





## MINES OF

duction of Canada for 1950 compared by the department with the production of the United States. The report which is being distributed to the provinces, shows a total value of \$1,000,000,000. This is arrived at on the basis of the following figures:

Antimony ore .....	
Copper .....	
Gold, Yukon .....	
Gold, all other .....	
Iron ore, exports .....	
Pig iron from Canadian .....	
Lead .....	
Nickel .....	
Silver .....	
Cobalt, zinc, etc., products .....	
Total, metallic .....	
Non-Metallic .....	
Arsenic .....	
Asbestos .....	
Asbestic .....	
Chromite .....	

Coal .....  
 Pet .....  
 Corundum .....  
 Feldspar .....  
 Graphite .....  
 Grindstones .....  
 Gypsum .....  
 Limestone for flux in iron f .....  
 Mica .....  
 Mineral pigments—Barytes .....  
 Mineral pigments—Ochres .....

Mineral water .....	.....
Natural gas .....	.....
Petroleum .....	.....
Phosphate .....	.....
Pyrites .....	.....
Salt .....	.....
Talc .....	.....
Tripolite .....	.....
Total .....	.....
Structural Materials and	
Cement, natural .....	.....
Cement, Portland .....	.....

Flagstones .....	
Sands and gravels, exports .....	
Sewer pipe .....	
Slate, squares .....	
Building materials, in bricks, building stone, etc.	
<b>Total structural materials</b> .....	
<b>Total other non-metallic</b> .....	
<b>Total metallic</b> .....	

Estimated value mineral products not returned .....

Total, 1907 .....

In arriving at these conclusions, the following information is given: The metals, copper, lead, zinc, silver, and gold, are, for statistical purposes, valued at the final average value of the year in which they were mined in New York. Pig iron is valued at the price of the furnace, and non-metallic minerals are valued at the mine or point of shipment. The contents of ore, matte, etc., at the time of shipment are: pound; lead contents of ore, 5.35 cents per lb.; nickel contents of ore, 5.35 cents per lb.; matte shipped at 45 cents per lb. of contents or ore, etc., at the time of shipment.

The total production of p  
ada in 1907 was 651,962 sho  
at \$9,125,226, of which it i  
about 107,599 tons, valued at  
be attributed to Canadian or  
ance to ore imported.

The following is given as  
duction since 1886:

1886	.....
1887	.....
1888	.....
1889	.....
1890	.....
1891	.....
1892	.....
1893	.....
1894	.....
1895	.....

1895 .....  
1896 .....  
1897 .....  
1898 .....  
1899 .....  
1900 .....  
1901 .....  
1902 .....  
1903 .....  
1904 .....  
1905 .....

The report says: The year 1907 and even well along in 1907 of the year, was a period of activity in all branches and the mining industry and other commercial undertakings. The results of increasing production outlook was for a mineral

prosperity brought about a  
recession, since within a few  
close of the year, a rapid  
place. Whereas, before the  
companies were unable to take  
business offering, work was  
that labor became scarce and  
the demand for commodities  
in the case of metals, prices  
had before reached a

...the reverse condition  
...; railway cars became  
of freight, laboring men we  
cept reductions in pay and  
and the price of metals fell  
unfortunately, however, for us  
financial stringency has not  
ous results as with our frie  
border and although some  
industries found it necessary

...assumed, and the great mass of the population continues to enjoy a steady progress. Fortunately, no change of condition occurred in the year to seriously affect the increase in mineral output. In 1907 we are enabled to record a decrease of over 9 per cent in the production of 1907 as compared with 1906.

The total value of the output according to the methods adopted in this branch since its inception, in 1883, 477, the largest output the mining industry has yet attained. As might be expected, however, production are not shown throughout all the mining industries some decreases recorded differences in gold and silver

...balance as in gold and lead,  
...ber of products of lesser  
...balance, such as corundum,  
...phite, etc., but these are m  
...terbalanced by the large i  
...iron, silver, asbestos, coal  
...petroleum and Portland ce



A preliminary estimate of the production of Canada for 1907 has been prepared by the department of Mines at Ottawa. The report which is subject to revision, shows a total value of \$36,183,477. This is arrived at on the following returns:

