

FIRST REPORT  
ON THE  
GEOLOGICAL SURVEY  
OF THE PROVINCE OF NEW BRUNSWICK.  
By Abraham Geener, Provincial Geologist, &c.  
[Continued.]

From Harbour De Lute to Head Harbour, the hornblende rock is most abundant. At the harbour, and near the light house, the altered slate appears again. It is filled with the sulphuret of iron, which, from its decomposition, covers the rocks with the sulphate of that metal, and thus an excellent opportunity is afforded for the manufacture of alum and copperas. The slate on the east side of the island exhibits the same character, and has been distorted by the same causes referred to in describing the west side. The hornblende is abundant; but, besides these, I discovered four enormous dikes of porphyry cutting through the slate at right angles in some instances, and passing between the strata in others. One of the dikes will be seen on each side of Schooner Cove, and another appears at Liberty Point; but the most remarkable of the four is at West Quoddy, and almost opposite the lighthouse, on the American side of the line. Here the porphyry cuts the slate at right angles, while near it there is a high cliff of trap, which interrupts the slate again. A drawing was taken of this remarkable spot, but I have been unable to have it engraved for the present report.

The whole of the eastern shore is bold and lofty.—Frightful needle shaped cliffs, and shelving masses of slate, descend into the sea so perpendicularly, that in foggy weather, vessels might be thrown by the waves against the cliffs, before any danger would be apprehended. Instead of the overhanging precipice, the west side of Campo Bello has a gentle slope towards the shore, where the inhabitants have made a considerable progress in agriculture. Friar's Head is a considerable cliff on the south side of the harbour at Welchpool. It has a detached mass of trap placed at its front, named the "Old Friar;" but the imagination must be very active to recognize any resemblance between this conical rock and any monastic functionary. The island is owned by Captain OWEN, R. N., who resides at Welchpool.

West Quoddy light, on the American shore, stands on a low cliff. Between Lubec and Campo Bello, the tide runs with great rapidity; and as the channel, at low tide, has scarcely two feet of water, and contains a number of dangerous rocks, the navigation is almost impracticable, except at high water.

At all the islands, peat is abundant, and frequently covers the rocks, even at places where it is exposed to the waves. There are also large collections of clam shells in the harbours and creeks, where they are often covered by the soil. They are always found at the ancient haunts of the Indians, who, before the discovery of the country by the whites, made the "clam," a principal article of diet in times of scarcity.

It is impossible to conceive a more interesting sight than is presented in the Bay during the summer season. Boats and vessels becalmed, and carried away by the tide, are at one instant hidden by the blackened rock, or the green foliage of some little island. At another, they glide from behind the curtain, and appear struggling with the overwhelming current. Often several hundreds of boats huddled together, and practicing a deadly deception on the haddock and cod, from a signal given by the tide, draw up their anchors, and hasten to the shore. The silence of evening is broken by the sound of the Indian's gun, levelled with deadly aim at the rising porpoise. The hollow sound of the "loon's" note is discordant with the scream of the gull. Here the glassy surface of the water is broken by a shoal of herring; yonder the spouting grampus is blowing up the spray in preparation for another dive. Perched on a rock, and armed with a pin hook, baited with a shrimp, the fisherman's boy can fill a large bag with herring half a score of scientific anglers could replenish with trout during a whole season. The sea is alive with fish, its surface with human beings, and the air with feathered tribes.

GRAND MANAN.—Grand Manan is a large and beautiful island, situated about twelve miles south from Campo Bello, and West Quoddy Head. It is twenty five miles long, and upon an average five miles in breadth; its longest diameter being from north east to south west. The north west side of the island lies almost upon a straight line, notwithstanding several high headlands that advance into the sea. It is uninhabited on this side, which presents a bold front of overhanging cliffs and lofty mural precipices of majestic grandeur and beauty. Occasionally collections of debris, or broken rocks, have fallen from the cliffs, forming steep slopes. Upon these slopes, wherever they are not too steep for the soil to repose, the birch, alder, wild gooseberry, and currant, are planted, and thrive amidst the ruins of the dilapidated coast. Between the main land and the island there is a powerful current, both on the flood and ebb tide. When the wind is opposed to a current, a heavy sea is soon produced, which by its violence is constantly undermining the rocks, and promoting their downfall. Deep caverns are worn out of the solid base of the lofty wall, which tumbles headlong into the sea beneath. Along the straight coast on this side of Grand Manan, there is a lofty ridge of trap rising most frequently in a perpendicular direction from the sea. The breadth of this ridge is about two and a half miles.—The mountain thus skirting the shore is furrowed lengthwise, and is occupied by several small lakes, that fill the deep circular impressions along its summit. It can scarcely be doubted that these basins, now filled with water, were once the craters whence the trap flowed in a liquid state. The molten masses that rush down the sides of the mountain may still be seen marking the limits of each fiery deluge, and the points where they became too cool to flow over the burning wave that had preceded them. There is a wide difference between the trap rock and the schistose formations underlying the southern side of the mountain. The latter have deep ravines extending from north to south, and those distinguishing grooves and scratches, that point out

