

18 and any joint stock company can obtain a "free miner's certificate" on payment of a fee, which for the individual is \$5 per annum and for a joint stock company either \$50 or \$100 per annum depending on capitalization. Mineral claims located under the provisions of the Mineral Act must not exceed 1,500 square feet.

Placer.—Placer mining is governed by the Placer Mining Act and its scope is defined as "the mining of any natural stratum or bed of earth, gravel, or cement mined for gold or other precious minerals or stones".

Placer Claims.—Placer claims are of 3 classes, as follows: (1) Creek diggings—250 feet long and 1,000 feet wide, 500 feet on each side of the stream; (2) Bar diggings—250 feet square on a bar covered at high water, or a strip 250 feet long at high water, extending between high-water mark and extreme low-water mark; (3) Dry diggings, over which water never extends—250 feet square.

A placer claim must be worked by the owner, or someone on his behalf, continuously during working hours. Discontinuance for 72 hours, except in closed season, lay-over, leave of absence, sickness or other reason satisfactory to the Gold Commissioner, is deemed abandonment. To hold a placer claim more than one year, it must be again recorded before expiration of the year.

Placer Leases.—Leases of unoccupied Crown lands approximately 80 acres in extent may be granted by the Gold Commissioner of the district, the annual rental for same being \$30 and the annual expenditure required in development work \$250. Dredging leases on rivers below low-water mark also are granted for 5 miles; the annual rental for same is \$25 per mile and the annual expenditure required in development is \$1,000 per mile, the value of any new plant or machinery employed to count as development. Leases of precious stone diggings, 10 acres in extent, may also be obtained.

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, but 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-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 Columbian ores, and the discoveries and developments in Quebec and Manitoba, the per capita production rose to \$31 in 1929, although owing to world-wide economic depression it dropped to \$18.20 in 1932, later increasing to \$20.73 in 1933 and about \$25.62 in 1934 with the general improvement in economic conditions.

In 1933, the latest year for which complete world figures of the Imperial Institute are available, Canada stood first in the production of asbestos and nickel, second in the output of gold and cobalt, third in copper, silver, zinc, and lead, and thirteenth in the production of coal. During that year Canada produced approximately 82 p.c. of the world production of nickel, 75 p.c. of the asbestos, 20 p.c. of the cobalt, 13.2 p.c. of the gold, 9.3 p.c. of the silver, 13.4 p.c. of the copper, 10.2 p.c. of the lead and 10.2 p.c. of the zinc.