

Ptychopariæ which I do not make out clearly, from Mr. Walcott's notes, as of this horizon, but which probably belong here (*P. Piochensis*, and *P. coronata*) and these have a still closer resemblance to *Anomocare*. *Olenellus* and *Olenoides* may be considered as the representatives of the *Paradoxides* family at this horizon, but the two last genera on the list find their representatives in Europe at a higher horizon than the *Paradoxides* zone, even as high as the summit of the Cambrian.

This remarkable grouping of genera, which it is stated gradually gave place to the Upper Cambrian fauna, would lead one to suppose that the introduction and removal of successive groups of marine forms in the West, during the Cambrian age, was governed by other conditions than those which prevailed in the better known regions around the North Atlantic Ocean.

In his former paper on the classification of the Acadian Cambrian Rocks, the writer considered the *Olenellus* fauna as a whole, but when the later phase of this fauna is removed, the evidence for the rest, *i.e.*, the *Olenellus-Dorypyge* phase, is in favour of its greater antiquity than the *Paradoxides* beds.

The great range of *Olenellus* in the west, as shown by Mr. Walcott's work, is unusual for a trilobite, but is paralleled by that of *Calymene Blumenbachii* in the Ordovician and Silurian and by other trilobites.<sup>1</sup> It is quite compatible with this feature, that the *Olenellus-Dorypyge* or older phase of the *Olenellus* fauna should also have a wide geographical range: accordingly, we find it spread all across the American continent, and although we do not know of the occurrence of *Olenellus* in Asia, its companion, *Dorypyge*, has been found in Northern China. Dr. F. Schmidt has described from a limestone on the Jenisei river, in Siberia, a trilobite which, by its form, agrees with the genus *Dorypyge*. Other Cambrian fossils are described in the same paper.

<sup>1</sup> *Protypus senectus* is also credited with a wide vertical range, but the examples figured are so defective that more than one genus may be included under the name.