

10 $\frac{1}{4}$	tons first quality ore of 22.0 per cent.	
43 $\frac{1}{4}$	" " " "	18.4 "
1 $\frac{1}{4}$	" second " "	9.0 "
154	" crush " "	4.00 "

These quantities, after deducting loss in dressing, correspond to 119 $\frac{1}{4}$ tons of 12 per cent ore, or 2.62 tons per cubic fathom. The total expenses of excavation and bringing to surface, amounted to \$574.10; equal to \$12.59 per cubic fathom, and to \$4.80 per ton of 12 per cent ore. The average thickness of the bed was here 19 $\frac{1}{2}$ feet, — 3 $\frac{1}{4}$ fathoms. Consequently one square fathom of the bed yielded 8.51 tons of 12 per cent ore, at an expense of \$40.92. During the following months of August and September the stoping was continued, accompanied by drifting under the old road leading into Flowers's pit (see map). Here were excavated 63.37 cubic fathoms of ground, which yielded—

49147 lbs.	first quality ore of 21.2 per cent.	
23850	" " " "	10.8 "
7114	" second " "	13.5 "
17000	" " " "	11.5 "
40320	" crush " "	5.2 "
134400	" " " "	4.1 "
22400	" smalls " "	3.5 "
128427	" " " "	2.6 "

These quantities, after deducting one-fourth of the copper contents of the crush ore, correspond to 95 $\frac{1}{4}$ tons of 12 per cent ore, or 1.5 tons per cubic fathom. The total expense of mining and raising this quantity was \$873; equal to \$13.77 per cubic fathom, or to \$9.19 per ton of ore. The average thickness of the bed was at this place 2 $\frac{1}{2}$ fathoms. Consequently a square fathom of the bed yielded 3.75 tons of 12 per cent ore, at an expense of \$34.32.

As regards the north-east extremity of Flowers's pit, a shaft had been sunk in the limestone there previous to September, 1861, to a depth of twenty feet on the incline, below the bottom of the open working, and forty-four feet below the floor, on the present collar of the shaft, now called No. 5. At the bottom, a considerable quantity of copper pyrites was observable, partly in veins permeating the limestone, and partly impregnating the same. In order to the examination of the ground here it was resolved