

knolls with intervening spaces, produced by denudation, of low and more or less swampy ground. Along the rocky knolls several quartz veins carrying auriferous pyrites are clearly traceable across at least the more eastern portion of the lot. On the more northern of these veins three or four trial pits have been opened, and a shaft has been sunk vertically to a depth (at this date) of 122 feet. The upper part of this vein is decomposed into earthy oxidized matter which pans richly throughout the course of the vein. A sample taken, without selection, from one of the pits gave me by fire assay no less than 4 oz. 13 dwt. 8 grs. of gold per ton of 2,000 lbs. of ore, equivalent in value to \$94. Another sample of solid vein-stuff (quartz and pyrites), taken personally from the bottom of the shaft, yielded \$16 per ton; and other samples from different places gave from five to twenty-four dollars. The shaft shows this northern vein to dip at an angle of about 80° towards the south, the dip being rather steeper than that of the inclosing rock—so that a very characteristic chloritic schist which forms the foot wall at the surface becomes the hanging wall on descending. The thickness of the vein, at its outcrop, varies from about two to three or four feet. It then increases considerably; but suddenly at a depth of about 50 feet it becomes choked or pinched to less than a foot in width. In this pinched condition it continues for about twenty feet, and then again opens out, until at the present depth of the shaft (122 feet) it shows a width of at least six feet with good promise of increase.

At the time of my visit to the mine one mill only was in operation. In this the broken ore was ground by balls, and about ten tons per day were being put through; but a more powerful mill with cone crushers on the Crawford principle, in which from fifteen to twenty tons per day would be treated, was in course of erection. At this period (May, 1893,) all the stuff put through the mill consisted of surface croppings mixed with weathered rock and soil, and of the vein-stuff taken from the upper part of the shaft, with much wall-rock where the vein had narrowed, but the monthly "cleanings up" gave an average of ten dollars per ton; and several handsome ingots were exhibited in ocular attestation of the value of the ore mine. The ore was used in an unroasted state; and, judging from the low yield of the tailings, the mill appeared to be giving good results.

Although the Belmont ore is so different in composition from the Marmora gold-bearing arsenical ore, the gold in each presents a remarkable similarity of character, inasmuch as it carries a very low amount of silver, and thus comes out with full yellow colour on the cupel. The silver, in the gold of both localities, varies from a mere trace to something under 4 per cent, the fineness of the gold being thus between 23 and 24 carats.