

**MINERAL PRODUCTION OF CANADA.**

The following summary of the mineral production of Canada in 1897 has been issued by the Geological Survey Department, and is subject to revision in a later bulletin :

Product.	Quantity. (a)	Value. (a)
<b>METALLIC.</b>		
Copper (fine, in ore, etc.) (b).....lbs.	13,300,802	1,501,660
Gold .....	.....	6,190,000
Iron ore .....	71,451	178,716
Lead (fine, in ore, etc.) (c).....lbs.	39,018,219	1,396,853
Mercury .....	688	324
Nickel (fine, in ore, etc.) (d) .....	3,997,647	1,399,176
Platinum .....	.....	6,600
Silver (fine, in ore, etc.) (e) .....	5,558,446	3,322,905
<b>Total metallic .....</b>	<b>.....</b>	<b>13,996,234</b>
<b>NON-METALLIC.</b>		
Asbestos and asbestic .....	25,262	324,700
Chromite .....	2,637	32,474
Coal .....	3,876,201	7,286,257
Coke (f).....	78,811	209,920
Felspar .....	1,275	3,506
Fire clay.....	1,923	5,759
*Grindstones.....	.....	40,000
Gypsum .....	239,691	244,531
*Limestone for flux .....	.....	40,000
*Mica .....	.....	75,000
<b>Mineral pigments—</b>		
Baryta.....	571	3,060
Ochres .....	3,995	23,560
*Mineral water .....	.....	140,000
Molding sand.....	5,485	10,931
Natural gas (g).....	.....	325,873
Petroleum (h).....	709,857	1,011,546
Phosphate (apatite).....	908	3,984
Pyrites .....	38,910	116,730
*Salt .....	.....	190,000
<b>Sundry minerals, partly estimated, including actinolite, graphite, manganese, soapstone and tripolite .....</b>		
		10,000
(a) Quantity or value of product marketed. The ton used is that of 2,000 lbs.		
(b) Copper contents of ore, matte, etc., at 11.29 cents per lb.		
(c) Lead contents of ores, etc., at 3.58 cents per lb.		
(d) Nickel contents of ore, matte, etc., at 35 cents per lb.		
(e) Silver contents of ore at 59.79 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 42 refined oil, and computed at \$1.42½ per bbl. of 35 imp. galls. The barrel of refined oil is assumed to contain 42 imp. galls.		
<b>STRUCTURAL MATERIALS AND CLAY PRODUCTS.</b>		
Cement, natural .....	85,450	65,893
" Portland .....	119,763	209,380
Flagstones .....	.....	7,190
*Granite .....	.....	75,000
*Pottery .....	.....	125,000
Sewer pipe .....	.....	164,250
Slate.....	.....	42,800
Terra-cotta .....	.....	155,595
Building material, including bricks, building stone, lime, sands and gravels and tiles (estimated as for previous year) .....	.....	3,600,000
<b>Total structural materials and clay products.....</b>	<b>.....</b>	<b>4,445,108</b>
<b>All other non-metallic.....</b>	<b>.....</b>	<b>10,097,831</b>
<b>Total non-metallic.....</b>	<b>.....</b>	<b>\$14,542,939</b>
<b>Total metallic.....</b>	<b>.....</b>	<b>13,996,234</b>
<b>Estimated value of mineral products not returned .....</b>	<b>.....</b>	<b>250,000</b>
<b>1897, Total.....</b>	<b>.....</b>	<b>\$28,789,173</b>
<b>1895 ".....</b>	<b>.....</b>	<b>22,609,825</b>

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

1895	"	.....	20,715,319
1894	"	.....	19,933,857
1893	"	.....	20,035,082
1892	"	.....	16,628,417
1891	"	.....	18,976,616
1890	"	.....	16,763,353
1889	"	.....	14,013,913
1888	"	.....	12,479,550
1887	"	.....	11,365,795
1886	"	.....	10,221,255

The following table shows the principal changes in production and values for the calendar year 1897, as compared with the figures given in the revised summary for 1896 :

PRODUCT.	Quantity.		Value.	
	Increase. p.c.	Decrease. p.c.	Increase. p.c.	Decrease. p.c.
<b>Metallic—</b>				
Copper .....	41.6	.....	46.9	.....
Gold.....	.....	.....	122.6	.....
Iron ore.....	.....	22.3	.....	6.7
Lead .....	61.2	.....	93.7	.....
Nickel.....	17.7	.....	17.7	.....
Silver .....	73.4	.....	54.6	.....
<b>Non-Metallic—</b>				
Asbestos and asbestic ....	106.2	.....	.....	24.5
Coal.....	3.5	.....	0.8	.....
Gypsum .....	15.8	.....	37.3	.....
Natural gas.....	.....	.....	17.9	.....
Petroleum .....	.....	2.3	.....	12.5
Cement .....	37.6	.....	36.5	.....

The increase in the items silver and lead is practically all to be credited to British Columbia, to which province is also largely due the increase in the production of copper. The largest increase in this latter metal is, however, due to the increased shipments of nickel-copper mattes from the Sudbury mines in Ontario. The third copper producing province, Quebec, also contributed a fair amount to the increase shown. The silver, copper and lead increases as far as British Columbia is concerned, represent the largely extended activities in the South Kootenay districts of Slocan, Nelson and Trail Creek.

The most significant item, however, is to be found in the increase of nearly 123 per cent. in the gold. All the gold producing districts of the Dominion show gratifying increases, although by far the largest part is due to the discoveries of rich placer mines in the Yukon country, and to the increased output of Trail Creek and other districts in British Columbia. The former increase amounted to about 2¼ millions and the latter to nearly \$1,000,000.

The remaining metal of importance is nickel, which is seen to have shown an increase of nearly 18 per cent. As in the past this is all from the Sudbury district.

Thus the aggregate result of the increases in the metallic productions is nearly \$6,000,000, or a proportion of about 7.4 per cent.

An interesting result of the mining developments and discovery of 1897 is shown in the increase in the proportion of the value of the total mineral production to be credited to the metals. In 1896 these constituted about 36 per cent., whilst in 1897 this proportion was increased to nearly 49 per cent.

Turning to the non-metallic products, we find that as far as the data at present available permit of a conclusion being arrived at, the total value shows under 2 per cent. of an increase over that of the previous year. The only considerable change to be noted is that given under the heading asbestos, where the quantity has more than doubled, whilst the value has fallen off almost 25 per cent. This is due to the fact that the output of the new by-product, asbestic, is included. This constitutes over half the weight of the whole, but being a low-priced article brings down the price per unit very much. The returns, however, show also a falling off in the prices of the usual grades of the mineral apart from the above influence.

In the important mineral coal the variation is but little. The falling off in the production of the higher priced mineral of British Columbia and the increase in that of Nova Scotia at a lower price causing a fall in the total value. In gypsum the increase in the value is larger than that shown in the quantity. This is due to the larger proportion of the higher priced product, plaster of Paris, included in the returns for 1897. The lower average price ruling during that year for petroleum caused the decrease in the value of this article to be much greater than in the quantity.

The following table gives the proportional values of the different minerals in the grand total. It is interesting to note the changes in their relative position in 1897, as compared with 1896 :