

## GEOLOGICAL SURVEY OF CANADA.

## REPORT OF PROGRESS FOR THE YEAR 1844.

MONTREAL, 1st May, 1845.

SIR,

I have the honor to request that you will do me the favor to place before His Excellency the Governor General the accompanying Report of the progress made in the Geological Survey of the Province in the year 1844.

I have the honor to be,

Sir,

Your most obedient humble servant,

W. E. LOGAN,

Provincial Geologist.

To the Honorable D. DALY,  
Provincial Secretary, &c. &c. &c.

To His Excellency the Right Honorable Charles Theophilus, Baron Metcalfe, of Fernhill, G. C. B., Governor General of British North America, and Governor in Chief in and over the Provinces of Canada, Nova Scotia, New Brunswick, and the Island of Prince Edward, and Vice Admiral of the same, &c. &c. &c.

Montreal, 1st May, 1845.

May it please Your Excellency,

In conformity with the terms of the Act passed in the last Session of the Provincial Legislature, making provision for the continuance of a Geological Survey of Canada, it is my duty to place before Your Excellency a Report setting forth generally the progress made in the investigation during the past season: and as the Act in question contemplates also a final, full, and scientific description of the rocks, soils, and minerals of the country, properly illustrated by maps, diagrams, and drawings, after the Survey shall have been completed, it will perhaps be sufficient, in reporting progress, that I should confine myself to a simple narration of the facts ascertained, without at present deducing from them any general conclusions of a purely scientific nature, or doing more than will be necessary to render intelligible such parts of the subject as may have an immediate bearing on matter of economic importance, whether of a positive or negative character.

With a view of prosecuting the examination of the Gaspé and Bonaventure Districts, in continuation of the previous season's operations, I left Montreal on the 27th May last, accompanied by my Assistant, Mr. Murray, and, embarking on board of the Unicorn steamer at Quebec, we reached Gaspé on the first June. Losing no time there beyond what was required to provide ourselves with Indians, canoes, and provisions, and to rate our chronometer.—for which purpose the place offered a good opportunity, being marked as one of his Observation Stations by Captain Bayfield in his admirable hydrographical charts of the St. Lawrence,—we commenced our investigation at Cape Rosier, and coasting upwards along the South Shore of the river as far as Cape Chat, a distance of about one hundred miles, every spot was examined where favorable sections promised to give us an opportunity of ascertaining the true nature of the rocks.

The Coast country between Cape Rosier and Cape Chat is of a mountainous character; the ridges in regular succession run in towards the interior at a very small

angle with the trend of the shore, and with the exception of nine miles between the first mentioned point and L'Ance à Griffon, the hills in general come close upon a rocky and precipitous margin, leaving very little space for settlement, beyond the narrow flats at the mouths of the principal streams that descend from the highlands to the St. Lawrence. These are in general occupied by fishing establishments of more or less importance, and among the principal are those of the Great and Little Fox Rivers, and those of the Magdalen, the Mont Louis, the Ste. Anne, and the Chat. On the chief part of these flats there is not much room for agricultural labor, and the inhabitants, wholly engaged in fishing, depend for their supplies on importations from Quebec, which appear to find their way by Gaspé and Cape Rosier; and provisions become dearer, the closer we approach Quebec up to Cape Chat.

Reaching the Ste. Anne River, the land immediately on the St. Lawrence assumes a less rugged aspect than lower down. There, as well as on the Chat, some few signs of cultivation make their appearance, and a small amount of arable land existing in the vicinity would permit its further extension.

The Magdalen, the Mont Louis, and the Ste. Anne present the only harbours along the coast. That of the Magdalen is the safest to lie in; and, if it were not for a sand bar in front, there would be water enough for larger vessels than the class of schooners frequenting it. That of Mont Louis gives good shelter to small coasters; while that of Ste. Anne, though possessed of deeper water than the others, is difficult of ingress and egress, there being a dangerous rock just at the entrance. Large vessels are occasionally built there, and one of 340 tons burden was on the stocks when we visited the place; but such a vessel could not be fully loaded in the harbour, there being only twelve feet of water on the bar in Spring-tides.

The Chat affords no shelter for vessels of any description. On the Cape there stands a conical hill 366 feet high, and about three miles lower down, the streams joins the St. Lawrence in the bight of a shallow bay bounded to the eastward by a low point, which is covered with sand above high-water mark, but juts out into a ledge of rocks laid bare for several hundred yards at the ebb of the tide. A current which comes obliquely across the St. Lawrence from the opposite side, at a constant rate of one to two knots an hour, and makes upon the shore, renders this point, and the whole vicinity, dangerous to the navigation;