

where the sedimentary rocks of the plains have been recently uplifted and where igneous intrusions are practically absent, and in areas such as some in the interior, where recent strata cover the older mineralized rocks, are deposits of metallic minerals lacking, and in most of these districts the coal resources are quite as valuable.

Only a small portion of the region has been prospected with definite results, so that an account of its resources cannot be attempted, but enough is known to justify sanguine expectations, and to render difficult a concise statement of the modes of occurrences of the minerals.

The Rockies and adjoining foot hills are, as has been mentioned, pre-eminently coal-bearing. Rich coal basins have been delimited from the boundary-line to beyond Yellowhead Pass, and coal is known to continue on northward. Some clay iron-stones are found in these strata, and, in the Livingston range, beds of iron that appear to be indurated iron sands; some argentiferous galena occurs at Field, near one of the few igneous intrusions.

The Selkirk Mountains are characterized by silver-lead and gold occurrences. The Columbia Mountains and the Interior Plateaus are gold-copper bearing, and the newer rocks, at intervals up to and in the Yukon, are coal bearing. The Coast Range batholith has not been found mineral-bearing, but along its entire extent the intruded strata on either side, wherever favorable for mineral deposition, are characterized by gold-copper and sometimes silver-lead occurrences, and in places by iron ores. The Cretaceous rocks of Vancouver Island and Queen Charlotte are coal bearing. Placer-gold districts, sometimes of extraordinary richness, have been found from the Klondike in the north to the international boundary line, particularly where the gravels of the old Tertiary rivers have escaped erosion, or have been captured by the present day streams.

Placer gold in the Cariboo district first called attention to British Columbia. The rich ground was found where the present streams cut through old Tertiary channels. Following the Cariboo the Cassiar field was discovered. Since then Dease Lake, Omineca, Big Bend of the Columbia, Wild Horse Creek, Granite Creek, Atlin and Klondike have been the better known placer fields. The latter, which has produced approximately \$250,000,000, is situated in an unglaciated region, and the old weathered Tertiary gravels, "the White Channel gravels," and present streams, where they have trenches through the White Channel deposits, are still being worked on a large scale.

While the bulk of the gold obtained from the Cordillera has been placer, in latter years lode gold has been of equal importance. The greater part of the lode gold is derived from the gold-copper deposits of Rossland, the boundary district, and the Coast; but in the Nelson district, and at Hedley, deposits are worked for gold alone, and some of the silver-lead deposits, as those of Lardeau, are gold-bearing. The gold veins are usually quartz veins carrying pyrite, chalcopyrite, galena, and zincblende, sometimes tetrahedrite and silver minerals, and gold, both free and confined.

The nickel-plate deposit at Hedley is peculiar. It is a contact metamorphic deposit in sediments, cut by sheet-like bodies of dioritic rocks that have altered the sedimentaries to garnet, epidote, calcite, etc., mineralized by mispickel and only relatively small amounts of iron and copper sulphides, hematite, etc.