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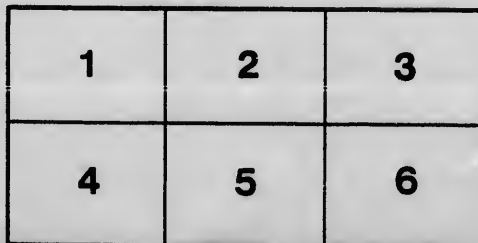
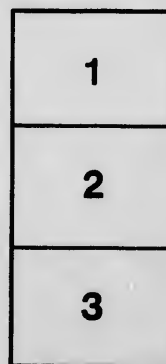
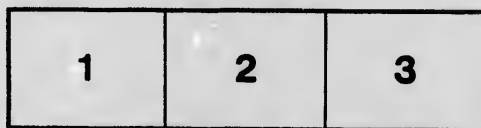
New Brunswick Museum  
Saint John

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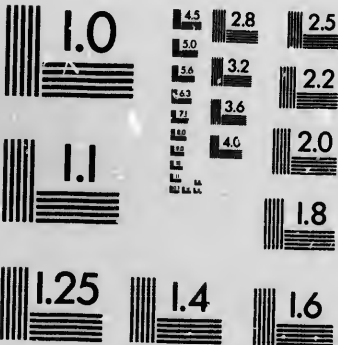
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PROSPECTUS

OF THE

EAST JOGGINS MINING COMPANY,

INCORPORATED

BY THE

LEGISLATURE OF NOVA SCOTIA,

MAY 6, A. D., 1875.

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CAPITAL \$200,000,

In Shares of \$100 Each, with Power to Increase the  
Capital Stock to \$500,000.

W. C. Milner

HALIFAX, N. S.

POST."

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1911

THE NATIONAL BUREAU OF STANDARDS

DEPARTMENT OF COMMERCE

WASHINGTON, D. C.

OFFICE OF THE CHIEF OF BUREAU

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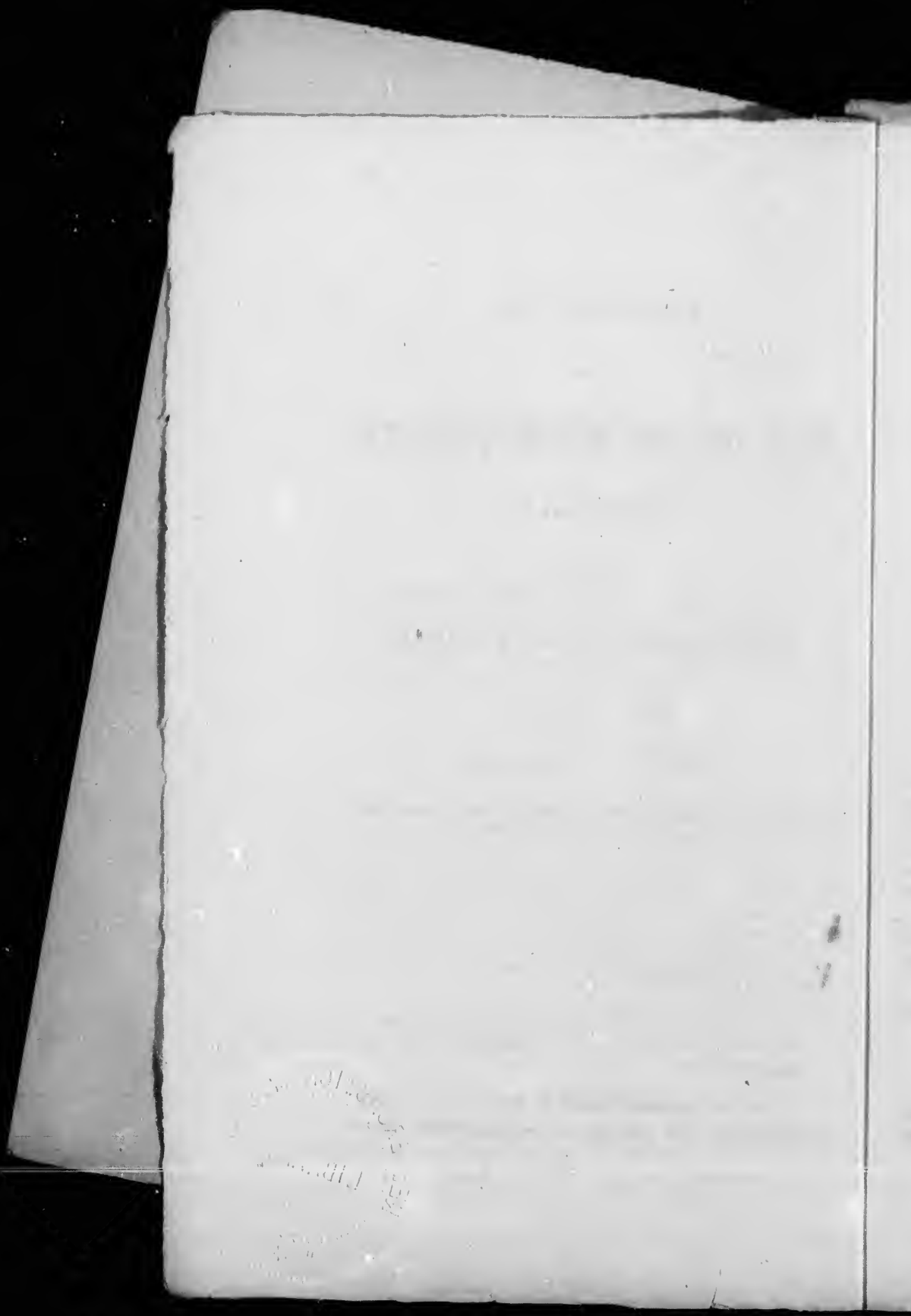
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SACKVILLE, N. B.:

