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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 handdressed, 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 smelled 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 ton, or to about 1 oz. 17 dwts. per ton of galena. This amount is insufficient to defray the cost of its extraction, but the ore may prove richer at lower depths, or in other parts of the vein. I have also found a small amount of gold (3 to 4 dwts. per ton) in some samples of iron and arsenical pyrites taken from a narrow cross vein, which is cut at the shaft, and thrown 9 or 10 feet by the Galway lode. It would be advisable to have this pyrites vein occasionally tested, where cut by the drifts at different levels, as the amount of gold may be found to increase. The throw to which this cross vein has been subjected, shows the more recent origin of the baryta or galena veins; and surface indications observable in some of the surrounding lots, lead to the inference that these latter veins are not likely to be disturbed by slips or other interruptions. This, at least, may be safely predicted as far as regards the Galway and Peterborough lodes.

Drifting and stoping might be commenced at the present depth of the shaft on the Galway lode, but this can scarcely be recommended. If the uncontrolled management of the works were under my charge, I would continue the sinking to another level of ten fathoms, and commence at the same time a second shaft about two hundred feet to the south-east of the present one. Owing to the fall of the ground, the new shaft at about 10 fathoms would reach the 20-fathom level of the other. The ore taken from these shafts ought to be at least sufficient to defray the cost of sinking. This second shaft would also fairly test the strength and richness of the lode: