount drilled in wells which had been started prior to 1926.

During the year the only completed wells were the Vulcan No. 1 and Illinois-Alberta No. 1, the former being 5,005 feet and the latter 3,831 feet. At the Vulcan well the limestone was entered at 4,865 feet; from this depth gas was met at various points, increasing in quantity as the well was deepened, until finally at 5,005 feet the flow was sufficiently strong to lift the cable drilling tools a considerable height in the well where they must have jammed with the drilling cable. In an endeavour to recover the tools the drilling cable broke, but although the latter and the string of tools are still in the well and must materially impede the free flow of the gas, the daily flow approximates 7,000,000 cubic feet, from which are extracted 140 barrels of naphtha per day by passing the gas through a separator. That all the naphtha content of the gas is not extracted must be apparent to all who can appreciate the difficulties in adjusting gas separators to a fluctuating pressure and yield.

The Illinois-Alberta Company appreciating the dangers of drilling into the gas zone with cable tools, discontinued the use of the latter at 3,678 feet (the limestone having been met at 3,651 feet), and endeavoured to complete the well with diamond core drilling tools; difficulties, however, were encountered, said to be due to the high gas pressure freezing the tools. The well was eventually drilled to the depth of 3,857 feet, where a flow of gas estimated at between four and five million cubic feet was encountered while the tools were in the well, all efforts to recover the latter proved ineffectual. The well was finally connected to a gas separator, by which means 120 barrels of naphtha are recovered daily. Again, as at the Vulcan, the residue gas has to be burned wild and distinctly shows that the naphtha content is not completely removed.

At the McLead No. 2 well a heavy flow of gas was encountered in August at 3,620 feet. Other flows were met increasing in quantity with depth until a maximum of ten million cubic feet was encountered at 3,770 feet where, unfortunately, a drilling bit was lost. Efforts to recover the latter have been continued to date without entire success, but immediately this is accomplished the well can be coupled up to the separator and will add another to the list of producing wells in the area.

Several of the new wells, commenced during 1926, are now at considerable depth and nearing the limestone and within a short period further wells should be in the producing list and add considerably to the amount of naphtha produced. In the majority of these wells the shallow oil horizon has been met at depths ranging between 2,200 feet and 2,400 feet, but in no case has any attempt been made to develop this zone, although it is probable that wells drilled to this horizon would prove very remunerative owing to the initial low cost for drilling and the high market value which the oil can command. At present operators are all tempted to drill for the Royaltite limestone.

Outside of the Turner Valley area all prospecting wells have been drilled (without any connected method) and in the majority of cases at points remote from one another. A brief summary of these operations follows:—

**Rice Creek.**—About thirty miles west of Nanton a well was drilled by the Imperial Oil Company to a depth of 5,747 feet where operations were suspended until spring.

**Highwood Area.**—About twenty miles west of the town of High River the Imperial Oil Company is drilling a well at a depth of 1,780 feet.

**Bragg Creek, Moose Mountain, Jumping Pound and Bow River Areas.**—During 1926 several wells were resumed and some started at different points in these areas, but none have yet reached a conclusive depth. In several, slight oil and gas indications were met which may, if followed up, lead to the discovery of productive areas.

**Wainwright.**—During the period under review only three new wells were started in this field, but none have yet been completed. An official test for production of the British Petroleum, Limited, Well No. 33, was carried out during November, the test over a period of three days showed a production of clean oil amounting to 3.8 barrels per hour.

**Ribstone.**—This is an area which has attracted a great deal of attention during 1926, and already three wells are being drilled. Up to date only one of these has been drilled to a depth where results may be expected, this is the Imperial Oils Ribstone No. 1 test which met a good show of heavy asphaltic oil at 1,900 feet; this, however, has been cased off and drilling is proceeding to test deeper strata. The indication is encouraging and proves the possibility of this heavy oil being found in remunerative quantities somewhere in the neighbourhood.

Outside of Alberta, very little prospect drilling was done in 1926, and that only of a desultory kind and at points widely separated.

**Conclusions.**—From present indications it is evident a great deal of new prospecting and development work will be started during the coming season, and if this is efficiently carried out many interesting developments are to be expected which may lead to the discovery of more productive oil and gas areas.

Petroleum and its products imported into Canada during 1926 were valued at \$52,063,686, an increase of \$8,221,259 over the 1925 import value of \$43,842,427. Gasoline importations were recorded at 82,839,688 gallons invoiced at \$11,958,795.

Crude petroleum amounting to 244,217 barrels valued at \$776,824 was produced in Canada during the half year under review. In the corresponding period of 1926 the production was 173,880 barrels valued at \$697,551.

Ontario producers received an average price of \$2.10 a barrel; those in Alberta, \$3.76, and in New Brunswick, \$2.07.

The Royalite Well No. 4, a wet-gas producer in the Turner Valley field, maintained its record average production of over 500 barrels of crude naphtha per day.