PRINTED AT THE OFFICE OF "CHIGNECTO POST."

1876.

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PROSPECTUS

OF THE

**EAST JOGGINS MINING COMPANY.**

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An Act of the Legislature of Nova Scotia, 38 Victoria chapter 71, was obtained at its last Session, Incorporating THE EAST JOGGINS MINING COMPANY, for the purpose of opening and working Coal; the Act giving all the powers incident to the objects for which the Company was incorporated.

As is indicated by the name of the Company, the Coal proposed to be worked, is the Eastward of the South Joggins Mines.

It may not be inappropriate to introduce the subject of this enterprise by noticing the extent of the coal trade of Nova Scotia, its rapid development, and some statistical facts furnished by the Department of Mines.

ABSTRACT.

Coal production of Nova Scotia from 1827 to 1873 inclusive:—

1827 to 1830.....	50,172 tons.
1831 to 1840.....	808,145 "
1841 to 1850.....	1,415,385 "
1851 to 1860.....	2,293,805 "
1861 to 1870.....	5,092,587 "
1871 to 1873.....	3,231,428 "
1874.....	872,720 "

These reports contain abstracts shewing (a) Expenditure for permanent works, called "Colliery Construction Account," which includes charges for shafts, slopes adits; colliery buildings, dwellings, surface work, with railways, wharves, and prospecting; and (b) Expenditure for production, called underground and surface work.

1. By the Report for 1873, there was expended on "Colliery Construction Account," the sum of \$814,099, and in the same year 1,051,476 tons of coal were produced, shewing the Construction Account equalled a charge of 77 cents per ton on the coal raised; and in 1874, the Construction Account was \$274,529. (less than one third of the previous year,) thus, this charge on the cost of production, was reduced to 29 cents per ton. Of these charges for construction: machinery, railways, dwellings, and wharves, in 1873, formed \$393,046, nearly one half, and in 1874, \$140,843, more than one half of the whole amount.

In further illustration, we have prepared from the same Reports, an

ABSTRACT

of Coal produced, and of Colliery Construction Account for Joggins, Spring Hill, and Bennett's Mines, for the year 1873 and 1874:—

from 1827 to 1873

50,172 tons.  
808,145 "  
415,385 "  
293,805 "  
092,587 "  
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PARTICULARS OF CONSTRUCTION ACT.	JOGGINS.		SPRING HILL.		COL. BENNETT.	
	YEAR.		YEAR.		YEAR.	
	1873.	1874.	1873.	1874.	1873.	1874.
Tons of Coal produced.....	19,326	16,665	6,704	32,127	1,562	1,741
Shafts.....						
Slopes.....						
Adits.....	\$ 201.95		\$6,934.13	\$8,023.47		\$ 80
Machinery.....	527.60	338.00	200.00	2,045.00	204.00	
Colliery Buildings.....	310.00	261.00	19,864.46	9,200.00		
Dwellings.....	978.38	240.00	3,623.37	1,050.00	12.00	
Surface Work.....	21.00		16,650.00	2,500.00		
Railways.....	261.00		5,615.67	5,079.43		
Wharves.....		650.00	16,491.10	648.00		
Prospecting.....			56.70			
	\$ 2,209.93	2,009.00	69,415.43	28,449.00	216.00	80

From this it appears the Joggins Construction Account in 1873 was 11 cents per ton of coal raised, and in 1874 was 12 cents. Spring Hill in 1873 was \$11, and in 1874 86 cents a ton; while Bennett's Mine was 18 cents a ton in 1873, and only 4 cents in 1874.

