

MADOC GOLD REGION.

(From our own Correspondent.)

BELLEVILLE, March 30, 1868.

In the setting up of my last week's letter, two mistakes have been committed. First, in the last line of the table of mill returns, the quantity of rock from the Richardson mine is stated as 207 lbs.; whereas it should have been 207 tons, the return from which was 9 oz. of gold, of the value of \$180 or about \$9 per ton.

The second is of a much more serious nature, as though it only consists in the mis-placing of a point, it reduces the stated value of the ore of the Empire mine to exactly the one hundredth part of its real worth. The first assay by Mr. Bell returned four hundred and eighty-three dollars, (\$483), and the second four hundred and ninety-seven dollars (\$497) per ton, of clean dressed ore, or with a per centage of 12 per cent. ore to 88 of gangue; and taking in the value of the copper, antimony, &c., along with the gold and silver, \$66.88 for the whole *vein* per ton.

Dr. T. Sterry Hunt's assay, made some months subsequently, upon ore dressed to within one fourth of absolute purity, that is, containing one fourth part of non-metallic matter, gave for the ton of 2,000 lbs., two hundred and six dollars and fifty cents (\$206.50) in gold, and one hundred and fifty-five dollars and seventy cents (\$155.70) in silver, or a total of \$362.20 per ton, from which he deduces that the *clean ore* would give nearly five hundred dollars per ton: a very close coincidence with the result of Mr. Bell's assay.

A writer in a local paper thinks Dr. Hunt might have been deceived; but that could scarcely be the case, as he took his specimens from the mine with his own hands. The ore assayed by Mr. Bell too, was brought to him to ascertain whether it was of *any value*; and the proprietors were so much astonished at the result as to be absolutely incredulous of the prize which had fallen to their lot.

I have written thus particularly, because I wish to shew clearly, that the ill-advised proceedings of the parties to the discreditable transaction I have alluded to, can neither affect the value of the mine in question, nor of the region generally, though it may have the effect of scaring away some sensitive capitalists, and thus retarding the full development of the Quinte Mines.

The new amalgamating apparatus for the Richardson Mine has been completed, and is now in course of erection on its destined site, so that we may shortly hope to hear authentic and reliable news of the realization of that magnificent deposit, which, above all else, has been the means of attracting public attention to the mineral wealth of Hastings.

Mr. Barrie's machinery has also been forwarded to its destination in the Township of Denbigh, where the indications of the precious metals are said to be very good. This, as well as the new apparatus for the Richardson Company, has been executed at the foundry of Messrs. G. and I. Brown of Belleville; who are also making rapid progress with the crushing mill of the Bay State Company.

The boiler for the Anglo Saxon Company's mill has also arrived at Eldorado, and their machinery will soon be in motion.

The Belleville Richardson Company have been making some preliminary explorations on their share of the "twenty acres;" and Mr. Anstee has commenced to sink shafts on the portion allotted to Messrs. Lombard and Hardin.

Mr. Jenkins, the manager of the Victoria Mining Company of Toronto, has showed the Editor of the *Madoc Mercury* a sample of gold taken from the claim of the Company, on lot 25, in the fourth concession of Madoc; also some fragments of "decomposed quartz," containing visible gold. The *Mercury* reports the "shew" to be very promising.

Two tons of rock from the Rose Mine are certified by the Secretary of the Eldorado works to have yielded 18 dwts. 27 grs. gold, i.e., \$9 50 per ton.

Eighteen tons of rock from the Moira Mine, 19th lot, in the 5th concession of Madoc, were operated upon last week at the mill lately owned by Messrs. Turley and Gilbert, and produced

13 oz. 13 dwt. 14 gr., retorted from strained amalgam, to which is to be added 15 dwt. 9 gr., obtained by retorting the mercury, by which it was held in solution, so that the whole will be 14 oz. 8 dwt. 23 gr., which will lose somewhat in refining, but which is worth about \$260 or \$15 per ton nearly.

Increased activity is evident in every branch of the mining business, either in actual work or in preparation. A considerable influx of strangers is now taking place, and should the present appearance of an early spring fulfil its promise, we may expect a busy season throughout the region.

Mining.

STAMP MILLS.—In view of the prospect of a considerable demand for stamp and other Mining Machinery, some of the most enterprising of our manufacturing firms, have prepared themselves to supply everything of the kind required and all of home manufacture. Among these, are Messrs. G. & I. Brown, of Belleville. Some of their machinery is already at work in the gold region, and is said to give first rate satisfaction.

