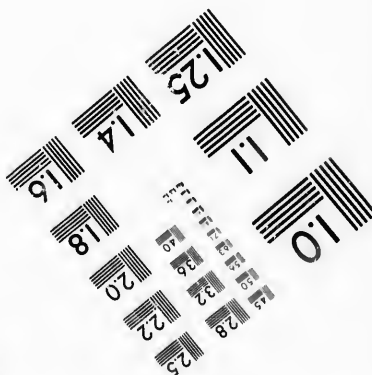
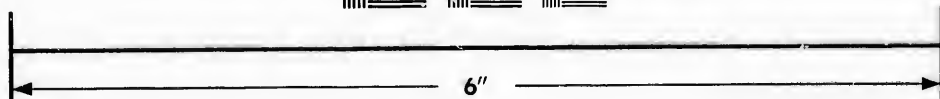
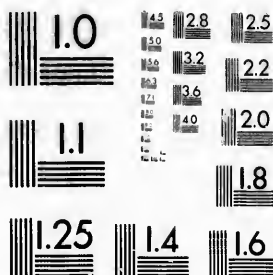


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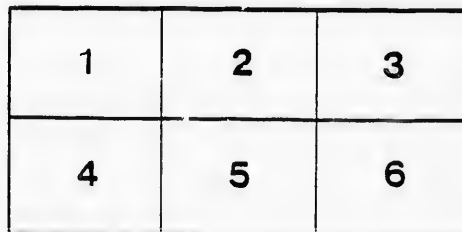
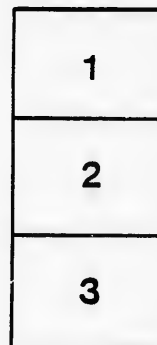
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BOURINOT

Coal Claims and Lands,

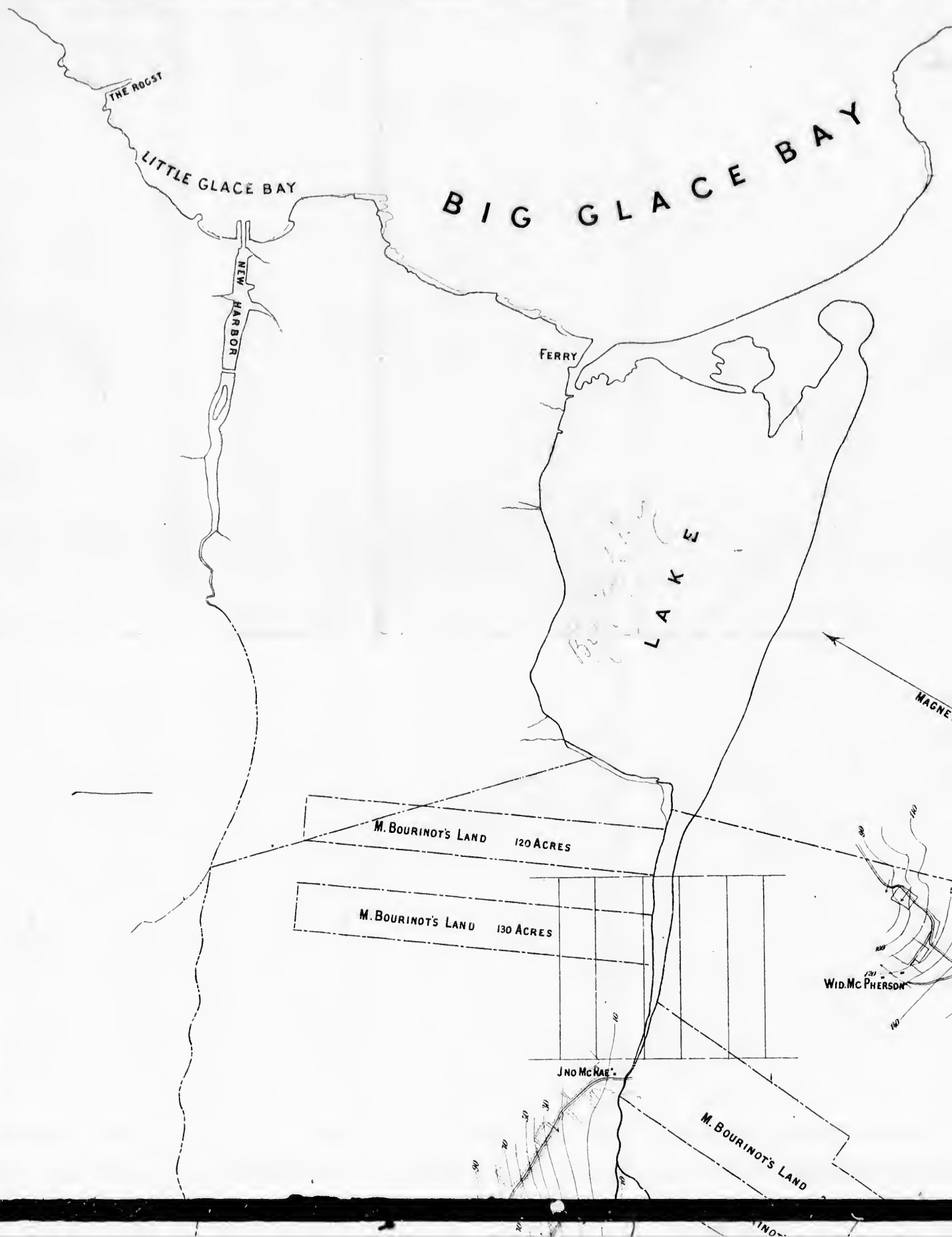
CAPE BRETON.

