

## SESSIONAL PAPER No. 26

On Mt. Anderson, on the east side of Becker creek, a number of claims are owned by Becker and Cochran, on which an important amount of development work has been recently performed—this being really the only vicinity in which there have been any important mining operations in connexion with veins of the gold-silver type, since the district was formerly examined.

*Becker-Cochran Property.* A number of mineral claims owned by Theodore Becker and Howard Cochran have been located on the west face of Mt. Anderson, about 2 miles south of Wheaton river, measured as the crow flies. These claims comprise the Whirlwind and Mountain Sheep groups which adjoin one another, and consist of 6 and 5 claims respectively, including the old "Rip" and "Wolf" claims.<sup>1</sup> What appear to be two main veins, and one or more others of less importance, have been discovered on these claims, all of which occur in fissures in the Coast Range granitic intrusives. The veins extend along the face of Mt. Anderson for a distance of 2,000 feet or more, and outcrop at elevations of from 4,600 to about 5,050 feet above sea-level, the elevation of Wheaton river at the mouth of Becker creek, being slightly over 2,800 feet above the level of the sea. The greater part of the development has been performed on the Whirlwind group on what is termed the "lower vein" which strikes about north 68 degrees west and dips to the northeast at angles ranging from 80 degrees to nearly vertical. The vein consists chiefly of quartz which is mineralized with argentiferous galena. A striking feature in connexion with this vein is that it has been invaded by a basalt dyke about 2 feet in thickness, which persistently accompanies it throughout its entire length as far as explored. This dyke in places occurs along the hanging wall, and at other points follows along the foot-wall, but generally occupies an intermediate position within the vein; in places also the dyke branches into two or more portions all of which may be included within the quartz. A drift known locally as "No. 2 tunnel," has been driven in on this vein about 350 feet, throughout which distance the quartz has a thickness in most places of from about 8 inches to 4 feet, and maintains a general average exceeding 18 inches. At the entrance to the drift, the quartz has a total thickness of 6 feet, the basalt dyke occurring within 12 inches of the hanging-wall. About 150 feet below this drift, a crosscut 172 feet long has been driven to the vein and a drift from the end of the crosscut follows the vein for about 150 feet. The crosscut and drift together are generally termed by the owners "No. 1" or "the lower tunnel." Throughout this lower drift, the quartz has a thickness of from 6 inches to 4 feet with an average of perhaps 18 to 20 inches.

Continuing to the southeast along the face of Mt. Anderson, vein outcrops have been exposed by a number of pits, small open-cuts, or trenches, for a distance of, possibly, 2,000 feet. These vein outcrops show the same characteristics as the lower vein just described, and are persistently accompanied by the same basalt dyke or by a very similar one. They may be portions of two or possibly three additional veins, or may be a southeasterly extension of the lower vein, that has been successively offset in an easterly direction, farther and farther into the mountain by transverse faulting. A surveyed plan of all vein outcrops gives support to this theory, showing as it does three fairly definite and distinct lines of outcrops, with similar strikes, but swinging successively more to the east as the south is approached, and each line of outcrops commencing practically opposite the last outcrop of the next line of exposures. On the Mountain Sheep group the most southeasterly of the three lines of outcrops, there occurs an

outcrop, designated by the owners, the "big showing." There is somewhat complex or irregular in form, but the quartz has an thickness of from  $3\frac{1}{2}$  feet to  $4\frac{1}{2}$  feet, and is well mineralized. About 100