#### Production of Crude Petroleum in Canada, 1925, 1926 and January 1 to June 30, 1927

Province	1925				1926		Jan. 1 to June 30, 1927	
	Barrels	Value less bounty	Bounty paid	Total value	Barrels	Total value	Barrels	Total value
New Brunswick.....	5,376	\$ 16,805	\$ 1,951	\$ 18,756	10,544	\$ 29,940	15,598	\$ 32,361
Ontario—								
Petrolia and Enniskillen.....	52,481	133,301	7,923	141,224	58,170	153,428	28,089	58,565
Oil Springs.....	39,137	102,148	5,627	107,775	38,350	107,438	18,642	40,182
Moore Township.....	8,195	20,815	576	21,391	2,438	6,639	1,002	2,089
Sarnia Township.....	1,905	4,839	379	5,218	1,890	5,153	919	1,916
Plympton Township.....	1,424	3,617	184	3,801	1,047	2,860	1,011	2,108
Bothwell.....	26,243	66,657	3,680	70,337	25,382	69,331	12,407	26,056
West Dover.....	1,820	4,766	309	5,165	959	2,619	147	306
Raleigh Township.....	887	2,253	156	2,409	676	1,843	276	575
Dutton.....	146	381	38	419	—	—	—	—
Onondaga.....	81	210	9	219	555	1,516	361	753
Moza Township.....	8,397	21,328	1,181	22,509	7,868	21,491	3,654	7,618
Thamesville.....	289	734	—	734	2,376	6,490	2,440	5,087
Dunwich.....	855	2,172	—	2,172	139	330	139	290
Romney Township.....	1,235	3,076	—	3,076	—	—	—	—
Euphemia.....	39	106	—	106	—	—	—	—
Total for Ontario.....	143,134	366,403	20,152	386,555	137,850	379,221	69,177	145,545
Alberta.....	183,491	845,394	—	845,394	216,050	892,504	159,442	598,918
Canada.....	332,001	1,228,602	22,163	1,250,705	354,444	1,311,665	244,217	776,824

# Imports into Canada and Exports of Petroleum and its Products, 1925, 1926 and January 1 to June 30, 1927

	1925		1926		Jan. 1 to June 30, 1927	
	Quantity	Value	Quantity	Value	Quantity	Value
<b>IMPORTS—</b>		\$		\$		\$
Crude petroleum in the natural state, -7900 specific gravity or heavier at 60 degrees temperature, when imported by oil refiners to be refined in their own factories..... gals.	430,258,650	23,414,837	570,383,547	31,338,734	301,467,140	14,106,340
Crude petroleum, gas oils other than naphtha, benzine and gasoline lighter than -8235 but not less than -775 specific gravity at 60 degrees..... gals.	4,181,914	227,378	60,562	6,159	74,636	5,832
Petroleum (not including crude petroleum imported to be refined or illuminating or lubricating oils) -8235 specific gravity or heavier at 60 degrees temperature..... gals.	103,667,295	4,690,901	91,577,778	3,742,505	33,222,731	1,351,825
Petroleum, imported by miners or mining companies or concerns, for use in the concentration of ores or metals in their own concentrating establishments..... gals.	129,605	26,251	133,439	37,133	99,596	24,083
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..... gals.	49,149	2,910	5,472,250	263,864	7,513,342	394,622
<b>KEROSENE AND ILLUMINATING OILS</b>						
Coal oil and kerosene, distilled, purified or refined, n.o.p..... gals.	4,860,876	391,538	3,611,778	404,051	1,767,994	164,179
Illuminating oils, composed wholly or in part of the products of petroleum, coal, shale or lignite, costing more than 30 cents per gallon..... gals.	2,451	1,776	6,210	2,919	3,507	1,628
Coal oil and kerosene, distilled, known as "engine distillates", -725 specific gravity and heavier, but not heavier than -770 specific gravity at 60 degrees temperature..... gals.	395,785	63,587	1,224,464	139,404	24,020	2,294
<b>LUBRICATING OILS</b>						
Lubricating oils, composed wholly or in part of petroleum, and costing less than 25 cents per gallon..... gals.	3,813,543	712,850	5,180,614	959,341	2,649,907	455,766
Lubricating oils, n.o.p..... gals.	4,632,195	1,770,739	5,079,264	2,009,214	3,129,218	1,306,023
<b>OTHER OILS</b>						
Gasoline under -725 specific gravity at 60 degrees temperature..... gals.	58,993,020	8,388,057	60,105,404	8,670,438	32,878,177	3,746,536
Gasoline -725 specific gravity but not heavier than -770 specific gravity at 60 degrees temperature..... gals.	24,897,661	3,204,479	22,666,298	3,277,288	9,723,698	984,010
Gasoline, n.o.p..... gals.	37,070	7,093	67,986	11,069	218,566	19,200
All other oils, n.o.p..... gals.	204,633	109,348	215,337	132,120	105,621	62,581
<b>OTHER PRODUCTS OF PETROLEUM</b>						
Grease, axle..... lb.	3,776,077	230,151	4,556,607	290,092	2,519,193	146,709
Paraffine wax..... lb.	1,601,505	124,234	1,946,905	141,241	1,918,577	99,282
Paraffine wax candles..... lb.	208,887	46,257	382,373	82,213	198,061	43,893
Vaseline, and all similar preparations of petroleum for toilet, medicinal or other purposes..... lb.	-	216,464	-	205,463	-	79,524
Petroleum, products of, n.o.p..... gals.	1,243,176	213,577	2,247,183	350,438	1,052,270	166,832
<b>Total.....</b>	-	<b>43,842,427</b>	-	<b>52,063,626</b>	-	<b>23,251,179</b>
<b>EXPORTS—</b>						
Oil, coal and kerosene, crude..... gals.	7,375,163	346,512	21,043,135	851,750	12,048,729	631,633
Oil, coal and kerosene, refined..... gals.	1,508,686	155,783	1,584,645	192,988	685,376	81,887
Oil, gasoline and naphtha..... gals.	1,568,855	333,330	3,867,536	773,958	1,270,372	229,080
Oil, mineral, n.o.p..... gals.	1,473,779	287,463	961,577	200,562	75,616	23,167
Wax, mineral..... cwt.	14,541	82,999	10,682	62,329	2,772	16,138
<b>Total.....</b>	-	<b>1,206,087</b>	-	<b>2,081,587</b>	-	<b>881,905</b>