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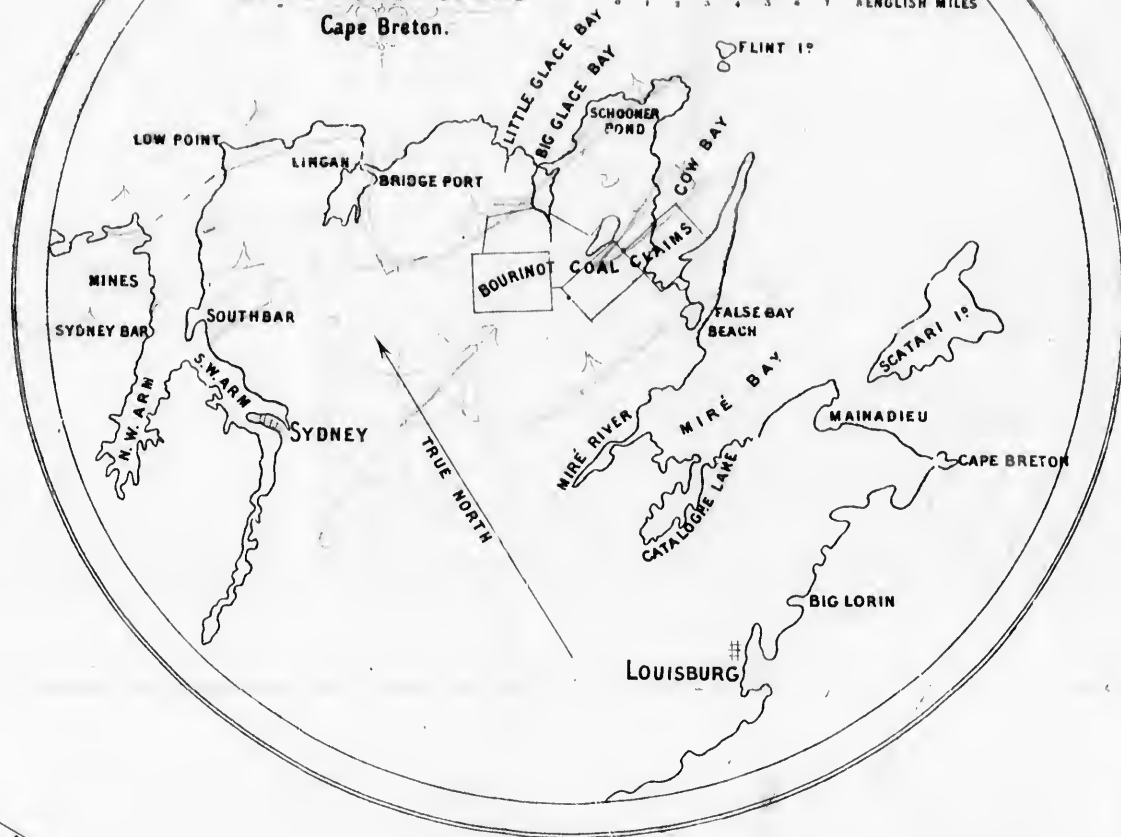


BAY

MAP
of the COAST from
SYDNEY TO LOUISBURG
Cape Breton.

SCALE

SEA MILES
ENGLISH MILES



MAGNETIC NORTH

SAND LAKE

WID. Mc PHERSON

DIP 11° S 25° W

ANGUS McDONALD
SHORT ANGUS
THE MCGILLAY BED
LEVEL OF THE BASIN

ANGUS MORRISON

BORING

M. BOURINOT'S LAND

196 ACRES

GEO. EDWARDS

Wm. MONROE

Wm. BOWN

WID. SPENCER

JNO. SMITH

GOWRIE MINES

MAP
of the **COAST** from
SYDNEY TO LOUISBURG
Cape Breton.

SCALE

0 1 2 3 4 5 6 7 SEA MILES
0 1 2 3 4 5 6 7 ENGLISH MILES



GOWRIE MINES

WID. SPENCER

GEQ. EDWARDS

WM. MONROE

ALFRED BOWN

WM. BOWN

M. BOURINOT'S LAND

196 ACRES

ANGUS MORRISON

BORING

BORING

SAND LAKE

ANGUS McDONALD
(SHORT ANGUS)

THE MCDONALD BED

THE BASIN

DIP 11° S 25° W

MC PHERSON

MAGNETIC NORTH

TOP OF SADDLE

LONG BEACH

Geological and Topographical

MAP

of the

FOUR BOURINOT COAL CLAIMS

NEAR

COW AND GLACE BAYS, C.B.

by

BENJAMIN SMITH LYMAN,

of No 437 South Fifth St. Philadelphia :

FEB. 1865

MILL BROOK COVE

BLOCK HOUSE

C
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W

B
A
Y

BREAKWATER

WILSON'S MINES

PIT.

