

the clay also has about the same thickness, and shells of the same species are seen in abundance in the latter. The height of this cutting above the sea level is about eighty feet. Other cuttings of considerable extent are seen on the railroad in the vicinity of Jacquet River, as well as between this locality and the Eel River; and at the forks of this stream, in Shannonnvale settlement, the clays occupy large areas, with a thickness of ten to fifteen feet, often covered by a thick stratum of sand and gravel.

At several points along the Upsalquitch and Restigouche, terraces of considerable extent are observed and have been already alluded to. On the former stream four very perfect ones are seen on the west bank. At the Chain of Rocks Brook, on the Restigouche, about eight miles above the Upsalquitch, three perfect and one irregular one were noticed, and at the forks of the Kedgewick two well-defined are seen. The general height of these terraces is about ten feet.

Peat bogs exist in large areas in the eastern part of Gloucester and Northumberland counties, especially near the shore of the Gulf of St. Lawrence. At Point Escuminac and on the south side of the Miramichi harbor they have a depth in places of over thirty feet. They are also found in the vicinity of Shippegan and in the Island of Miscou. Quantities of walrus and other bones are found on this Island at a considerable distance from the shore.

Striæ or ice-grooves were observed at several points; on the Peter's River, north of Bathurst, they have a nearly east and west course (N. 85° E.), as also in the vicinity of the Elm Tree River, but the great thickness and wide extent of the superficial drift renders the exposures of striæ rare. Glacial markings.

ECONOMIC GEOLOGY.

Although in the area examined during the past two seasons minerals in considerable variety were observed, some of which have been mined quite extensively in former years, the greater part appear to exist in quantities so small and under conditions so unfavorable that the prospects for their successful development are not promising. They were, however, carefully sought for, and a brief description is herewith appended.

Gold.—The occurrence of gold has been reported from a number of localities. Professor Hind, in his report to the New Brunswick Government (1865), mentions the discovery of gold in small quantity at several points in the Nipisiguit in the drift, but in no case did the washings indicate its existence in paying quantity. Quartz veins are very numerous throughout the whole extent of the metamorphic rocks, many of which were broken up and carefully examined, Gold in the drift.