

coal; and we now, therefore, proceed to advert to the investigations on that head, the results of which, we trust, will put an end to any further fruitless speculations as to the existence of that so much to be desired, but, as far as the geological structure of Canada warrants, altogether incompatible mineral.* On this subject, Mr. Logan, in his usual, characteristically wary and elaborate way, thus observes:—†

Among the economic materials of Bay St. Paul and Murray Bay, it is a matter of regret that *I have not in my power to include the coal reported to have been discovered there*. Upwards of two years since, the Commissioner of Crown Lands transferred to me a few specimens of this mineral, which had accompanied a petition from Messrs. Julien Bouchard and Abraham Ménard, of Bay St. Paul, to Your Excellency, representing that they had discovered such indications of its existence on their farms, as induced them to request an examination of the locality, by a competent person, at the expense of the Government. Knowing the general strike of the formations through the country, and being aware, from previous examination, as stated in previous reports, that a band of calcareous rock of the age of the Trenton limestone of New York, which is well ascertained to be far below the recognized carboniferous deposits of North America, carried its outcrop in a continuous line from Grenville on the Ottawa, to Beaufort below Quebec, on the north side of the St. Lawrence; and that another formation (contemporaneous with the Hudson River group of New York,) superior to the Trenton limestone, but also far beneath the same carboniferous deposits, extended on the south side of the St. Lawrence, from Point Levi to Cape Rosier, it was but reasonable to infer that the calcareous rocks of Bay St. Paul, which have been mentioned in published geological papers by Capt. Baddeley and Capt. Bayfield, were of the Trenton era. The existence of

workable coal beds in them, so far below their ordinary position, would have been a new fact, not only in relation to the carboniferous eras of other continents, but to that of North America itself, while it would also have appeared strange that the Trenton limestone, which in Canada and the United States has been examined over thousands of miles without any trace of true coal, should show so novel and exceptional a feature at Bay St. Paul. The improbabilities of the case induced me to consider that it would not be expedient to anticipate the visit that would be made to the locality in its turn in the due course of examination.

The fact upon which the existence of coal was predicated, was that several persons worthy of credit, having visited certain springs of water on the farms of J. Bouchard and A. Monard, had extracted with their own hands, and seen others extract from the springs, pieces of coal of good quality, which were supposed to have been brought to the surface by the force of the water from some coal seam in the rock beneath. The discovery of such specimens in such a situation, in a country which had been settled for centuries, and in which pit coal had been long in use, would have attracted no attention whatever; their presence would have been attributed to some of the thousand accidents connected with the requirements and works of man, which might have brought them there; but in a district reclaimed from its original forest within a comparatively recent period, where the history of the fields in which the specimens were found was known to the present cultivators, from the time those fields were first cleared, it was not by them supposed probable that the presence of the fragments could be due to any forgotten accident. The specimens are pieces of excellent clean, hard, compact, brilliant, black, bituminous coal, bearing the undoubted evidence of stratification, and varying in size from one-eighth of an inch to one inch cube. After the locality had been inspected by me, two men were set to work to clear out a few yards of trench cut back from the spring, and to expose fresh ground on its bottom and sides, which they effected after a full day's labor. Some small fragments of coal were found in the ground that had been previously moved,

* It may be proper to note, that, geologically speaking, the rocks composing the basis of the valley of the St. Lawrence, are regarded as from 20,000 to 30,000 feet below the carboniferous series.

† See Report for 1850, p. 18 to 25.