

The value of metal output in Saskatchewan increased from \$48,082,000 in 1953 to \$68,216,000 in 1954 and that of Manitoba from \$25,264,000 to \$35,107,000. These increases resulted mainly from a rise in the output of copper by Hudson Bay Mining and Smelting and to new production from Sherritt Gordon. Uranium is not included as data on its production are not released.

Hudson Bay Mining and Smelting Company's production was higher in 1954 than in 1953. Copper was up 5,000 tons to 45,222 tons while the total zinc production and the amount of Special High Grade zinc made were higher than in any previous year; output (all forms) totalling 66,800 tons valued at \$15,952,000. The Company brought its Schist Lake copper-zinc mine, 3½ miles southeast of Flin Flon, into production in August 1954 and in the same month discontinued operations at the Cuprus copper-zinc property, 7½ miles southeast of Flin Flon, where the orebody was mined out. The Company has four new mines in the Flin Flon area under development.

Gold output in Manitoba and Saskatchewan in 1954 was 237,000 oz. t. compared with 220,000 oz. t. in 1953. More than half the output comes from base metal operations, mainly from the Flin Flon mine of Hudson Bay Mining and Smelting. Lode gold production of 114,103 oz. t. came from Nor-Acme Gold Mines Limited in the Snow Lake area and from San Antonio Gold Mines Limited in the Rice Lake area, both in Manitoba. In the latter area, Forty-Four Mines Limited, which is controlled and operated by adjoining San Antonio, began operations early in 1955.

Silver is produced as a byproduct mainly of base metal operations, the Flin Flon mine again being the chief source. Production in both provinces in 1954 amounted to 1,885,000 oz. t. compared with 1,687,000 oz. t. in 1953.

Ontario.—At no time in the history of mining in Ontario has the metal mining industry made such progress as in the period under review. New production records were established: the output of nickel for instance was greater than in 1942, the former peak; marked strides were made in the exploration and development of new properties particularly in the Manitouwadge base metal and Blind River uranium areas and prospecting activity was unparalleled, with a record 50,000 claims staked in 1954. At the end of the period the groundwork had been laid for a large scale uranium industry which promised to make Ontario a leading producer of the metal for years to come and the Province had a greatly expanded base metal production potential.

As Canada's leading metal producer Ontario in 1954 accounted for all of the Canadian output of platinum metals, cobalt and tellurium, 98 p.c. of the nickel, 54 p.c. of the gold, 47 p.c. of the copper, and 33 p.c. of the iron ore. The value of its metal output rose from \$370,596,000 in 1953 to \$395,203,000 in 1954. Nickel showed the greatest increase in volume and value of production, rising 14,317 tons valued at \$16,126,000 over 1953 to 158,009 tons valued at \$176,556,000 in 1954. Copper and gold also showed marked increases in volume and value of output but iron ore, because of a lack of demand, declined from 2,832,000 long tons in 1953 to 2,417,000 long tons.

The demand for nickel for defence and civilian use continued to outstrip supply and the two chief Canadian producers, The International Nickel Company of Canada Limited and Falconbridge Nickel Mines Limited, extended every effort to expand their production facilities in the Sudbury area to meet requirements. Deliveries of nickel in all forms by International Nickel were 141,000 tons, an increase of 15,292 tons over 1953. These deliveries were about 70 p.c. of the free world output. The Company's program of expansion has involved an expenditure of \$150,000,000 during the past decade and included the changeover from open pit and underground mining to almost all underground mining. The cessation of open pit operations is scheduled for 1956. In 1954 the Company mined 14,456,000 tons of ore of which 2,468,000 tons were from open pit operations. Ore production from the underground mines averaged more than 44,000 tons a mine-operating day. During 1954, \$30,000,000 was provided for expansion purposes including \$16,000,000 for the construction of a pyrrhotite plant near Copper Cliff for the recovery of nickel and an iron oxide product from nickel bearing sulphide concentrates.