

(1) Creek lease—on rivers or on abandoned or unworked creeks, half a mile in length—annual rental, \$37.50; annual expenditure required on development, \$250. (2) Bench lease—80 acres—annual rental, \$25; annual expenditure required on development, \$250. (3) Dredging lease—on the bed of any river below low water mark, 5 miles—annual rental, \$25 per mile; annual expenditure required on development, \$1,000 per mile; the value of any new plant or machinery employed to count as money expended in development. (4) Precious stone diggings—10 acres.

Section 2.—Summary of General Production.

Since 1886, the first year that the Geological Survey issued complete returns of mineral production, Canada has shown a fairly steady growth in mineral output. In that year the per capita production was only \$2.23; in 1901, five years after the Yukon discoveries, production totalled \$12.16 per capita. There was a falling-off from 1902 to 1904. Thereafter, owing to the discovery of silver in the Cobalt area, the development of the copper and nickel ores of the Sudbury district, the opening up of the gold mines of Porcupine and Kirkland Lake in Ontario, the improvements in metallurgical practice which led to the recoveries of large quantities of lead and zinc from British Columbia ores, and the discoveries and developments in Quebec and Manitoba, the per capita production rose to \$31.73 in 1929.

In 1929, the latest year for which world figures are available, Canada stood first in the production of asbestos and nickel, third in output of gold and silver, fourth in lead and copper, sixth in zinc and eleventh in the production of pig iron and coal. During that year Canada produced 85 p.c. of the world's nickel, 68 p.c. of the world's asbestos, a little less than half the world's cobalt, 10 p.c. of the gold, 9 p.c. of the silver, 8 p.c. of the lead, 5 p.c. of the zinc, and 16 p.c. of the copper. Figures of total production fail to convey a correct impression of the magnitude of the industry on account of the diversity of the products and of the units involved, while the varying prices attendant upon fluctuating market conditions vitiate comparisons on the value basis.

Preliminary figures of the 1930 output, valued at \$278,470,563, reflected the lower prices for metals and the general falling-off in demand for coal and other non-metallics. More gold, copper, zinc, natural gas, petroleum, stone, and sand and gravel were produced than ever before and the silver and lead output exceeded that of the previous year, but the production of coal, asbestos, gypsum, lime, cement and clay products were all lower than in 1929. In addition to the mining and metallurgical development of our known ore bodies, prospecting in outlying areas has been carried forward on a much greater scale than formerly. The development of the aeroplane has provided an agent of rapid transportation in regions where the canoe and dog team were the only other means available, whilst photography from the air is providing reliable maps of large regions formerly entirely unexplored.

Subsection 1.—General Statistics of Mineral Production.

In Table 1 will be found the total values of the minerals produced in Canada in each year since 1886, while Table 2 gives the details of the mineral production of 1928 and 1929, with the percentage of increase or decrease in the latter year.