

equal distance. It may be best studied by reference to the excellent "West Kootenay Sheet" of Messrs. McConnell and Brock, of the survey, which will show that the dominant feature of the region is the Nelson granite (Post-Jurassic?). To the east of the granite we find along both shores of Kootenay Lake a fringe of crystalline Archaean rocks, quartzite, mica-schist and limestone, in the last of which lies the Bluebell Mine (lead-zinc), on the east side of the lake. Passing north-westward into the Slocan district, a band of Cambrian schists is crossed and the "Slocan Series" of slates is entered. These have not been exactly correlated, but they are supposed to be of the upper Cambrian or lower Carboniferous age. They contain many important deposits of silver-lead-zinc ores, which are remarkable for their tenure of silver, only slightly less than two ounces to each per cent. of lead.

Reverting to the main mass of granite, we find in it to the north of Nelson and south of the Slocan slates, many veins of dry ores, especially in the vicinity of Slocan Lake. Just west of Nelson again the granite holds some small but valuable veins of gold-quartz.

Extending southerly and south-westerly from Nelson there is a considerably area of the "Rossland volcanic group" (carboniferous and post-carboniferous), which to the east of Columbia River has not been found to be particularly fertile. Near Nelson, however, on Toad Mountain, the first important mine of the district is found, the Silver King, affording copper-silver ores in an immediate environment of schistose augite-porphyrite. Further south the same rock holds several gold-quartz veins, but with one or two exceptions, whilst the ore is of high grade, it is of very irregular occurrence.

To the west of Columbia River the monzonite core at Rossland, and the volcanic rocks adjoining are highly productive; but these, together with the interesting and extensive limestone replacements of the Boundary district, are so well known and so ably described elsewhere that we leave to others any special mention of them.