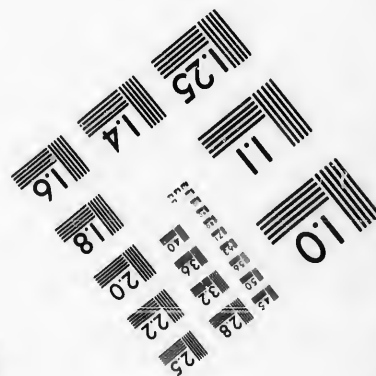
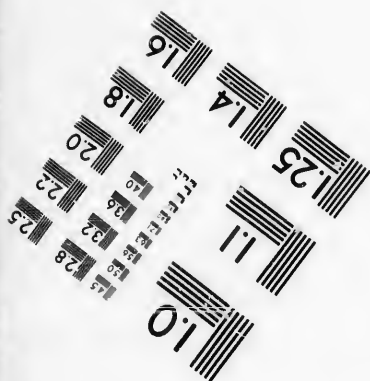
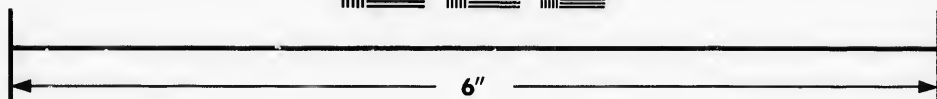
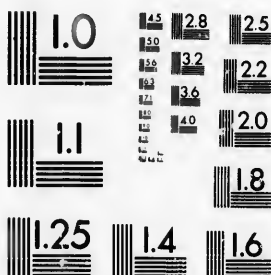


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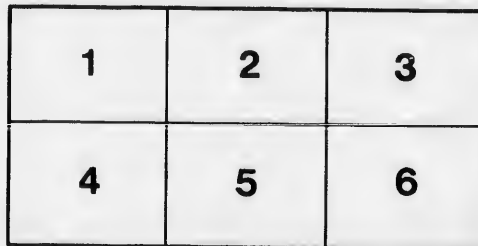
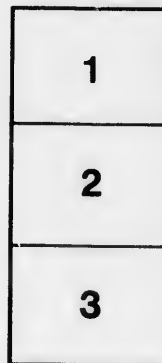
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# REPORT

ON THE

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PRODUCE, EXPORT AND IMPORT TRADE, &c.

OF

COAL AND OTHER COMBUSTIBLE MINERALS

OF

NEW BRUNSWICK,

BY

L. W. BAILEY, M. A.

PROFESSOR OF CHEMISTRY AND NATURAL HISTORY IN THE UNIVERSITY OF NEW BRUNSWICK.



FREDERICTON.

G. E. FENETY, PRINTER TO THE QUEEN'S MOST EXCELLENT MAJESTY.  
1866.

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REPORT  
ON  
THE COAL AND COAL MINES  
OF NEW BRUNSWICK.

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To His Excellency The Honorable ARTHUR HAMILTON GORDON, C. M. G.  
*Lieutenant Governor and Commander in Chief of the Province of New Brunswick,*  
*ſc. ſc. ſc.*

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MAY IT PLEASE YOUR EXCELLENCY,

In compliance with instructions received from Your Excellency at Government House, March 31st, 1866, I have the honor to submit the following Report on the occurrence of Coal and Coal Mines in New Brunswick, with statements as to the amount and value of the Coals annually exported from or imported into the Province, and such other facts as seem to be called for by the Circular Despatch to which my attention has been called by Your Excellency.

While the words of that Circular request information with reference simply to "Coal Mines or indications of Coal Mines," I have thought that the object of the inquiry might fairly be deemed to include other related Minerals, such as Shale, Petroleum, and Asphalt, which, though not strictly *Coal*, closely resemble that substance in origin, character, and uses. Any other interpretation of the Despatch would compel me to omit entirely the consideration of the most valuable and interesting of the combustible materials of New Brunswick. That no misunderstanding, however, may arise on this account, I have, both in the following remarks, and as far as possible in the appended Tables, considered the above named substances apart from the true Coal.

More than one third of the Province of New Brunswick, or an area of from 7000 to 8000 square miles, is covered by rocks of the Carboniferous or Coal-bearing Series, being a continuation of the same series in the adjacent Province of Nova Scotia, the combined extent of the two being as much as 18,000 square miles. While, however, in the latter, coal seams are numerous and collectively of great thickness, those of New Brunswick are few, small, and for the most part unimportant.