COAL 2 1/2 FT.

WID. SPENCER

JNO. SMITH

GEO. EDWARDS

WM. MONROE

ALFRED BOWEN

WM. BOWEN

ACRES

WILSON'S MINES

MCKENZIE'S COVE

LITTLE SAGAROOT

NONEC POINT

WM. SPEARS

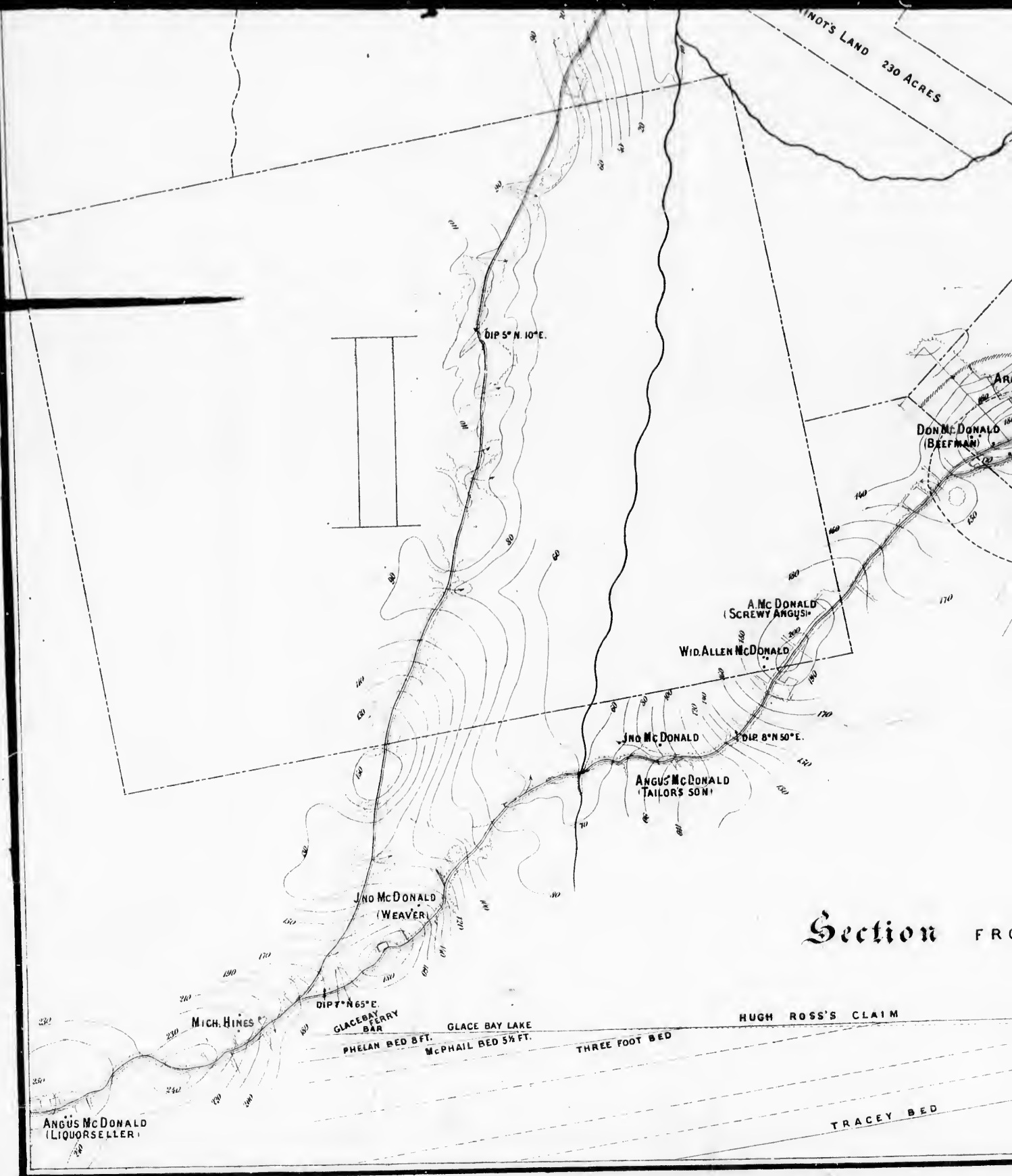
FISH HOUSES

INCLINED PLANE

LANDING PLACE POINT

JAS. PEACH

BIG SAGAROOT



Section FROM

C

BOURINOT

COAL CLAIMS AND LANDS,

CAPE BRETON.

NEW YORK:
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1865.

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BOURINOT COAL CLAIMS AND LANDS, CAPE BRETON.

The following Report of Benj. Smith Lyman, Esq., Mining Engineer, of Philadelphia, on the above claims, which he has been engaged for eight months in thoroughly exploring, is submitted together with his Geological and Topographical Map of the same district.

REPORT on the Four Bourinot Coal Claims, near Cow and Glace Bays, Cape Breton, by Benj. Smith Lyman, Mining Engineer, of No 135 South Fifth Street, Philadelphia; accompanied by a Geological and Topographical Map.

