

localities visited, Montebello and Kirk's Ferry, on the North shore of the Ottawa, were visited, and interesting collections and notes taken at both places.

Montebello.—At Montebello on the 19th July, and through the kindness of Mr. L. J. Papineau, who placed his yacht and services at the disposal of the Geological Branch, an interesting exposure of the Potsdam terrane, showing rippled-marks in abundance, besides the tracks and trails of marine animals (*Protichnites septemnotatus*, Owen), was visited on the Presqu'île north of Squirrel Island. This exposure of the Potsdam presents a bold bluff of from ten to twenty-five feet front in height, above low-water mark at this time of the year, facing the north or Laurentide Hills, clearly indicating the existence of an open and free channel from east to west in Pre-glacial times. The sandstones were beautifully glaciated in several places, and showed that the march of the old glaciers was at right angles to the present flow of the Ottawa, and in a north and south direction, down from the adjoining slope to the north.

Kirk's Ferry.—At Kirk's Ferry, up the Gatineau River eleven miles, a most successful excursion was held, and the magnificent rock cuts along the Gatineau Valley Railway afforded excellent opportunity of examining the relations of Archæan rocks of various kinds, in close contact and at times fused one into the other. Crystalline limestones, graphite, opelite, calcite, diorites and pyroxenites, as well as apatite and mica, were collected. This region and cutting is well worthy of close attention on the part of the petrographical geologist.

RADIOLARIANS.

In May, 1890, I prepared a number of specimens of rock from the Shales of the Utica, in Gloucester, from the limestones of the Trenton, Ottawa, and also from the calcareo-arenaceous shales of the Chazy of Nepean, for Mr. Tyrrell, who was sending away to Dr. Rust, in Germany, specimens of radiolarian rocks from Manitoba and the North-West. Mr. Tyrrell has since heard that the Ottawa specimens have been examined, but no radiolarians were found therein.

Although this note is negative, still it shows that probably these low organisms in the economy of nature were absent in the Ordovician seas of the Ottawa Palæozoic Basin.