

work in the Mattagami and Chibougamau areas of Quebec. In the Quebec-Labrador area Canadian and American interests were involved—to the extent of over \$700,000,000—in what will, in a decade or so, become the country's largest iron mining area. In Saskatchewan some 25 companies held land for development of rich potash deposits extending across the central part of the province; one mine was in production by the end of 1957.

While the short-term prospects for some minerals were still somewhat clouded at the end of 1958, most mining executives believed that the worst of the downturn was over; that whatever the next few years might bring, the long-range outlook remained as promising as ever; that a world bent on a high standard of living, industrial expansion and the conquest of outer space would, in the years ahead, require unprecedented quantities of metals, industrial minerals and fuels.

### Subsection 1.—Metals\*

In contrast with the spectacular gains of previous years, the value of Canada's metallic mineral production in 1957 levelled off at \$1,159,579,226 and in 1958 fell to an estimated \$1,142,140,007. The main cause of the decline was the drop in demand and market prices for base metals.

**Nickel.**—In 1957 there was an increase in the world supply of nickel, a rise in stocks held by both producers and consumers. Defence demands were reduced and the era of premium nickel prices came to an end. As a result, several companies abandoned development plans and by March 1958 The International Nickel Company of Canada Limited, the country's leading producer, had announced its first production cutback. Total 1957 production rose to 187,958 tons valued at \$258,977,309 compared with 178,515 tons at \$222,204,860 in the previous year. However, 1958 brought a marked decline in both volume and value, production for the year reaching 139,041 tons at \$196,733,985.

Ninety-five per cent of Canada's nickel production came from the Sudbury area of Ontario and the remainder from Manitoba and the Northwest Territories. In 1957, International Nickel operated at capacity for the eighth successive year, mining 16,000,000 tons of ore and increasing its nickel deliveries to 145,025 tons. But in March 1958 the company cut production by 10 p.c. and by July was operating at about two-thirds capacity. A development of major importance was the introduction by International Nickel of a new process for the recovery of nickel by the direct electrolysis of nickel matte. This method also permits recovery of cobalt high-purity sulphur and selenium.

For Falconbridge Nickel Mines Limited, whose seven Sudbury-area mines accounted for 2,005,439 tons of ore, 1957 was a record year and operations in 1958 were close to capacity. On the other hand, Nickel Rim Mines Limited, on the east rim of the Sudbury basin, shut down its mine in 1958 pending an increase in prices. The previous year it had milled 342,565 tons of nickel-copper ore bearing about 1,336 tons of nickel. Sherritt Gordon Mines Limited, with two producing nickel-copper mines and a concentrator at Lynn Lake, Man., and a refinery at Fort Saskatchewan, Alta., produced 10,033 tons of nickel in 1957 and continued to operate close to capacity the following year. North Rankin Nickel Mines began production of nickel-copper concentrate at Rankin Inlet, N.W.T., some 320 miles north of Churchill, Man., and in 1957 accounted for about 979 tons of nickel. Western Nickel Limited at Hope, B.C., constructed a mill and produced its first shipment of nickel concentrates early in 1958 but ceased operations when mining became uneconomical.

The most important exploration-development news in nickel in 1957-58 came from Manitoba, where International Nickel had under way a major program to bring its Thompson and Moak Lake mines into production by late 1960. A 30-mile railway spur was completed from the Canadian National Railways' Hudson Bay line to the town of Thompson in the autumn of 1957. In the Sudbury area of Ontario the company worked

\* The figures for 1957 in this Subsection are final but those for 1958, as well as some pertaining to individual companies in both years, are subject to revision.