Product—Metallic	Value
Aluminum and alloys	\$ 65,000

Antimony ore		11,478,944
Copper		35,222,000
Gold, Yukon		3,150,000,000
Gold, all other		5,144,756,000
Iron ore, exports		1,983,307
Iron ore from Canadian ore		2,532,536,000
Lead		9,535,407
Nickel		8,259,222
Silver		200,000
Cobalt, zinc, etc., products		200,000
Total, metallic		\$42,434,000
	Non-Metallic	
Arsenic		36,280
Asbestos		2,462,994
Asbestic		22,069
Chromite		72,901
Coal		24,550,320
		200
Corundum		177,922
Feldspar		29,909
Graphite		1,000
Limestones		46,576
Gypsum		642,470
Limestone for flux in iron furnaces		298,001
Mica		333,333
		4,600

Mineral pigments	35,570
Mineral pigments—Ochres	110,524
Natural gas	794,851
Petroleum	1,657,088
Phosphate	139,363
Pyrites	128,963
Salt	292,215
Talc	4,692
Tripolite	229
<b>Total</b>	<b>\$31,217,000</b>
Structural Materials and Clay Products	
Cement, natural	4,043
Cement, portland	2,347,528
Flagstones	2,500
Sands and gravels, various	119,867
Sewer pipe	1,211
Slate, various	20,066
Building materials, including bricks, building stone, etc.	7,500,000
<b>Total structural materials, etc.</b>	<b>\$12,232,300</b>
Total other non-metallics	81,277,960
<b>Total value of these metallic products at the mine or point of shipment. Copper contents of ore, matte, etc., at 20.000 cents per pound; lead contents of ore, matte, etc., at 5.235 cents per lb.; nickel contents of matte shipped at 100 cents per lb.; silver contents of matte shipped at 65.327 cents per lb.</b>	<b>\$66,158,477</b>

1987	\$10,221,266	
1988	10,321,321	
1989	12,518,894	
1990	14,012,338	
1991	16,765,353	
1992	18,976,611	(thous.)
1993	16,622,415	
1994	20,921,153	
1995	20,821,559	
1996	20,506,597	
1997	22,474,256	
1998	28,486,023	
1999	28,412,431	

1899	49,525
1900	64,420,983
1901	68,804,611
1902	68,281,634
1903	61,740,513
1904	60,073,397
1905	59,525,170
1906	79,057,308
1907	86,168,477

The report says: The early months of 1907 and even well along past the middle of the year, was a period specially marked

by great activity in all branches of commerce and the mining industry shared with other commercial undertakings the beneficial results of increasing prosperity. The outlook was for a mineral product far beyond all prosperity records. But excessive prosperity brought about its own depression, since within a few months of the close of the year, a rapid change took

place. Whereas, before the transportation companies were unable to take care of the business offering, work was so plentiful that labor became scarce and high in price the demand for commodities so great that in the case of metals, prices rose to figures seldom before reached; in one short month exactly the reverse conditions were in evidence; railway cars became idle for want of freight, laboring men were glad to accept reductions in pay and keep their jobs and the price of metals fell rapidly. Fortunately, however, for us in Canada, the financial stringency has not had such serious results as with our friends across the

border and although some of our mineral industries found it necessary to cease operations, some of those have already resumed, and the great mass of the mining industry continues to enjoy a conservative and steady progress. Fortunately, also, this change of condition occurred too late in the year to seriously affect the expected increase in mineral output. Thus it is that we are enabled to record a substantial increase of output for the year, the mineral production of 1907 as compared with 1906. The total value of the output, valued according to the methods adopted in this branch since its inception was about \$68,000,000.

As might be expected, however, increases in production are not shown uniformly throughout all the mining industries. There are some decreases recorded, such, for instance as in gold and lead, and in a number of products of lesser relative importance, such as corundum, feldspar, graphite, etc, but these are more than counterbalanced by the large increases in pig iron, silver, asbestos, coal, natural gas, petroleum and Portland cement.

It will be observed that a slight increase is shown in the copper output, a decrease in British Columbia being more than offset by an increase in the copper contents of the output. The output of nickel has suffered a considerable decrease in gold production, more than offset by a decrease in the nickel content of the output. The output of silver has increased 28 per cent, practically represents a doubling off in every district, with the possible exception of the Yukon. The output of zinc in pig from production a substantial increase is indicated. New furnaces were started in operation in Hamilton and Port Arthur, the output of which has increased 100 per cent, to about 13 per cent. Nickel shows but little change. The output of silver was over 50 per cent greater than in 1906 and this despite a falling off in British Columbia. The output of lead is due to the shipments from the Cobalt district.