## Phosphate

Activity in the phosphate industry in Canada has been practically negligible for a number of years. In 1926 a small shipment of phosphate rock amounting to 40 tons valued at \$800 was made from the province of Quebec.

During the preceding year 16 tons of crude materials worth \$189 were shipped from an old mine dump. The Canadian demand for phosphate is supplied almost entirely by shipments of Florida phosphate, and the total imports during 1926 were recorded at 14,244 tons, appraised at \$65,607. During the previous year imports amounted to 14,002 tons valued at \$62,107.



During the first six months of 1927 the Canadian production of phosphate amounted to 69 tons valued at \$893. These shipments consisted of 31 tons of crude material taken from an old mine dump in the province of Quebec and 38 tons shipped for experimental purposes in British Columbia. Imports of phosphate during this period were 3,240 tons evaluated at \$23,073.

### Pyrites

Shipments of pyrites (iron and copper) were made during 1926 by the Eustis Mining Company in Quebec, the Grasselli Chemical Company in Ontario, the Consolidated Mining and Smelting Company, and the Granby Consolidated Mining, Smelting and Power Company, Ltd., in British Columbia. The total production by these producers was reported at 17,845 tons worth \$63,899; in 1925 the shipments amounted to 15,605 tons at \$58,899. The average sulphur content of the ores shipped in 1926 was 50.3 per cent, or 8,975 tons.

The production of pyrites during the first half of 1927 totalled 21,418 tons valued at \$78,931 as compared with an output of 7,615 tons worth \$30,645 produced in the same period of 1926. Early in the year the Britannia Mining and Smelting Company commenced shipments of a pyrite concentrate to manufacturers of sulphuric acid.

### Production, Imports and Exports of Pyrites, 1925, 1926 and January 1 to June 30, 1927

	1925		1926		Jan. 1 to June 30, 1927	
	Tons	Value	Tons	Value	Tons	Value
<b>PRODUCTION BY PROVINCES—</b>		\$		\$		\$
Quebec.....	12,250	30,750	14,100	42,117	8,533	25,590
Ontario.....	685	8,799	371	4,912	199	2,588
British Columbia.....	2,670	13,350	3,374	16,870	12,686	50,744
<b>Total.....</b>	<b>15,605</b>	<b>58,899</b>	<b>17,845</b>	<b>63,899</b>	<b>21,418</b>	<b>78,931</b>
<b>IMPORTS—</b>						
Brimstone, or sulphur, crude or in roll or flour..	146,609	1,982,788	185,625	2,945,651	53,334	906,464
<b>EXPORTS—</b>						
Sulphur contained in pyrites.....	13	150	—	—	4,435	35,476

### Quartz

Production of quartz (silica) from Canadian quarries during 1926 amounted to 232,082 tons valued at \$553,161, as against a total of 197,224 tons worth \$363,612 shipped in 1925. Ontario sales were recorded at 192,733 tons; Quebec, 24,550 tons; and Nova Scotia, 8,333 tons.

Silex and crystallized quartz to a total of 2,554 tons at \$60,070 and flint to the amount of 4,731 tons at \$49,635 were imported into Canada during the year under review.

Shipments of quartz (silica) from Canadian quarries during the six months ending June 30, 1927, amounted to 97,156 tons worth \$179,216, as compared with shipments of 62,314 tons at \$120,673 in the same period of 1926. The Ontario sales were recorded at 85,237 tons; Quebec 10,567 tons; and Nova Scotia 1,013 tons.

Importations of silex, or crystallized quartz, amounted to 1,155 tons at \$27,036, and flint to the amount of 1,158 tons at \$13,066 was also brought into Canada.

### Production in Canada and Imports of Quartz, 1925, 1926 and January 1 to June 30, 1927

	1925		1926		Jan. 1 to June 30, 1927	
	Tons	Value	Tons	Value	Tons	Value
<b>PRODUCTION—</b>		\$		\$		\$
Nova Scotia.....	1,352	6,700	8,333	29,018	1,013	4,507
Quebec.....	6,457	30,064	24,550	107,779	10,567	35,973
Ontario.....	188,560	324,526	192,733	339,304	85,237	137,659
British Columbia.....	853	2,262	6,496	77,060	339	1,017
<b>Total.....</b>	<b>197,224</b>	<b>363,612</b>	<b>232,082</b>	<b>553,161</b>	<b>97,156</b>	<b>179,216</b>
<b>IMPORTS—</b>						
Silex or crystallized quartz, ground or unground.....	2,196	39,301	2,554	60,070	1,155	27,036
Flint.....	3,001	30,936	4,731	49,635	1,158	13,066

### Salt

Salt production in Canada continues to increase; the high record of 233,746 tons produced in 1925 was topped by a new high mark of 262,547 tons in 1926. This year's value was recorded at \$1,480,149, as compared with a value of \$1,410,697 for the 1925 production. The average price for all grades declined somewhat, being \$5.63 per ton in the year under review, as against \$6.04 in the previous twelve months.



