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# MINERAL PRODUCTION OF CANADA

ROBERT BELL, M.D., LL.D., F.R.S.,  
*Acting Deputy Head and Director.*

SIR,—I have the honour to submit herewith the annual preliminary statistical statement of the mineral production of Canada for 1900.

This has been somewhat delayed this year owing to difficulties experienced in getting some of the more important data by the provincial authorities, upon whom we are dependent for some of our figures.

Although the figures given herewith are, as stated, 'subject to revision,' they may still be taken as a very close approximation to those which will be given in the final report.

The completed annual report will follow later, and besides containing a revise of the general table of production, will include other details relating to exploration, development, exports, imports, etc. As much of this information is not available till several months after the close of the year, and the compilation and printing necessarily occupy some time, it cannot be completed until well on in the year following the one covered.

I am, sir,

Your obedient servant,

ELFRIC DREW INGALL.

OTTAWA, March 16, 1901.

GEOLOGICAL SURVEY OF CANADA

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SECTION OF

MINES AND MINERAL STATISTICS

SUMMARY

OF THE

MINERAL PRODUCTION OF CANADA

FOR 1900.

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# GEOLOGICAL SURVEY OF CANADA.

## SUMMARY OF THE MINERAL PRODUCTION OF CANADA IN 1900.

(Subject to Revision.)

PRODUCT.	Quantity. (a)	Value. (a)
METALLIC.		\$
Copper (b)..... Lbs.	18,919,820	3,063,119
Gold, Yukon..... \$22,275,000		
" all other..... 5,441,752		
		27,916,752
*Pig iron..... Tons.	35,387	583,158
Lead (c)..... Lbs.	63,169,821	2,760,521
Nickel (d)..... "	7,080,227	3,327,707
Silver (e)..... Oz.	4,446,505	2,730,598
Zinc..... Lbs.	212,800	9,342
Total metallic.....		40,391,197
NON-METALLIC.		
Arsenic..... Lbs.	606,000	22,725
Asbestos and asbestic..... Tons.	30,641	763,431
Chromite..... "	2,335	27,000
Coal..... "	5,332,197	12,668,475
Coke (f)..... "	157,134	649,140
Fire clay..... "	1,245	4,130
Graphite..... "	1,922	30,940
Grindstones..... "	5,549	53,450
Gypsum..... "	252,001	259,009
Limestone for flux..... "	52,966	39,332
Mica..... "		166,000
Mineral pigments—		
Baryta..... Tons.	1,331	7,575
Ochres..... "	1,966	15,398
Mineral water.....		75,000
Natural gas (g).....		417,094
Petroleum (h)..... Bbls.	710,498	1,151,007
Phosphate (apatite)..... Tons.	1,415	7,105
Pyrites..... "	40,031	155,164
Salt..... "	62,055	279,458
Soapstone..... "	420	1,365
Talc..... "	1,000	5,000
Tripolite..... "	336	1,950

\*The total production of pig iron in Canada in 1900 from Canadian and foreign ores amounted to 96,575 tons, valued at \$1,501,698, of which it is estimated 35,387 tons, valued at \$583,158, should be attributed to Canadian ore and 61,188 tons, valued at \$918,540, to the ore imported.

(a) Quantity or value of product marketed. The ton used is that of 2,000 lbs.

(b) Copper contents of ore, matte, etc., at 16.19 cents per lb.

(c) Lead contents of ores, etc., at 4.37 cents per lb.

(d) Nickel contents of ore, matte, etc., at 47 cents per lb.

(e) Silver contents of ore at 61.41 cents per oz.

(f) Oven coke, all the production of Nova Scotia and British Columbia.

(g) Gross return from sale of gas.

(h) Calculated from inspection returns at 100 galls. crude to 54 refined oil, and computed at \$1.62 per brl. of 35 imp. galls.

**SUMMARY OF THE MINERAL PRODUCTION OF CANADA**  
**IN 1900—Concluded.**

(Subject to Revision.)

PRODUCT.	Quantity. (a)	Value. (a)
<b>STRUCTURAL MATERIALS AND CLAY PRODUCTS.</b>		<b>8</b>
Cement, natural rock..... Brls.	125,428	99,994
"    Portland..... "	283,124	545,826
Flagstones.....		5,250
Granite.....		80,000
Pottery.....		200,000
Sewer pipe.....		231,525
Slate.....		12,100
Terra-cotta, pressed brick, etc.....		259,450
Building material including bricks, building stone, lime, sands and gravels, tiles, etc.....		4,850,000
Total structural materials and clay products.....		6,284,145
"    all other non-metallic.....		16,799,748
Total non-metallic.....		23,083,893
"    metallic.....		40,391,197
Estimated value of mineral products not returned.....		500,000
Total, 1900.....		63,775,090
1899. Total.....		49,584,027
1898 ".....		38,697,021
1897 ".....		28,661,430
1896 ".....		22,584,513
1895 ".....		20,639,964
1894 ".....		19,931,158
1893 ".....		20,035,082
1892 ".....		16,628,417
1891 ".....		18,976,616
1890 ".....		16,763,353
1889 ".....		14,013,913
1888 ".....		12,518,894
1887 ".....		11,321,331
1886 ".....		10,221,255

