

# THE CANADIAN MONETARY TIMES AND INSURANCE CHRONICLE.

DEVOTED TO FINANCE, COMMERCE, INSURANCE, BANKS, RAILWAYS, NAVIGATION, MINES, INVESTMENT,  
PUBLIC COMPANIES, AND JOINT STOCK ENTERPRISE.

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SUBSCRIPTION,  
\$8 YEAR.

## Mercantile.

### Gundry and Langley.

**ARCHITECTS AND CIVIL ENGINEERS**, Building Surveyors and Valuers. Office corner of King and Jordan Streets, Toronto.  
THOMAS GUNDRY. HENRY LANGLEY.

### J. B. Bonstead.

**PROVISION and Commission Merchant.** Hops bought and sold on Commission. 82 Front St., Toronto.

### John Boyd & Co.

**WHOLESALE Grocers and Commission Merchants**, Front St., Toronto.

### Childs & Hamilton.

**MANUFACTURERS and Wholesale Dealers in Boots and Shoes** No 7 Wellington Street East, Toronto, Ontario. 28

### L. Coffe & Co.

**PRODUCE and Commission Merchants**, No. 2 Manning's Block, Front St., Toronto, Ont. Advances made on consignments of Produce.

### J. & A. Clark,

**PRODUCE Commission Merchants**, Wellington Street East, Toronto, Ont.

### D Crawford & Co.

**MANUFACTURERS of Soaps, Candles, etc., and dealers in Petroleum, Lard and Lubricating Oils**, Palace St., Toronto, Ont.

### John Fiskin & Co.

**ROCK OIL and Commission Merchants**, Yonge St., Toronto, Ont.

### W. & E. Griffith.

**IMPORTERS of Teas, Wines, etc.** Ontario Chambers, cor. Church and Front Sts., Toronto.

### Thos. Haworth & Co.

**IMPORTERS and dealers in Iron, Cutlery and general Hardware**, King St., Toronto, Ont.

### Hurd, Leigh & Co.

**GILDERS and Enamellers of China and Earthenware**, 72 Yonge St., Toronto, Ont. [See advt.]

### Lyman & McNab.

**WHOLESALE Hardware Merchants**, Toronto, Ontario.

### W. D. Matthews & Co.

**PRODUCE Commission Merchants**, Old Corn Exchange, 16 Front St. East, Toronto, Ont.

### R. C. Hamilton & Co.

**PRODUCE Commission Merchants**, 119 Lower Water St., Halifax, Nova Scotia.

### Parson Bros.,

**PETROLEUM Refiners, and Wholesale dealers in Lamps, Chimneys, etc.** Waterrooms 51 Front St. Refinery cor. River and Don Sts., Toronto.

### C. F. Reid & Co.

**IMPORTERS and Dealers in Wines, Liquors, Cigars and Leaf Tobacco**, Wellington Street, Toronto. 28.

### W. Rowland & Co.

**PRODUCE BROKERS and General Commission Merchants.** Advances made on consignments. Corner Church and Front Sts., Toronto.

### Reford & Dillon.

**IMPORTERS of Groceries**, Wellington Street, Toronto, Ontario.

### Sessions, Turner & Co.,

**MANUFACTURERS, Importers and Wholesale Dealers in Boots and Shoes, Leather Findings, etc.**, 8 Wellington St West, Toronto, Ont

## Mining.

### MADOC GOLD DISTRICT.

(From our own Correspondent.)

Belleville, Nov. 2, 1868.

The high hopes respecting the richness of this region in the precious metals, which were so prevalent eighteen months ago, have been slowly giving way before the repeated disappointments which have attended the efforts of Companies and individuals to realize the expectations excited by the undoubted richness of some of the deposits, and the reported value of others. Instead of the general haste to become rich, by monopolizing every lot where gold was said to have been found, the holders of mining property, so called, are for the most part only desirous of finding a chance to *hedge*, or in other words, to get rid of their lands, stock, etc., with the least possible loss; while the question of the day has resolved itself into this, "Does gold exist in Hastings in paying quantities?"

