cross-cut. The level of the north branch is extended to a point 160 feet from the cross-cut.

The level east exposes pay ore for the first 40 feet and from there on is unproductive. At the 157 foot point, raise No. 552 extends 60 feet above the level. It exposes a 6 to 12 inch streak of sulphide ore of low grade.

On the level west the pay ore continues to a point 80 feet from the shaft cross-cut. This ore, together with the forty feet on the level east, constitutes a large body which has been stoped out above, nearly to the fourth level. This stope has an average width of 13 feet and has yielded 17,091 tons, average \$15.32, smelter's gross assay value. The stope has not yet been exhausted. From the above-mentioned 80 foot point to the 175 foot point along the south branch the vein shows ore in spots, but on the whole is too low grade for profit. From the 175 foot to the 245 foot point the vein is of better grade but still below the pay limit. The remaining 51 feet on the level is in barren ground. At the 150 foot point on this south branch, raise No. 590 extends 40 feet above the level. It is almost entirely in pay ore of the average width of 5 feet and a grade of \$16.00, smelter's gross assay values. The level on the north branch has exposed pay ore for 120 feet of its length. This is 4½ feet wide and averages \$13.20, smelter's gross assay value.

Sixth Level.—The split in the vein strikes this level at a point probably 100 feet east of the shaft. On the north branch the level is extended 110 feet east of the shaft and 120 feet west of it. At a point 15 feet west a cross-cut, 60 feet long, gives access to the south branch. Drifting on this branch has extended 40 feet east and 30 feet west from the cross-cut.

In the level east on the north branch, the first 50 feet from the shaft is too low grade for consideration. From the 50 to the 90 foot point the ore is 5 feet in width, averaging \$12.60, smelter's gross assay value. From the 90 to the 110 foot point the ore is 20 feet in width, averaging \$16.00, smelter's gross assay values. At the 120 foot point the ore is cut off by a dyke and drifting has not yet extended farther. Raise No. 651 was started in the low grade material 40 feet east of the shaft. For the first 20 feet above the level the ore was only 6 inches wide and of little value. Above this point it rapidly widened out into a large body of high grade ore. The stope upon this body has so far produced about 8,000 tons of about \$28.00 per ton, smelter's gross assay value. The stope averages 11 feet in width. Raise No. 653, 75 feet east