

## SILVER VALUE PER TON.

|                        | No. 1.  | No. 2.  | No. 3.  | No. 4. | Aver.   |
|------------------------|---------|---------|---------|--------|---------|
| Professor Chapman..... | \$3,038 | \$3,191 | \$2,134 | \$691  | \$2,236 |
| Dr. Hayes .....        | 18,679  | 4,560   | 2,357   | 477    | 3,431   |
| Mr. Macfarlane .....   | 5,332   | 2,956   | 2,000   | 736    | 2,095   |

If the average of the results of the three assayers, as given above, is taken, it amounts to 6.387 per cent., equal to 2,087 ounces or \$2,587.88 per ton. The value of the silver contained in the 1,336 lbs. of ore now in the Company's possession here, will, at this rate, amount to \$1,543.48, being the product of one blast of some surface pieces taken from under water.—*Report of the Montreal Mining Company, December 7th, 1868.*

The Montreal Mining Company are said to be fully determined to proceed with the development of their silver mines, even should an increase of their capital be needed. They have also secured Mr. Macfarlane's services for a space of three years, so that we may look for further valuable discoveries and reliable reports of them when made.

Two American Companies—the Superior Mining Company, and the Ontonagon Silver Mining Company—are also about to commence operations. They own about 8,000 acres. Though they paid for their land two years since, it was only late last spring that they got their patents, so that there has not been time to do much. The land has been selected by competent men, and is being carefully examined with a view of commencing operations.

**Copper.**—I have heard of no discoveries, or operations of any importance, on the north shore of Lake Superior, during the past year. The continued low price of copper has had a depressing effect, but a change seems likely to take place in this.

In 1868 the product of the Bruce and associated mines, compared with that of the ten preceding years, was as follows:

| YEAR.                             | No. of tons net of 21 cwt. |      |      | Produce, per cent. | No. of Units. | Value in Sterling. |    |    |
|-----------------------------------|----------------------------|------|------|--------------------|---------------|--------------------|----|----|
|                                   | Tons.                      | Cwt. | Qrs. |                    |               | £                  | s. | d. |
| From 1858 to 1867 inclusive ..... | 24,729                     | 4    | 10   | .....              | 493,011.78    | 430,450            | 16 | 3  |
| Average during above period ..... | 2,472                      | 13   | 12   | 20.37              | 49,801.17     | 43,045             | 1  | 7  |
| 1868 .....                        | 2,742                      | 0    | 8    | 20.00              | 59,440.00     | 34,577             | 9  | 7  |

The new method of extracting copper by the wet way will make ores pay that would not be worth working by the present process of smelting, and will also obtain a larger percentage from rich ores.

**Lead.**—The following work has been done at the Frontenac Lead Mine:—An adit has been driven about four hundred feet along the vein, and a shaft sunk upon it at a depth of fifty feet, continuing twenty feet deeper, and a good deal of progress made in cutting the lode. An excellent mill, dressing machinery, and (at present) two smelting hearths, with blower, are in operation, which can smelt three tons of pig lead per day. Much activity is also shown in trying methods of saving labor in washing the ore. About thirty hands are employed.

The vein averages ten feet in width, and holds out well. The percentage of lead averages from four to six per cent.

James Romanes, Esq., of Kingston, has kindly supplied me with the above information.

Dr. Dawson remarks, in his report on this mine, (1868):—"The Frontenac Lead Mine . . . has exposed a deposit of remarkable richness and extent, warranting the erection of all necessary machinery for crushing, washing and smelting, with a certainty of very large profits under management ordinarily skilful."

There is also a lead mine at work in the township of Galway of sufficient importance to warrant the erection of smelting works, which, I believe, are now in operation. The whole country thereabout is cut by lead veins, and must ultimately be the seat of a large mining industry.

**Iron.**—The Marmor Iron Mines shipped about 20,000 tons of ore to the States during the past summer.

**Plumbago.**—A very valuable deposit of this mineral is now worked in the Township of Bedford, County Frontenac. The vein has been opened at intervals for a distance of two miles, and is from six to twelve feet wide. A shaft has been sunk fifty feet, and a level driven from the bottom thirty feet along the vein. From these workings a shipment has been made of 100 barrels, averaging 450 lbs. each.

**Petroleum.**—The Petroleum trade has taken a fresh start since the last issue of the *Year Book*. The impeding to exports, arising from want of proper deodorizing, has been removed, and our oils compare favourably with those of Pennsylvania. During the past year a large increase of capital has been attracted to Petrolea, and preparations are in progress for doubling the present capacity of the refineries within six weeks.

The average daily product of the wells (now sixty or so in number against fifteen this time last year) is 800 or 900 barrels. The capacity of the tanks at Petrolea is about 500,000 barrels. The blue clay of the district is an excellent material to sink tanks in, which are dug of such size as to hold from 3,000 to 5,000 barrels each. There are also iron tanks holding 35,000 barrels, and some wooden tankage. The stock of crude in tank at the wells is at present about 380,000 barrels, and there are 40,000 barrels in London and other places in the Dominion. There are also about 8,000 barrels of refined on hand, so