

# THE CANADIAN MONETARY TIMES AND INSURANCE CHRONICLE.

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

VOL. III—NO. 5.

TORONTO, FRIDAY, SEPTEMBER 17, 1869.

SUBSCRIPTION \$2 A YEAR.

## Mercantile.

- J. B. Boustead.**  
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. Coffee & Co.**  
PRODUCE and Commission Merchants, No. 2 Manning's Block, Front St., Toronto, Ont. Advances made on consignments of Produce.
- Candee & Co.,**  
BANKERS AND BROKERS, dealers in Gold and Silver Coin, Government Securities, &c., Corner Main and Exchange Streets, Buffalo, Y. N. 21-1v
- John Fiskin & Co.**  
ROCK OIL and Commission Merchants, Wellington Street East, Toronto, Ont.
- W. & R. Griffith.**  
IMPORTERS of Teas, Wines, etc. Ontario Chambers, cor. Church and Front Sts., Toronto.
- Gundry and Langley.**  
ARCHITECTS AND CIVIL ENGINEERS, Building Surveyors and Valuers. Office corner of King and Jordan Streets, Toronto.  
THOMAS GUNDRY. HENRY LANGLEY.
- 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.
- H. Nerlich & Co.,**  
IMPORTERS of French, German, English and American Fancy Goods, Cigars, and Leaf Tobaccos, No. 2 Adelaide Street, West, Toronto. 15
- Parson Bros.,**  
PETROLEUM Refiners, and Wholesale dealers in Lamps, Chimneys, etc. Water rooms 51 Front St. Refinery cor. River and Don Sts., Toronto.
- Reford & Dillon.**  
IMPORTERS of Groceries, Wellington-Street, Toronto, Ontario.
- C. P. 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 Streets, Toronto.
- Sessions, Turner & Cooper.**  
MANUFACTURERS, Importers and Wholesale Dealer in Boots and Shoes, Leather Findings, etc., 8 Wellington St. West, Toronto, Ont
- Sylvester, Bro. & Hickman,**  
COMMERCIAL Brokers and Vessel Agents. Office—No. 1 Ontario Chambers, (Corner Front and Church Sts., Toronto. 2-6m

## Mining.

### MADOC GOLD REGION.

We give the following extract from Mr. T. C. Wallbridge's paper on the geology of the Madoc region:—

All the rocks in which gold has recently been discovered in the County of Hastings are comprised within the Laurentian area, known as the Quinte Gold Mining District. The first discovery of the precious metal was made in 1866, during an unsuccessful search for copper ores. Superficial indications of the occurrence of copper in the township of Madoc had previously led to the prosecution of irregular workings in several localities; but none of the explorations had been characterized by any measure of success. At length, however, a specimen was obtained from one of these so-called mines, which, although at first mistaken for native copper, was soon found to be native gold. Stimulated by this discovery, further search was prosecuted; and at the locality which subsequently became famous as the "Richardson Mine," a considerable quantity of free gold was discovered in two pockets, or irregular cavities, at a depth of about 15 feet below the surface. Considerable interest attaches to this mine, not only on account of the large amount of gold which it yielded within a very short space of time, but more especially on account of the peculiar conditions of association under which the metal occurred.

The Richardson Gold Mine is situated on the eighteenth lot of the fifth concession of the township of Madoc. The surrounding rock consists of an epidotic and chloritic gneiss, enclosing a bed of staurolitic schist and associated in certain places with a ferruginous dolomite. A peculiar character is given to this dolomite by the local occurrence of a black carbonaceous substance, which, in external character, bears considerable resemblance to a lignite, but which is regarded by Dr. Sterry Hunt as probably an altered form of bitumen. It occurs imbedded in the dolomite, in small irregular fragments, which break with a conchoidal fracture, and present a pitch-black color and a resinous lustre. Heated in the open air, it readily ignites, burning with little or no flame, and leaving a residue which, in a specimen examined by Dr. Hunt, consisted of "carbonate of lime, with some siliceous and ferruginous matter, including a quantity of gold."

This friable carbonaceous substance, in association with ochrey oxide of iron, incrusts the walls of the gold bearing pockets of the Richardson Mine, and formed the mixture through which the metal was chiefly disseminated. It would appear that these pockets are merely expansions of a fissure running along the plane of bedding between the highly inclined rocks of the surrounding country. The contents of these cavities have evidently been derived from the decomposition of the surrounding dolomite; for that rock, as seen by the specimens exhibited, contains the disseminated carbonaceous matter, together with free gold, whilst it appears to be sufficiently ferruginous to yield the oxide of iron on decomposition. Whether the carbonaceous substance has, by its reducing action, played any part in the genesis of the gold is a chemical question on which the

writer is not prepared to enter; but their intimate association in this mine is at least highly suggestive. Moreover, the presence of this carbonaceous matter, not in cavities in the dolomite, but imbedded in the rock itself, is a point of considerable significance to the paleontologist, as indicating the existence of organic remains in rocks which have been referred to so old a formation as the Lower Laurentian.

The gold yielded by the pockets of the Richardson Mine usually occurred in a finely divided state, or in the form of small scales and dendritic fragments, but never exhibited distinct crystalline forms. It presented a reddish-yellow color, and was remarkably pure. A specimen assayed in Toronto was between 22 and 23 carats fine, the native metal being thus quite as pure as the standard gold of this country. The auriferous metal extracted from the pockets (consisting of the carbonaceous and ochreous substances) yielded from £3 to £4 worth of gold to the pound. How much of this gold-stuff the mine actually produced it is extremely difficult to estimate, for whilst the workings were in the hands of Mr. Richardson, considerable quantities were surreptitiously carried off by parties who gained access to the mine and were distributed to so large an extent, that, even at the present time (now more than two years after the discovery), specimens may readily be purchased in the neighborhood. It is said that upwards of 60 lbs. of the auriferous material were sent to the United States by the first purchasers of the mine, and subsequently three barrels of the same material were forwarded to New York. It is commonly supposed that the total value of the gold yielded by the pockets of the Richardson Mine was not less than £10,000.

When, however, the two deposits were exhausted the supply ceased, and attention was then directed to working the surrounding "country," where the gold exists either in so finely divided a state as to escape detection by the eye, or in combination with iron pyrites and other metallic sulphides.

It has been said that the metal was confined exclusively to the fissure, and that it could not have been derived from the adjacent rocks, as these, if not entirely destitute of gold, are impregnated with it only to a very limited extent in the immediate neighbourhood of the crevice. Such a statement, however, is entirely contradicted by a chemical examination of rocks broken at a considerable distance from the pockets. Several assays have been made by Professor I. T. Bell, of Albert College, who has kindly furnished me with the results. Two specimens of dolomite from the Richardson Mine yielded respectively 9 oz. 11 dwts. 16 grs., and 4 oz. 5 dwts. 17 grs. of gold per ton of 2,000 lbs.; whilst the metallic sulphides, chiefly iron pyrites, washed from these two specimens contained as much as 88 oz. of gold to the ton. The average value of the gold-stuff at present crushed at the mine is only about £1 per ton; but even this is found to be more than sufficient to cover the working expenses. It should be noted, however, that all the gold thus obtained is abstracted by amalgamation; and as the rock contains a large percentage of auriferous sulphides, it is probable that larger returns would be yielded by a metallurgical treatment better adapted to the character of the ore.

In the same township as the Richardson Mine,