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DOMINION BUREAU OF STATISTICS - CANADA
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MISCELLANEOUS METALS, 1930.

Finally revised statistics on the production of antimony, beryllium, bismuth, cadmium, chromite, manganese, iron ore, mercury, molybdenum, radium, tin and tungsten in Canada during 1930, as reported by the Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics at Ottawa, are as follows:-

Antimony.- Antimony bearing minerals occur in the provinces of Nova Scotia, New Brunswick, Ontario, and British Columbia, also in the Yukon Territory. There was no production of antimony ore in Canada in 1930. Auriferous antimony ore has been mined in Nova Scotia and during 1930 the Lake George Mines Ltd., carried out considerable underground development in their antimony mine in York county, N.B.

Imports into Canada of antimony in 1930 amounted to 1,303,560 pounds valued at $87,027; additional imports consisted of 21,146 pounds of antimony salts valued at $3,691.

Beryllium.- Considerable research has been carried out on the utilization of beryllium in alloys and as a deoxidizing agent in the production of copper of high electric conductivity. The principal ore is beryl; this mineral occurs in several localities in Canada and shipments for experimental purposes have been made from the Oiseau River area in Manitoba and from Renfrew county, Ontario.

Bismuth.- No metallic bismuth was produced in Canada during 1930. In Ontario the Deloro Smelting and Refining Co. exported a silver-lead-bismuth bullion for refining in the United States. Bismuth contained in bullion produced and exported during 1930 amounted to 12,732 pounds valued at $6,366. In 1929 the bismuth production of 194,329 pounds was valued at $307,114.

Imports of metallic bismuth into Canada during 1930 amounted to 2,273 pounds valued at $2,330 together with bismuth salts valued at $43,206.

Cadmium.- Cadmium produced as a by-product in the production of refined zinc at the Trail refinery of the Consolidated Mining and Smelting Company was valued at $304,175 as against $675,294 in 1929. Considerable quantities of this metal are employed in the electro-plating and pigment industries. Favourable results have recently been obtained in Great Britain in tests on cadmium-copper bearing metals.

Chromium.- Two tons of chromite were shipped to American smelters from a new prospect situated in the Thunder Bay district of Ontario. This shipment was for experimental purposes. Chromite deposits also occur in both British Columbia and Quebec and for several years the latter province was a steady shipper of chromite ore and concentrates.

Iron Ore.- No hematite, magnetite, or other iron ores employed in the making of pig iron or steel were mined in Canada in 1930.

Titaniferous iron ore or ilmenite production amounted to 412 tons valued at $1,239 as against 2,748 tons valued at $7,359 in 1929. This ore was exported to the United States titanium consumers.

Shipments of hematite iron ore from the Wabana mines in Newfoundland, while not included in the mineral production of Canada, are of interest in the Dominion owing to the consumption of these ores by the Nova Scotia iron smelters. Shipments of ore during 1930 averaged 51.5 per cent iron and totalled 1,319,316 tons valued at $3,200,569. Of this amount 523,918 tons valued at $1,262,642 were shipped to Canada; 54,623 tons to the United States and 740,774 tons to Germany.

Lithium.- Lithium bearing minerals occur in the Lac du Bonnet area of Southeast Manitoba. Shipments have been made from these deposits for experimental purposes. Lithium minerals are used both in their natural stated and as sources of salts and compounds. An American alloy of extreme lightness, fair permanence, and considerable hardness was recently produced, this alloy contains both lithium and beryllium, the latter metal protecting the lithium from oxidation by moisture or heat.

Manganese.- Shipments of manganese ore were made to Canadian metallurgical plants from a deposit near Turtle Creek station, Albert county, New Brunswick; a test shipment of manganese ore was also made from a mine in Lunenburg county, Nova Scotia, and in British Columbia a small tonnage of ore was mined on Birch Island for experimental purposes.

The total production of manganese ore in Canada during 1930 amounted to 273 tons valued at $1,356. Imports of manganese oxide amounted to 98,777 tons valued at $992,485 as against 99,139 tons worth $990,606 in 1929.

Mercury.- No mercury was produced in Canada during 1930; samples assaying 3 per cent mercury have been obtained from a cinnabar occurrence in the Bridge River area, British Columbia, and considerable exploratory work has been done in the same province on a mercury property on Barkley Sound. There is little or no mercury produced in the British Empire, most of the world's supply coming from mines in Spain and Italy.

Molybdenum.- Molybdenite occurs in several localities in Canada. Properties have been worked in eastern Ontario and northwestern Quebec. In British Columbia the mineral is found associated with granites and other acid rocks in the Omineca and New Westminster mining divisions. Deposits in Quebec produced 16,150 pounds of molybdenite in 1929. There was no Canadian production of this mineral in 1930.

Radium.- Exploratory work was done during 1930 on radium bearing ores in Cardiff township, Ontario, and at Great Bear Lake, Northwest Territories. Small shipments have been made from these deposits for experimental purposes. The ore in the Ontario occurrence is uraninite, the richest ores of radium known and is the mineral which has provided most of the world's supply of radium. Czechoslovakia and the Belgian Congo are probably the world's greatest producers of radium bearing ores at the present time.

Tin.- Tin is not produced in commercial quantities in Canada, the metal is known to occur in the Sullivan and Snowflake mines in British Columbia and staniferous pegmatites in southeastern Manitoba have been investigated as to their economic importance.

Tungsten.- Tungsten minerals occur in several places in Canada; scheelite has been mined in Nova Scotia and in 1930 prospecting was carried on at the Romilly tungsten mine in Halifax county. No Canadian tungsten production was reported during the year. China is, at present, the world's greatest producer of tungsten; larger quantities of this metal are being employed in the manufacture of tungsten carbide alloys.
