

the north lode, as it is called, is behind Nos. 6, 7 and 8. If the plan of the north lode be therefore placed exactly behind the other, and the upper part raised to an angle of 35° a correct idea of the situation and appearance of the lodes in a vertical section will be given.

By a reference to the section you will perceive the positions and various depths of the shafts, with the level proposed to be driven through the mine, on reaching a depth of 25 fathoms from the surface, as well as the ground to be opened up by that level. That portion of the plan colored green shows the excavations already made, and the yellow exhibits the extent of stopes already opened by the shafts, and ready to be worked out as soon as desirable, as well as what lies between that and the 25 fathom level. The extent of ore ground which will be opened by the 15 fathom level west from Meredith's shaft, cannot of course be estimated, as the vein there takes its course through a swamp, and its surface has never been uncovered; nor can we estimate that which will be exposed by a level from trial shaft running east at the same depth, as the lode here enters a bluff, and although it is easily traced on the surface, the ground is very unsettled; but if the lode answers the hopes it now holds out in the shaft and stopes, this will be one of the most productive parts of the mine. At present the quantity of surface exposed by working amounts to 209 fathoms (5 fathoms of which are not shown in the plan) yielding a produce of 502 tons, 14 cwt. 1 qr. 8 lbs. of ore of 20 per cent of fine copper, in one fathom in depth, or an average of 2 tons, 8 cwt. 0 qr. 12 lbs. per fathom. Part of this is exposed by the shafts to a depth of 18 fathoms from the surface, part not so deep, but taking the average of the whole we have 1845 fathoms of ore ground opened up, promising to produce 4402 tons of ore. As the shafts are sinking, new ground will be constantly exposed, so that by the time they reach the 25 fathom level, and it is driven through, there will be opened up between it and the surface, an additional 4,370 fathoms of ground, which there is every reason to believe will be at the least as productive as the portion already exposed. Indeed there is good cause for