

recovery and rearmament requirements stimulated the production of the metal in 1936 and 1937.

Quebec.—Until 1894, when Ontario took the lead, Quebec was the chief copper-producing province of Canada, the principal mines being the Eustis and Huntingdon properties in the Eastern Townships. There is still an annual production from this field. Developments in the Rouyn Camp of northwestern Quebec have resulted in a greatly increased production of copper since 1927. Since 1931 the Canadian Copper Refiners Ltd., have treated blister copper in their electrolytic refinery located at Montreal East. This material comes from the Noranda smelter in Quebec and the Flin Flon smelter in Manitoba. Gold, silver, selenium, and tellurium are also products of the Montreal refinery.

Ontario.—The Sudbury deposits were first noted in 1856, but did not attract attention until 1883-84, when, during the construction of the C.P.R., a railway cutting was made through the small hill on which the Murray mine was afterwards located. During the first years the deposits were developed for their copper content alone; not until 1887 was the presence of nickel determined and the true value of the ores known. These nickel-copper ores of the Sudbury area are now the source of nearly all the copper produced in Ontario. Under the International Nickel Co. of Canada, an amalgamation of the former International Nickel Co. and the Mond Nickel Co., an extensive program of expansion in the mining and metallurgical facilities of the district has been carried out. A subsidiary company, the Ontario Refining Co., Ltd., operates a copper refinery at Copper Cliff where electrolytically refined copper, precious metals, selenium, and tellurium are produced from the blister copper smelted by the International Nickel Co., chiefly from ores from their own mines in the district. The Company also operates the Acton precious metals refinery situated near London, England, where it recovers, in a refined state, the gold, silver, and platinum metals contained in the concentrates produced at both the Swansea and Port Colborne nickel refineries. The Falconbridge Nickel Mines, operating a mine in Falconbridge township, make a copper-nickel matte which is shipped to Norway for refining. Adverse industrial conditions led to reductions in the copper production of Ontario in 1931 and 1932. There has been, however, a remarkable recovery in production since then.

Manitoba and Saskatchewan.—During the four years 1917-20, when high prices prevailed for copper, ores containing 9,866,328 lb. of copper were shipped by the Mandy mine. Much development has been carried on in the Flinflon district on the Manitoba-Saskatchewan boundary since the War, and large bodies of ore have been proven on the Flinflon property of the Hudson Bay Mining and Smelting Co. and the Sherritt-Gordon property. About 135 miles of branch line from the Hudson Bay railway provide these properties with transportation facilities. A copper smelter and electrolytic zinc plant are operated by the Hudson Bay Mining and Smelting Co. at Flinflon, while a large hydraulic development on the Churchill river provides the necessary power. Production from the plants of this Company has been continuous since 1930.

British Columbia.—Until 1930, British Columbia had been the leading copper producer among the provinces for many years, but it then gave first place to Ontario and since 1930 production has greatly declined, owing principally to the cessation in August, 1935, of mining and smelting operations at Anyox, as a result of the low price of copper and exhaustion of ore reserves. In 1937, the Granby Company resumed operations at its Copper Mountain mine, and an increase in British Columbia copper output resulted.