2. For the underground and surface work (exclusive of construction work) in 1873, there were 877,421 days work done, and in 1874 there were 915,732 days work done, against 1,924,187 tons of coal raised, shewing each day's work produced 1 1-10 tons of coal.

In the prospectus of the Joggins Coal Mining Company it is stated on page 7 and details given, that the cost of mining and shipping coal at the Joggins, including Royalty 10 cents a ton, and all expenses, was \$1.13 per ton. In "Taylor's Statistics of Coal" it is stated the cost of mining coal at Cape Breton is 75 cents per ton. We learn that in Pictou the coal cutters get 45 cents a ton, and Mr. Redpath, mining engineer and manager of the Joggins mines, states in his letter hereinafter printed, that it should be mined by the East Joggins Mining Company, for 70 cents a ton.

These statements shew that it is the colliery construction account that produces the large expenditures, and that the cost of mining coal only varies a few cents per ton, in different mines.

In the same Report for 1874, it is stated that the value of the coal produced for that year was the sum of \$1,787,098. It must be recollected that a large percentage of this enormous sum, is directly or indirectly added to the permanent wealth of the country, or of those concerned in operating them, and there can be no doubt that the Coal Mines of Nova Scotia must continue for ages to be one of the chief sources of her wealth.

The activity existing even in Cumberland County in pursuit of coal, will surprise many; we extract from the same Report:—

MONIES PAID FOR LICENCES IN CUMBERLAND :

Year.	Licences to Search.	Licences to Work.
1871.....	\$1,868.95	\$ 340.69
1872.....	2,128.32	1,409.04
1873.....	920.00	1,477.72
1874.....	1,020.00	1,450.00
	<u>\$5,937.27</u>	<u>\$4,677.65</u>

Total Licences to Search.....297  
 Total Licences to Work..... 94  
 Total paid Government in 4 years....\$10,614.92

These facts prove that the value of coal, and the profits of a mine are greatly if not entirely dependant upon: first, its first cost; secondly, its colliery construction account, and; thirdly, its locality. The cost of mining is not the chief item of expense to be considered. If one mine requires \$100,000 to purchase and develop it, and secure facilities to reach market, and another only \$5,000, it is self evident (other things being equal) that the mine requiring only the small outlay is more valuable, not only in the saving of the original expenditure, but in the expense of maintaining and renewing the machinery and permanent works. The prospectus of the Joggins Coal

Joggins Construction Account  
 of coal raised, and in 1874  
 1873 was \$11, and in 1874  
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ing exhausted. This alone would not be a successful investment. But with the capital invested by the Joggins Mining Company, such profits would make it a very successful enterprise, and with a Company whose expenditure did not exceed \$5,000, that profit would make it successful, even beyond the far famed Albertite Mine of Hillsborough.

That a coal mine cannot be opened and worked unless at a great expense, is generally true, because a workable seam of good coal in a favorable locality, is seldom to be obtained, and, if purchased, must be with a large sum. But where a seam of coal can be obtained without paying a large sum for it, and worked without the employment of machinery, and the mine is in such a favourable locality, as to enable the coal to be taken to market at a minimum cost of transportation, then instead of being expensive, the coal (if ordinary prudence is exercised in mining it) will almost immediately return the outlay. In this, as in all other business transactions, the commercial aspects must be considered.

A correspondent of the *Halifax Herald* writing of the present depressed state of the Nova Scotia Coal Trade

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With these preliminary remarks, we will now direct attention to the AREA proposed to be worked by the EAST JOGGINS MINING COMPANY.