Ontario's production amounted to 252,345 tons, or 96.1 per cent of the Canadian total, while Nova Scotia and Alberta contributed the remainder. Alberta shipments came from the Fort McMurray district and totalled 2,037 tons. The Nova Scotia production was derived from the Malagash mine.

Customs' records showed that 188,401 tons of salt appraised at \$1,036,594 were brought into Canada in 1926.

The production of salt in Canada during the first six months of 1927 was 124,166 tons valued at \$785,484. During the corresponding period of last year, shipments amounted to 124,921 tons at \$708,664.

Ontario production was 117,877 tons, Nova Scotia 6,189 tons, and Alberta 100 tons.

#### Production of Salt in Canada, by Grades, 1925, 1926 and January 1 to June 30, 1927

Grade	1925			1926			January 1 to June 30, 1927		
	Manu- factured	Sold	Value of salt sold (Not includ- ing pack- ages)	Manu- factured	Sold	Value of salt sold (Not includ- ing pack- ages)	Manu- factured	Sold	Value of salt sold (Not includ- ing pack- ages)
	Tons	Tons	\$	Tons	Tons	\$	Tons	Tons	\$
Table and dairy.....	47,452	46,790	713,571	50,642	50,905	762,491	25,801	25,842	424,614
Common fine.....	34,383	33,197	186,297	46,131	47,202	241,320	19,430	19,690	121,896
Common coarse.....	46,637	43,931	312,107	30,937	32,785	228,395	13,383	11,904	98,514
Land salt.....	5,133	5,125	21,826	4,170	3,965	16,865	3,329	3,242	16,170
Other grades.....	11,799	11,203	83,396	15,178	14,670	118,058	9,342	9,852	70,654
Brine for chemical works (Salt equivalent sold or used)....	93,500	93,500	93,500	113,020	113,020	113,020	53,636	53,636	53,636
<b>Total.....</b>	<b>238,904</b>	<b>233,746</b>	<b>1,410,697</b>	<b>268,079</b>	<b>262,547</b>	<b>1,489,149</b>	<b>124,921</b>	<b>124,166</b>	<b>785,484</b>
Value of packages.....	-	-	518,528	-	-	569,396	-	-	272,579
<b>Grand Total.....</b>	<b>-</b>	<b>-</b>	<b>1,959,225</b>	<b>-</b>	<b>-</b>	<b>2,049,545</b>	<b>-</b>	<b>-</b>	<b>1,058,054</b>

#### Imports into Canada and Exports of Salt, 1925, 1926 and January 1 to June 30, 1927

	1925		1926		January 1 to June 30, 1927	
	Tons	Value	Tons	Value	Tons	Value
		\$		\$		\$
<b>IMPORTS—</b>						
Salt, for the use of the sea or gulf fisheries.....	80,398	329,820	83,929	327,040	25,430	99,458
Salt, in bulk, n.o.p.....	73,196	327,364	75,965	393,747	34,703	168,138
Salt, n.o.p., in bags, barrels, etc.....	40,061	420,137	28,053	284,118	14,098	136,427
Salt, table, made by an admixture of other ingredients, when containing not less than 90 per cent of pure salt. (From April 1, 1926)....	-	-	454	31,689	430	27,093
<b>Total.....</b>	<b>193,655</b>	<b>1,077,321</b>	<b>188,401</b>	<b>1,036,594</b>	<b>74,679</b>	<b>429,116</b>
<b>EXPORTS.....</b>	<b>2,324</b>	<b>26,678</b>	<b>1,164</b>	<b>19,423</b>	<b>301</b>	<b>7,837</b>

#### Sodium Carbonate

Shipments of sodium carbonate crystals during 1926 were somewhat lower than the quantity shipped in 1925. The production for the year under review amounted to 595 tons at \$5,370, as compared with shipments of 1,120 tons at \$8,140, in 1925.

Sodium carbonate is used in the manufacture of glass, soap and paper, for bleaching and washing linen, cotton, wool, etc., dyeing and printing fabrics, preventing the formation of boiler scale, and also to a small extent as a re-agent in analytical chemistry.

The manufacture of soda ash from salt brine is carried on in Canada on a large scale by Brunner-Mond, Limited, at Amherstburg, Ontario.

The production of sodium carbonate crystals during the first six months of 1927 totalled 271 tons valued at \$2,710.

### Sodium Sulphate

Natural sodium sulphate shipped from Canadian deposits during 1926 amounted to 6,775 tons valued at \$13,550. In 1925 shipments were 42.8 per cent lower, amounting to 3,876 tons at \$19,380.

