

fifths of Canada's production. Nova Scotia produced silver in significant quantities for the first time since 1956; late in the year, Magnet Cove Barium Corporation began to mill sulphide ore at Magnet Cove, near Walton.

World production in 1960 was estimated at 236,500,000 oz.t., 9 p.c. higher than the 1959 production of 216,800,000 oz.t. Most of the increase was attributable to increased refinery production in the United States where 40,000,000 oz.t. were produced compared with 23,000,000 oz.t. in 1959. Contrary to the refinery production trend, mine output of silver in the United States continued the decline which started in 1956 and, as a result, Canada retained its position for the second consecutive year as the world's second largest mine producer of silver, following Mexico.

Silver consumption in Canada in 1960, at the record level of 11,742,064 oz.t., was considerably higher than the previous record of 10,730,255 oz.t. attained in 1957 and the consumption in 1959 of 10,202,769 oz.t. The increase was attributable to larger coinage requirements which amounted to 7,481,617 oz.t. compared with 5,737,347 oz.t. in 1959. World consumption (excl. U.S.S.R.) in 1960 was estimated at 319,300,000 oz.t., a gain of 6 p.c. over 1959.

Base-metal ores treated at domestic and foreign smelters have been Canada's chief source of silver for many years. In 1959 and 1960, about 77 p.c. of the total production was from these ores; the northern Ontario silver-cobalt ores of Cobalt and Gowganda accounted for about 21 p.c. of the total and the remaining 2 p.c. was extracted from gold ores.

Canada's principal producer of refined silver from base-metal ores is The Consolidated Mining and Smelting Company which operates lead and zinc treatment plants at Trail, B.C., and produced 8,690,244 oz.t. of silver in 1960, about 26 p.c. of total Canadian production. Other important producers were: Canadian Copper Refiners Limited, the operator of a copper refinery at Montreal East, Que.; Deloro Smelting & Refining Company, Limited, which until April 1961 operated a silver-cobalt refinery at Deloro, Ont.; International Nickel, the operator of treatment plants for nickel-copper ores at Copper Cliff, Ont.; and Hollinger Consolidated Gold Mines, Limited and the Royal Canadian Mint, which operate gold refineries at Timmins and Ottawa, Ont., respectively. Canada's largest mine producer of silver, as the primary product, is United Keno Hill Mines Limited, which produced 7,231,900 oz.t. from its three mines in the Mayo district of Yukon Territory during the year ended Sept. 30, 1961. Other leading primary producers were: Mastodon-Highland Bell Mines Limited in British Columbia; Agnico Mines Limited and Langis Silver & Cobalt Mining Company Limited near Cobalt, Ont.; and McIntyre Porcupine Mines, Limited and Siscoe Metals of Ontario Limited near Gowganda, Ont. These five companies together produced 6,223,702 oz.t. in 1960.

The average Canadian price of silver in 1961 was 94.39 cents an oz.t. compared with 88.92 cents in 1960. On Nov. 28, 1961, the President of the United States announced that the Treasury Department would no longer sell government-held silver to domestic consumers; as a result, there was an immediate price increase of about 10 p.c.

Cobalt.—Cobalt is derived as a by-product from the smelting and refining of the nickel-copper ores of Sudbury, Ont., and Lynn Lake, Man., and from the nickel ores of Thompson, Man. International Nickel recovers cobalt from its refinery operations at Port Colborne, Ont., and Clydach, Wales, based on its Sudbury and Thompson ores. Falconbridge Nickel recovers cobalt in the refining of its Sudbury nickel-copper matte at its refinery at Kristiansand, Norway. Sherritt Gordon produces refined cobalt powder and briquettes and cobalt metal strip in its refinery at Fort Saskatchewan, Alta., from nickel-copper concentrates shipped from its mine at Lynn Lake in northern Manitoba. Deloro Smelting & Refining Company, Limited closed its smelter at Deloro, Ont., in April 1961 after a final clean-up run on silver ores from the Cobalt and Gowganda areas of Ontario. In 1961, Canadian cobalt production amounted to 3,236,323 lb. valued at \$4,902,657, compared with 3,568,811 lb. valued at \$6,763,016 in 1960.