

grey sandstones, which are banded with paler layers, containing thin beds of grit with crinoids, but in part also of fine, bluish-weathering slates, both being of decidedly Silurian aspect.

About two or two and a half miles above the mouth of Beaver Brook, the sandstones and slates above noted are followed by great masses of very coarse conglomerate, filled with large, well-rounded pebbles of metamorphic rocks, as well as some composed of another conglomerate, imbedded in a thin, sandy paste, and which include sandy beds a foot or more wide, dipping very regularly S. 60° E. < 50°. These conglomerates are also well-exposed upon the Ashland Road, and large boulders, derived therefrom, are strewed over all the surrounding country. Their position, as seen on the last-named road, is probably beneath the sandstones, and they are remarkable in containing numerous fragments of black, siliceous slate, with others of green, jaspery slate, features in which they strongly resemble the conglomerates of the Fish River section, as they do others believed to hold a like position on Beccaguimic River, in Carleton County, New Brunswick, on Siegas River, in the same Province, and on Lake Temiscouata, in the Province of Quebec.

Half a mile below the above exposures, sandstones again come out in high bluffs upon the right bank of the stream, and are probably a portion of the same belt as that first noticed. Here, however, they are remarkable for their massive character, for their low dip (S. < 5-10°), and for their peculiar aspect, being conspicuously filled with little black specks, some of which are, undoubtedly, fragments of black slate, but of which others appear to be fragments of plant remains. They also contain fragments of dark-green serpentine. Besides the doubtful impressions referred to, the rock contains numerous, and in some instances well-preserved, shells and corals. In a collection here made, Mr. Ami has recognised the following:—

- Impression of a Coral *resembling* Favosites.
- “ “ Bryozoon. *probably* Callopora.
- Orthis, *sp.*
- Strophomena subplana ? *Conrad.*
- “ rhomboidalis, *Wilckens*
- Rhynchonella, *sp.*
- Spirifera, *sp.* (*like* S. radiata, *Sowerby.*)
- Atrypa reticularis, *Lin.*
- Cornulites (*like* C. flexuosus, *Hall.*)

Mr. Ami regards the above fossils as of about the age of the Niagara or Wenlock, in which case their position would be below the Lower Helderberg limestones of Ashland, but neither the stratigraphy of the beds or their contained remains have as yet been sufficiently studied to remove all doubt upon the subject. That they are Silurian, however, rather than Devonian, as they have been hitherto described, appears to admit of but little question.

Below the mouth of Beaver Brook, Aroostook River exhibits several abrupt changes of direction, and thus alternations of what are probably the same beds are several times repeated along its banks. They include ledges of conglomerate and sandstone, similar to those above described, followed by dark, bluish-grey slates, which, at the southern point of the chief bend in the stream, shew a broad low anticlinal, one hundred yards in length, with a dip in either direction of not more than two or three degrees. Somewhat lower,