

intrusive, and brings to the surface dislocated portions of the steatite and chlorite.

The ore contained in these rocks is a yellow sulphuret of copper, and is deposited in the form of concretionary layers and bunches; usually following or conforming to, the lines of stratification, but also occurring in veins and seams, forming various angles with the strike of the strata.

In the south drift the copper pyrites forms a vein of from 4 to 8 inches in thickness. In the north drift it occurs in minute seams, more or less spread over the entire face of the drift, and in small nodular masses. In both drifts the copper has frequently been cut off by intrusions of diorite, and this may be expected to continue until the workings are carried beyond the immediate influence of the diorite. When this is done, more regular deposits of ore may reasonably be expected.

The cross section shown on the map is made up from various points of the property, beginning at "Powder-house hill," taking the stratified rocks in their order of superposition, from south to north, and the erupted rocks as they occur on the surface.

Nos. 1, 9, 10 ridges are diorite, more or less affected in color and texture by the rock through which it has been erupted, and with which it is often interfused. The purple diorite, where in contact with the red syenite, is slightly porphyritic, the crystals being white felspar. The surface of diorite on the location, taking its width in three places, is over three thousand feet.

No. 2.—A bed of amorphous green slate, intersected and reticulated by thin bands and dykes of diorite, 200 feet thick, showing in places stains of green carbonate of copper.