The Carboniferous formations of this Province have been divided into two separate groups, essentially distinct, and unlike in the amount and kind of mineral fuel which they yield,

## 1. UPPER AND MIDDLE COAL FORMATION.

These two formations, essentially unlike in Nova Scotia, (the former having a thickness of 3000 feet or more, with thin seams of coal and limestone, the latter 4000 feet thick, and containing for the most part the workable coals,) extend into and occupy a wide area in New Brunswick, but here exhibit a far less thickness, and as yet have not been certainly distinguished from each other.

The area occupied by these formations covers large portions of the Counties of Queen's, Sunbury, York, Kent, Northumberland, and Gloucester, a triangular district, of which the two longest sides are about 150 miles each in length, and the shorter as much as 100, besides several small and detached areas near the southern coast. While thus largely developed in superficial extent, the Coal Measures of New Brunswick are believed, from various geological data, to attain but little thickness, the strata comprising them being for the most part nearly horizontal, and penetrated, even near the centre of the coal-basin, by rocks of older metamorphic series. Much of the district which they occupy is still covered with forest, so that any conclusions as to the productiveness of the formation in unexplored parts must be to a considerable extent conjectural. Where known, however, they have given as yet but little promise of large or valuable beds of coal.

The strata of the Coal Measures above alluded to are sandstones, conglomerates, and shales, usually grey in color and coarse in texture. The coal seams associated with these rocks are numerous but thin, the thickness of the largest yet known (that of Grand Lake) not exceeding 22 inches. In all cases the coal is a *caking* coal, highly bituminous and ready of ignition, but requiring frequent stirring for complete combustion. It is often much contaminated with pyrites, from which, however, it may be freed by careful screening. It will yield about 8,500 feet of gas per ton, but of a very inferior quality, and is not applied to this purpose. It has been principally employed as a house-coal and for manufacturing purposes. While not so well adapted for the former use as the foreign imported coals, it has, from its comparative cheapness, attained a local consumption, principally in Fredericton, the capital, of nearly 6000 chaldrons annually, and for blacksmiths and certain other uses is preferred to any of the imported varieties. The market value of Grand Lake Coal in the City of Fredericton was, in 1865, £1 10 5 currency per chaldron, while in St. John, (where foreign coals are very cheaply introduced by way of ballast,) it was comparatively little used. Table G exhibits the average *wholesale* prices of the different varieties of coal placed in the St. John market during the past year.

About 1000 tons of Grand Lake coal were exported from the Province during the year 1865. Table C shows the annual consumption of the same (so far as can be ascertained) from the year 1828 to 1864.

The lateral extent of the Grand Lake beds has not as yet been ascertained, this portion of the Province being largely forest-clad, but the nearly uniform thickness of such beds as have been observed, lead to the conclusion that they



extend over a considerable tract of country. Table A contains a tabular statement of all known out-crops belonging to this formation, exceeding five inches in thickness, with the names of the localities, their extent, quality, amount raised, &c.

## 2. LOWER COAL FORMATION.

The area occupied by rocks of this formation comprises from 3000 to 4000 square miles, and includes large portions of the Counties of King's, Albert, and Westmorland, with smaller areas in St. John, York, Queen's, Sunbury, Northumberland, and Victoria.

The rocks of the formation are thick and coarse conglomerates, with some sandstones, usually of a bright red color, and associated with large and valuable beds of limestone and gypsum; also grey and brown flags and shales, the latter very abundant and highly bituminous, passing into an impure *cannel coal*, and associated with large and valuable deposits of *asphalt* or *altered bitumen*, and occasional oil-springs. Manganese ores, freestones, grindstones, &c. are among the more abundant and valuable products of the series.

The formation under consideration underlies the productive coal measures, and is not known to contain any workable seams of *true coal*, unless the "Dunsinane" coal included in Table A be found to appertain to this series. The character of the formation, however, is not such as to forbid its occurrence, and as workable coal-beds have been found in the same formation both in America and Europe, further exploration may yet lead to its discovery in this portion of the Continent.

The most interesting and important mineral of the Lower Coal Formation in New Brunswick is that above termed Asphalt or altered bitumen, and locally known as *Albertite*. Formerly regarded as a true coal, and later as a variety of jet, it is now generally believed to have been originally a fluid mineral oil or petroleum, subsequently changed and solidified by chemical action. It is a black, brittle, lustrous mineral, breaking with a high conchoidal fracture, and differs from coal in its mode of occurrence, (in irregular *veins* instead of *beds*,) in its homogeneity, (being indivisible into layers and of one quality throughout,) as well as in its chemical composition and physical characters. It occupies an irregular and nearly vertical fissure in disturbed bituminous shales, has a varying thickness of from 1 inch or less to 17 feet, and has been mined to a depth of over 900 feet. From the original locality, discovered in 1849, large quantities of Albertite have been annually removed and exported from the Province. Table II illustrates the amount of such exportation for the years 1863, 1864, and 1865. About one hundred men are usually employed in connection with the works, and several large engines (one of 400 horse power) are in constant operation. The mine is favourably situated, not more than six miles from the Bay of Fundy, with which it has been connected by a railway.