Amongst the non-metallic products as a whole there shows a substantial progress, and an increase in the prices of the principal commodities. Higher prices. Coal mining also shows a steady growth in all fields with higher prices. Natural gas and petroleum products show a substantial increase in output and prices, particularly gratifying as indicating that these fields in Ontario have not yet reached the exhaustion point. Portland cement, with its incomplete returns shows an increase in output and prices.

1906-Products		
Coal	.....	24.93
Gold	.....	15.70
Copper	.....	13.48
Nickel	.....	11.00
Crude, stone and lime	.....	11.00
Silver	.....	7.15
Cement	.....	3.93
Lead	.....	3.86
Asbestos	.....	2.48
Pig iron, from Canadian ore	.....	2.16
Petroleum	.....	.95
Bureau	.....	.74
1907-Products		
Coal	.....	28.498
Copper	.....	13.818
Nickel	.....	11.064

The price of refined silver varied considerably during the year. The average monthly price reached its highest in February at 68.35 cents per ounce, falling slightly in April and May, and increasing to over 68 cents again in July and August, then falling rapidly during the balance of the year to an average of 54.565 cents in December. The average of the year was

There was a slightly smaller output of silver in British Columbia in 1968, a fallings off of nearly 300,000 ounces.

It may be noted that there was a larger amount of silver in ore, entered for export, than the records of production show, the excess being over 2,000,000 ounces. The exports of the 12 months according to the customs returns were 14,812,735 ounces, valued at \$9,941,849, an average value of \$7.11 per ounce.

**Copper**—The aggregate production of copper for 1967 was about 57,381,746 pounds, an increase of 3 per cent over 1966.

As with the metals, silver and copper prices have advanced in 1966. With the start of the mining season during the year, in New York for the first five months of the year, the price held steadily at 6 cents per pound, then steadily advanced to 6 1/2 cents per pound. The average for the first five months was 6 1/4 cents, and the average for the first six months was 6 1/2 cents, as compared with 5.63 cents in 1965.

On the London market, the highest quote for the year was £22 2s. 6d. and the lowest £13 per long ton, a difference between the highest and lowest of over £9 per long ton.

Nickel—With the exception of the nickel-sulfate produced by Inco from the Cobalt district, the production of nickel in Canada is derived from the well known nickel-copper deposits of the Sudbury district. The production of nickel in 1965 was 10,000 metric tons, or 100,000,000 lb. In the last five years, although the actual amount of nickel contained in matte shipped in 1967 is somewhat less than in 1966, the two companies are carrying a stockpile of 100,000,000 lb. of nickel.

The two companies are carrying a stockpile of 100,000,000 lb. of nickel. The Canadian Copper Company at the Canadian Copper Company at Copper Cliff. The ore is first roasted and then smelted to a concentrate of 25% nickel and 10% copper. The concentrate of the combined metals, copper and nickel, is then refined to 99.99% pure nickel, which is shipped to the United States and Great Britain for refining.

**MENT**

Phoenix, March 14.—The comfortable sum of about \$200,000 represents what the Granby Consolidated company is spending this year in improvements and enlargements at the company's smelting works near Grand Forks, including the new ore and coke bunkers just completed and the machinery and structural steel for the enlargement of the smelter proper.

A. B. W. Hodges, the local manager of the company furnished the following details of the orders placed a few days ago

To make room for the enlarged converter plant the steel converter building will be lengthened 30 feet. The new converters will be electrically operated—the first of this type in the Boundary—and will be operated by 35 horse power electric motors.

In the blower building the engine capacity will be doubled. At present the engines have 500 horse power capacity and a new engine of 500 horse power capacity has been ordered, with a 500 horse power motor to drive it. It will be a double cylinder.

ty engine to haul the feed cars from the  
coke and ore bins. Four of these trolley  
engines, each of 30 horse power, are now on  
their way to Grand Forks from the makers  
in the east.