The four Coal Claims near Cow and Glace Bays, Cape Breton, owned by Marshall Bourinot, Esq., are rights of search licensed by the government; the First and Second of five square miles each, the Third of six square miles and the Fourth of about four hundred acres less than five square miles; in all, more than twenty square miles. The Fourth Claim is situated at the upper end of Cow Bay and covers six hundred acres of land on the northwestern shore and for the rest extends over the Bay itself. The Second Claim adjoins the Fourth on the northwest and the Third adjoins the Second on the north, and the First adjoins the Third on the west. The Third Claim reaches to the upper end of Big Glace Bay Lake on the east and to the Little Glace Bay Brook on the north.

That portion of Cow Bay which is covered by the Fourth Claim, is for the most part shallow and filled with mud or sand bars but growing deep towards the east. The land rises northerly from the Bay to the limit of the Fourth Claim, and the low flat ridge formed here extends westward through the second claim sloping down on the south to Black Brook, and having a slight hollow on the north, in which lies Morrison's Lake. North of this hollow is a second ridge somewhat higher than

Situation

Topography.

the first and about parallel to it and north of that a deeper hollow, at the upper end of which lies Sand Lake in the Southern part of the Third Claim. Between Sand Lake and Big Glace Bay Brook to the north, lies a broad ridge narrowing westward, with a gentle slope to the north. The Big Glace Bay Brook runs nearly straight through the southeastern edge of the First Claim and through the middle of the Third Claim, with flat high land on the north. The direction of this Brook is curiously parallel to that of the northern shores of Cow Bay and Mire Bay and of Little Glace Bay Brook. The hills in these claims vary from 120 to 200 feet in height.

Geological
Structure.

The lay of the rocks of this region is (as Professor Lesley has shown) in the form of a large basin with its centre somewhat north of Little Glace Bay, and with a nearly east and west strike in the southern and eastern parts of these claims by a gradual curve becoming a north and south strike somewhat north of the northern end of the claims; and into the southwestern side of this basin enters a saddle which makes a comparatively small basin to the south of it throughout its length. This saddle is wide and high on the shore of Cow Bay and has its highest point there a little northeast of Long Beach; it disappears near the eastern corner of the first claim. Throughout its length it has on the south dips as steep as forty-five degrees, and at its western end causes the ordinary dip of the basin to be for a space gentler than otherwise would be the case. The small basin south of this saddle is called the Cow Bay Basin, and within it lie the best and most accessible coals of these claims. Its wide end is towards the east and it tapers off gradually to the west; it has on the south side a gentle dip of about one in six and a half ($9\frac{1}{2}^{\circ}$) towards the north. The steeper dip of forty-five degrees on the northern side of the basin would not interfere with the working of the coal but adds materially to the quantity of it contained within an acre. Claim No. II. covers nearly the whole of the productive part of the western end of this basin, and Claim No. IV. contains a portion of it further to the east. The northern part of Claim No. III. and the whole of Claim No. I. lie in the large Glace Bay Basin.

Coal Beds.

Within these claims three beds of coal of workable thickness have been actually opened by boring or digging; namely the McAulay Bed, the McRury Bed and a Three Foot Bed; a fourth, the Tracey Bed, worked at Mire Bay, also underlies the whole of these claims, but does not crop out on them, and has not been opened.

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The uppermost of these beds, the McAulay, is the bed worked by the Messrs. Archibald at the Gowrie Mines, Cow Bay; and the same as the McDonald Bed at Schooner Pond, the Phelan Bed at Big Glace Bay, the Bridgeport Bed and the Lingan Bed. Within these claims it occurs only on the Second, and was bored there at the eastern edge of the claim and near the western end of Morrison's Lake, and was opened by a trial pit near the crop, three hundred yards west of that lake. It proved here to have not only improved decidedly in quality from what it is at the Gowrie Mines, the nearest working on the same bed, but to have increased in thickness, though, still, less in thickness than at Glace Bay. The thickness at the trial pit was five feet and a half of good coal with six inches of poor slaty coal below. As these six inches would be at any rate made nearly worthless in the operation of "holing" under the coal to remove it, the bed is here about equal in value to one of six feet of solid coal. The five feet and a half contain at two feet from the bottom a one inch seam of splint coal (or coarse cannel), but are otherwise solid bituminous coal. This bed underlies within the Second Claim 450 acres containing 4,070,000 tons. Of this amount 300 acres containing 2,640,000 tons lie below the level of high tide, and 150 acres containing 1,430,000 tons lie above the level of high tide. The lowest part of this Coal is at the bottom of the basin at the eastern edge of the Claim, and is there four hundred and twenty-five feet below the surface of the ground.

About two hundred feet below the McAulay Bed is a bed that is to be seen on the shore of Cow Bay near the Widow Spencer's house and is called the Spencer Bed. At that point it contains two feet and eight inches of coal besides some layers of slate. The same bed has been bored on the north side of the road at Alex. McRury's and found to be there only eighteen inches thick; and the same bed is still thinner at Schooner Pond; so that it can hardly be reckoned as a workable coal within these Claims.