Importations of salt cake during 1926 were recorded at 41,945 tons worth \$644,696; glauber's salt to a total of 733 tons at \$10,069 and bisulphate of soda or nitre cake amounting to 15,948 tons at \$53,536 were also imported into Canada.

Production of sodium sulphate in Canada from the deposits of natural sodium sulphate in the province of Saskatchewan totalled 2,471 tons valued at \$4,943 during the first half of 1927. The imports of salt cake during this period were reported at 13,330 tons valued at \$216,427, while soda, bisulphate of, or nitre cake, amounting to 6,000 tons at \$24,001, and glauber's salt to a total of 65 tons were also imported into Canada.

### Talc and Soapstone

The improvement shown in the talc and soapstone industry in Canada during 1925 was continued throughout 1926. Shipments in the year under review totalled 15,767 tons valued at \$217,195 as compared with 14,474 tons at \$205,835 shipped in 1925.

In addition to the advance in production of talc in Canada there has been a considerable increase in soapstone shipments. An excerpt from a report on the soapstone industry by Hugh S. Spence follows:—

Canadian sulphate pulp mills are estimated to use in the neighbourhood of 2,500 tons of soapstone per year. This stone is employed in the form of sawn blocks and bricks for building the furnaces used in recovery of the alkali or black liquor from the digestors, and is the only natural product known that will satisfactorily resist the action of the molten alkali. Since the recovery of such alkali is of great import in kraft mill practice, it follows that soapstone is a very important material to the pulp mill operators.

In the province of Quebec, however, the most active development has been undertaken, operations here having been helped by the fact that many of the largest kraft mills are situated in the province, within a relatively short rail haul from the deposits. Production has, in the main, been confined so far to a single operator, the Robertsonville Soapstone Quarry Company, which has opened up a number of small quarries in the eastern portion of the serpentine belt, with which are associated the principal asbestos mines. Small, portable sawing units, driven by individual gasoline engines, are used to cut the stone into blocks and bricks of the dimensions specified by the mills. Most of the quarries opened by the company in its initial stages have now been abandoned, and work is at present confined to a single quarry, where the stone has been found to be of superior quality to that hitherto worked. It is the intention of the company to instal permanent equipment at this point, and to undertake operations on a larger scale, with a view to taking care of the entire soapstone requirements of Eastern Canada. It is also proposed to grind the quarry waste, making products suited to the roofing and foundry trades.

While a certain amount of soapstone continues to be imported from the United States and from Scandinavian countries, it is gratifying to note that Canada seems now well on the way to filling her requirements in respect of this material from within her own borders.

Production of talc and soapstone during the first half of 1927 reached a total of 7,729 tons worth \$111,406 as against 7,888 tons at \$115,113 shipped in the corresponding period of 1926.

### Production in Canada, Imports and Exports of Talc and Soapstone, 1925, 1926 and January 1 to June 30, 1927

	1925		1926		January 1 to June 30, 1927	
	Tons	Value	Tons	Value	Tons	Value
		\$		\$		\$
<b>PRODUCTION—</b>						
Soapstone.....	768	32,655	995	42,609	505	23,080
Talc.....	13,706	173,180	14,772	174,586	7,224	98,326
<b>Total.....</b>	<b>14,474</b>	<b>205,835</b>	<b>15,767</b>	<b>217,195</b>	<b>7,729</b>	<b>111,406</b>
<b>IMPORTS—</b>						
Talc or soapstone, ground or unground..	4,568	91,288	4,213	89,026	1,754	30,394
<b>EXPORTS—</b>						
Talc, crude .....	—	—	—	—	12	154
Talc, refined.....	10,461	124,217	10,823	125,633	5,062	58,968

## STRUCTURAL MATERIALS AND CLAY PRODUCTS

Construction contracts awarded in Canada during 1926 were the highest on record since the banner construction periods of 1912 and 1913. Corresponding with this record increase the 1926 production of clay products and other structural materials reached a total valuation of \$39,959,398 as compared with a total of \$37,649,234 in 1925. The clay products group showed a gain of 8.6 per cent in aggregate value and other structural materials, including cement, lime, stone, sand and gravel, advanced 5.2 per cent above the figures for the preceding year. Cement output showed a gain of 7.2 per cent, but due to the lower prices prevailing in 1926 the total value was 7.3 per cent under the figures for 1925. Lime production showed a growth of 15.2 per cent in quantity and 11.6 per cent in value. Production of sand and gravel and building stone also reflected the greater building programs carried on throughout the year.

Building and construction contracts awarded in Canada during 1926, as reported by the *MacLean Building Review*, were valued at \$372,947,900, an advance of 25.16 per cent over the total of 1925. The classification of these contracts was as follows: residential projects, \$109,562,400; business, \$112,408,900; industrial, \$79,689,700; and engineering, \$71,286,900. Quebec was the leading province, mainly because of increases in industrial, business and residential building. Ontario followed with a 14.6 per cent higher total than in 1925. Of the other provinces, Prince Edward Island, New Brunswick, Manitoba, Saskatchewan, Alberta and British Columbia showed increases, while there was a decrease of about 17.1 per cent in Nova Scotia.

Costs of building materials in Canada during 1926 were very stable. The Bureau of Statistics index number of prices applying to 32 building and construction materials (base 100 in 1913) showed only a slight variation during the year, ranging from 152.3 in January, the maximum for the year, to 147.7 in December.