It has been known for years that the coal formation exposed on the Cliffs at the South Joggins, with their seams of coal extend Eastwardly as far as Styles Mine, a distance of 17 miles, (see Geological Report of Dominion for 1873-4, page 162) and the different collieries located between the two are all outcrops of some of the numerous seams shewing themselves on the Joggins Cliffs. A seam of coal called the "Dirty Seam," from its impurity, has been found on the Bay Shore, at the River Hebert, on the Maccan, at Bennett Mine, and at Blight and Styles Mines. Another called the "Hardscrabble," now re-christened the Cumberland, and opened at the Joggins Shore, is the same seam worked by Col. Bennett, and has been prospected at Blights and Styles'. Another seam recently has been discovered on the River Hebert by Mr. John Anderson, and is now held by Messrs. Seaman, and others. It is about half a mile below the Victoria Pit, and has been opened on the West side of the River. The Area proposed to be worked by the East Joggins Mining Company is on the East side of the River Hebert, and extends thence towards the Maccan, covering this seam for 2 1-2 miles, and from the same seam being discovered by Mr. Whitefield McCarthy on the regular strike, near the Maccan, we are assured the seam is regular, and without fault, and the Area covers it the whole distance. The Hardscrabble seam has not yet been discovered in this Area, although from its existing in workable quantity both on the West and East of it; we have reason to believe we possess that too. We refer to the subjoined diagram and map shewing the different seams of coal so far as prospected from the Joggins to Style Mines, and demonstrating the general regularity of the strata between these distant points.

The seam proposed to be worked, as proved in the West side of the River by the workings of Messrs. Seaman, is three feet nine inches in thickness, with a parting of six inches in the centre. The lower bench being two feet, and the upper, one foot nine inches in thickness; the coal is very superior, clear, firm, and free from sulphur, and for steam purposes is represented by the proprietors as much superior to the Joggins coal.

Mr. Hall, Mining Engineer and Manager of the Spring Hill Mines, writing of the same seam near the Maccan, says:—

SPRING HILL, Jan. 6, 1876.

DEAR SIR:—

I have much pleasure in stating to you what I know about the Seam of Coal near Maccan prospected by Whitfield McCarty. Being at Maccan, I went to the pit sunk by McCarty, and going down i saw two seams of coal together about three feet in thickness with a parting between them of about a foot. The coal was of good quality to be so near the surface, and I think it will make pretty working. If, as you said you proposed, you can get a level into the seam, the ground rising from the river, you could avoid machinery, and open with a small expenditure of capital, and work it economically. Should the coal prove good, as I think it promises, I think it will be profitable.

W. HALL.

To C. Milner Esq.

This seam (entirely without reference to to the Hard-scrabble Seam, which probably will be equally as productive) will yield 350,000 tons of coal without sinking below the level of the marsh on the River Hebert, as the land between the two rivers rises sufficiently high to enable that quantity to be mined, by driving in an adit from the level of the marsh, and thus work without the intervention of machinery, either to keep the mine dry or to raise the coal.

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This fact referred to by Mr. Hall prevents the expenditure which machinery would involve, and is of consequence, in considering the economic question.

The prospectus of the Joggins Coal Mining Company states that all the coal raised from the Joggins Mine up to the time of the purchase had been taken from above the level of the Bay, page 71.

The quantity so taken from above the level of the Bay is not stated, but on page 4, it states that at that time "about 8,000 tons of coal are raised yearly, and the mine is worked by a shaft 100 feet deep, and that every 100 feet of sinking in the shaft will yield 500,000 tons of coal," and in pages 10 and 11, where numerous certificates are given; Captain Firth of St. John, states that the late John Walker had for 15 years purchased and sold annually from 3,000 to 5,000 tons, so that it may be safely stated there had been over 100,000 tons of coal then raised and shipped.

The next subject for inquiry is what facilities can be obtained for taking the coal to market. With the exception of the Joggins Mines, there is no coal with reference to the Bay Fundy or United States markets so advantageously placed as this. Situate on the River Hebert, in the midst of a populous and wealthy farming district, and extending to within three miles of the Maccan River, the coal, during the season of navigation can be shipped at the River Hebert, one of the best and safest tidal rivers at the head of the Bay of Fundy, at a freight only slightly above that of that of the Joggins, and sent to any part of the Bay of Fundy. Thus avoiding all Railway charges to which other mines are subject; and in the winter season, coal can be delivered at the Maccan Station as cheaply as any, and more cheaply than most other coals, thus presenting a decided superiority over the Joggins Mines, from which coal cannot be sent while navigation is closed.

Captain Estabrook of Sackville writes as follows:—

SACKVILLE, N. B., Jan. 27, 1876.