All of the above machinery has been con-  
tracted for with the explicit provision that  
it is for delivery on or before July 1. As  
soon as it arrives the work of installation will  
be at once started, one furnace being  
changed over and enlarged at a time. This  
will slightly cut down the smelting capacity  
for a short time, but when one or two fur-  
naces are enlarged, the increase in size  
will make up for other furnaces being out

MEASURES AFFECTING THIS CITY  
THAT PASSED

Dr. Hall, M.P.P., has returned from his duties at the provincial capital and was busy yesterday talking over the event

"I think my \$85,000 debenture bill in shape it finally passed will give the needed relief sought here and I believe that the debentures, when issued, will find a ready sale.

"When the act to amend the liquor license act came up I moved an amendment that in unorganized districts where the issue of licenses is left wholly in the hands of the superintendent of provincial police at Victoria, there should be an appeal to the county judge, but the amendment was voted down. I am strongly of the opinion that such an appeal as I asked for should be

"I brought in a bill amending the municipal clauses act by which city councils, such as Nelson, could dispose of old electric light plant, water rights, water privileges, etc. There were several other bills to amend the municipal clauses act and by consent they were consolidated and those approved, including the measure I introduced, were included in the new act that passed."

Referring to the new clause in the municipal elections act, regarding qualification of electors, Dr. Hall pointed out that the word "male" in the original bill had been stricken out and the clause now reads as follows: "Any male or female, being a British subject of the full age of 21 years, who

**TWO MONTHS' PROFITS**  
**GOOD SHOWING OF SEVERAL**  
**MINES IN TWO MONTHS OF YEAR**  
**NINETY-THREE PROPERTIES EARN**  
**NEARLY \$7,000,000 DIVIDENDS**  
Certainly the prevailing low prices of silver, copper, lead and zinc, and the

dividends to date the enormous sum of \$253,174.208 on an issued capitalization of \$302,041,850, showing a return of nearly 84 per cent. It should be stated that this record does not include the profits divided by the Amalgamated Copper Range Consolidated and one other mines securities holding corporation, which for the two months, this year amounted to \$1,233,220, making a total to date \$64,819,880 on the outstanding share-capital of \$194,266,000, a return of about 33 per cent in less than 10 years. In addition, there has been

to the shareholders last November. During the past 20 years the Boston & Montana Gold Mining Co. has paid dividends of \$475,000, which is more than 15 times the capitalization of \$3,750,000. The Arizona Copper Co. owned largely by Great Britain, paid dividends of \$647,180 on a capitalization of \$3,750,000. The total \$11,689,354 on the \$3,775,000 capitalization. United Verde, ex-senator Clark's mine in Arizona, paid a dividend in January of \$225,000, making this the highest dividend the \$2,000,000 322, which is over eight times the capitalization of \$3,000,000.

Twenty-one gold, silver and lead mines declared dividends of \$1,522,766 on a capitalization of \$3,750,000. This makes the total up to date \$61,148,950 on the issued share-capital of \$7,607,200, showing a return of nearly 79 per cent. Paid by the shareholders have been made by the smaller low-grade mines which have been compelled to adopt the most economical mining and ore treatment processes. The great Alaska Treadwell gold mine, which has been only recently started, from ore as mined is still able to pay large dividends on its \$5,000,000 capitalization; so far this year the de-

Grand total to date \$36,366,000 of which \$3,000,000 capitalization. The Homestake gold mine in the Black Hills, S. D., is paying a monthly dividend of 10 cents per share (\$103,200) and has declared to date \$16,298,750 (the present value of the mine) as capitalization being \$21,840,000. Recent developments in the economic treatment of the slimes at the Homestake suggests a new lease of life for the mine as a dividend payer. The Camp Bird gold mine in Colorado, partly owned in Great Britain, continues to pay good dividends so far this year the amount is \$196,800, making the total to date \$4,018,104, the outstanding capitalization of \$4,100,000.

The escape route of fire prevention and escape is needed in every town and city in the continent; in no other way will the appalling annual waste of life and property be lessened.