The original deposit, above alluded to, is the only one of Albertite yet thoroughly tested, though other openings have been made, with more or less success, in the immediate vicinity. The very characteristic accompanying

rocks have been traced over a large extent of country, and small veins of Albertite have been observed within this district at points distant from each other as much as fifty miles. The expectation may therefore be entertained that other and equally rich deposits will be discovered. This expectation is strengthened by the supposed origin of the Albertite as an altered Petroleum, by its geological position, which is the same as that of the oil wells of the United States, and by the actual occurrence of such wells upon a limited scale in the district under consideration. Several attempts have been made to open the latter, but as yet without profitable results.

The Albertite has never been employed as a simple fuel. It is far better adapted to the manufacture of oil and gas, for which purposes it is unequalled by any other mineral known. The demand for the substance is in excess of the amount raised, but the Company refuse to extend their operations beyond 18,000 or 20,000 tons *per annum*.

As another source of oil and gas, the bituminous shales above alluded to, and very extensively developed in the County of Albert, are beginning to acquire considerable economic importance. Numerous mining claims have recently been taken out for operations in this substance both in the above named County and in that of Westmorland. In the latter work has been begun, and I am informed that 2000 tons were removed in the year 1865, and were shipped to the United States, selling in that market for \$6 per ton. The cost of quarrying is said to be about \$1 $\frac{1}{4}$  to \$1 $\frac{1}{2}$  per ton, and the freight to Boston, \$1 $\frac{1}{2}$ . In consequence, however, of the low price of mineral oils in the United States, it is considered necessary that the distillation of these shales should be carried on before exportation. For this purpose a Company on the Memramcook River are about erecting one hundred retorts, with which they expect to work up 100 tons of shale *per diem*.

As a source of oil and gas, the Albertite far surpasses even the richest of the bituminous shales above described. The following are some facts, derived from reliable sources, bearing on this point.

The mineral of the Albert Mine is said to yield 100 gallons of crude oil per ton, or 14,500 cubic feet of gas, of superior illuminating powers, while in the latter case, where employed in connection with other coals, the residuum is a valuable coke.

The yield of the bituminous shales is very variable, that of the best bed at the Caledonia Mine in Albert being 7,500 feet per ton of gas, or 63 gallons of crude oil. That of the Westmorland Company above alluded to will yield only from 37 to 40 gallons, while other varieties contain a still smaller proportion. Moreover, unlike the Albert coal, the residuum of these shales is bulky and worthless. For comparison it may be stated that the Grand Lake coal will yield about 8,500 cubic feet of gas per ton, but of a very inferior quality.

Table J will afford some idea of the export and import coal-oil trade of the Province during the years 1860-64.

*Remarks upon the Export and Import Trade of New Brunswick in Coal, Shale, Asphaltum, and Petroleum.*

The Coal Trade of the Province is one both of Importation and of Exportation, the former exceeding the latter nearly in the proportion of two to one. The export trade, however, if we include all combustible minerals, is upon the rapid increase, as shown by the accompanying statistical Tables.

Table D shows the general Imports of Coal from the year 1860 to 1864 inclusive, illustrating the quantities imported, the amounts entered for home consumption, the total value, and the rate of duties imposed thereon. This Table does not distinguish between the different varieties of combustible minerals.

Table F shows the amount of *Bituminous Coal* and *Anthracite* severally imported into the Province during the years 1863, 1864, and 1865, with the values thereof, as far as at present known. The values of Anthracite, imported from the United States, cannot be given with accuracy, in consequence of the numerous changes in the rate of discount in the currency of that country during the past few years.

Table E shows the general Exports of Coals, &c., from the Province from 1860 to 1864 inclusive, their quantity, value, and the countries to which the same were exported. The quantities marked as "Produce and manufacture of the Colony," include both Bituminous Coal, Albertite, and Bituminous Shale, but consist *almost* exclusively of Albertite.

Table H illustrates the exportation of these three varieties severally for the years 1863, 1864, and 1865.

Table K contains a statement of the Produce of the Albert Mine for the same years.

Table J contains a comparative statement of Total Exports and Imports of Coals and Coal Oils from the year 1860 to 1864 inclusive. It will be observed that a steady decrease in the quantity of Coals imported is apparent, while their value has nevertheless remained nearly constant. The quantity exported exhibits but little variation within the limits specified. The returns for 1865, if complete, would add considerably to the amount exported as produce of the Colony.