At two hundred and fifty feet below the McAulay Bed, or fifty feet below the Spencer, lies the McRury Bed, bored and opened by a trial pit at Alex. McRury's, in the Fourth Claim, near the edge of the Second. It is the same as the four foot four inch bed a little above Long Beach, at Cow Bay, on the north side of the basin, and as the McPhail Bed worked by Mr. Ross at Schooner Pond, and as the upper one opened on Little Glace Bay Brook in 1863. At the last named point it is five feet eight inches thick, containing five feet four inches

of coal; and it is about the same at Schooner Pond. It is, no doubt, also the same as the bed worked by Mr. Wilson at the end of the Southern Head of Cow Bay; and here it contains about six feet of coal divided in the middle by two feet and a half of stone, and has about ten feet above it another double bed of four feet of coal divided also in the middle by two feet of stone. At Alex. McNary's the McNary Bed has nine inches of good coal at the bottom overlaid by two feet eight inches of clay, on which rests two feet five inches of good coal. Over this lies clay eighteen inches thick, and on that six inches of soft dirty coal. There are, then, three feet and two inches of good coal divided into two benches at nine inches from the bottom by a band of fire clay, which is no doubt of very irregular thickness, like a similar band in the middle of the same bed on the north side of the Northern Head of Cow Bay, which disappears almost completely within two-thirds of a mile across the Bay of Schooner Pond. As this point, at Alex. McNary's, is also the one where this coal is thinner than at all other points where it has been properly opened this side of Little Glace Bay Brook, it is not unreasonable to expect an average thickness of it in these Claims of three feet. Its quality at Alex. McNary's is very excellent, so hard and free from sulphur, so well adapted to domestic, steam and even forge purposes, that it may be considered workable in its condition there. The "holing" could be done in the clay, saving the coal itself from injury, and adding to the height of the rooms; and it would probably be desirable to remove the whole of the clay so as to turn the lower nine inches of coal to account, giving three feet two inches of coal and making the gangways and rooms five feet ten inches high. It would not be necessary to remove the clay from the mine, but only to throw it to one side in the rooms themselves. This coal underlies 1,050 acres of the Second Claim, containing 5,290,000 tons, reckoning on a thickness of three feet; of this amount 640 acres or 3,215,000 tons are below high tide level, and 410 acres or 2,075,000 tons are above it. In the Fourth Claim this bed underlies 450 acres, containing, at a thickness of three feet 2,184,000 tons; of this 210 acres or 1,013,000 tons lie under the water of Cow Bay, and 240 acres or 1,168,000 tons under the land; of this last amount 180 acres or 873,000 tons lie below the level of high tide, and 60 acres or 295,000 tons above it, so as to be drainable by a drift from the shore.

Thin Beds of
Schooner Pond.

At Schooner Pond and on the extreme end of the Northern Head of Cow Bay, there is a three foot bed of coal about a

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hundred feet below the McPhail (or McRury) Bed, accompanied by a one foot bed twelve feet higher up. These beds appear to have grown much thinner at Cow Bay and are not counted on as workable in these claims. This three foot bed was conjectured to be the same as the Spencer Bed, already mentioned, before any geological survey had been made at Cow Bay.

At 150 feet below the McRury Bed lies a Coal bed that has been bored south of Alex. McRury's and found to be there two feet and three inches thick; the same bed was bored at the western edge of the Claim No. II. and was there one foot nine inches thick; so that its average thickness may, then, be taken to be two feet. Close under this bed is a valuable bed of fire clay, twenty-five feet thick, which will furnish good material for ordinary bricks, if for nothing else.

At 100 feet below the Two Foot Bed lies a Coal bed that has been bored also south of Alex. McRury's and found to be eighteen inches thick.

At 100 feet below the Eighteen Inch Bed, or 350 feet below the McRury Bed, lies a Coal bed that was shown by a boring south of Alex. McRury's, to be two feet ten inches thick. It is the same as a bed once poorly opened below high water mark, just above Long Beach, on the northern shore of Cow Bay, and found to be three feet and two inches thick. It may be called the Long Beach Bed, or the Three Foot Bed. It underlies 1,980 acres of the Second Claim, containing at a thickness of three feet, 9,800,000 tons; of this 1,700 acres or 8,500,000 tons lie below high tide level, and 280 acres or 1,300,000 tons above it. In the Fourth Claim it underlies 1,150 acres, containing, at a thickness of three feet, 5,568,000 tons; of this, 620 acres or 2,990,000 tons lie under the waters of Cow Bay, and 530 acres or 2,578,000 tons under the land; of the latter amount, 520 acres or 2,528,000 tons lie below high tide level, and 10 acres or 50,000 tons above it.

At about 2,400 feet below the Long Beach Bed lies the Tracey Bed, worked at Miré Bay, near False Bay Beach. The quality of this coal is good, a half of it very good. Its thickness at four places where I measured it in the mine averaged three feet eight inches and a quarter, with a band of clay averaging five inches and a quarter in thickness at six or eight inches from the bottom, making the whole thickness four feet one inch and a half; at one point the clay disappears entirely and leaves three feet eleven inches of coal. This bed underlies the whole of the four claims; so that with a thickness of three feet eight inches, there would be 73,000,000 (seventy-

three million) tons within the four claims. The points where it comes nearest to the surface are at the western corner of the First Claim, and at the southwestern corner of the Fourth Claim, where it is about equally deep below the surface, that is, 1,280 feet. In the direction of the Saddle and at its top, this depth increases very gradually to about 1,400 feet at the eastern boundary of Claim No. III.

