

dently increasing width of 16 feet. It consists essentially of a quartz gangue, carrying large quantities of solid and crystallized mispickel, with scales of mica, and here and there some layers of talcose slate, especially along the hanging wall; and it presents constantly good shews of free gold. The greater part of the gold which it contains is absorbed, however, in the mispickel, and thus requires a somewhat more elaborate process than mere amalgamation for its extraction. From the numerous trials that I have made, I do not think that any portion of the pure mispickel contains much less than 100 dollars' worth of gold to the ton, and a great deal more is present in many portions of it. The mixed ore in its crude or undressed state will necessarily shew a lower yield; but, as already stated, in fairly chosen samples I have never found less per ton than fifty dollars' worth of gold. The gold is alloyed with a small amount of silver, but the fineness is never reduced by this below 22 carats. A thin string or narrow band of ore runs along the hanging side of this vein, at a distance of a few feet to the west, the two uniting a short distance south of the location on the property of General Tuttle.

No. 2 vein has been tested with regard to its extension, &c., by shallow excavations in various parts of its course, but apart from this it remains at present undeveloped. It presents, however, the same surface features as the Gatling vein.

No. 3 is also of the same general character, as regards surface conditions and nature of ore, but a shaft has been sunk upon it to a depth of 22 feet. At this depth, the width is somewhat over three feet.

No. 4, the west vein, I purpose in this Report to call the "O'Neil vein," after Captain O'Neil, by whom the gold-bearing veins of this locality were first brought into notice, and to whose energy the development of the present mineral property is so largely due. The O'Neil vein differs in a very