

The expansionary trend in the industry is seen in the marked increase in the volume and value of metal production in 1954. Metals rose 13 p.c. in value over 1953 to \$799,916,000. Copper and nickel recorded the greatest gains, copper of \$24,759,000 to \$175,713,000 and nickel of \$19,743,000 to \$180,173,000. Lead increased \$8,174,000 in value to \$58,251,000 and gold \$9,167,000 to \$148,765,000. Zinc declined \$5,894,000 to \$90,207,000. In volume of output, copper rose 20 p.c. over 1953 to 302,732 tons, lead 13 p.c. to 218,495 tons, iron ore 13 p.c. to 7,362,000 tons, nickel 12 p.c. and silver 10 p.c. to 161,279 tons and 31,118,000 oz. t., respectively, and gold 8 p.c. to 4,336,000 oz. t. Zinc declined from 401,762 tons in 1953 to 376,491 tons in 1954.

Exports of the four principal non-ferrous base metals in all forms continued to go mainly to the United States and were valued at \$416,258,000, an increase of \$33,451,000 over 1953. Exports of refined copper increased from 132,000 tons in 1953 to 156,000 tons in 1954; of refined nickel from 80,000 tons to 91,000 tons; of refined lead from 103,000 tons to 117,000 tons; and of refined zinc from 158,000 tons to 206,000 tons. The United Kingdom purchased 51 p.c. more copper than in 1953, 9 p.c. more lead and 87 p.c. more refined zinc. The United States bought 14 p.c. more nickel and 20 p.c. more lead but 19 p.c. less copper and 3 p.c. less zinc.

Base metal prices improved markedly during the review period. Lead rose from 13·25 cents in July 1954 to 14·25 cents at the end of the year and remained steady throughout the rest of the period. Zinc increased from 11 cents to 12·85 cents at the end of 1954 and closed the period at 12·50 cents. Copper remained fairly steady at just over 29 cents during the latter half of 1954. However a growing shortage of the metal brought about by increased consumption combined with a greatly reduced production as a result of mine and smelter strikes led to a number of price increases during the first six months of 1955 and copper closed the period at 35·375 cents. Nickel was 57 cents until mid-November 1954 when it was increased to 64·50 cents.

Accounts of developments in metal mining on a regional basis follow:—

British Columbia.—British Columbia, the home of the famous Sullivan mine which is the largest lead-zinc-silver mine in the world, is Canada's largest producer of lead and zinc. These two metals account for two-thirds of the total value of the Province's metal output: copper, silver, gold, tungsten concentrates and iron ore in order of value, with minor amounts of cadmium, bismuth, antimony and tin, make up the remaining metal production. British Columbia ranks fourth among the provinces and territories in value of mineral production and is the only Canadian source of tungsten, antimony and tin.

Two factors have tended to slow down metal mining development in the Province: the relative inaccessibility of mountainous areas for exploration and development and the lack of sufficient hydro-electric power. The Geological Survey of Canada in its field work during 1953 and 1954 made some progress in assessing the mineral potential of mountainous areas by initiating the use of the helicopter for reconnaissance. The Coquitlam area immediately northeast of Vancouver was mapped on a scale of 1 inch to 4 miles, about five seasons' work in one—at half the cost of the slower ground methods, despite exceptionally unfavourable weather.

• The importance of available low cost hydro power has been amply demonstrated by The Consolidated Mining and Smelting Company of Canada Limited which over the years has provided the power necessary to support the growth of its great enterprise and which only recently completed a \$35,000,000 plant on the Pend d'Oreille River, 12 miles south of Trail, to furnish the additional hydro power needed to carry out the extensive expansion and modernization of its productive facilities.

The Province's wealth of power resources has attracted to it a great new aluminum industry which will eventually make British Columbia a world source of aluminum (from imported ore). The Aluminum Company of Canada, Limited completed the first stage—involving the installation of 450,000 h.p. generating capacity—of its \$550,000,000 Kitimat-