The trade in Coal and Mineral Oils, both of Export and Import, has been subject to great fluctuations, due in part to the changing tariffs, and in part to the great development of Petroleum Springs in the United States. In consequence of these fluctuations, expensive works have been constructed in the Province and again abandoned. The distillation of Bituminous Shales promises to add within a few years very greatly to the Export Oil Trade of the Province.

The revenue derived from Coals raised in the Province is shown in the Table (I) of Royalties paid for that substance into the Provincial Treasury in the years 1863, 1864, and part of 1865. The total amount paid is \$8,089.29.

It is remarkable that the Albert Mine is the only one from which this rental comes. The revenue derived from the Imports of Coal, &c., are contained in Tables D and J.

Table G contains a list, derived from two of the principal importers, shewing the average *wholesale* price of Provincial and Foreign Coals in the market of St. John in the year 1865.

The above statistics are for the most part derived from the Custom House Returns; the geological remarks preceding are the results of the most trustworthy investigations of competent geologists. It is believed that both may be relied upon as approximately accurate.

I have the honor to be

Your Excellency's most obedient servant,

L. W. BAILEY.

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**TABLE A.**

TABLE of all known Out-crops of Bituminous Coal in the Province of New Brunswick equalling or exceeding five inches in thickness.

| County.     | Locality.          | Thickness. |     | Variety.    | Quality. | Remarks.  |
|-------------|--------------------|------------|-----|-------------|----------|---|
|             |                    | Ft.        | In. |             |          |   |
| York,       | Nashwaak River,    | 0          | 5   | Caking,     | Fair,    | Few bushels removed and burnt.                        |
| Queen's,    | Newcastle District | 1          | 8   | do.         | do.      | 5000 chaldrons removed in 1864.<br>12,863 since 1828. |
| Do.         | Salmon River,      | 1          | 10  | do.         | do.      |   |
| Do.         | Coal Creek,        | 1          | 8   | do.         | do.      |   |
| Do.         | Washademook,       | 1          | 0   | do.         | do.      |   |
| King's,     | "Dunsinane,"       | 1          | 10  | Bituminous. | do.      | Opened, not worked.                                   |
| Albert,     | Cape Enrage,       | 0          | 8   | Caking.     | do.      | Not worked.   |
| Kent,       | Cocagne River,     | 2          | 0   | do.         | ?        |   |
|             | Richibucto River,  | 1          | 3   | do.         | Fair,    |   |
| Gloucester, | New Bandon,        | 0          | 8   | do.         | do.      |   |

**TABLE B.**

TABLE of all known Out-crops of workable Bituminous Shale and Asphaltum.

| County.      | Locality.                        | Thickness.         | Variety.          | Quality.  | Remarks.                     |
|--------------|----------------------------------|--------------------|-------------------|-----------|------------------------------|
| Kings,       | Apohaqui,                        | Irregular veins,   | Albertite.        | Superior, | Not explored.                |
| Do.          | S. Branch of the Kennebecasis R. | ..                 | do.               | do.       | Not worked.                  |
| Do.          | Ward's Creek,                    | ..                 | Bituminous Shale, | Fair,     | do.                          |
| Do.          | Dutch Valley,                    | ..                 | do.               | do.       | do.                          |
| Albert,      | Albert Mine,                     | 1 inch to 17 feet, | Albertite,        | Superior. | Extensively worked.          |
| Do.          | East Albert Mine,                | ..                 | do.               | do.       | Now being opened.            |
| Do.          | Baltimore,                       | 6 feet,            | Bituminous Shale, | Good.     | Works erected but abandoned. |
| Do.          | Turtle Creek,                    | 10 feet,           | do.               | do.       | Claims taken out.            |
| Westmorland, | Memramcook,                      | Large beds,        | do.               | do.       | Now being worked.            |

**TABLE C.**

Quantity of Coal raised at Grand Lake since 1828.

|       |     |     |               |       |     |     |                  |
|-------|-----|-----|---------------|-------|-----|-----|------------------|
| 1825, | ... | ... | 66 Chaldrons. | 1835, | ... | ... | 3,537 Chaldrons. |
| 1830, | ... | ... | 70 "          | 1838, | ... | ... | 2,143 "          |
| 1833, | ... | ... | 138 "         | 1864, | ... | ... | 5,000 "          |
| 1834, | ... | ... | 687 "         |       |     |     |                  |

Total number of Chaldrons, 11,641.