the course of a current of waters once sweeping over them. The diluvial grooves common in the Province are parallel to the ravines worn out of the slate.

The mountainous district is covered with a fine growth of beech, birch, and maple. The southern side of the island is low, and quite level. The different kinds of slate and quartz rock, into which numerous dikes of trap have been injected, compose its base. These slates also have been more or less changed in their characters by the heat attending the filling of the dikes and the strata are much disordered from causes already noticed. It is to be remarked that this island, and almost all those in the Passamaquoddy Bay, have their longest diameters in the direction of the course followed by the stratified formations of the Province, and there can be no doubt that the direction of strata in all countries has greatly modified the courses of mountains formed by intrusive rocks, independent of magnetic influence which is supposed to have had an effect of a similar nature.

It is probable that an opening in the earth for the transmission of accumulated matter under the forms of lava and gas would be much more liable to occur in the direction of the strata, and between their layers than at right angles with their natural joints; and it would be an important enquiry that would discover how far volcanic vents are influenced by the rocks through which they pass. Wherever the trap exists unassociated with the stratified rocks in the British Provinces, it is found to attain a much greater elevation than when it appears under any other circumstances. This may be accounted for by the resistance the strata have made wherever volcanic violence has not been sufficiently powerful to remove them altogether, or to open such a passage for the lava as would allow it to flow freely from beneath.

Formerly the lower lands produced an immense growth of pine and spruce, but the large timber has been consumed by fire, the great destroyer of American forests. The hard wood upon the mountain was protected by its less inflammable foliage, and the thick growth of green plants covering the hills.

My examinations were commenced on the north side of the main island, but the turbulence of the sea prevented me from completing them in that quarter, and a vessel of sufficient size could not be procured during the fishing season to buffet the waves and afford a retreat on an uninhabited coast, where travelling on foot is rendered impracticable from the lofty cliffs whose bases are washed by the sea to the depth of many fathoms. Indeed, it is by no means a comfortable employment to be creeping beneath the precipices from two to three hundred feet high, whose overhanging rocks are suspended above, and are constantly falling upon the shattered fragments spread along the shore, or dropping into the ocean to be no more seen. I was able, however, to determine the character of each formation, and procure the beautiful and interesting minerals contained in them.

The northern side of the island will average from three to four hundred feet in height. Its lofty mural cliffs stand like rude imitations of masonry, and rival in grandeur those of the celebrated Cape Blomidon in Nova Scotia. The rock at many places is perfectly basaltic, and appears like large pieces of squared timber placed upright side by side, with a perfection and beauty equal to the basaltic columns of Staffa. These are met by enormous blocks of rhomboidal and amorphous trap, which from their architectural arrangement appear to have been laid by the skill and ingenuity of man. The amorphous trap is frequently alternated with amygdaloid, which by decomposing more rapidly than the compact variety, hastens the undermining and consequent breaking down of the headlong steep. Whole facades of columns have been broken off and carried away by the sea. The ends of the columns have been polished by the attrition of the waves constantly moving the sand, and the lofty colonnades stand based upon a natural tessellated pavement.

About nine miles from Northern Head westward, there is a singular indentation in the cliff called Dark Harbour.—At the entrance of this opening the sea has forced up a barrier of sand, pebbles, and drift timber, and completely closed the mouth of a safe and very convenient harbour for small vessels. During the flood tide, and at high water the sea infiltrates through the bar, and there is a regular ebbing and flowing in the basin thus produced, and partially filled by a small stream descending from the mountain above. It may not be improper to remark here, that only a small sum of money would be required to open this singular harbour, which might be entered at all seasons of the year, and allow the inhabitants to have communication with the main land during the winter months.

