

MINERALS.

From the boundary line to Hi-ah-kin Creek, the geological formation is granite in a great variety of forms and conditions, some of it assuming the form of porphyry, and at other times almost pure feldspar. Where mica and hornblende exist to any extent, the granite is affected by climatic changes. A portion of the granite mountains resist all climatic agencies, and stand in bold, perpendicular cliffs. Some of these fine quarries will be sought after and utilized at no distant day for building purposes. After passing Hi-ah-kin Creek we found a good deal of slate and quartz, which appeared to increase as we approached the head of Galena Bay. They are associated with granite. The ledges throughout this region all appear to be in place. The slate is usually of a soft blue variety, destitute of any grit, and frequently quite shelly. We saw but little talcose slate, mica schist, shale or sandstone. We found float specimens of mica or isinglass that looked fair, and from appearances is not inferior to French importations. The sheets were very free from blemishes and quite transparent. The Indians report it on the mountains in large quantities. The slate formation has numerous quartz seams in it from a few inches to twenty feet in width. All of these quartz veins have a healthy mineral-bearing look. Found a good deal of galena on the mountain sides of Galena Bay, mostly in quartz. In a few instances it was associated with lime. Found two well-defined ledges of galena; both traced to the water's edge, and also up the mountain side for several hundred feet.

Lime is found in a variety of forms in the region above Hi-ah-kin Creek; some pure carbonate of lime, and also a magnesia lime. We found two hot soda springs—one on the