Claim II. The Second Claim therefore contains 450 acres or 4,070,000 tons of McAulay Coal; 1,050 acres or 5,290,000 tons of McRury Coal; and 1,980 acres or 9,800,000 tons of the Three Foot or Long Beach Coal. This all lies within the 1,980 acres which the Long Beach Bed covers, and amounts to 19,160,000 tons.

Claim IV. The Fourth Claim contains in like manner 450 acres or 2,184,000 tons of the McRury Coal, and 1,150 acres or 5,568,000 tons of the Three Foot Bed; in all, within the 1,150 acres, 7,752,000 tons. Of these amounts, 240 acres or 1,168,000 tons of the McRury, and 530 acres or 2,578,000 tons of the Three Foot Bed; in all, 530 acres or 3,746,000 tons of both are under the land. 210 acres or 1,016,000 tons of the McRury, and 620 acres or 2,990,000 tons of the Three Foot Bed in all 620 acres, or 4,006,000 tons of both are under the waters of Cow Bay. I am decidedly of the opinion that the water will not prevent the working of this coal under the Bay.

All the claims contain, therefore, of these three upper Coals, within a space of 3,130 acres, 26,912,000 tons; or under the land within 2,510 acres, 22,906,000 tons; and under the Bay, within 620 acres, 4,006,000 tons. Reckoning also, the Tracey Bed, there are, then, within the twenty square miles of all the claims, 100 millions of tons. Yet the McAulay Bed alone, within the Second Claim, would yield a hundred thousand tons a year for forty years, if the pillars were thoroughly robbed; or for thirty-two years, if the pillars were left. The 3,130 acres just mentioned would be included within five square miles; the 2,510 acres within four square miles; and the 450 acres of McAulay Coal would be less than one square mile, the ordinary extent of a single government coal lease.

Shipment. The distance of the middle of this portion of the McAulay Bed from the Gowrie Mines Wharf and Breakwater at Cow Bay is two miles and a half, and an easy line of railroad could be constructed to this point. The distance to Mr. Bourinot's seven acre lot at False Bay Lake, is four miles and a quarter, and the topographical map shows that a railroad could easily be constructed in this direction. The distance to the upper end of Big Glace Bay Lake is, in a straight line, only two

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miles and three-quarters, but by the line any railroad would have to take, about four miles and a half, and it is a mile and a half farther to the mouth of the lake. The distance to Sydney in a straight line is thirteen miles, and a railroad could be built there pretty straight without heavy grades. I believe that False Bay Lake can be converted into a good harbor at comparatively small expense, by cutting through the beach only 200 feet wide between it and Miré Bay.

Mr. Bourinot owns 1008 acres of land lying almost wholly ^{Land Lots.} within these Claims. One lot contains seven acres and lies on the southwest shore of False Bay Lake, close to the deepest water of the lake and well situated for the shipment of coal when the lake is made into a harbor. Another lot of 196 acres lies almost wholly within the Fourth Claim coming down to the shore of Cow Bay. It is partly improved, and almost all the rest of it is good woodland. Another lot of 325 acres is situated nearly in the middle of the Second Claim. It contains near the western end of Morrison's Lake a dry barren of some size which will be a good location for a village of miners' houses, near to the works. The outlet of Morrison's Lake traverses this lot and no doubt furnishes some good mill-sites; the stream is small but very constant through the year. This lot as well as the one last mentioned contains good localities for the sinking of pits on the McRury and Three Foot Beds. Another lot of 230 acres lies in the southern part of the Third Claim, bounded on the north by Big Glace Bay Brook, and is uncommonly well wooded. Two other lots of 130 and 120 acres lie near together in the northeastern part of the Third Claim and consist in good part of woodland; they are bounded on the southeast by the upper end of Big Glace Bay Lake.

BENJ. SMITH LYMAN.

PHILADELPHIA,
23 Feb., 1865.

The enterprise of the Coal interests of this country having been so generally turned to the Coal fields of Cape Breton, the products of which are now so largely used by the Gas Companies of the United States, as well as for steam, manufacturing and domestic purposes, the above valuable Report will prove most interesting to all concerned.

One of the great drawbacks to the value of the Coal fields of this region, except the mines at Sydney belonging to the General Mining Association of London, has been the want of good harbors sufficiently near—a want which has compelled the expenditure of very large sums of money by the Mining Companies there in operation, for the construction of break-waters and artificial harbors, and has determined the International and other Coal Companies of New York upon the construction of a Railroad from Cow Bay to Sydney Harbor, a distance of over 20 miles, at a probable cost of nearly half a million of dollars.

This Railroad being built by an amalgamation of the interests of the different Coal Companies in that section, viz: the International Coal Company of New York, The Block House Mining Company of New York, the Clyde Company of New York, and a Boston Company represented by Mr. Converse and others, will pass through these Bourinot Claims, and add immensely to their value.

The Little Glace Coal Company of Boston, *whose mines with those of the other Companies above named, are contiguous or nearly so to these Claims*, has spent \$80,000 in gold on the construction of an artificial harbor—still quite inadequate—yet after only three years existence, the great profits of the Little Glace Bay Company enabled them to declare a dividend of over 40 per cent. last year.

