

Phacops caudatus (or allied).

Dalmania, allied to *D. micrurus*, Hall.

* *D. Logani*, Hall.

It will be seen that, while the majority of the species found in the lower bed occur also in the upper, the latter is much richer in species, and especially in those of the Upper Arisaig or Lower Helderberg proper. It is also remarkable for its much greater number of Lamellibranchiate shells and Trilobites. On the other hand it presents no points of resemblance with the Oriskany fossils which accompany the ore of Nictaux in the western part of Nova Scotia.*

The fossils above referred to are derived from the beds immediately containing the iron ore deposits, or from the ore-beds themselves. But in many parts of the district there are rich fossiliferous beds, the relation of which to the iron ores is not so manifest, though they obviously belong to the same great series of deposits. From these beds I have obtained specimens of nearly all the species above catalogued, and some others in addition. The most important of these latter are the following:

Zaphrentis, sp. not determinable.

Meristella didyma, Dalman. A well-known European Upper Silurian species, plentiful in some beds on the East River, but which I have not yet seen from Arisaig.

Lingula sp.

Rhynchonella transversa, Hall (or allied).

R. allied to *R. acutiplicata*, Hall.

R. equiradiata, Hall (or allied).

Orthis multistriata, Hall (or allied).

* *Atrypa emacerata*, Hall.

* *Trematospira Acadica*, Hall.

* *Goniophora consimilis*, Billings.

* *Grammysia Acadica*, Billings.

* *Clidophorus concentricus*, Hall.

* *C. cuneatus*, Hall.

* *Modiolopsis rhomboidea*, Hall.

* *M. sub-nasutus*, Hall.

* *Bucania trilobita*, Hall.

Bellerophon, allied to *B. carinatus*, Sowerby.

* See paper in this Journal, 1879, on 'Recent Papers on the Geology of Nova Scotia.'