To this momentous query, the reply of the great majority of those who have been stung by the golden *Astors* would be, if they spoke their real sentiments, a decided "NO!" And yet there is no doubt that gold does exist in appreciable quantities in many of the rocks of the district,—that it is not confined to a few localities, or to any particular stratum, but that it is diffused over a large extent of country, and is to be found in several varieties of rock, of very different chemical composition and mechanical structure. In short, it is at once enticingly common, and provokingly scarce. Upon the right solution of this question, however, depends the future prosperity of the district, and the wellbeing of a large number of its population; and it is therefore worthy of serious consideration and demands a close examination to discover, if possible, the real causes of the general want of success which has thrown such a gloom over our mining prospects.

The first appears to be the rash confidence with which men, totally ignorant of the requisites for success in mining operations, invested their means in the purchase of land and the construction of machinery, on the mere report of interested parties and of *soi disant* assayers, who were either ignorant of the business, or so dishonest as to give false certificates for the purpose of attracting customers and increasing their receipts. Next, the utter inadequacy of the machinery employed to deal with the peculiar conditions under which the gold of these formations is associated with other metals and minerals. Third, the difficulty of obtaining persons qualified to work such machinery as was in use to the best advantage. Fourth, the want of that determined energy which perseveres to the end, and submits to no discouragement so long as a chance of success remains, but when one method fails, sets about to try another. Lastly, in many instances, the want of sufficient capital to carry out the expensive alterations which would be necessary to pursue their object to a satisfactory conclusion.

Having thus presented the dark side of the picture, let us inquire what inducements there are to persevere in the attempt to realize the advantages promised by the presence of the precious

metals. First, only one method of reduction has been tried, namely, mercurial amalgamation, which, as is well known, can only be successfully applied to ores in which the metal exists, not only in a free or native, but also in a clean state. Now, most of the gold of this region is found in combination with other matters which impede, and in some cases totally prevent the action of the quicksilver. In many cases which have come under my own observation, particles of gold, distinctly visible to the naked eye, some of them over a grain, or even several grains in weight, have been submitted to the action of mercury for an hour or more, without any amalgamation being effected, even after being boiled with salt, soda, etc., though after being submitted to the roasting action of the blow-pipe, the mercury seized upon the same particles with avidity. I have also frequently observed several particles of gold in the tailings of an amalgamation assay, partially coated with quicksilver; from which it appears that the action of mercury is at best only partial and uncertain, and that we must expect considerable loss from its employment as the agent for the collection of gold.

Second, no attempt has yet been made to get rid of any part of the dead matter, (lime, magnesia, silice, alumina, and other comparatively worthless minerals), previous to submitting the ore to the action of the mercury; yet the metallurgists of Europe have found that the net returns of their mines have been largely increased by well managed concentration with improved apparatus, and that by this means they have been enabled to reduce profitably many ores which were formerly considered too poor to pay working expenses, and even to work over again the refuse of former operations. There is, however, an objection to these modes of concentration, viz., that they operate through the medium of water, which causes a loss of a certain portion of the valuable matter of the ore, varying according to the friability and gravity of the substance; though, in the case of gold, I believe the loss to be over stated. This difficulty seems likely to be overcome, as I read lately an account of a machine exhibited in Montreal, which separates the various substances contained in an ore by the application of centrifugal force, and the resistance of the atmosphere, according to their several specific gravities. After their separation, the valuable portions can either be melted with proper fluxes, or roasted and submitted to the action of mercury or chlorine.

The last mentioned agent has not been hitherto introduced in this district, though it is being used with great success in the Pacific States for the reduction of gold-bearing sulphurets, and I am strongly of opinion that it may be profitably employed in the treatment of the similar substances which abound in the Hastings mines, and which has so far proved the chief difficulty in our reduction works.

Two other processes are about to be tried here. One is the Stevens flux, in which very few of our mining men appear to have any confidence. The works of Messrs Jones & Robbins, in Hungerford township, have been ready for two weeks past, and their operations have only been delayed by the absence of the flux, which was shipped from Boston on the 16th ult, but has been unaccountably delayed in its transit.

The other is the thermo-electric process of Dr. Rœ, of Syracuse, the apparatus for which he is