## REMARKS.

It is gratifying again to be able to record a large increase in the total production of minerals in Canada during 1900, thus continuing the very satisfactory records of the past four years. The total increased by a little over 28 p. c., 12·6 p. c. of which must be credited to the enlarged output of the Yukon gold; 9·6 p. c. to increases in other metals; and 6 p. c. to the increase in the aggregate value of the non-metallic products, the value of the structural materials and clay products showing only a slight growth over past years.

Compared with 1894, when the steady increase began, the total mineral production of 1900 improved nearly 320 p. c., and since 1886, when the first figures are available, over 600 per cent.

The value per capita of the mineral income of the community based on an estimate of the population amounts to \$11.84, as compared with about \$8.90 in 1899 and \$2.23 in 1886. The per capita production in the United States for last year, is estimated at a little over \$15.

The metal mining industries of the country lead all other classes, contributing 63·27 p. c., the non-metallic accounting for 26·38 p. c., and the structural class being credited with nearly 10 p. c. If, however, the Yukon placer gold be excepted as a special feature, the metallic and non-metallic products other than structural materials, stand nearly on an equal footing.

Grouping the metalliferous products with coal and coke, over 84 per cent. of the total output is accounted for.

1899.		1900.	
Product.	Per cent of total Production.	Product.	Per cent of total Production.
Gold .....	42·88	Gold .....	43·84
Coal and coke .....	21·45	Coal and coke .....	20·92
Building material .....	9·07	Building material .....	7·62
Copper .....	5·36	Nickel .....	5·19
Nickel .....	4·17	Copper .....	4·81
Silver .....	4·10	Lead .....	4·34
Petroleum .....	2·42	Silver .....	4·29
Lead .....	1·97	Petroleum .....	1·81
Cement .....	1·28	Asbestos .....	1·20
Asbestos .....	0·98	Cement .....	1·11
Natural gas .....	0·78	Pig iron .....	0·92
Gypsum .....	0·52	Natural gas .....	0·66
Salt .....	0·51	Salt .....	0·44

The above figures give the percentage contributions for 1900 based on the values of the different minerals produced in comparison with 1899.

As for several years past, gold is the dominant factor, followed by coal and coke; lead takes a much more prominent place, whilst petroleum ranks considerably lower. The pig iron item, refers only of course to the proportion of the whole credited to Canadian ores. Other features of less import, will be evident on inspection of the figures.

Product.	Quantity.	Value.
	Increase.	Increase.
	p. c.	p. c.
Metallic—		
Copper.....	25·47	15·35
Gold.....		31·30
Iron ore (Canadian).....	7·40	14·96
" pig ".....	3·40	17·20
Lead.....	188·94	176·81
Nickel.....	23·26	60·93
Silver.....	30·33	34·34
Non-metallic—		
Asbestos.....	19·99	57·13
Coal.....	8·27	23·19
Coke.....	55·86	85·45
Cement.....	2·97	1·98
Gypsum.....	3·84	0·65
Natural gas.....		7·70

The foregoing figures illustrate the growth in the chief branches of the mineral industry.

In copper there were increases at every centre. In gold large increases in British Columbia and the Yukon were slightly offset by small decreases in the eastern gold mining districts. The iron smelting industry shows encouraging features. The figures above refer to Canadian ore and the pig produced from it. The total production of pig from both foreign and home ore, viz.: 96,575 tons, valued at \$1,501,698, compared with that of the previous years, shows a decrease of 6·19 per cent in quantity and an increase of 9·03 per cent in value.

The very large growth in the output of lead was slightly offset by somewhat lower prices. British Columbia, as practically the only producer, is to be credited with this gratifying feature of the year's record, as well as with that illustrated in the figures for silver, where the higher prices ruling considerably enhanced the already large



increase in quantity. The nickel output of the Sudbury district in Ontario was much increased in quantity, and the prices were higher by about 30 per cent, as evidenced by the figures.

The chief non-metallic minerals show increases in quantity also, as well as higher values in most cases. Prices were much higher for asbestos, causing, of course, a larger output from the mines in Quebec. The coal output of the country still continues to grow steadily, and the value to increase owing to enhanced prices. The associated coke industries are growing rapidly, and the much greater value given is to be attributed to better prices and the increased prominence of the higher priced western product, chiefly from the new Crow's Nest Pass operations.