**TABLE D.**

GENERAL IMPORTS OF COAL INTO THE PROVINCE OF NEW BRUNSWICK FROM THE YEAR 1860 TO 1864 INCLUSIVE.

| YEAR. | COUNTRIES<br>WHENCE IMPORTED. | QUANTITIES IMPORTED.   |                        |        | Entered for<br>home<br>consump-<br>tion. | VALUE IN STERLING.   |  | DUTY.                                 |
|-------|-------------------------------|------------------------|------------------------|--------|--|----------------------|--|---------------------------------------|
|       |                               | In British<br>Vessels. | In Foreign<br>Vessels. | Total. |  | Of total<br>Imports. | Average<br>price paid for<br>the value if<br>calculated<br>officially. |                                       |
| 1860. | United Kingdom,.....          | Tons.                  | Tons.                  | Tons.  | Tons.                                    | £ s. d.              | £ s. d.  | } 2½ per cent. March 1859.            |
|       | Nova Scotia,.....             | 24,055                 | ..                     | 24,055 | 11,695                                   | 10 0 0               | 270 15 2   |                                       |
|       | United States,.....           | 290                    | ..                     | 290    | 103                                      | 18 0 0               | 2 12 0   |                                       |
|       | Cape de Verde Islands, .....  | 665                    | ..                     | 665    | 224                                      | 7 0 0                | 5 12 3   |                                       |
|       | Montevideo, .....             | 10                     | ..                     | 10     | 5  | 0 0 0                | 0 2 6  |                                       |
|       | Total,.....                   | 25,070                 | 10                     | 25,080 | 12,086                                   | 5 0 0                | £279 15 8  |                                       |
| 1861. | Nova Scotia,.....             | 6,761                  | ..                     | 6,761  | 4,760                                    | 17 0 0               | ..   | } Free.                               |
|       | United States,.....           | 7,433                  | 485                    | 7,868  | 5,978                                    | 11 0 0               | ..   |                                       |
|       | Total,.....                   | 14,194                 | 485                    | 14,629 | 10,739                                   | 8 0 0                | ..   |                                       |
| 1861. | United Kingdom,.....          | 24,174                 | ..                     | 24,174 | 23,064                                   | 52,298 53            | Gross amt.<br>in Currency.<br>\$1,273 64                               | } 2½ per cent. March 1859.<br>} Free. |
|       | Nova Scotia,.....             | 6,388                  | ..                     | 6,388  | 6,388                                    | 21,173 00            | ..   |                                       |
|       | United States,.....           | 1,147                  | 4,548                  | 6,695  | 6,695                                    | 22,626 25            | ..   |                                       |
|       | Total,.....                   | 31,709                 | 5,548                  | 37,257 | 37,047                                   | \$96,097 78          | ..   |                                       |
| 1862. | United Kingdom,.....          | 27,028                 | 509                    | 27,537 | 27,537                                   | \$67,948 00          | \$1,689 55   | } 3 per cent.<br>} Free.              |
|       | Nova Scotia,.....             | 3,994                  | ..                     | 3,994  | 3,994                                    | 11,397 00            | ..   |                                       |
|       | Prince Edward Island,.....    | 43                     | ..                     | 43     | 43                                       | 53 00                | ..   |                                       |
|       | United States,.....           | 2,839                  | 745                    | 3,584  | 3,584                                    | 13,653 00            | ..   |                                       |
|       | Total,.....                   | 33,904                 | 1,254                  | 35,158 | 35,158                                   | \$93,031 00          | ..   |                                       |

|                      |        |        |             |               |
|----------------------|--------|--------|-------------|---------------|
| United Kingdom,..... | 20,417 | 20,418 | \$41,733 00 | } 3 per cent. |
| Canada,.....         | 20     | 20     | 53 00       |               |
| Nova Scotia,.....    | 7,430  | 7,430  | 27,403 00   |               |
| Total,.....          | 27,867 | 27,868 | \$69,189 00 |               |

|                           |        |       |        |        |        |       |       |             |             |                           |             |
|---------------------------|--------|-------|--------|--------|--------|-------|-------|-------------|-------------|---------------------------|-------------|
| 1866                      | 3,394  | 745   | 35,158 | 35,158 | 35,158 | 3,584 | 3,584 | 11,397 00   | 13,633 00   | Value stated by Importer. | 3 per cent. |
| Prince Edward Island..... | 43     | ..    | ..     | ..     | ..     | 43    | 43    | 53 00       | 53 00       | ..                        | Free.       |
| United States.....        | 2,839  | ..    | 3,584  | 3,584  | 3,584  | ..    | ..    | ..          | ..          | ..                        | Free.       |
| Total.....                | 33,904 | 1,254 | 35,158 | 35,158 | 35,158 | 3,584 | 3,584 | \$93,081 00 | \$93,081 00 | ..                        | ..          |

