## THE CANADIAN

## 解ercantile.

## J. B. Bonstead.

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

## John Eoyd Ac Co.

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Btreet.
${ }^{28-15}$

## Childs \& Hamilten.

MANUFACTURERS and Wholesale Dealers in Boet and Shoes, No. 7 Wellington Street East, Toronto

## 1. Ceffee \&c.

PRODUCE and Commission Merchants, No. 2 Manning' Plock, Front St.. Toronto, Ont. Advances made on Block, Front Srume.

## d. A A. Clark,

PRODUCE Commission Merchants, Wellington Stree East, Toronto, Ont

## D. Crawford \& Ce

M ANUFACTURERS of Soaps, Candles, etc., and dealer Toronto, Ont.

John Fisken Ac Co.
$\mathbf{R}^{\text {OCK Toronto, Ont. }}$ OIL and Commission Merchants, Yonge St.,
IMPORTERS
Thos Grifith \& C
and Wholesale Dealers

## MPORTERS w. \& R. Girinith

MPORTERS of Teas, Wines, etc. Ontario Chambers,
cor. Chureh and Front Sts
Thes. Hawerth Ac Ce.
MPORTERS and dealers in Iron, Cutlery and general
Hardware, King

## Hurd, Leigh \& Ce.

$G^{\text {ILDERS }}$ and Enamellers of China and Earthenware, 72 Yonge St., Toronto, Ont. [See advt.]

## Lyman st MeNab.

$\mathbf{W}^{\text {HoLESALE Hardware Merchants, Toronto, Ontario }}$
$\qquad$
R. C. Hamiliten \& Ce.

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

Parsen Bres.,
PETROLEUM Refiners, and Wholesale dealers in Lamps, Chimneys, etc. Waierooms 51 Front St. Reflinery cor
River and Don Sts., Toronto.

## C. P. Reid \& Ce

[MPORTERS and Dealers in Wines, Liquors, Cigars and eaf Tobacen, Wellington Street, Toront

## W. Rewland ete

RODUCE BROKERS and General Cemmission Merchants. Advances made on Consignments. Corner

## Reford \& Dillon.

$\mathrm{I}_{\substack{\text { Yportergs } \\ \text { ontarios }}}$

## Sessions, Turner \& Co.

$\mathrm{M}^{\text {ANUPACTURERS, Importer and }}$, Wholeale Dealers thagton st. West, Toronto, Ont

## Hhining.

## MADOC GOLD DISTRICT

Some interesting details respecting mining matters, are afforded in the fellowing correspondence which, coming from a thoroughly reliable source, we take pleasure in publishing

## Belleville, Ont., Sept., 25, 1868.

Dear $S_{\text {IR, }}$,-According to your request, I visited, on Wednesday, 16 th inst., the Quartz-lead discovered by D. B. Johnston, on Lot No. 30, in the sixth concession of the township of Madoc, and now beg to hand you the result of my obser vations.
Leaving the waggon at the village of Bannockburn, we followed a bye-road leading through the woods in a north-easterly direction, for about three-fourths of a mile, which brought us to the place where the vein had been exposed, a iew place where within the boundary of the lot.
The lode runs along the gently sloping side of a little valley, where a clearing of a few acres in extent has been made, across which it has been traced for about 40 rods, to where it enters the base of a piece of rising ground covered with thick woods, beyond which it has not been followed; the bearing by compass being N: 30 E .
The lode consists of ao distinct vein of semiopaque crystalline quartz of a whitish color, and possessing a rather oleaginous than glassy lustre on the surface of fracture. It is about four fect wide, and is enclosed between well defined wallrocks; that on the west side consisting of micaschist, dipping to the west with an inclination of about 87 degrees ; and that on the east side talc-schist, dippinc to the east at an angle with the horizon of airout 80 degrees, so that the vein appears to widen downwards at an angle of ahout 12 degrees. The whole is covered with only a few inches of loose soil, which had been removed for a space of 12 feet in length by 7 feet broad.
Having taken notes of these points, I proceeded to search for gold in sitû, and succeeded in bring. ing up from the bottom of the hole made by blasting, which is nowhere more than two feet deep, and then contained a little water from recent rains, a few pieces of quartz in which gold was plainly discernable. I then broke off from the solid rock of the vein a few fragments which contained visible particles of gold. Some of the larger pieces which lay about, apparently gold on their surfaces

I also observed that the quartz contains a few scattered nodules and scales of titanic and mag. netic iron ore, and crystals of common pyrites (bisulphuret of iron), and has an interrupted vein of galena (sulphide of lead), about half an inch in thickness, running along the middle.
On leaving, I selected portions of the clean vein-stone; of earthy debris, containing fragments of the wall-rocks and surface quartz; of the drocomposed quartz forming the cap of the vein ;'and of the central part, containing the galena-over 25 lbs . in all ; from which, since my return, I have made the following tests:-
No. 1. Clean vein-stone, shewing no gold to
process) 0182 grains gold $=13 \mathrm{dwts} .16 \mathrm{grs}$., value $\$ 13.64$ pet ton of $2,000 \mathrm{lbs}$
No. 2. Earthy debris, containing fragments of wall rocky and v-in-stone; 5 lhs, gave by mill process, 0.07 grs , gold $=1$ dwt. 4 grs . per ton.
${ }^{2}$ No. 3: Ferruginous decomposed quartz from surface of lode : 5 lbs. gave, by mill process, a small quaptity of gold.
No. 4. Same as last ; 5 lbs. gave a similar return.
No. 5. Fire assay of sulphurets concentrated from the tailings of the above four assays- 425 grains yiefled 0.11 grains alloy, containing 0.075 silver, and 0.035 gr . gold $=$

No. 6. Quartz from middle of vein, including galena, se, 5 lbs concentrated to 1,116 grains of which 69 grains was magnetic iron. The 1,116 grains yielded by fire assay, 805 grains lead, or 72.148 per cent ; which, by cupellation, gave 2.13 grains of silver alloyed with about 1-700th part of gold $=77$ ozs. 3 dwts. 11 grs -value $\$ 98.64$ per ton.
From the above results I draw the following deductions:
First-That the discovery is genuine and valuable.

Second - That if properly worked, the vein is likely to prove richly remunerative.
Third-That so far as I can judge from the present 1 |mited exposure, the gold appears to be disseminated throughout the whole width of the vein; but that it occurs chiefly in the immediate vicinity of the wall-rocks, especially on the west side of the lode ; and that the silver accompanies the galena,

Fourth-That the proper mode of working such a vein would be, to separate the portion containing the galena, and work the remainder by panamalgamation, saving the sulphurets. The portion confaining the galena to be crushed and concentrated, and reduced by smelting along with the sulphnrets from the other part of the vein, when the alloy of silver and gold would be obtained by Pattinson's process, and afterwards by solution and precipitation,
am, dear Sir,
Yours very truly,
James T. Beli,
Practical Mineralogist \& Assayer: W. H. Pöntos, Esq.

The Albion Mines near New Glasgow, cover an area of furur square miles, in which several pits have boen bored and mining continued at a depth of 400 feet in all directions. The thickness of the coal spams heretofore mined has been enormons -nearly forty feet; but of this not more than twelve feet has been of a good quality of coal. At present only two pits are being worked, others having been abandoned, and one, the largest, having taken fire within a year, involving the necessity of permitting the river to flow in and suhmerge it in order to extinguish the flames, At presept, however, the company have a new pit 900 feet in depth, where, as they claim, a much

