

## MINING IN CANADA.

By THOMAS CROSS, Esq., Ottawa,

Mining industry in Canada is recovering from the effects of the imprudence and incapacity which have characterized it so generally hitherto. The results of embarking in mining enterprise without the necessary skill and capital are painfully visible over the country. Operations are now entered upon more soberly and systematically, and the chances of success have improved accordingly.

## ONTARIO.

**Gold.**—Gold in Ontario, so far as it is known to exist in paying quantity, is confined to the Quinte Gold Mining Division, containing the auriferous district of Madoc and the surrounding townships.

No statistics are procurable of the product of the Gold Mines of this division. The existence of gold in paying quantity in this district has been known for about three years. The yield per ton of rock has been found to be from \$152 downwards. Numerous crushing mills have been erected, and a large population attracted. The gold, nevertheless, remains in the rocks, owing to the fraud, imprudence and want of skill which have characterized the mining enterprise of this region. Very little work is being done. Many crushers have been found useless, owing to malconstruction. There is a scarcity of rock to crush. The Richardson Mine is idle for the present. During the past three years about \$500,000 have been expended here, and this over-speculation has been ruinous to legitimate mining.

**Silver.**—Though silver has been found in many parts of the province, (some veins of galena yielding as much as \$30 per ton), it is only lately that any prospect has appeared of working it profitably. During the summer of 1867, two companies commenced operations at Thunder Bay, Lake Superior. Shafts have been sunk (August, 1868,) about 17 fathoms, and levels driven, from which silver is obtained. The yield, however, is kept secret. Two American companies, also, composed principally of practical mining men, explored, surveyed, and paid the local government for about 9,000 acres on Thunder Bay; but though twelve months have elapsed since their doing so, they have not yet obtained their patents, and the tract remains undeveloped.

**Copper.**—Although none of the copper locations on the North Shore of Lake Superior have yielded any adequate return, the fact that copper exists at all points in this region gives assurance that such will not continue to be the case when exploration is more thorough, and when capital is expended according to the advice of experienced and conscientious mining captains, as has not been the rule hitherto.

The number of acres of mineral lands on Lake Superior sold by the Canadian Government, up to 31st December, 1866, was 166,695. Of this, about 29,000 acres were sold to private individuals, who have made, we believe, no effort at development. The remainder is principally in the hands of the Montreal, Quebec and Lake Superior, and British American Mining Companies. These companies have spent large sums in attempting to establish mines, but without success in any instance; owing partially to the chances inseparable from mining, but in some measure also to want of skill and knowledge; operations having been largely entered into upon places which an experienced miner would have pronounced hopeless at first sight.

The Montreal Mining Company is at present employing Mr. Macfarlane, late of the Acton Mine, and formerly of the Freiburg (Germany) School of Mines, a geologist and practical miner of great information and experience; from whose investigations, it is to be hoped, that the immense tracts owned by them will at length be found valuable. Mr. Macfarlane, we learn, has made promising discoveries of silver on the Company's property.

Copper mining has been profitably carried on for twenty years at the Bruce Mines, on Lake Huron. From 1847 to 1862, 9,400 tons of 18 per cent. ore were raised at this mine.—(*Geology of Canada.*) It is at present worked by the West Canada Mining Company of London, England, capital \$200,000; together with the adjoining Wellington and Huron Copper Bay Mines. The product of these mines for the last ten years has been as follows, according to the report most kindly furnished by Captain Plummer, late Manager:—

Year.	No. of tons "Net" of 21 cwt.	Produce, per cent.	No. of Units.	Value in Sterling.
	Tons. cwt. qrs.			£ s. d.
1858.....	1,077 0 0	21.94	22,212.00	23,218 2 4
1859.....	1,533 14 2	21.35	32,198.00	32,953 14 4
1860.....	2,050 20 3	20.50	42,045.30	40,788 10 1
1861.....	2,060 0 0	19.60	40,376.00	39,966 3 1
1862.....	2,726 5 3	19.65	53,569.81	45,681 2 4
1863.....	3,162 20 3	20.00	63,260.00	55,416 10 3
1864.....	2,940 0 0	19.48	57,271.20	47,673 19 1
1865.....	2,834 5 1	21.24	60,199.47	49,528 4 11
1866.....	3,540 0 0	20.00	70,800.00	53,164 10 0
1867.....	2,804 0 0	20.00	56,080.00	42,060 0 0
Total.....	24,729 4 10	Average pr. ct. 20.37	498,011.78	£430,450 16 5

Captain Plummer says further:—"The veins are in some places very thick, from 18 to 20 feet, and at others narrow down to 4 or 5 feet. The deepest point reached is 60 fathoms. The lode in its downward course does not vary much, but does not contain so large a percentage of metal. This circumstance, together with the fact that the lodes do not carry any of the richer ores, such as the vitreous, peacock and horseflesh ores, renders mining a little less profitable than when nearer the surface."

"The number of lineal fathoms cut last year was 1,533. The number of persons employed is 273. The number has lessened of late in consequence of the continued depression in the copper