

## MEANS OF COMMUNICATION.

Wagon roads have been constructed by the Yukon government, from Robinson on the White Pass and Yukon railway, to various parts of the district. One road extends along Wheaton river to Carbon hill which is situated in the most westerly portion of the area, about 30 miles distant from Robinson; and a branch from this main road has been built to Stevens creek near the summit of Mt. Stevens. Another road 20 miles long, has been constructed from Robinson to Gold hill which lies 3 to 4 miles north of Wheaton river, and midway between that stream and Watson river. All parts of the district are thus easily accessible, and only short, easily constructed branch roads are necessary to connect all the mineral properties, not already so connected, with the railway.

Robinson is distant 78 miles, by rail, from Skagway, Alaska, whence several lines of well equipped steamships sail regularly to Vancouver and Seattle, distances, respectively, of 867 and 1,000 miles.

## TOPOGRAPHY.

Topographically, Wheaton district occupies a position along the extreme western edge of the Yukon Plateau physiographic terrane, and is thus bordered on the west by the mountains of the Coast range. There is here, however, no very marked distinction between the land features of these two topographic provinces along their boundary; in fact, in most places, it is difficult to decide just where the dividing line should be placed.

Within Wheaton district, possibly the most striking point in connexion with the topography is the marked contrast between valleys and upland, both of which possess very pronounced characteristics. The valleys are typically deep, steep-sided depressions the walls of which rise abruptly 2,000 to 3,000 feet to the upland above. Between these incision-like valleys, high gently rolling stretches of an upland surface occur, there being everywhere an abrupt change representing a topographic unconformity at the junction of the upland with the tops of the valley walls. This upland constitutes part of an old plateau which possessed only slight relief and extended, practically unbroken, from the mountains of the Coast system on the west, eastward to the Rocky mountains, a distance of from 250 to 300 miles. Even yet, to an observer standing on this upland surface, well back from the edge of a valley wall so vast an expanse of gently rolling surface presents itself to his view, that it is easy to imagine the intersecting valleys again refilled or to forget that they have ever been excavated; and thus a picture of the landscape as it existed before the valleys were incised, is presented.

This plateau is generally conceded to represent a maturely eroded surface, that was reduced by ordinary normal erosion processes to a nearly plain-like condition, during a long period throughout which this portion of the earth's crust remained relatively stable. The erosion interval was interrupted, however, in what is thought to be late Tertiary time by a regional uplift which in Wheaton district amounted to about 3,600 feet, and as a result of this crustal movement a lowland tract became a highland surface. The uplift gave renewed life and energy to the streams which were thus soon able to cut deep, V-shaped incisions into the new upland, and these now constitute the main valleys of the district. At a later period glacial ice invaded Wheaton district, and occupied all the main depressions which as a result of ice action, became both widened and deepened, and gradually assumed pronounced U-shaped cross-sections. Also, such well known glacial forms as cirques, hanging valleys, roches moutonnées, and kettle-holed valley floors were produced. The morainal and other materials which were deposited in the valley bottoms, blocked the stream courses in different places to such an extent that even