The strictest supervision should be placed upon schools and all similar buildings where a number of persons are crowded together. At present, the prevailing idea seems to be that when school children have been trained in fire-drill, that is sufficient. If the Cleve-

The Ontario minister of education has issued a circular insisting upon the equipment of schools with fire escapes and the provision of adequate exits which must open outwards. School inspectors have been instructed that it will form part of their duty to see that these regulations are observed. This action is the immediate result of a report received by him with regard to the McKeough school, Chatham. Although

"As fires in schools," he said, "usually occur in weather such as that fire escapes are likely to be slippery and the children would be liable to fall and get injured, fire escapes are of very little use. It is well known that sidewalks may be cleared off in the morning and be quite slippery by noon, so it may be imagined what difficulty there would be in trying to keep fire escapes or galleries safe. Of course, fire escapes are of use on other buildings, where there are adults, who are better able to climb around. But their usefulness is

hundred the girls, mostly under seven and eight years of age, are daily in jeopardy. The school occupies the third floor of a four-story building, the ground floor of which is used as a hardware and fuel alcohol store. The only egress from the class-room is by a tortuous stairway leading through a narrow hallway to the single front door, common to all the upper part of the building. The door opens inward, the stairs being just wide enough to permit it to do so. In the event of a rush, it would be impossible to hold it open; but

The Montreal Society for the Protection of Women and Children has taken up the fight for better protection of the schools of Montreal against fire, and adopted resolutions provided for petitioning the provincial legislature for the passage of laws compelling the authorities to properly equip all school buildings with outside fire escapes.

From all parts of the country come reports telling of investigations and action by municipal authorities of the kind in these schools. St. Catharines, Ont., is already preparing a bylaw to enforce the placing of fire escapes upon all public buildings. Other municipal

of the Black Tail and White Tail on Boudary creek, the first by M. E. Shea and the last by W. J. White. Certificates of work have been issued on the Emerald, Emerald fraction, Standard fraction and Gold Standard to J. Waldbeser for the recorded owners; to Mrs. Agnes Baxter on the Amethyst for the recorded owner; to M. Egan on the Rio Tinto; to J. Desirau on the Cloudy Day and the Rainy Day for the recorded owners. Transfer has been made of the Viceroy, situated one mile east of Nelson.

end expenditure \$7,591,875. The cash on hand from last years of \$1,567,484, gives a total of \$9,590,856 to meet the year's outlay.

### KAMLOOPS LIBERALS

The annual meeting of the Kamloops district liberal association was held last week. The election of officers resulted as follows: Hon. presidents, senator Bostock and Wade, J. Hoygood, W. Hargraves, jr., J. Duncan Ross, M.P.; president, J. M. Harper; 1st vice-president, T. C. Costley; 2nd vice-president J. H. Wilson; treasurer, E. Rushton; secretary, J. D. Swanson; executive

## COPPER RISES

have been definitely but delivery was not be taken until after the plant is in operation. Furthermore the C.P.R. is planning extensive improvements in the roadbed and gradients of its feeders to the Mother Lode mine.

Locally, in Nelson it is stated by machinery men and by business firms generally that business since the beginning of the year, especially during February, is much brighter and better than it was during the same period of 1907. More orders are coming in for machinery and supplies from all quarters. It is therefore to be confidently anticipated that the season of 1908, despite the untoward circumstances which ushered

Other mines .....		4
Total .....	24,440	194.5
<b>ROSSLAND SHIPMENTS</b>		
Centre Star .....	2,732	35.1
Le Roi .....	1,306	16.8
Le Roi No. 2 .....	603	6.9
Evening Star .....	33	9

Slocan Star .....	33
Other mines .....	10.9
Total .....	1,822 26.5
The total shipments for the past week were 30,736 and for the year to date 239,111 tons.	
<b>GRANBY SMELTER RECEIPTS</b>	
Grand Forks, B.C.	
Granby .....	24,460 154.0
<b>CONSOLIDATED CO.'S RECEIPTS</b>	

Northport, Wash.		
Le Roi .....	1,306	16.00
First Thought .....	113	1.12
Queen .....	25	1.12
Other mines .....	30	1.12
Total .....	1,444	17.94

The total receipts at the various smelters for the past week were 30,540 tons and for the year to date 273,662 tons.

**USEFUL HINTS**

For poisoned skin use a teaspoonful of sugar of lead to one quart of rain water. The leaves of bruised nightshade covered with thick cream is another infallible remedy.

A simple rule for soda bread is just half as much buttermilk as you have flour.

Borax sprinkled about your flowerbeds will save them from red ants. Use tomatoes for billiousness, carrots for indigestion.

To prevent labels from falling off of wood, tin or glass, add one teaspoon

For a dog poisoned with green paint, hold nose and drench with a quart of new sweet milk. Ten minutes later give same quantity of lime water, to produce vomiting. The animal thus experimented on was getting stiff and remained ill for two succeeding days, but finally recovered.