|                    |        |       |        |        |        |        |        |              |              |                           |             |
|--------------------|--------|-------|--------|--------|--------|--------|--------|--------------|--------------|---------------------------|-------------|
| 1863.              | 20,417 | 1,850 | 20,417 | 20,418 | 20,418 | 7,430  | 7,430  | \$41,733 00  | \$41,733 00  | Value stated by Importer. | 3 per cent. |
| Canada.....        | 20     | ..    | 20     | 20     | 20     | 5,136  | 5,136  | 53 00        | 53 00        | ..                        | 3 per cent. |
| Nova Scotia.....   | 7,430  | ..    | 7,430  | 7,430  | 7,430  | 500    | 500    | 27,403 00    | 40,076 00    | ..                        | Free.       |
| United States..... | 3,286  | 1,850 | 5,136  | 5,136  | 5,136  | ..     | ..     | 40,076 00    | 1,125 00     | ..                        | 3 per cent. |
| United States..... | 500    | ..    | 500    | 500    | 500    | ..     | ..     | 1,125 00     | ..           | ..                        | 3 per cent. |
| Total.....         | 31,653 | 1,850 | 33,503 | 33,504 | 33,504 | ..     | ..     | \$110,390 00 | \$110,390 00 | ..                        | ..          |
| 1864.              | 16,997 | ..    | 16,997 | 17,051 | 17,051 | 144    | 144    | \$37,832 00  | \$37,832 00  | Value stated by Importer. | 3 per cent. |
| Canada.....        | 21     | ..    | 21     | 21     | 21     | 10,813 | 10,813 | 61 00        | 61 00        | ..                        | 3 per cent. |
| Nova Scotia.....   | 144    | 123   | 267    | 267    | 267    | ..     | ..     | 393 00       | 393 00       | ..                        | Free.       |
| United States..... | 10,813 | ..    | 10,813 | 10,813 | 10,813 | ..     | ..     | 33,909 00    | 25,179 00    | ..                        | 3 per cent. |
| United States..... | 2,468  | 696   | 3,164  | 3,164  | 3,164  | ..     | ..     | 25,179 00    | ..           | ..                        | Free.       |
| Total.....         | 30,443 | 819   | 31,262 | 31,316 | 31,316 | ..     | ..     | \$102,974 00 | \$102,974 00 | ..                        | ..          |

TABLE E.

General Exports of Coal from the Province of New Brunswick from 1860 to 1865\* inclusive, as shown by official Custom House Returns.

| YEARS.                  | COUNTRIES TO WHICH EXPORTED. | QUANTITIES.                          |                     |        |   |        |           | VALUE IN STERLING OR CURRENCY†         |   |                           |  |
|-------------------------|------------------------------|--------------------------------------|---------------------|--------|---|--------|-----------|--|---|---------------------------|--|
|                         |                              | Produce & Manufacture of the Colony. |                     |        | British, Foreign and other Colonial produce and manufactures. |        |           | Produce and manufacture of the Colony. | British, Foreign and other Colonial produce and manufactures. | TOTAL.                    | Average price paid for the value if calculated officially. |
|                         |                              | In British Vessels.                  | In Foreign Vessels. | Total. | Tons.   | Tons.  | Tons.     |  |   |                           |  |
| 1860.<br>Coals & Shale. | Nova Scotia,.....            | 230                                  | ..                  | 230    | ..  | 413    | £242      | £194                                   | £136  | Value stated by Exporter. |  |
|                         | United States,.....          | 13,845                               | 157                 | 14,002 | ..  | 14,002 | 43,757    | ..                                     | 43,757  |                           |  |
|                         | Total,.....                  | 14,075                               | 157                 | 14,232 | 183   | 14,415 | £43,999   | £194                                   | £44,193   |                           |  |
| 1861.<br>Coals.         | Nova Scotia,.....            | 80                                   | ..                  | 80     | 77  | 157    | \$393     | \$436                                  | \$829   | Value stated by Exporter. |  |
|                         | United States,.....          | 15,971                               | 960                 | 16,931 | 497   | 17,398 | 249,920   | 1,754                                  | 251,674   |                           |  |
|                         | Total,.....                  | 16,051                               | 960                 | 17,011 | 574   | 17,555 | \$250,313 | \$2,190                                | \$252,503   |                           |  |
| 1862.<br>Coals.         | Nova Scotia,.....            | 1,611                                | ..                  | 1,611  | ..  | 1,611  | 14,044    | ..                                     | \$14,044  | Value stated by Exporter. |  |
|                         | Newfoundland,.....           | 120                                  | ..                  | 120    | ..  | 120    | 1,200     | ..                                     | 1,200   |                           |  |
|                         | Nassau,.....                 | ..                                   | 250                 | ..     | ..  | 500    | ..        | ..                                     | 1,700   |                           |  |
| Total,.....             | 10,053                       | 250                                  | 10,303              | ..     | 10,303  | ..     | 103,630   | ..                                     | 103,630   |                           |  |
| 1863.<br>Coals.         | Nova Scotia,.....            | 11,784                               | 250                 | 12,035 | 500   | 12,534 | \$118,274 | \$2,700                                | \$120,974   | Value stated by Exporter. |  |
|                         | United Kingdom,.....         | 1                                    | ..                  | 1      | ..  | 1      | \$10      | ..                                     | \$10  |                           |  |
|                         | Nova Scotia,.....            | 951                                  | ..                  | 951    | 108   | 1,059  | 8,146     | ..                                     | 8,758   |                           |  |
| Total,.....             | 16,146                       | ..                                   | 16,146              | 375    | 16,277  | ..     | 4,000     | ..                                     | 4,000   |                           |  |
| 1864.<br>Coals & Shale. | Nova Scotia,.....            | 17,098                               | ..                  | 17,098 | 614   | 17,712 | \$169,616 | \$5,143                                | \$174,762   | Value stated by Exporter. |  |
|                         | United States,.....          | 1,402                                | ..                  | 1,402  | 133   | 1,535  | \$11,219  | \$614                                  | \$11,863  |                           |  |
|                         | Total,.....                  | 18,011                               | ..                  | 18,011 | 604   | 17,213 | 149,101   | 3,230                                  | 152,337   |                           |  |
|                         |                              |                                      |                     |        | 737   | 18,748 | \$160,339 | \$3,880                                | \$164,200   |                           |  |

