

PALÆOZOIC FOSSILS.

---

VOL. III.

---

1. *On some new, imperfectly characterized or previously unrecorded species of fossils from the Guelph Formation of Ontario.*

The "Guelph Formation" is a purely local name which was originally suggested by Mr. Robert Bell in 1861 and first publicly adopted in the "Geology of Canada," published two years afterwards, as a designation for a series of highly fossiliferous dolomites which occupy a position between the Niagara and Onondaga Formations of the Silurian System as now restricted. The geographical distribution and lithological peculiarities of these dolomites are fully described in the concluding portion of the twelfth chapter of the volume cited, which also contains several lists of the fossils of the formation. The rocks in question are believed to form a "great lenticular mass" which extends in a north-westerly direction from the Niagara River to the Grand Manitoulin Island, and which attains its maximum development in Canada, both in thickness and geographical extent, in the central portion of the western peninsula of Ontario. In the United States the Guelph Formation has been recognized in Ohio and Wisconsin, and on the Atlantic coast of Canada its nearest equivalents would seem to be the limestones of L'Anse à la Barbe and L'Anse à la Vieille on the north side of the Baie des Chaleurs, and the sandstones of Back Bay, New Brunswick.

The lists of the fossils of this formation in the "Geology of Canada" contain, among others, the names of ten manuscript species, of which no descriptions or figures have ever been published, and which consequently it has been impossible to recognize. These are as follows:

Columnaria Galtensis.	Cyclonema Psyche.
Diphyphyllum irregulare.	" depressa.
Amplexus laxatus.	Pleurotomaria Huronensis.
Cyclonema Galtensis.	Murchisonia Tullia.
" Thysbe.	Cyrtoceras Jonesi.

---