But apart from the great advantages accruing to these properties by the construction of the Railroad to Sydney and the opening of that magnificent harbor as a place of shipment, the proprietors of these Claims feel they possess still greater advantages in the existence of False Bay Lake (as per plan,) so near to them, which, as Mr.

Lyman
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Lyman states above in his Report, "*can be converted into a good harbor at comparatively small expense, by cutting through the beach only 200 feet wide between it and Mire Bay.*"

The great advantages offered by the opening of such a harbor, induced the special employment of an Engineer to survey and report upon it, and the Report and plan of Mr. Angus McDougall on that point, will set all doubts of its practicability at rest.

MARSHALL BOURINOT, ESQ.,

Sydney, Cape Breton.

Sir:—

I have the honor to submit herewith the result of a survey made in pursuance of your instructions, viz: "to examine the Beach at False Bay for the purpose of discovering the practicability of making such improvements there as are necessary for the shipping of Coal and to make it a Port capable of giving shelter to vessels."

On the 12th of October, I got here with a party and immediately commenced boring for any obstruction, that there might be hidden under the surface of the Beach, which now separates False from Mire Bays. On the south side of the Beach, we bored twenty-nine feet in three days, meeting with no obstruction and on the north we bored twenty feet, with the same result.

This is sufficient to establish the fact, that no rock will be encountered in making a cut across the Beach at the part immediately situated between the boldest waters at each side.

The soundings on the plan exhibit a depth of about twenty feet of water in the two basins at the western end of False Bay. With very little trouble these basins could be deepened sufficient for two hundred acres, and are of themselves sufficient for the accommodation of about two hundred vessels of the various sizes usually found together in a sea-port. The other much larger portions would afford accommodations to any extent but will not be required.

When on the ground, we had a gale, the severest experienced for some years; during this gale four large craft anchored at the Cow Bay Collieries, were driven ashore. I would here mention that the brig "Kate Cummings," of Newfoundland,

worked out of Miré Bay in the severest part of it. From this instance, it is to be inferred, that the long headlands of Miré Bay afford greater protection than at Cow Bay during the storms the heaviest here—that is the southeast storms.

The waters in Miré Bay for miles past the Beach are bold, and clear of reefs and shoals: with the entrance completed into False Bay a port is provided, easily approached and entered, and vessels are at all times well sheltered.

The fog, which is frequent on the southern coast, is kept off by the elevated ground running from Scatarie Island towards the interior. Fog is known but seldom to interrupt navigation north of the light-house.

As this is situated within four miles of your extensive "areas," on which you have workable seams of Coal that are very valuable, and from the "Block House" and "Gowrie" Mines, only about five miles and within a mile of the Tracey Mine, now worked by Dr. McLeod, the importance of making the necessary improvements cannot be well estimated, for it is likely to become the principal depot on the eastern part of this island for shipping coal.

The cost of cutting the Beach is small compared to the amount required to secure it from becoming refilled. Should an excavator be provided, the cost of excavating should not exceed fifteen (15) cents per cubic yard, but to make the necessary protection of durable material, as would be necessary for a port of such importance, I would estimate for the materials and labor complete, say \$16,000 and for excavation, 3,000

—————
\$19,000

Yours Respectfully,

ANGUS MAC DOUGALL,

Civil Engineer.

*False Bay Beach, Oct. 31st, 1864.

In corroboration of Mr. MacDougall's report, the sub-joined letter of A. C. Morton, Esq., is submitted.

New York, March 15th, 1865.

M. BOURINOT, Esq.

Dear Sir:

As the consulting Engineer of the International Coal Com-

* See Bayfield's Admiralty Chart of Cape Breton.—Sheet X.

pany, I have visited and examined all the points on the coast of Cape Breton between Sydney and Louisburg, which have been either improved or proposed for harbors by artificial works with a view to facilitate the shipment of coal from the mines of that district.

It is well known that both Sydney and Louisburg are harbors of great capacity equal if not superior in many respects to any on the coast of Nova Scotia; but at no point on the coast between these places are there natural harbors or places where protection to shipping may be secured except by artificial works, varying in extent and cost according to the peculiar features of the several localities. Among the latter I regard the place known as False Bay Beach, from its position and general characteristics, as holding out comparatively superior facilities for securing harbor accommodations by artificial work.

It is situated about midway between Sydney and Louisburg. It will be observed by reference the map that Cow Bay and Miré Bay are deep arms of the sea, extending several miles into the interior of the country, and are in position nearly parallel with a narrow intervening strip of high lands. The waters of the upper extremity of Cow Bay reach False Bay Beach and are separated from those of Miré Bay at that place by a narrow sand bar of from two to three hundred feet in width and about three-fourths of a mile in length.

There are strong indications that at some distant period there was here an opening where these waters united, and that the intervening section was an Island.

Inside this bar is a large basin containing several hundred acres with sufficient depth of water in some portions to float a large class of vessels. The shape and extent of this basin, the depth of water and the position and dimensions appear to be correctly represented on your map of that locality. These soundings and measurements show that but a comparatively small expenditure is required for opening and securing a channel through this bar for the passage of vessels, and the area inside of the bar may be enlarged and deepened so as to accommodate a large number of vessels.