\*The Returns for 1865 are not yet sufficiently complete to be here included.

†The Pound Sterling equals £1 4s. 2d. Currency; One Sovereign equals \$4.86½.

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**TABLE F.**

SHOWING the amount of *Bituminous Coal* and *Anthracite* imported into the Province of New Brunswick during the years 1863, 1864, & 1865, together with the values thereof, as shown by the Custom House Returns of the Port of Saint John and the several Out-Ports.

|  | 1863.  |           | 1864.  |          | 1865.  |          |
|--|--------|-----------|--------|----------|--------|----------|
|  | Tons.  | Values.   | Tons.  | Values.  | Tons.  | Values.  |
| <b>BITUMINOUS COAL.</b>                        |        |           |        |          |        |          |
| From United Kingdom,.....                      | 20,418 | \$41,733  | 17,051 | \$37,832 | 16,246 | \$36,472 |
| “ Canada, { Produce of }<br>{ Great Britain, } | 20     | 53        | 21     | 61       | 20     | 58       |
| “ Bermudas, do.                                | ..     | ..        | 267    | 393      | 223    | 450      |
| “ United States, do.                           | 500    | 1,125     |        |          |        |          |
| “ Nova Scotia,.....                            | 7,430  | 27,403    | 10,813 | 39,509   | 12,025 | †        |
| Totals,.....                                   | 28,368 | \$70,314  | 28,152 | \$77,795 | 28,514 |          |
| <b>ANTHRACITE, .....</b>                       | 5,136  | \$40,076* | 3,164  | \$25,179 | 3,744  | †        |

\* The value of *Anthracite* in these Returns is given in United States currency; and that of *Bituminous Coal* in New Brunswick currency at the place of shipment.

† The value of Nova Scotia Coal and of *Anthracite* imported in 1865 cannot be given, the Returns not being complete for that year. Returns for the Port of Chatham, (1865) where there are probably importations of Coal from the United Kingdom and Nova Scotia, have not yet been handed in.

**TABLE G.**

SHOWING List of Prices of Provincial and Foreign Coals in the Market of Saint John in the Year 1865.

|   |                  |                  |
|---|------------------|------------------|
| Grand Lake Coal, ... ..                   | \$4 00 to \$4 50 | \$4 00 to \$5 00 |
| Scotch Coal, ... ..                       | 5 00 “ 5 25      | 5 50 “ 6 00      |
| English Coal, ... ..                      | 6 25 “ 6 50      | 6 00 “ 7 00      |
| Sydney, C. B., Coal, ... ..               | 6 00 “ 6 25      | 6 00 “ 7 00      |
| Joggins and Victoria, N. S., Coal, ... .. | 0 00 “ 4 50      | 4 50 “ 5 00      |
| Anthracite, ... ..                        | 7 00 “ 9 00      | 7 00 “ 8 50      |

The prices named are the averages derived from two of the principal Importers. Those for English and Sydney were current in Autumn and Winter, when the sale is brisk. The prices for Coal, especially Scotch, ruled *high*.

