

ECONOMIC GEOLOGY

The section of this memoir dealing with economic geology has reference to the entire Atlin mining district, and thus differs from the other parts of the memoir, which refer only to the western portion of the area, or as it is here designated, Taku Arm belt.

The various deposits of economically important minerals (other than placer gold, with which this memoir is not concerned) that occur in Atlin mining district have been tentatively classified as follows:

I. ORE DEPOSITS

- (a) Gold-tellurium-quartz veins.
- (b) Gold-silver-quartz veins.
- (c) Cupriferous silver-gold veins.
- (d) Silver-lead veins.
- (e) Copper veins.
- (f) Antimony veins.
- (g) Contact metamorphic deposits.

II. COAL.

Gold-tellurium veins have been found in only one locality which is situated on the west side of Taku arm above Golden Gate, at the Engineer mines and adjoining claims, and much the richest ores discovered in Atlin mining district have been obtained from these properties. The discovery at the Engineer mines of a number of pockets of quartz worth from \$3 to \$5 per pound, caused much excitement during the summer of 1910, and had a decided effect in arousing enthusiasm in lode-mining. The most wide-spread group of deposits are the gold-silver veins which are found in a number of localities scattered over the greater part of the district. Cupriferous silver-gold veins have been found only on Table mountain, and only one vein worth noting has been discovered. A number of strong, well-mineralized veins belonging to the silver-lead division occur on Crater creek and in that vicinity. Copper veins have been found only on the southern end of Copper island, and those so far discovered do not appear to be of any present economic value. One antimony vein is known to occur in the district; it outcrops on the west shore of Taku arm 10 miles below Golden Gate, but as the