The Minerals between Northern Head, and Dark Harbour, are amethyst, agate, jasper, hornstone, Thompsonite, stibite, heulandite, calcareous spar, zeolite, and apophyllite. These are similar to those found in the trap rocks of Nova Scotia, and although they may not prove to be of much practical value, they are very interesting in the science of mineralogy, and the discovery will give a new feature to the Province, which is evidently not surpassed in mineral wealth by any of her sister colonies. Several veins of specular and magnetic iron ore were also discovered along the shore, but none of them are of sufficient thickness, and are placed in such situations as will admit of their being worked with profit. Most of the minerals first mentioned are contained in the amygdaloid, which at many places forms the foundation on which the amorphous and columnar rocks rest. The amygdaloid is extremely vascular, and has its cavities filled with varieties of zeolite and calcareous spar.

(To be continued next week.)

**FIRE STOCK.**  
SEVERAL Shares of Stock in the Central Fire Insurance Company for sale.—Terms known on application at this Office, or at R. RANKIN & Co's, Store, Fredericton. Fredericton, 23d July, 1838.

**INDENTURES for Sale at this Office.** Feb. 11

**VALUABLE PROPERTY.**

For sale upon advantageous terms, by ROBERT RANKIN & Co.

A VALUABLE Building Lot and Wharf Lots, in front of the Honorable J. S. SAUNDERS, lying between the Market House square and Jackson's Hotel.

Two Town Lots near the Catholic Chapel fronting on Brunswick and George Streets.

A Lot of about sixty acres near Blake's Mills on the Nashwaak.

A Lot on the Nashwaak near the Ferry, formerly owned by Donald McLeod, deceased.

A Lot in the Parish of Woodstock, near Eel River, containing two hundred acres.

A wilderness Lot in the Parish of Woodstock, in rear of Land owned by JOHN DIBBLE, Esquire, containing two hundred acres.

A Lot of one hundred acres in the Parish of Brighton, granted to — Gray.

A Lot of one hundred acres in the Parish of Perth, granted to Robert Woodward.

A Lot of one hundred acres in the Parish of Andover, granted to — Smith.

For particulars apply to

WILLIAM J. BEDELL, Fredericton

April 16, 1838.

**FLOUR, FISH, &c.**

PICKLED FISH.

BRIS. No. 1 Pickled Herrings, Gibb'd, do. Pickled Cod Fish, do. Pickled Haddock, Naps and Fins; do. Pickled Round Mackerel.

DRY FISH.

Large Table Cod Fish, Common size do. do. Superior lot of Pollock Fish.

FRESH GROUND WHEAT FLOUR, in barrels, half barrels, and quarter ditto.

Barrels CORN MEAL; round and yellow Corn. A quantity of Hamburg, Canada, and P. E. Island PORK.

Franklin Stoves; Cooking Stoves of the most approved patterns, which have given general satisfaction to purchasers this present winter. Close Stoves, from 18 to 36 inches, with Dumb Stoves, Stove Pipe and Elbows to match; Sheet Iron; Hand Irons; Coal Scutles, and Fire Fenders.

FURNITURE.

Chairs of various kinds and qualities; Toilette Tables; Wash Stands; Looking Glasses; Door Mats.

ORNAMENTAL GLASS WARE.

Glass Dishes, ditto Plates, ditto Lamps for burning Oil, Carriage Lanterns, Stable ditto, Hand ditto, with Oil Burners.

Lamp OIL and Wick, with the whole of an extensive Stock, and very general assortment of British and American GOODS, will be sold at the lowest possible rates for Cash by

ROBERT CHESTNUT.

N. B. PLASTER PARIS, in rock by the Ton, and in flour by the Bushel.

Fredericton, January 8, 1839.

**REVISED EDITION OF THE PROVINCE LAWS.**

THE Subscriber having been induced by numerous applications from different sections of the Province, to publish an additional supply of the above valuable work, for the use of those not entitled to copies from Government, such persons as may be desirous of procuring them will have the goodness to leave their names and places of residence, at an early period, to the Royal Gazette Office, or with either of the undermentioned Gentlemen, where Copies of the work may be seen:—

HON. E. B. CHANDLER,....Dorchester.

THOMAS WYER, Esquire,....St. Andrews.

J. W. WELDON, Esquire,....Richibucto.

GEORGE KERR, Esquire,....Chatham.

W. H. BALDWIN, Esquire,....Bathurst.

J. M. CONNELL, Esquire,....Woodstock.

MR. DAVID McMILLAN,....St. John.

J. SIMPSON, QUEEN'S PRINTER.

Fredericton, 16th October, 1838.

**FIRE INSURANCE COMPANY.**

Connecticut, United States.

