

The rich gold find by Mr. N. C. Owen at Millipic, has turned all eyes in that direction, and just now great activity is being displayed among persons owning property in that district. All persons who are fortunate enough to own property in that district are making thorough searches for the precious stuff, and it is reported that a shaft is being sunk on a two foot lead on the property of Dr. Cowie of Halifax, and the prospects are of the most encouraging nature. Persons who have examined the quartz taken from this lead pronounce it very fine and having every indication of turning out rich. The doctor has evidently struck a bonanza and we wish him success.—*Bridge-water Enterprise.*

AMALGAMATION.

By B. C. WILSON, PRESIDENT GOLD MINERS' ASSOCIATION OF NOVA SCOTIA.

From Canadian Mining Review.

In the early days of California gold mining, amalgamation was an unknown term, and quicksilver and amalgam unknown quantities. We washed away the auriferous sands and got the golden grains in their original and yellow purity. By and by some of the large sluicing and hydraulic companies introduced quicksilver, and it was soon in general use, but being very crudely handled immense quantities were washed away with the debris, and if quicksilver can do it, certainly the whole State of California should be thoroughly salivated.

When quartz crushing was inaugurated in Nova Scotia, the quicksilver and gold were not introduced to each other until after the ore was crushed, and not during the process of reduction; consequently the present system of copper plates was unknown, but the crushed sand was washed over riffles and pools of quicksilver arranged according to the ingenuity of the experimenters in various tempting ways to inveigle the gold into a new home, and it was not considered inconsistent to employ 100 pounds of quicksilver per battery of four stamps.

I think the first person to introduce quicksilver amalgamation to crushed ores in Nova Scotia was the late Charles Puttner, of Bavaria, who came here from Carolina at the instance of the late Joseph Weir, and set up an experimental Chilian mill at Freshwater, Halifax.

If I am not in error, I started the third stamp mill in Nova Scotia, making all the patterns myself and invented, without knowing it, the present style of stamp head and method of attaching it to rod. Our venture was a joint stock affair owned in Halifax, and the directors deemed it their duty to do a great amount of detail directing on matters of which they were perfectly ignorant, and in the light of present improvements I was not much better, and I got a decided reprimand for putting in round stamps instead of square ones, and learning that I entertained certain heretical ideas of putting mercury in the mortar while the ore was being reduced they took early precaution to direct me "not to do it" under penalty of their severest displeasure.

We crushed three weeks without quicksilver, other than in riffles and in sluices; and finding particles of unamalgamated gold going off in the tailing, I then without the knowledge of any one, charged one battery with quicksilver and ran the other without. The result of the week's work was 25 per cent more gold in the quicksilver mortar than in the other—next week I changed the quicksilver to the other mortar and ran the first without, with just about the same results in favor of the one with mercury in it. I followed this up for four weeks to thoroughly satisfy myself and then reported to the directors, who kindly directed me to use my own judgment in the matter.

This innovation called the copper plates into existence. At first they were very small and very thin; later on we got thicker ones, made wide at the top and narrow at the bottom like the inverted gable of a house, and, so enduring are early impressions, that I regret to say many persons who consider themselves authorities on this subject still adhere to this form of plate. It requires, however, but little demonstration to show the fallacy of the principle; whatever increases the quantity of water or pulp on any part of the plate disturbs the adjustment to an extent which makes either one or the other part inoperative as a saving appliance.

More recently a copper plate with an electro deposition of silver on one surface (more popularly known as "silver plate") have been introduced. My own experience with these extends over only half a year or so, but I am free to record my appreciation of them, as they always present a clean amalgamated surface from the word "go," which cannot be permanently obtained on a copper plate until there is on it an amount of amalgam equal to about two ounces of gold per square foot, which must be kept there as long as you expect the plate to be efficient, though, of course, you can get it all back when the plate has outlived its usefulness (provided the temptation offered has not induced some one to rob you in the meantime), while on a silver plate the permanent accumulation of gold seems to be practically inappreciable, so that, all things considered, the silver plate is both an economy and a security.

There seems to prevail an idea that any gold once attached to an amalgamated plate is practically saved. This I have lived to know, is an expensive fallacy, and one which I believe to be largely increased on the silver plate as compared with the copper one, and I deem it very important to provide means to intercept the slow glacier-like progress of amalgam which commences an almost imperceptible journey down and eventually over the plates and out of the mill.

(To be Continued.)

MINERS' TOOL SUPPLIES

Octogan Cast Steel,
Striking and Sledge Hammers,
Patent Shovels and Picks,
Belting, Waste Oil,
Dynamite, Fuze and Caps.
Cut Nails and Spikes,
Wire and Hemp Rope, &c., &c.
AT LOWEST PRICES.

P. WALSH,
MARKET SQUARE, HALIFAX, N.S.

MACDONALD & CO..

(LIMITED)

HALIFAX, N. S.

Manufacturers of and Dealers in

PUMPING MACHINERY
FOR MINERS' USE,
IRON PIPES AND FITTINGS, &c.

JOHN SILVER & CO.,

Importers & Dealers in British, Foreign & Home Manufactured

DRY GOODS.

The Old Stand, 176 & 178 Granville St., and 2 Buckingham St., Halifax, N. S.

ESTABLISHED 1845.

A Splendidly Assorted Stock. New Goods by every Steamer.

Ring up TELEPHONE 497 for prompt execution of orders.

Foyle Brewery,

HALIFAX, N. S.

P. & J. O'MULLIN,

MANUFACTURERS OF

India Pale and Mild Ales,

- AND -

BROWN STOUT PORTER,

In Wood and Glass.

- ALSO -

TABLE BEER & KRAIZER BEER.

NEW GOODS

ARRIVING AT

E. MAXWELL & SON'S,

Ladies & Gents Tailoring Establishment,

68 Granville St.,

SOUTH OF Y. M. C. A.

L. ANNIE VEAZEY,
Christian Scientist,

106 GRANVILLE STREET,

(Opp. Province Building.)

OFFICE HOURS, 3 to 6 P. M.

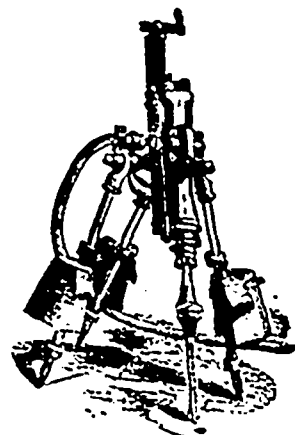
CONSULTATION FREE

Victoria Mineral Water Works
W. H. DONOVAN, Prop.

Manufacturer of

BELFAST GINGER ALE, AERATED LEMONADE,
SPARKLING CHAMPAGNE CIDER, SODA WATER
and all kinds of MINERAL WATERS.

22 GRANVILLE ST., Halifax, N. S.



Ingersoll Rock Drill Comp'y
OF CANADA,

204 ST. JAMES ST., Montreal

—MANUFACTURERS OF—

Rock Drills, Air Compressors, Steam Hoists
Boilers, and General Mining Machinery,
Explosives, Batteries, Fuses, &c.

Drill can be seen working at the Halifax
Dry Dock.