C. MILNER, ESQ.,

DEAR SIR:—In answer to your enquiry, I may state that I carried coal from Joggins to St. John last season for one dollar and twenty cents per chaldron. I think it could be carried from River Hebert for twenty cents more per chaldron than from the Joggins. I would like to enter into a contract to carry a number of cargoes at that rate, a good loading ground and quick despatch being provided. Yours, &c.,

WILSON ESTABROOK.  
Master Schr. Effa.

The prospectus of the Joggins Coal Mining Company stating that the total cost of mining and shipping coal including Royalty was \$1.13 per ton, has already been referred to.

Mr. Robert Redpath, Mining Engineer and Foreman of the Mine at the Joggins, writes as follows:—

JOGGINS MINES, Jan. 11, 1876.

C. MILNER, ESQ.,

DEAR SIR:—I have received your note asking my opinion about what it would cost to drive in a level on your Area at River Hebert. The cost will depend greatly on circumstances. If you have to drift through rock, it will cost a good deal more than if there is none. If you catch the coal and run your level in it, it will be much cheaper. The size of the level must be considered. I should think a level six feet wide and from three and a half to four feet high will be large enough for a seam of three to four feet thick; and a level of that size ought to be driven for \$2.00 a yard, and out of the yard you will have near a chaldron of coal, which is worth \$4.00 at the Joggins. If rock cutting is necessary, an addition per yard would have to be paid, as I do not know the nature of the rock, I cannot give a price. Coal ought to be mined from your seam 3 to 4 feet thick and brought to the mouth of the level; for cutting 68 cents per ton, and a boy with a small pony will haul 30 tons, 300 yards, this boy to be paid 60 to 70 cents per day, that would be a little over 70 cents a ton in all.

R. REDPATH.

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The economic advantages claimed for the coal seams existing on this area are as follows:—

1. The mine will be for years self draining, thus dispensing with steam pumps.
2. The coal will be mined from a level instead of from a shaft or slope dispensing with an engine to raise coal.
3. The coal being near water, there is no railway to construct and expensive rolling stock to be purchased and kept running.
4. The proprietors do not propose to sell more than enough of the stock to develop the property, so that on a very small production of coal yearly, is necessary to be profitable.

The question then presents itself as to what expenditure will be necessary to enable the Company to raise and ship coals from this Area. This is best answered by recapitulating the various works which have to be performed before any return is received:

1. An adit must be driven in from the marsh in the seam of coal; the price of this is estimated by Mr. Reespath, and the number of yards to be driven may be estimated from 50 to 100 yards.
2. Land at the adit and for a tram way; this can be purchased or leased.
3. A tram way from the mines to the River, below Pugsley's, at Landal's or Moffatt's mill creek, a distance of three-fourths of a mile.
4. A wharf at loading place; this from the position will cost only a small sum.
5. Coal wagons and horses.
6. Miners' houses, which can be rented.
7. Blacksmith's tools, picks, shovels, &c.
8. Contingencies.

Of the necessary expenditure for these several items, an estimate is subjoined.

The proprietors of this area have not yet organized under their Act, but propose to do so on——day of March. In the meantime, a stock-book is opened, and subscriptions for a limited number of shares are solicited.

Parties who are desirous of obtaining further particulars in respect to this undertaking with a view of investing may enquire of.

As five thousand dollars is the total amount required to commence effective operations the terms are of the most liberal character.

ESTIMATE OF RESULTS OF MODERATE MINING OPERATIONS ON THIS AREA.

Colliery Construction Account, estimate \$

40 tons of coal a day=31 chaldrons.

do., 786 do., per week.

do., 744 do., per month of 4 w'ks.

do., 5952 do., per 8 mos. of 4 w'ks.

MEMO.—Eight months are thirty-five weeks. Three weeks are taken off for contingencies.

The cost of coal, mining and shipping, is by the reports given, taking the highest estimate including all charges and Royalty, \$1.13 per ton, or \$1.46 per chaldron.

The selling price at the Joggins is \$4.00, which would leave a profit of \$2.54 per chaldron. The difference in the cost of carriage to St. John in comparison with the Joggins would be 20 cents per chaldron, but allowing 54 cents for this charge, there would remain a profit of \$2.00 per chaldron. As however many unforeseen contingencies might arise, allowing this profit to be cut down one half, the profit would be \$1.00 per chaldron, or on the estimated production first year, \$5,972.

SACKVILLE, Feb. 10th, 1876.

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