



THE TOWN OF TIMMINS, LOOKING FROM THE EAST. HOLLINGFER AND OTHER MINE BUILDINGS MAY BE SEEN IN THE BACKGROUND.

ONTARIO

Geological and Mineral Notes

The Province of Ontario has an estimated area of 407,262 square miles. This area is three and a third times that of the British Isles, and over one and a half times that of Texas, the largest of the United States.

In the accompanying geological sketch map, the formations are broadly classified as follows:

1. Paleozoic (young) rocks, including limestones, shales and sandstones.
2. Pre-Cambrian (old) rocks, including granites, volcanic rocks, quartzites and other sediments.

The Paleozoic rocks, representing 30 per cent. of the area of the province, are divided into two sections of about equal extent, one occupying a large part of the southern Ontario and the other fronting James and Hudson Bays.

Pre-Cambrian formations are pre-eminently the metal-bearing rocks of America. In these rocks occur the phenomenally rich silver mines of Cobalt, the far famed nickel-copper deposits of Sudbury, the iron ore of Helen, Magpie and Moose Mountain mines, and the gold of Porcupine and Kirkland Lake.

The mineral resources of Ontario cover practically the entire list of metallics and non-metallics, with the exception of coal. Non-metallic products from the Paleozoic rocks include petroleum, natural gas, salt gypsum, lime, shale, for brick and lime manufacture, building stone, etc. Products from the Pre-Cambrian rocks are gold, silver, nickel, copper, iron, arsenic, corundum, feldspar, mica, graphite, talc, iron pyrites, etc.

The rapid growth of Ontario's mineral industry during the last two decades is shown by the following figures:

| Year | Value |
|------|--------------|
| 1893 | \$ 6,120,753 |
| 1903 | 12,870,593 |
| 1913 | 53,232,311 |

Ontario's mining laws are liberal. A miner's license costs \$5 per annum and entitles the holder to stake out three claims a year in each mining division. The Bureau of Mines issues annual reports dealing with the geology and mineral industry of Ontario.

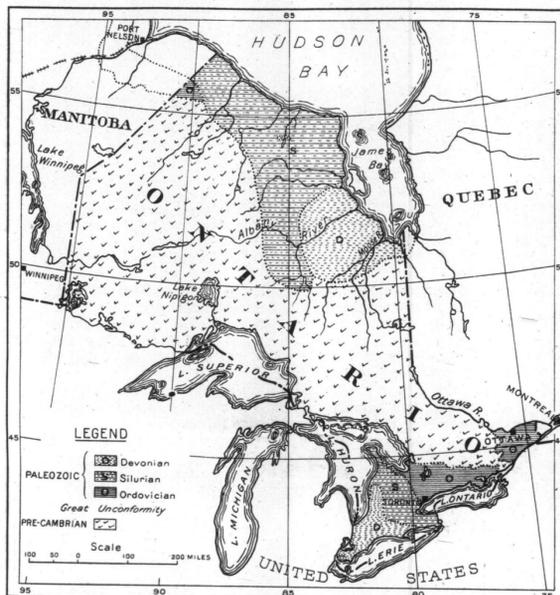
For list of publications, maps, reports and mining laws, apply to:

HON. G. H. FERGUSON,
Minister of Lands, Forests and Mines,
TORONTO



PROVINCE OF ONTARIO
DEPARTMENT OF LANDS, FORESTS AND MINES
BUREAU OF MINES

Hon. G. H. Ferguson, Minister. Thos. W. Gibson, Deputy Minister.
Willet G. Miller, Provincial Geologist.



GEOLOGICAL SKETCH MAP

—OF—

ONTARIO

Showing Distribution of Pre-Cambrian and Paleozoic Rocks

ONTARIO

Mineral Statistics

SUDBURY

The Sudbury Region is the world's greatest producer of nickel, and an important producer of copper. Production is rapidly growing, and millions of tons of ore have been proved to exist, the presence of which was not known five years ago, although mining has been carried on in the camp for more than a quarter of a century.

SMELTER PRODUCTION OF NICKEL-COPPER ORES

| YEAR | ORE MINED | ORE SMELTED INTO MATTE | | VALUE Matte Shipped |
|------|-----------|------------------------|----------------|---------------------|
| | | Nickel Content | Copper Content | |
| | Tons. | Tons. | Tons. | |
| 1889 | 44,990 | 432 | 733 | |
| 1894 | 103,223 | 2454 | 2,604 | 766,422 |
| 1899 | 159,957 | 2,872 | 2,834 | 702,341 |
| 1904 | 203,338 | 5,274 | 2,455 | 2,193,198 |
| 1909 | 451,892 | 13,141 | 7,873 | 1,913,012 |
| 1914 | 1,000,364 | 22,759 | 14,448 | 7,189,031 |

Total value of copper produced in Ontario to the end of 1914—\$21,161,355.

Total value of nickel cobalt produced in Ontario to the end of 1914—\$51,400,370.

The Cobalt camp, discovered in 1903, has been a steady producer of silver.

Silver production by five year periods is as follows:

| | |
|------|------------|
| 1904 | \$ 11,877 |
| 1909 | 12,461,576 |
| 1914 | 12,765,461 |

The zenith of production was reached in 1912, when the value was \$17,408,935; while the total production to the end of 1914 has a valuation of \$111,050,557.

PORCUPINE AND KIRKLAND LAKE

The mines at Porcupine and Kirkland Lake lead in gold, as do the Sudbury mines in nickel and copper, and the Cobalt mines in silver.

Gold production in Ontario for the last five years is as follows:

| | |
|------|-----------|
| 1910 | \$ 68,498 |
| 1911 | 42,637 |
| 1912 | 2,114,086 |
| 1913 | 4,558,518 |
| 1914 | 5,529,767 |

The total production of gold in Ontario since the beginning of mining operations to the end of 1914 amounts to \$14,822,998.



PANORAMIC VIEW, LOOKING SOUTH ACROSS PEARL LAKE, OF SEVERAL PORCUPINE MINES.

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