

ture of galena and
erous mineral prob-
eminated.

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the summit of the
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olomite and shat-
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at the time of my
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s about S. 60° E.,
It averages about
y constant in this
rtz, and contains

copper- and iron-pyrites distributed throughout in stringers and small bunches. The gold is contained in these sulphurets, and the average value in gold per ton of the ore is stated at \$30. At the date of my visit an adit had been run in to the vein, intersecting it at a depth of about ninety-five feet from the outcrop, and since that time further work has been done, and a ten-stamp mill, with concentrators and other machinery, has been placed on the ground ready for erection in the spring.

Other Metalliferous Deposits.

Though scarcely recognized as belonging to the Toad Mountain region proper, the deposits on Eagle Creek are really on the northern slope of the mountain-mass thus named. A few outlying localities in this vicinity and elsewhere in the district, in which minerals of economic value are known to occur, may now be alluded to.

Copper Queen.—This name is applied to a discovery situated on the Copper ore north side of the Kootanie River, about a mile above the mouth of Forty-nine Creek. I was unable to visit this claim, which is described as an irregular deposit of great size. Specimens received from it, however, show the ore to consist chiefly of massive copper-pyrites. Though reported to contain a considerable proportion of silver, specimens of this ore subjected to examination in the laboratory of the Survey proved to contain only 1.4 ounce of silver to the ton, with traces of gold.

Iron Ore near the Lower Fall.—About half a mile below the lower Iron ore fall of the Kootanie River, on the north bank, and near the water's edge, is a remarkable occurrence of magnetic iron-ore. The ore is found in large loose masses weighing several tons, but owing to the want of good exposures its actual relations to the rocks adjacent could not be ascertained. The place of its occurrence is near, if not on, the line of junction of the granites with the, here, highly altered rocks of the stratified series. It appears to be associated with a dyke about forty feet in width of green-grey augite-porphryite of somewhat peculiar appearance, which crumbles down easily under the action of the weather.* It seems probable that the iron-ore when *in situ* may form large irregular masses along the borders of this dyke.

* In this intrusive mass, according to Dr. A. C. Lawson, the predominant mineral is pyroxene, in idiomorphic porphyritic crystals, or occasionally in polysynthetic masses. The pyroxene is partially altered to hornblende and there are besides some hornblende crystals which may not have been so derived. Felspar is present, but in subordinate amount. Biotite, magnetite and chlorite are sparingly found as accessory minerals, and there is a little quartz which is probably secondary in origin.