

As this Vein cuts into a rock some 12 feet high on entering the bluff, it afforded a good opportunity for taking Specimens from it at different heights, whereby we are enabled to ascertain the changes in its metalliferous appearance.

From the dip and direction of this Vein, and the fact of the Ore changing to Metallic Copper, we were led to believe that it would terminate in and unite with a large Vein of Native Copper, which lies at a short distance to the east of it.

#### VEIN No. 4.

This Vein is 5 feet wide, course E.  $25^{\circ}$  N., Dip  $80^{\circ}$  E. Veinstone, Quartz and Calcareous Spar. Wall rock Amygdaloidal Trap.

It runs along the shore a short distance and passes into the bluff.

Some 200 feet of the surface of this Vein is exposed in different places, and at each point we obtained Specimens of Native Copper, which is diffused through the whole Veinstone in minute crystals.

Upon crushing several Specimens in a mortar, and carefully washing the same, they yielded from 10 to 20 per cent of Copper.

#### VEIN No. 5.

This Vein is about 2 feet wide, situated about the middle of the Location on the Lake. Its course bears N.  $35^{\circ}$  E. Dip  $48^{\circ}$  N. Wall rock Trap.

The Veinstone is entirely of Calcareous Spar, compact and more highly crystallized than any other Vein upon the Location.

About three rods of the surface of this Vein is exposed to view beneath the water, and passes out of the Lake into the shore, where it enters a high bluff. There was so much earth and loose rock lying above it, that I was not able to obtain any good Specimens from it without blasting, excavating and bestowing more labor upon it than we were prepared to do at that time. It bore a very favorable appearance, and I think will contain Native Copper and Grey Sulphurates, on being opened.