Incorporated in 1810—with a Capital of \$150,000

THIS long established Institution has for more than twenty years transacted its extensive business on the most just and liberal principles—paying its losses with honorable promptness. During this period have settled all their losses, without compelling the insured, in any instance, to resort to a Court of Justice. The present Board of Directors pledge themselves, in this particular, fully to maintain the high reputation of the Company. It insures on the most favourable terms every description of property against LOSS OR DAMAGE BY FIRE, but takes no marine risks.

Application for insurance may be made either personally or by letter to the Secretary of the Company, or to its Agents, who are appointed to many of the principal Towns and Cities of the United States, and in the British Provinces.

PRESENT BOARD OF DIRECTORS.

Eliphalet Terry, Samuel Williams,

James H. Wells, F. J. Huntington,

S. H. Huntington, Elisha Colt,

H. Huntington, Jun., R. B. Ward.

Albert Day, ELIPHALET TERRY, President.

James G. Bolles, Secretary.

THE Subscriber having been appointed Agent at Fredericton for the above mentioned Company, is now prepared to take risks on every description of Property against loss or damage by Fire.

ASA COY.

**VICTORIA LINE.**

Saint John to Fredericton,

Three times a Week each way.

**THROUGH IN A DAY!**

WILL leave St. John every Tuesday, Thursday, and Saturday mornings, at 7 o'clock. Returning, will leave Fredericton every Monday, Wednesday and Friday mornings, at the same hour, by the Nerepis Road. Fire through, 20.

Books kept at the St. John Hotel, and at the Fredericton Hotel. All baggage at the risk of the owners.

The Subscribers would respectfully solicit a share of the Public patronage, as they have placed upon this route four good four horse Teams, first rate Coaches, and careful and obliging Drivers.

C. STOCKWELL,

JAMES HEWITT,

H. GOULD.

Fredericton, December 4, 1838.

**Tobique Mill Company.**

AN Assessment of One Pound per share, on each and every Share of the Capital Stock of the Tobique Mill Company, is ordered to be paid to the Treasurer of the said Company, at his Office in Fredericton, as follows:

Ten Shillings on each and every Share, on or before the fifteenth day of February next, and Ten Shillings on each and every Share on or before the fifteenth day of March next; whereof notice is hereby given, and payment thereof required accordingly. Dated the eleventh day of January, 1839.

WM. JAS. BERTON, Secretary.

**LAND FOR SALE.**

THE FARM belonging to the late EDWARD GARDNER, situate in the Parish of Dumfries, in the County of York, possession given on the first day of May next.

Terms of Sale may be known by applying to JAMES TAYLOR, Esquire, of Fredericton, or to the Subscriber at Woodstock.

A. NELSON GARDEN.

Woodstock, 2d January, 1839.—4w.

**NAILS, NAILS.**

Wholesale and Retail, Manufactured and sold by

W. H. SCOVIL.

North Market Street, St. John, N. B.

**CUT NAILS**

OF all descriptions, of a superior quality to those usually imported into this market, and at a less rate. The Cut Finishing Nail will be found far preferable to the wrought Nail.

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OF all descriptions, of a superior quality to those usually imported into this market, and at a less rate. The Cut Finishing Nail will be found far preferable to the wrought Nail.

Carpenters and Builders are requested to call and inspect for their own satisfaction.

A Discount of about 25 per cent, will be made to Retailers.

March 6, 1839.

**CO-PARTNERSHIP.**

THE undersigned having entered into Co-partnership, the business heretofore conducted by DUNCAN BARBER, will be in future carried on in the Firm of DUNCAN BARBER & COMPANY.

DUNCAN BARBER.

LAWRENCE WM. GALL.

Springhill, Fredericton, Nov. 17, 1838.

**CONSIGNMENT.**

THE Subscriber has just received by the late Steamers, a large quantity of TEAS; consisting of Gunpowder, Hyson, Twankey Young Hyson, Souchong, Congo of different kinds, and Bohea, part of the Clifton's and part of the Hon. East India Company's Teas, comprising an excellent assortment for family use or Retailers.

Also—Very superior WINES, Bottled in Cases and Barrels: put up for the Mess of the 65th Regiment.

Best Golden SHERRY, Best L. P. MADIERA Old CLARET, Old PORT, and

Pale BRANDY.

One Bale 7, 9-4 and 10-4 BLANKETS; an assortment of FURS, consisting of Caps, Mitts, Boas, &c.

Likewise on hand—Lisbon and Sherry Wine, Bottled in Barrels, best Cognac BRANDY in wood, best Government Manilla SEGARS, with a variety of other articles.

