

now engaged in fitting up in the mill of the Merchants' Union Company, in the village of Madoc, and which will shortly be in operation.

A telegram to the *Intelligencer*, of Friday last, announced the cleaning up of a crushing of 70 tons of rock from the Feigel mine, township of Marmora, the result of which is stated to be \$1,330 in gold, or at the rate of \$19 per ton.

NOVA SCOTIA GOLD MINING REVIEW.

The continued wetness of the season has seriously affected both surface and underground operations. Work has wholly ceased on several shafts until machinery can be procured for draining them, and there has been a consequent falling off in the produce of some of the best mines.

The following quantities of bar gold have been reported in Halifax between the 10th and 22nd October:

Co.	District.	Oz.	Dwt.	grs.
Shaffer	Oldham	74	17	0
Queen	Uniacke	58	0	0
North St. Lawrence	"	28	0	0
Wellington	Sherbrooke	83	15	0
Palmerston	"	115	1	13
Hayden & Derby	"	25	11	1
El Dorado	Wine Harbor	23	3	6
Ophir	Renfrew	163	2	0
Uniacke	Uniacke	96	12	11
Waverley	Waverley	16	3	13
Boston & Nova Scotia	"	17	6	12
Not stated	"	3	12	9
		11	6	10
		716	11	3

The Mines Department Returns for the last quarter of 1867 and the first six months of 1868 have just been issued. The yield for 1867 shows an increase of 2090 oz. 5 dwts. 20 grs. over that of 1866; and the yield for the first quarter of 1868 is 67 oz. 5 dwts. 4 grs. in excess of the same period in 1867; but the same quarter, from the causes above referred to, shows a falling off, compared with that of the previous year, of 2548 oz. 18 dwts. 7 grs. It is gratifying to see Lawrence town again resume the rank of a producing district, although at present it is but in a small way, the returns for the half-year being only 192 oz. 13 dwts. 17 grs.

SHERBROOKE.—Mr. Carnie, of Boston, has started the works of the Stanley Co. A rich boulder of great width has been found on the property of the New York & Sherbrooke Co., and they are now searching for the lode, which the depth of soil and extremely wet weather render a somewhat arduous task. The Palmerston, Wellington, and Hayden and Derby Companies have sent up substantial results, described in the bulletin report; and the Canadian Companies are making good and hopeful progress.

WINE HARBOR.—Under date the 8th inst., "A Miner" writes:—"Times are first-rate here at present, any amount of men of all sizes, grades, and professions to work, the picture of content stamped upon every lineament of their features; quite the contrary to what it has been here for the last two or three autumns, when every person appeared to be anxious to know which pit was likely to work longest, or all winter, so that they could secure a winter's job. This autumn, however, there are no doubts or uncertainties. The Orient Co. are pushing on their work with a strong battalion, fully armed and equipped with all the necessities for a long winter's campaign. The manager has just let a contract to David Murray & Co., which, when completed, will come to nearly four thousand dollars. It is calculated said contract will turn out 400 tons of quartz or thereabouts. There are also two other contracts going on on two other leads. The Eureka Co. have let a contract which, when completed, will, it is calculated, turn out 240 tons or thereabouts. The Provincial Co. are pressing forward towards

the prize which even former unbelievers now allow they will yet receive. The El Dorado Co. is all right. They have just cleared up 38 tons, which they had crushed at the Victoria mill (out of the new lode they have been sinking on, which is fourteen feet wide,) and which yielded 21 oz. retorted gold. When it is taken into consideration that where they are sinking is on their extreme western line, and that said belt runs through the whole breadth of their property, I think every one else might come to the decided conclusion that they are all right. The McIntosh Co. are to work on the same belt, about 400 feet to the westward of the El Dorado shaft, taking out quartz at almost a tremendous rate; and showing some beautiful specimens of gold. They have just commenced to crush out of said lode, and the manager purposes to run two batteries on it for the remainder of this month, after which it will speak for itself. The Stadacona Co. are, to use a common expression, 'going in big licks,' and turning out a great pile of crushing material. They have not cleaned up any yet, consequently I cannot give a correct or decided account of what has been taken out, or the yield thereof. It will, however, speak for itself shortly."

The Provincial Co. have had a portable stamp mill of one battery, for prospecting purposes, built by Messrs. Symonds & Co., of this city. It is a most complete arrangement, and attracted much notice at the late Exhibition.

UNIACKE.—The Queen Co., besides taking a prize at the Exhibition, have sent up nearly 60 ounces within the fortnight, and are now passing through their mill ore of very excellent quality. The North St. Lawrence Co. have contributed a small bar, and the Uniacke Co. have remitted 96 oz. 12 dwts. 11 grs.

OLDHAM.—Messrs Cook & Bekling are working with good prospects; and Mr. Shaffer has worked with good results, 74 oz. 17 dwts. being his modicum for the past fortnight.