I have no knowledge of the character of the bed of this basin or depth of water from surveys of my own, and therefore cannot speak definitely of the extent and value of the accommodations which may here be obtained or the cost of the same.

The character of the country between this place and your mine favors the construction of a railway for the transportation of coal to this point for shipment.

It may be well to state in this connection, that arrangements are in progress for the construction of the Sydney and Louisburg railway. In the event of the construction of this railway it will pass either over or near your coal area.

Respectfully yours,

A. C. MORTON.

The following letter of Mr. A. McBean, a Contractor, who has had long previous experience in similar matters, places the question beyond doubt:

SYDNEY, Cape Breton, 5th Jan, 1865.

MARSHALL BOURINOT, Esq.,

Sydney.

Sir:—

According to request I have examined the plan of proposed Harbor at False Bay Beach; if correct, as I have no doubt it is, to make the wharfs and deepen channel as per plan.

The Wharfing I would recommend, however, in the first place, to be well and substantially close Piled; at the outer or seaward end to sink good and sufficient blocks, well ballasted, as a perpetual protection to said Wharfing. For the whole amount, say Piling, Blocking and Ballasting, as also deepening channel according to plan, the subscriber will agree to do the same for the sum of fifteen thousand one hundred and sixty dollars, (\$15,160.)

I may here add, that should the writer be otherwise employed on the coast near said harbour, would and could afford to do your work at a less sum, but if not, it is as low as it could possibly be done for without other work.

Should this meet your views, will be glad to hear from you at your earliest convenience.

Meantime, remain,

Your obed't serv't,

A. McBEAN.

Samples of Coal from an opening made on the McAulay Bed, upon these claims, were sent to the Manhattan and New York Gas Light Companies and tested by them.

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Mr. Adam, the President of the latter Company, expressed a very high opinion of the Coal from the result, and the following letter from Joseph A. Sabbaton, Esq., will also show its fine character as a Gas Coal—the more surprising from its being taken at depth of only 25 feet from the surface.

MANHATTAN GAS LIGHT COMPANY,
ENGINEER'S OFFICE,
18th Street Station, North River.
NEW YORK, March 1st, 1865.

Dear Sir:—

The result of the examination of the Coal from the McAulay opening on your claim in Cape Breton Island is as follows:—

One ton, 2,240 pounds, yielded 9,500 cubic feet of 15.53 candle gas, and 40 bushels of coke, weighing 1,540 pounds. The coke makes a very good fire. The ash fuses into a heavy hard clinker. This Coal seems to be inferior to that from the Block House Mine only in the quality of its coke.

ANALYSIS OF THE COAL.

Volatile matter, 35.8
Fixed carbon, 54.3
Ash, 9.3

100.0

ANALYSIS OF THE GAS.

Olefiant gas,	} 5.25 per cent,
Hydro carbon vapor,	
Carbonic oxide,	11.00 per cent.

Very respectfully,

JOS. A. SABBATON,

ENGINEER.

MR. MARSHALL BOURINOT.

In conclusion, as a summary of the very valuable nature of these properties, there are Mining Rights extending over an area of 20 square miles, containing most valuable quality of Coal. There are several valuable ownerships in fee simple of the different lots of land, as specified on Mr. Lyman's plan, furnishing timber and

other necessary material &c. required in extensive mining operations. There is a property of seven acres with a water frontage of 17 chains on False Bay Lake, the most available spot there for shipping purposes, and a Water Grant extending from the whole 17 chains frontage—valuable for wharves &c.

One of the most important things however, in connection with these properties, is the feasibility with which False Bay Lake can be converted into a good and spacious harbor—almost adjoining the Coal Beds in some instances, and only $4\frac{1}{2}$ miles from the McAuley opening, with a grade requiring little expense to construct a rail road.

Without this harbor it is true, the existence of the rail road running through the property to Sydney Harbor would greatly enhance its value, but the superior advantages of opening False Bay Lake enhances it still more. Mire Bay is open nearly all the year. Sometimes it may be closed by drift ice for nearly two months—never longer, and often navigation is not impeded for two weeks. It is singularly free from fog, possessing in the absence of fog a superiority even over Louisburg.

False Bay Lake is somewhat nearer New York than Sydney in actual distance, but more so in point of time, especially in the autumn, as with northerly winds, so prevalent at that season, it is impossible for vessels to beat up from Cow Bay Head to Sydney—and they are often obliged to harbor in Louisburg for two or three weeks waiting for wind

Vessels would go to this proposed harbor at Mire Bay for less freight, and when the amount saved by a Company in carrying Coals only 4 miles instead of, say, 16,

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is considered, it is plain that this property is better situated than any other in Cape Breton for all practical and paying purposes. Say on 12 miles further carried to Sydney at 3 cents per ton per mile \$36,000 would be saved on the transportation of 100,000 tons.

It may not be amiss to state that all necessary steps for a charter to open False Bay Lake have been taken and right secured.

NEW YORK, 12th March, 1865.

address.

*Mr. Marshall Baurinich
St. Nicholas Hotel
New York*

