

vein stone remarkably uniform in character. I made several tests of the ore from various points on the vein by pulverizing, roasting and washing which shewed considerable gold; some tests shewing coarse gold. In making these tests I did not select ore shewing gold to the eye; and some of the samples were of the lode near the middle of the location and others from the portion near the southern boundary, 1,300 feet apart.

I also took out a ton of the average ore, half of this ton was blasted out of the bottom of the principal excavation (from which the 100 tons referred to were mined) at a depth of 11 feet. I took it as it came without selection. The other half ton was taken out in the same way from the surface at a point on the vein where it enters the valley, 60 feet to the S. W.; here the quartz is 5 to 6 feet wide. I took this ore to New York and had it tested by two leading metallurgical firms Ledoux & Ricketts, and Mathey & Riotte. The former crushed the whole ton and sampled it with much care down to 200 pounds; this they put through another finer crusher and sampled it down to a few pounds, and made two large assay tests which shewed an average of close on \$50 to the ton. See their certificate (No. 2). Then I took 250 pounds of the first part sampled. I sent this quantity to Mathey & Riotte to have it tested in different ways, and also to see how the two would compare. They ground it fine, sampled and assayed it, the yield shewing \$46.80 to the ton.

Then they stamped it and run it over the copper plates, which caught \$3.28 g. 'd, or a yield shewing \$26.24 to the ton. The tailings were then assayed and gave an average yield of \$20.26 to the ton. In this test, as will be seen by their certificate (No. 3) it shewed an average of \$40.06 of gold to the ton independent of the silver of which there was a considerable loss. Then the tailings were run over Frue's vanners and concentrated to 11 4-10 per cent. or about $8\frac{1}{2}$ tons into one. The concentrations assayed \$82.48 to the ton, that is an average to the ton of ore of \$9.42, which, with the \$26.42 saved on copper plates, makes \$35.66 saved by milling. Assays of the balance shewed a loss still in the tailings of \$9.42 to the ton. The test was made by a small vanner, I believe the large vanner will do much better work. Mr. Goldsmith, the manager of the works said the ore was good ore to work and that a large mill