### Bentonite

A shipment of 30 tons of bentonite valued at \$150, was made in 1926 from a deposit near Princeton, B.C. Production of this item has been included in the section on "Clay Products."

### Cement

Continuing the increase in cement production recorded in 1925, the year under review showed a further advance to a new high record for the industry in Canada. Shipments during the year amounted to 8,707,021 barrels valued at \$13,013,283.

The provinces of Quebec, Ontario, Manitoba, Alberta and British Columbia are the sources of the Canadian production. Nova Scotia was formerly a producer of puzzolan cement from blast furnace slag, but this has been discontinued in recent years. Quebec mills occupied the leading position in 1926, with a sales total of 3,727,377 barrels, Ontario mills came next with 3,398,860 barrels; the Manitoba sales were 50.2 per cent higher in 1926 than in 1925 and amounted to 612,155 barrels. British Columbia also reported an appreciable advance to a total of 544,863 barrels, and Alberta mills took part in the general augmentation of production with an increase of 7.05 per cent.

The average selling price per barrel, f.o.b. plant, was as follows: Quebec, \$1.22; Ontario, \$1.41; Manitoba, \$2.57; Alberta, \$2.06; and British Columbia, \$2.27.

Portland cement to the amount of 21,114 barrels valued at \$77,866 was imported into Canada during 1926. The average value of the imported cement in 1926 was \$3.68 per barrel, while in the preceding year the average was \$2.89. Exportations of this commodity were recorded at 285,932 barrels invoiced at \$358,231.

## Summary Statistics of the Cement Industry in Canada, 1925 and 1926

	1925		1926	
	Barrels	Value	Barrels	Value
		\$		\$
Output.....	7,869,946	-	9,041,411	-
Sold or used.....	8,116,597	14,016,704	8,707,021	13,013,283
Stocks, December 31.....	1,274,923	-	1,609,313	-
Imports—				
Portland.....	21,849	63,967	21,114	77,866
Manufactures.....	-	13,753	-	18,813
Exports.....	997,915	1,498,495	285,932	358,231
Apparent consumption.....	7,140,531	-	8,442,203	-

## Sales of Cement in Canada by Provinces, 1925 and 1926

Province	1925		1926	
	Barrels	Value	Barrels	Value
		\$		\$
Quebec.....	3,365,802	5,689,991	3,727,377	4,535,386
Ontario.....	3,462,354	5,253,911	3,398,860	4,792,857
Manitoba.....	407,395	1,037,929	612,155	1,572,401
Alberta.....	395,857	913,529	423,766	873,621
British Columbia.....	455,185	1,151,344	544,863	1,239,018
<b>Canada.....</b>	<b>8,116,597</b>	<b>14,016,704</b>	<b>8,707,021</b>	<b>13,013,283</b>

## Clay Products

An advance of 8.69 per cent in the value of production of Canadian clay and clay products was recorded in 1926. The value of this year's shipments was reported at \$10,357,323; in 1925 the value of these products was \$9,529,691. Increases were recorded in almost all provinces producing during the year.

Imports of clay, clay products and similar materials were valued at \$8,196,014 in 1926, and the Canadian exports under this heading were invoiced at \$224,916.

## Production of Clay Products in Canada by Provinces, 1925 and 1926

Province	1925	1926
	\$	\$
Prince Edward Island.....	3,020	-
Nova Scotia.....	442,690	362,667
New Brunswick.....	69,473	75,851
Quebec.....	2,426,887	2,792,298
Ontario.....	5,195,044	5,356,469
Manitoba.....	173,794	248,497
Saskatchewan.....	95,952	214,113
Alberta.....	618,860	804,933
British Columbia.....	523,931	592,455
<b>Canada.....</b>	<b>9,529,691</b>	<b>10,357,323</b>



