## NEW BRUNSWICK.

Tufaceous limestone. 8 N

A rather remarkable outcrop of tufaceous limestone in thick beds, which seem to be a continuation of those underlying the gypsum, occurs in the bank just above the plaster cliff. This has been described by Mr. Hind in his "Proliminary Report on the Geology of New Brunswick," page 64.

Character of soil.

This Lower Carboniferous tract, as well as the Silurian area succeeding it on the river, is generally characterized by highly productive soils, well adapted for cultivation. Extensive intervales and large flat islands occur in many places along the river as far as the main forks. Part of this low land is covered with groves of large elm and balsam-poplar; most of the lots adjacent to the river, however, are taken up, and settlement has already extended to within half a mile of the forks, or for fifty-four miles back from the St. John River. A projected railroad, connecting with the New Brunswick railway system at the mouth of the Tobique, and extending up the river as far as Plaster Rock, will, when built, and materially to the value of this section.

## F. DEVONIAN.

Devonian on Campbell River.

Devonian fossils. A small area of soft, dark blue, calcareous slates and soft, dark-grey, rusty-buff weathering sandstones referable to this age occurs on Campbell River, extending for a mile or more above the mouth of the Don, and for about three miles below this point. The dip, as seen at a small island a mile and a half below the mouth of the Don, is S. 45° E.  $< 75^{\circ}$ , and two miles below S. 80° W.  $< 70^{\circ}$ .

The exposures are too few, and the strata too much crumpled, to allow of their structure being definitely ascertained, but they probably form an irregular synclinal lying in a trough in the older rocks, which has been pretected by them from denudation. The few exposures seen are abundantly fossiliferous, although, owing to the cleavage which cuts the bedding obliquely, the forms obtained were generally imperfect and distorted. Those collected, however, which have been determined by Mr. Ami, justify the beds being placed in the Oriskany group, at the base of the Devonian. From a small collection made at the locality, Mr. Ami has furnished the following list:--

1. The carbonized stem of some plant too imperfect for identification.

2. Polypora. Sp. indt. (Generic reference doubtful)

3. Strophomena (Strophodonta) mag.nifica, Hall. Several casts of the interior of this shell present the muscular impressions very perfect.

4. Strophomena (Strophodonta) varistriata? Conrad. A form which is most probably referable to the above species occurs in the collection.

5. Strophomena rhomboidalis, Wilckens. There are numerous examples of this species occurring at this locality, and they appear to be that

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