Lawrence at present. Great numbers have been dredged by Mr Bell on the coast of Gaspé in about 60 fathoms. Along with them are found a few specimens having the characters of the typical Astarte sulcata of Great Britain, and others having the characters of A. compressa, a species much more nearly related than the others to the fossil A. Laurentiana, though quite distinct. I can recognise in the collections made by Mr. Bell and myself all the above species or varieties, and in addition the A. Arctica, which I have found only in the pleistocene beds near Portland. A. Laurentiana and A. Arctica are without doubt distinct species from Sulcata, but different views have been entertained as to the others. The distinction based by some authors on the crenulated or smooth margin, and on which the species A. Scotica and A. Danmoniensis have been founded, is evidently worthless, depending as it does on age; but the distinctions of external form and marking are apparently constant at all ages, and do not shade into each other. Although therefore Dr. Gould and Mr. Stimpson retain the name sulcata for all our American forms, I think it admits of a doubt whether the same distinctions made by Forbes and Hanley in Britain do not hold here. Mr. P. P. Carpenter when in Montreal very kindly went over my collections with me, and expressed himself satisfied that we have the forms recognised in Britain as elliptica, sulcata, and compressa, whatever their specific value. My impression at present is that compressa is a good species, but that sulcata and elliptica as we have them may be varieties of one. It is curious that while A. Lawrentiana prevails exclusively in the St. Lawrence deposits, the modern species is found at Labrador; and very possibly, especially when we regard the more inland position and greater elevation of the former, this indicates a difference of age in the deposits.

The clay attached to and in the interior of Capt. Orlebar's specimens is very rich in the minute *Foraminifera*. It contains specimens of all the forms found in the clays of Montreal and described in my former papers, and in addition the following:

Rotalina oblonga, Fig. 1.

Bulimina pupoides, Fig. 2.

B. auriculata?

Orbulina universa,

Textularia variabilis, Fig. 3.

Nonionina Labradorica, N. sp. Fig. 4.

Truncatulina lobata Fig. 5.