## Production in Canada, Imports and Exports of Clay and Clay Products, 1925 and 1926

Kind	1925		1926	
	Quantity	Total selling value	Quantity	Total selling value
<b>PRODUCTION (SALES)—</b>				
Brick: Soft mud process { Face.....	M	\$ 27,701	28,235	\$ 556,573
Common.....	M	51,214	78,158	1,145,490
Stiff mud process { Face.....	M	93,903	1,883,856	2,146,362
(wire cut) Common.....	M	116,105	1,635,257	1,624,055
Dry press { Face.....	M	37,201	800,504	651,236
Common.....	M	22,053	270,135	200,598
Fancy or ornamental brick (including special shapes, embossed and enameled brick).....	M	524	20,320	24,057
Sewer brick.....	M	2,485	52,382	117,194
Paving brick.....	M	—	—	5,015
Firebrick from domestic clay.....	M	6,197	305,332	192,276
Fireclay.....	tons	623	6,544	23,258
Fireclay blocks and shapes.....	—	36,567	—	54,004
Structural tile: Hollow blocks (including fireproofing and load-bearing tile).....	tons	115,576	1,093,397	1,313,707
Roofing tile.....	No.	78,479	6,323	1,562
Flower tile (quarries).....	Sq. ft.	140,927	28,358	43,854
Ceramic or glazed floor and wall tile.....	—	—	—	943
Drain tile.....	M	14,552	404,503	306,018
Sewer pipe (including copings, flue linings, etc.).....	tons	73,791	1,440,269	1,480,776
Pottery, glazed or unglazed.....	—	267,255	75,896	320,135
Other products—Bentonite.....	tons	—	30	150
<b>Total.....</b>	—	<b>9,529,691</b>	—	<b>10,357,323</b>
<b>IMPORTS—</b>				
Brick.....	—	695	—	67
Building brick.....	M	5,489	125,565	93,337
Building blocks.....	—	81,873	4,157	77,230
Clays—	—	—	—	—
China.....	Cwt.	363,890	105,032	200,902
Fire.....	Cwt.	824,774	166,733	193,741
Pipe.....	—	1,668	937,487	1,323
Zirconium silicate.....	—	—	—	2,704
Other clays.....	—	64,498	—	81,253
Drain tile, unglazed.....	—	8,622	—	2,547
Drain and sewer pipe.....	—	60,960	—	65,487
Insulators, electric, porcelain.....	—	—	—	305,774
Earthenware and chinaware.....	—	4,558,194	—	4,047,395
Brick, fire, other, valued at not less than \$100 per M, rectangular shaped: the dimensions of each not to exceed 125 cubic inches for use exclusively in the construction or repair of a furnace, kiln, etc.....	—	27,113	—	41,690
Brick, fire, n.o.p., for use exclusively in the construction or repair of a furnace, kiln or other equipment of a manufacturing establishment.....	—	861,696	—	1,023,850
Firebrick, n.o.p.....	—	194,060	—	156,781
Firebrick, chrome.....	—	35,277	—	50,203
Magnesite brick.....	—	93,840	—	66,429
Silica brick.....	—	185,356	—	263,293
Paving brick.....	M	1,563	39,901	72,989
Other clay manufactures.....	—	771,001	—	848,989
<b>Total.....</b>	—	<b>7,478,084</b>	—	<b>8,196,014</b>
<b>EXPORTS—</b>				
Building brick.....	M	1,758	22,027	25,908
Clay—	—	—	—	—
Unmanufactured.....	Cwt.	7,325	8,496	3,898
Manufactures.....	—	85,383	—	61,523
Earthenware.....	—	16,879	—	12,764
Porcelain insulators.....	—	58,033	—	120,823
<b>Total.....</b>	—	<b>220,818</b>	—	<b>224,916</b>

## Fuller's Earth

In the first half of 1927, samples were taken for investigation from a deposit of fuller's earth found in the vicinity of Copper Creek, near Red Lake, B.C. It is reported that the material found occurs in abundance.

## Kaolin

There was no production of kaolin reported in 1926.

From a deposit near Williams Lake in British Columbia, shipments were made in 1926 of a refractory material known locally as kaolin, but described merely as "silicate of alumina" by the Provincial Mineralogist. Shipments of this material amounting to 129 tons valued at \$1,900 were made to Vancouver, B.C., where some of the material was used in the manufacture of plastic firebrick, and refractory cements, and some was used directly as fireclay.

For this reason production figures for this item have been included in the section of "Clay Products" in this report.

In previous years some kaolin was produced at St. Rémi d'Amherst, but there has been no production from this source since 1923.

### Lime

Production of lime in Canada during 1926 was reported at 11,825,736 bushels with a valuation of \$3,781,484. The year's production consisted of 9,945,336 bushels of quicklime and 65,814 tons of hydrated lime. In 1925 the total production was 10,256,542 bushels worth \$3,387,652. Increases in the total quantity produced were general throughout the producing provinces.

Canadian operators received an average of 30 cents per bushel for quicklime and \$11.59 per ton for hydrated lime.

Lime importations into Canada decreased during the year under review, when 110,509 bushels were imported with a value of \$42,855. Exports were recorded at 534,618 bushels at \$344,616.

#### Production of Lime in Canada by Provinces, in 1926

Province	Quicklime		Hydrated Lime		Total value
	Quantity	Value	Quantity	Value	
	Bushels	\$	Tons	\$	\$
Nova Scotia .....	446,628	56,777	251	3,000	59,777
New Brunswick .....	477,226	196,477	—	—	196,477
Quebec .....	2,509,006	667,480	11,922	98,638	766,118
Ontario .....	5,402,251	1,593,468	39,217	457,978	2,051,446
Manitoba .....	498,875	147,401	6,528	103,868	251,269
Alberta .....	108,309	39,517	—	—	39,517
British Columbia .....	503,032	317,733	7,896	99,149	416,882
<b>Total for 1926 .....</b>	<b>9,945,336</b>	<b>3,018,853</b>	<b>65,814</b>	<b>762,631</b>	<b>3,781,484</b>
<b>Total for 1925 .....</b>	<b>8,539,399</b>	<b>2,794,765</b>	<b>60,459</b>	<b>682,887</b>	<b>3,387,652</b>

#### Production, Imports and Exports of Lime, 1925 and 1926

	1925		1926	
	Bushels	Value	Bushels	Value
		\$		\$
PRODUCTION .....	10,256,542	3,387,052	11,825,736	3,781,484
IMPORTS .....	134,314	47,639	110,509	42,855
EXPORTS .....	465,315	312,108	534,618	344,616

### Sand-Lime Brick

In continuance of the custom to include in all reports on the mineral production of Canada, a reference to the production of sand-lime brick, a few notes covering the information at hand are given below.

