

allowed 50 per cent. for depreciation in the quality of the mispickel. The following results were obtained by careful assay:

Hawkeye ore from three shafts, mixed mispickel—Gold, \$753.48; silver, \$15.71. Total, \$769.19.

Gatling five-acre lot.—From one shaft quartz—Gold, \$200.93; silver, \$3.14. Total, \$204.07 per ton.

Gatling Company.—From three shafts, mixed mispickel—Gold, \$351.63; silver, \$21.91. Total, \$373.54.

Gatling Company.—O'Neil Shaft, third vein—Gold, \$376.64; silver, \$7.85. Total, \$384.49.

Tuttle Property.—Surface quartz—Gold, \$125.48; silver, \$4.70. Total, \$130.18.

<i>Average</i> —First-class quartz and pure mispickel, . . .	\$372 29
Deduct $\frac{1}{2}$ ton for gangue in bulk, leaving . . .	74 46
" $\frac{1}{2}$ ton for inferior mispickel, leaving . . .	37 23
" for loss in reduction \$7 23, leaving . . .	30 00
Or net yield of ore in treatment \$30 per ton.	

F. W. Dahne, Esq., who dressed a lot of this ore sent to Swansea, says: "The ore I treated contained, before dressing, $2\frac{1}{2}$ ounces of gold to the ton (2240 poui.

Captain Benjamin L. Lamer, who examined these mines for Messrs. John Taylor & Sons, of London, carefully sampled the ores from the different openings, and had his samples assayed by Professor Chapman, of University College, Toronto, who obtained the following as the average of a number of assays, gold counted at \$20.66 per ounce troy:

Sample No. 19, Gold \$38.65 per ton of 2000 pounds.	
" No. E, " 24.87 " "	
" No. F, " 36.60 " "	
" No. G, " 24.74 " "	
Average, \$31.21.	

The amount of silver in these samples never exceeded $\frac{1}{4}$ ounce per ton.

TESTS ON A LARGER SCALE.

Two barrels of average ore treated at Balbach's works, in Newark, N. J., yielded:

From East Vein.—Gold, \$23.76; silver, \$4.07. Total, \$27.83 per ton of 2000 pounds.

From O'Neil Shaft.—Gold, \$25.62; silver, \$4.39. Total, \$30.01 per ton.

Four barrels of ore sent to Messrs. Richardson & Co., Swansea,