

An increase in the elevation of the ventral valve (see fourth column) is quite as noticeable in this genus as in *Acrotreta* as it is found in the Basal Cambrian; but so far as bulk of the valve is concerned the two genera differ, for *Acrothyra* shows no increase, but on the contrary, if anything, a reduction in bulk. It would seem to have been a closed type, which had reached its culmination and was not capable of further development.

No. 7. DID THE UPPER ETCHEMINIAN FAUNA INVADE EASTERN CANADA FROM THE SOUTHEAST?

Some years ago, when president of Section IV. of this Society, the writer had the honour of asking the attention of the members of this section to certain conditions of the fauna and sediments of the early Palæozoic in the North Atlantic region, that seemed to indicate the manner of the migration of animal species at certain times from one side of the Atlantic to the other; the faunas in some cases being borne from Europe to America, and in others from the latter continent to Europe.

These conjectures in regard to the migration of species were based largely on the known spread of the genera from certain provinces where the faunas were in full force, to others where they were represented by a limited number of species.

For instance, the *Paradoxides* fauna, of which *Anopolinus* is a member, appeared to have its headquarters in Northern Europe, for there not only does it have the greatest variety of genera, but it also shows the most continuous chronological succession. *Anopolinus*, while it is found in Scandinavia and Britain and extends as far west as Newfoundland, has not been found in Canada. And the species of *Paradoxides* abundant in Europe and well represented as far as Maritime Canada, is reduced to one species (or two) in Massachusetts, and west of this is unknown.

A representative form of one species of this fauna, a *Liostracus* (the *Conocephalites tener* of Hartt), which we had thought to be peculiarly American, was sent to me this summer from the south of France, by Mons. Jean Miquel, it thus also proves to be European, but belongs in the southern facies of this fauna, represented in *Paradoxides rugulosus* and the associate species. The American fauna of *Paradoxides* thus drew its representatives from both the northern and southern provinces in Europe. It would be an instructive study to ascertain how and why the northern fauna of *Paradoxides* prevailed over the southern in Maritime Canada, and what held the Upper Fauna of