The total shipments of sand-lime brick in Canada during 1926 were 49,269 thousand valued at \$589,447, as compared with 63,869 thousand at \$781,555 in the preceding year. As usual, Ontario was the principal producer; the eight plants reporting in this province accounting for practically the entire Canadian output.

### Sand and Gravel

Sand and gravel production in Canada during 1926 totalled 17,112,798 tons with a valuation of \$4,941,434, as compared with 11,018,647 tons valued at \$3,220,410 shipped in 1925.

Imports of sand and gravel into Canada during the year under review were recorded at 254,935 tons worth \$212,038, while silica sand imported for the manufacture of glass and carborundum and for use in foundries amounted to 155,109 tons invoiced at \$372,488. Corresponding data in 1925 were, for the former material, 282,203 tons at \$184,000 and the latter material 143,502 tons at \$353,237. A considerable advance was shown in the exports of sand and gravel in 1926, when 907,935 tons appraised at \$278,278 were shipped from Canada as against a total of \$64,672 tons worth \$198,485 exported in 1925.

### Slate

There have been no shipments of Canadian slate reported since 1923. During that year crushed green and red slate, amounting to 1,836 tons valued at \$17,289, was produced from deposits in Melbourne township, Quebec. In 1926 interest was renewed in the deposits of slate in Kings county, Nova Scotia.

The imports of roofing slate were slightly higher than in 1925 and totalled 4,963 squares valued at \$57,418.

### Production in Canada and Imports of Slate, 1925 and 1926

	1925		1926	
	Quantity	Value	Quantity	Value
		\$		\$
PRODUCTION.....Tons	-	-	-	-
IMPORTS—				
Roofing.....Squares	4,411	50,331	4,963	57,418
School-writing.....	-	102,878	-	92,766
Pencils.....	-	4,810	-	6,361
Mantles and manufactures of slate, n.o.p.....	-	47,488	-	61,597
<b>Total</b> .....	-	<b>205,597</b>	-	<b>218,142</b>

### Stone

Production of stone in Canada during 1926 of 6,397,590 tons, valued at \$7,865,874, was considerably higher than the figures for the 1925 shipments of 5,706,119 tons worth \$7,464,777. Ontario was the leading producer, accounting for 56.7 per cent of the total quantity. Quebec followed with 36.0 per cent. The other provinces in order of tonnage produced, were: British Columbia, Manitoba, Nova Scotia, New Brunswick and Alberta.

The kinds of stone quarried included granite (trap-rock, syenite and other igneous rock), limestone, sandstone and marble.

The quantities of limestone quarried and used in the manufacture of lime by the operator have not been included under this industry; only the quantity and value of lime are recorded in order to avoid duplication of entries.

### Production of Stone in Canada by Provinces, 1925 and 1926

Province	1925		1926	
	Tons	Value	Tons	Value
		\$		\$
Nova Scotia.....	102,125	134,686	92,315	150,792
New Brunswick.....	25,391	124,743	19,108	99,545
Quebec.....	2,242,916	3,895,455	2,305,734	3,728,228
Ontario.....	3,022,712	2,817,333	3,622,042	3,157,288
Manitoba.....	52,770	188,496	101,571	357,884
Alberta.....	3,979	6,868	3,759	13,890
British Columbia.....	256,226	337,196	253,061	358,247
<b>Canada</b> .....	<b>5,706,119</b>	<b>7,464,777</b>	<b>6,397,590</b>	<b>7,865,874</b>

## Imports into Canada and Exports of Stone, by Kinds, 1925 and 1926

	1925		1926	
	Tons	Value	Tons	Value
		\$		\$
<b>IMPORTS—</b>				
Building stone, other than marble or granite, sawn on more than two sides, but not sawn on more than four sides .....	285	4,143	202	4,223
Building stone other than marble or granite, planed, turned, cut or further manufactured than sawn on four sides .....	231	7,917	591	28,561
Flagstone, granite, rough sandstone, and all building stone, not hammered, sawn or chiselled .....	-	134,170	-	187,055
Flagstone and building stone, other than marble or granite, sawn on not more than two sides .....	-	97,875	-	95,790
Granite, sawn only .....	-	2,255	-	6,189
Granite, manufactures of, n.o.p. ....	-	158,614	-	175,651
Paving blocks .....	-	-	-	-
Marble, rough, not hammered or chiselled .....	-	67,507	-	91,030
Marble, sawn or sand rubbed, not polished .....	-	174,029	-	186,462
Marble, manufactures of, n.o.p. ....	-	40,293	-	101,748
Refuse stone .....	160,997	100,514	334,832	220,177
Manufactures of stone, n.o.p. ....	-	37,645	-	47,719
<b>Total .....</b>	-	<b>824,992</b>	-	<b>1,144,614</b>
<b>EXPORTS—</b>				
Crushed .....	42,518	81,764	101,117	134,755
Granite and marble, unwrought .....	3,430	30,552	3,553	38,828
Limestone, limestone, and other building stone, unwrought .....	4,166	14,389	2,853	3,915
Dressed .....	-	5,687	-	17,090
<b>Total .....</b>	-	<b>139,392</b>	-	<b>194,588</b>



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