

been brought into full working order; but I wish, in this estimate, rather to underrate, than overrate, the assumed profits of the mine.

Taking these data, the debit and credit account (exclusive of a small deduction for interest on capital, management, commission, and wear and tear of machinery) may be stated as follows:—

DEBIT ACCOUNT.		CREDIT ACCOUNT.	
	\$		\$ c.
Mining 20 tons ore at \$2 50.....	50	3½ tons pig lead, at 4½ cents	
Hauling to Mill, at 50 cents.....	10	per lb.....	337 75
Crushing and dressing, at 50 cents, 10			
Smelting dressed ore, say 5½ to 6			
tons, at \$2.....	12		
Freight on 3½ tons lead to front..	20		
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	\$102		

Leaving, in round numbers, a profit of \$80 per ton of reduced lead; but, as a higher per centage of galena will probably be found in the lode, a larger profit may be fairly anticipated.

The estimated cost of mining or winning the ore (\$2 50 per ton) may appear, at first sight, too low; but \$2, I believe, would be nearer the true cost. This may be verified, to some extent, by actual cost of the work done in sinking the shaft. The cost, per foot of depth, has been, I understand about \$17. The mean sp. gr. of the rock-matter and ore removed from the shaft may be taken at about 4.0. It would be somewhat less than this for the first few fathoms; but more at lower depths. As the shaft measures about 10 feet by 6 feet, each vertical foot of stuff removed would equal 60 cubic feet, the weight of which would be about 7½ tons. This amount, at \$17, equals \$2 26 per ton. It must be remembered, in this connexion, that the greater portion of the matter, removed from the shaft, consisted of very hard rock, whereas the extraction of the vein matter will be much more easily effected, and will be carried on also by drifting and stoping, in place of sinking. The above estimate will thus allow for the cost of underground timbering, where this may be required in the drifts.

A considerable amount of pay-ore has been taken out of the present shaft. A large portion has been carried off piecemeal by persons visiting the mine. Specimens of 8 or 10 lbs. weight, may be seen all over the vicinity, and probably a ton weight, if not more, has found its way in this manner to Peterborough alone. The ore that has escaped these depredations, is partly stored in a lock-up shed near the mouth of the shaft, and partly piled in heaps upon the ground. It has been roughly hand-dressed, and in part washed on a temporary buddle fed by water from the shaft. Much of it, consequently, contains over 70 per cent. of galena; and if the whole were smelted on the spot, it ought to produce at least nine hundred or a thousand dollars worth of metal.

I have made several assays of this galena, taken from different parts of the shaft, in order to determine the amount of silver present in the lead. The average amount is equal to a little over 2 oz. Troy in the