RENFREW.—The Ophir tells its progress by a brick of 163 oz. 2 dwts.; the Andrews shaft continues to give satisfaction; the Colonial Co. report some promising lodes; the Cameron Co., when not impeded by weather, have made good headway in prospecting; and Messrs. Thomas and Macdonald are working a lode that shows both coarse and fine gold.

ECUM SECUM.—The machinery for the mill of the Atlantic Co. has all arrived, and Mr. Andrews continues to report favorably. *Halifax Mining Gazette.*

THE SALT WELLS OF GODERICH.

The discovery of Salt was quite unlooked for, the result following the search for oil. A well having been sunk there with the expectation of getting petroleum, turned out a blank. It was then suggested that, by going deeper, salt might possibly be reached, especially as the water obtained at a depth of 500 feet was rather salty in flavour. The drilling was resumed, and at the depth of between one thousand and eleven hundred feet heavy brine was reached, which it was thought would yield salt in paying quantities. Before going further a chemical analysis of the brine was obtained, to discover if the properties contained would render the salt valuable for pickling purposes, and also to see if a sufficient per centage of solid salt could be obtained from a given quantity of brine to render the industry profitable. The samples were referred to competent chemists, and their reports being highly satisfactory, it was determined by the Goderich Salt and Petroleum Company—the enterprising pioneers of the salt interest—to erect the necessary works for the manufacture of salt. These work have for about a year been in active operation, and so far have proved a financial success, and notwithstanding the competition offered by the Americans, who seek to swamp the infant enterprise, the works are run to a profit. Other companies, following the example of this

company, have gone to work and sunk wells, and there is no question that Goderich is now in a position to supply all the salt required by Ontario. The wells finished and partly in operation number eight, as follows:—

	Capital.
Goderich Salt and Petroleum Co.	\$15,000
Tecumseh	5,000
Dominion	20,000
Huron (in operation)	10,000
Victoria (do)	10,000
Maitland	10,000
Prince Well (now boring)	10,000
Ontario	15,000

Of the above, the first named is the largest, operating with 104 kettles; the Tecumseh is waiting till spring; the Ontario commenced in July, making 60 kettles; Dominion 60 kettles, and Huron 120 kettles, in full operation; Victoria 60 kettles; Maitland, drilled to salt, operations for the present suspended, with a view to experiment on some cheaper method of evaporation; Prince well down 600 or 700 feet. We will now attempt to describe the process of salt making. The pumping machinery is precisely the same as that used by oil wells. The "well" is a round hole of from four to five inches in diameter, drilled perfectly straight down over a thousand feet into mother earth, and lined or cased with iron casing to prevent the surrounding earth from "caving in" and filling it up. Down this well is fixed the pump tubing, about three inches in diameter, which descends to about 600 feet. At the end or bottom of the tubing is fixed the pump, and inside the pump tubing are wooden rods connected by iron couplings, which work the pump valves and force the brine up the tubing to the surface. In the "Goderich Company" they use a 20 horse steam engine, which, by the aid of connecting machinery, works the pump. The brine, which is pumped up at the rate of 560 barrels in 24 hours, flows to a large vat, where it is held till wanted, and connected with the vat are pipes leading to the salt kettles. In the "Goderich Company's" works there are four rows of these kettles, to the number of 104, each holding 140 gallons of brine. They occupy a space of 120 feet long and 64 wide, and are, of course, built in brick-work, and underneath are the furnaces to heat the brine and carry off the vapour. One long furnace runs under each row of kettles, so that four furnaces are employed, each using about four cords of wood per day. When the furnaces are in full blast, the kettles are "drawn" or emptied every four hours, and then the yield is generally a bushel and a half of salt to each charge. The kettles require cleaning once a day, the process being the chipping off the calcined salt which adheres to the sides, and is only valuable for manure, and is sold to the farmers at \$2 a ton. The quality of the salt depends much upon the cooking of the brine, as the faster it boils the finer becomes the salt. Another plan of absorbing the water is by evaporation by solar heat; but this process requires extensive works, produces a coarse salt, and has not yet been introduced into Canada. The cost of cordwood at the wells is about \$2 to \$2.50, and some of the works are about to try coal as a more economical fuel, as it can be laid down at Goderich for \$4.50 per ton. The number of men employed at the "Goderich Company's" works comprise fourteen, including engineer and packers. The workmen state that the action of the salt has a singular effect upon their clothes, quickly rotting all cotton garments, rendering it necessary for them to wear woollen clothes, which are not affected by the brine.

Taking the experience of the "Goderich Company," the manufacture of salt costs about \$1 per barrel, including the package, which is made for about 30c. at the factory. The cartage to the station or wharf is 44c. per barrel, and the freight to Toronto \$24 per car load, and to London \$17. The amount turned out by the company named is about from 90 to 100 barrels per day, 280 lbs. of salt comprising a barrel. For purity and freedom