GOLD ASSAYS.—Professor Chapman of University College, Toronto, recently addressed the Canadian Institute on the subject of gold assays. He remarked, as to the value of assays, that the statement had been made frequently that they were next to useless. How could they, it is asked, determine from an ounce or two of rock any evidence as to the actual richness of the region? That might be true, but no one would think of using only one or two ounces from one spot to make an assay. But eight or ten points are taken, not that the rock from all should be put into the crucible, but that the test should be made from different sections of the rock. Then all assays should be made in duplicate, and if this be done he thought it must be admitted that the test would be complete. Of course, if there be any gold, it must be in some of the powdered fragments made use of. Frequently, however, when only one large piece is taken, the gold may not be found, though in the rock, as it is not equally distributed. They had also to assume that assays were fairly made. But it was notoriously the case that there are assayers that always find gold, and some of them did so because if they found none they would not be employed again. He afterwards detailed the mode of conducting the assays, and stated that it was perfectly impossible to do so accurately without lead, although some assayers assert that they can. Regarding the products of the assay, he stated that such from two ounces must be necessarily small. Supposing that from two ounces of ore one twentieth of a grain was obtained, that would indicate 1 oz. 13 dwt. 8 grs. in a ton, consequently a paying quantity. If one tenth of a grain was obtained that would be double to the ton, and if one grain was obtained in the crucible they would get twenty times the amount he had named. Even in the mines of California an ounce to the ton was a paying quantity, while, as he had shown, the one-twentieth of a grain in two ounces was more than that quantity to the ton. From this he argued the folly of expecting large returns from an assay, adding that when it was of the amount sometimes stated it could at least be seen with the naked eye, certainly with a microscope. On that ground he strongly advised people to be cautious of assays which gave equal grains of gold. He had heard it stated that gold cannot be put in an assay. This he proved fallacious by showing that the cost of a piece of gold put into two ounces of quartz to make the product represent two ounces of gold to the ton, would be inconsiderable. In a ton there are 32,000 ounces, and nine grains of gold out of two ounces would equal 300 ounces in a ton, which would be worth over \$6,000. The chief thing to be remembered in all this, he said, was, that it is perfectly impossible to get gold out of stone without using lead, and this was a test where none could be seen through a microscope.

AUSTRALIAN GOLD MINING.—The following list of leading dividend paying mines of the

colony of Victoria shows an extraordinary rate of profits upon a very small amount of capital. The workings were conducted upon practical and scientific knowledge:—

Name of Mine.	Subscribed Capital.		Dividends up to Nov. 1867.		s. d.	in 6 years.
	£	£	£	s.		
Cosmopolitan ..	5,986..	128,944	5	0	0	"
Koh-i-noor ..	19,000..	249,260	0	0	0	"
United Band of Hope ..	32,000..	361,000	0	0	3 1/2	"
Great Reidian ..	9,880..	339,250	0	0	7	"
Sir W. Don ..	2,000..	132,500	0	0	2	"
Newington Freehold ..	6,500..	45,000	0	0	14 mos.	"
Western Freehold ..	6,100..	25,500	0	0	8	"
Defiance ..	5,563..	70,000	0	0	7 years.	"
Nelson & Wellington ..	18,658..	167,357	0	0	6	"
Albion ..	18,000..	90,921	5	0	4	"
Prince of Wales ..	18,795..	131,567	1	0	3	"
Buninyong ..	12,000..	139,007	14	10	3	"

Totals .. 145,382.. 1,878,907 5 10

THE GOLD AND SILVER PRODUCTION OF THE PACIFIC COAST.—The following is a statement of Deposits and Coinage, at the Branch Mint of the United States, San Francisco, Cal., during the year ending Dec. 31st, 1867:—

	VALUE.
Gold Deposits ..	\$18,923,152 17
Silver Deposits and Purchases ..	613,117 94

Total Deposits .. \$19,536,270 11

Coinage Executed—Gold		
DENOMINATION.	NO. OF PIECES.	VALUE
Double Eagles ..	920,750	\$18,415,000 00
Eagles ..	9,000	90,000 00
Half-Eagles ..	27,000	135,000 00
Quarter Eagles ..	28,000	70,000 00

Total .. 986,750 \$18,720,000 00

SILVER.		
	NO. OF PIECES.	VALUE
Half-Dollars ..	1,196,000	\$598,000 00
Quarter-Dollars ..	48,000	12,000 00
Dimes ..	140,000	14,000 00
Half-Dimes ..	120,000	6,000 00
Fine Bars ..	27	20,534 92

Total .. 1,504,020 \$650,534 92

Recapitulation.		
Gold Coinage ..	986,750	\$18,720,000 00
Silver Coinage ..	1,504,20	\$650,534 92

Total .. 2,490,770 \$19,370,534 92

Localities from whence the Silver Bullion was received:—

California ..	\$5,700,871 12
Idaho ..	1,144,483 04
Oregon ..	319,620 90
Montana ..	309,843 32
Nevada ..	49,050 47
Arizona ..	48,797 73
Parted from Silver ..	108,901 92
Fine Bars ..	10,388,791 94
Foreign Coin ..	153,453 31
Foreign Bullion ..	47,358 42

Total Gold .. \$18,923,152 17

Localities from whence the Silver Bullion was received:—

Nevada ..	\$205,618 67
Arizona ..	8,425 74
Idaho ..	38,727 45
Parted from Gold ..	69,999 56
Bars ..	239,799 25
Foreign Coin ..	27,597 31
Foreign Bullion ..	21,951 76

Total Silver .. \$613,117 94

Silver Bars Stamped ..	\$20,534 92
Total Gold and Silver ..	19,536,270 11
Fine Bars, Total ..	20,534 92

GODERICH SALT WELLS.—The *Huron Signal* gives, in a recent issue, a pretty full account of the progress being made in the development of the Goderich Salt Territory. The Dominion Well had been drilled to a depth of 565 feet, and the work is being pushed vigorously forward. The Ontario Well was finished last fall, and gave very satisfactory results; the works are to be in full blast by the 1st June. The Tecumseh is a new well, located near the railway, and is bored 150 feet deep. At present the drill is stuck, but it is hoped boring will be recommenced before long. The Huron is progressing finely, and is at present 835 feet deep. It is expected to be in working order by the 1st July. The Victoria is 775 feet deep, but the rock is just now very hard. Across the Maitland River is the Maitlandville Well; the contractor has attained a depth of 270 feet. Boring