MARK NEEDHAM.

Fredericton, Nov. 13, 1838.—tf.

**THE SUBSCRIBER.**

Offers to the Public for Sale, Cheap for Prompt Payment.

A SMALL assortment of DRY GOODS newly commenced in his Store, formerly occupied by J. Sutherland, with an addition of FLOUR, CORN MEAL, TEA, TOBACCO, SUGAR, MOLASSES, &c.; 1 ton CHEESE, 1 do. BUTTER, with a variety of Groceries.

Also—500 Quintals Seal Fish; 100 do. Codfish, 100 Brils best Canso Herring,

100 do. " Grand Manan,

20 do. Pickled Cod & Haddock,

25 do. Mackerel. 20 do. Cod Oil,

Lamp and Sperm Oil; 150 Boxes smoked Herring; 150 Tons Stone Plaster; 200 Casks ground Plaster, 50 Bushels Calcined do.; 60 Hds Lime.

JAMES DRAKE.

Fredericton, January 2, 1839.—3m.

**FOR SALE.**

A LOT of LAND in the lower part of the Town of Fredericton, containing one acre and a half.

For further particulars apply to

CHRISTOPHER BROWN, Jr.

Regent Street.

Fredericton, February 13, 1839.

**COUNTY OF GLOUCESTER**

**MINING ASSOCIATION,**

NEW BRUNSWICK.

THIS Association, possessing a Crown Grant of the Mines and Minerals in the entire Counties of Gloucester and Restigouche, New Brunswick, (containing very rich and extensive beds of Copper Ore, Coals, Iron, Lead, &c. &c.) announces to Capitalists, men of science, and Miners, in America and elsewhere, that they are ready to treat on highly advantageous terms with adventurers for the Lease of spots of ground for Mining purposes, to be selected by the adventurers themselves, and for periods not exceeding 50 years; and the Association will treat with the first discoverer of a Mine in preference to any other person, whenever the Directors are in possession of the facts.

For further particulars and for terms, apply to WM. STEVENS, Esquire, Bathurst, New Brunswick; or Frederic Bankart, Esq., 34 Clements Lane, Lombard Street, London, Solicitor to the Association, where specimens of the Ores discovered may be seen and examined.

N. B. All Communications by Letter to be post paid.

**Botsford Mill Flour.**

THE subscribers having erected Mills on the Little River Falls, in the neighbourhood of this City, for the manufacture of Flour, and having likewise imported per ship Eagle, from London, a very superior lot of best Dantzic Red and White WHEATS, beg leave to inform the public, that they will continue to keep on hand at their Store, No. 28, South Market Wharf, best Superfine and Fine FLOUR, in barrels and in bags—which they will warrant equal in quality to that imported from the United States; and as they intend selling on reasonable terms for cash or other approved payment, they trust they will be favoured with a share of the public patronage. Bakers will do well to call and examine for themselves.

OWENS & DUNCAN.

St. John, August 4, 1838.

**Tobique Mill Company.**

FREDERICTON, 27TH FEBRUARY, 1839.

GEORGE F. S. BERTON, Esquire, being about to leave the Province on account of ill health, has resigned the office of Treasurer of the Company; and WILLIAM J. BERTON, Esquire, having resigned the office of Secretary to the said Company. The Board of Directors consider it advisable to consolidate the said Offices and have appointed ROBERT GOWAN, Cashier of the Central Bank, to be Treasurer and Secretary of the said Tobique Mill Company, of which all persons concerned will please take notice.

JAMES TAYLOR, President.

**HOUSE TO LET.**

THAT eligible stand for a BOARDING HOUSE, situate on the corner of Phoenix Square, (containing 18 Rooms of different dimensions, and very commodious in other respects, for that purpose. The House and premises will be let for a term of years, and possession given on the 1st day of May next.

Apply to the Subscriber,

JAMES BALLOCH.

5th March, 1839.

**Commercial Bank of New Brunswick**

HAVING assumed the business of the Bank of Fredericton, Notice is hereby given, that on Friday next the first day of March, a Branch of this Bank will be opened, in the building known as the Bank of Fredericton.

COMMITTEE OF DIRECTION.

Asa Coy, F. E. Beckwith James Hale, W. D. Hartt, Thomas T. Smith and B. Wolhaupter, Esquires.

Cashier, Archibald Scott, Esq.

Discount days, Monday and Thursday of each week; hours of business from 10 to 3 o'clock.

By order of the President and Directors.

A. BALLOCH, Cashier.