\*The Returns for 1865 are not yet sufficiently complete to be here included.

†The Pound Sterling equals £1 4s. 2d. Currency; One Sovereign equals \$1.86.

\$161,200

\$3,880

\$160,320

18,748

737

18,011

18,011

Total,.....

**TABLE H.**

SHOWING the amount of Albertite, Bituminous Coal, Bituminous Shale, and Anthracite Coal, respectively, exported from the Province of New Brunswick during the years 1863, 1864, & 1865, together with the value of each.

|                            | 1863.  |         | 1864.  |         | 1865.  |         |
|----------------------------|--------|---------|--------|---------|--------|---------|
|                            | Tons.  | Value.  | Tons.  | Value.  | Tons.  | Value.  |
| <b>ALBERTITE.</b>          |        |         |        |         |        |         |
| To Nova Scotia, .....      | 675    | \$6,750 | 1,051  | \$9,450 | 391    | \$3,519 |
| United States, .....       | 16,146 | 161,460 | 16,539 | 148,851 | 17,284 | 153,717 |
| <b>BITUMINOUS COAL.</b>    |        |         |        |         |        |         |
| Produce of New Brunswick.  |        |         |        |         |        |         |
| To Nova Scotia, .....      | 119    | 632     | 351    | 1,760   | 453    | 1,907   |
| United States, ..          | 96     | 85      | 50     | 250     | 529    | 2,599   |
| <b>BITUMINOUS COAL.</b>    |        |         |        |         |        |         |
| Produce of United Kingdom. |        |         |        |         |        |         |
| To Nova Scotia, .....      | 108    | 612     | 133    | 644     |        |         |
| United States, .....       | 131    | 534     | 604    | 3,236   | 130    | 520     |
| <b>BITUMINOUS SHALE.</b>   |        |         |        |         |        |         |
| To United States, .....    | ...    | ...     | ...    | ...     | 1,230  | 3,075   |
| <b>ANTHRACITE.</b>         |        |         |        |         |        |         |
| Produce of United States.  |        |         |        |         |        |         |
| To Nassau, N. P. ....      | 375    | 4,000   |        |         |        |         |

**TABLE I.**

SHOWING the amount of Royalties on Coal collected during the years 1863, 1864, and part of 1865, and paid into the Province Treasury.

| Date when Quarter ended. | Collector's Name.   | Mining claim on which Royalty paid.                             | 1863.      | 1864.      | 1865.      |
|--------------------------|---|---|------------|------------|------------|
| March 31,                | Wm. Wallace, Deputy Treasurer, Hillsborough, Albert County. | Lease No. 25 to Peter & John Duffy, Albert Co., "Albert Mines," | \$296 70   | \$564 00   | \$519 22   |
| June 30,                 |   |   | 972 43     | 1,241 64   | 885 60     |
| Sept. 30,                |   |   | 1,164 20   | 1,501 74   |            |
| Dec. 31,                 |   |   | 831 00     | 112 76     |            |
|                          |   |   | \$3,264 33 | \$3,420 14 | \$1,404 82 |

Total amount paid in the above time, \$8,089.29.



**TABLE K.**

STATEMENT of Produce of Albert Mine for the years 1863, 1864, and 1865,  
by W. Ellman.

|                                    |         | 1863.  | 1864.  | 1865.     |
|------------------------------------|---------|--------|--------|-----------|
| Exported to Nova Scotia, ... ..    | Tons.   | 639    | 1,051  | Tons. 608 |
| Saint John, ... ..                 |         | 1,014  | 1,246  | 2,260     |
| United States in 1863,             | 2,009   |        |        |           |
|                                    | 630     |        |        |           |
|                                    | 5,173   |        |        |           |
|                                    | 278     |        |        |           |
|                                    | 1,225   |        |        |           |
|                                    | 7,200—  | 16,515 |        |           |
| Exported to United States in 1864, | 3,995   |        |        |           |
|                                    | 217     |        |        |           |
|                                    | 356     |        |        |           |
|                                    | 182     |        |        |           |
|                                    | 2,416   |        |        |           |
|                                    | 10,000— | ...    | 17,166 |           |
| Exported to United States in 1865, | 10,058  |        |        |           |
|                                    | 4,145   |        |        |           |
|                                    | 386     |        |        |           |
|                                    | 131     |        |        |           |
|                                    | 280     |        |        |           |
|                                    | 263     |        |        |           |
|                                    | 187     |        |        |           |
|                                    | 135     |        |        |           |
|                                    | 205—    | ...    | ...    | 15,790    |
|                                    |         | 18,168 | 19,463 | 18,658    |

Total amount Exported in the three years as above, ... 56,289 Tons.

