

§ 138. Of the 52 genera in the Upper Cambrian, 17 may be said to be typical of the Second fauna, viz, *Discina*, *Lingula*, *Leptaena*, *Orthis*, *Triplisia*, *Bellerophon*, *Euomphalus*, *Holopea*, *Maclurea*, *Metoptoma*, *Ophileta*, *Pleurotomaria*, *Hyolithes*, *Serpulites*, *Amphion*, *Bathyurus*, and *Ogygia*. Of the above genera, *Discina*, *Pleurotomaria*, *Amphion*, *Bathyurus*, and *Ogygia* are doubtfully identified in the Cambrian. Several other genera pass up into the base of the Lower Silurian (Ordovician), but are not considered as typical of the Second fauna.

§ 139. When an accurate stratigraphic and paleontologic study is made of the passage beds between the Cambrian and Lower Silurian (Ordovician) systems, or the Potsdam and Calciferous Formations of the New York and Canadian sections, we shall possess the data upon which to compare the faunas of the two sections. At present this knowledge is, to a large extent, wanting.

CLASSIFICATION OF NORTH AMERICAN CAMBRIAN ROCKS.

§ 140. The following table expresses my view of the classification of the various formations that go to make up the Cambrian system of North America. It is subject to revision in details, but the main divisions are based on paleontologic and stratigraphic data that I think will render them of service in the permanent classification of American Paleozoic rocks.

The faunas of the Lower Calciferous unite the characters of those of the Upper Cambrian and Lower Silurian (Ordovician), and it will often be difficult to determine to which system the strata containing them should be referred.

Classification of North American Cambrian rocks.

UPPER CAMBRIAN.	Lower Calciferous.	Lower portion of the Calciferous Formation of New York and Canada. Lower Magnesian of Wisconsin, Missouri, &c.
	Potsdam. Knox. Tonto.	Potsdam of New York, Canada, Wisconsin, Texas, Wyoming, Montana, and Nevada; Tonto of Arizona; Knox Shales of Tennessee, Georgia, and Alabama. The Alabama section may extend down into the Middle Cambrian.
MIDDLE CAMBRIAN.	Georgia. L'Anse au Loup. Prospect.	Georgia Formation of Vermont, Canada, and New York. Limestones of L'Anse au Loup, Labrador. Lower part of Cambrian section of Eureka and Highland Range, Nevada. Upper portion of Wasatch Cambrian section, Utah.
LOWER CAMBRIAN.	St. John. Braintree. Newfoundland. Wasatch. Tennessee. †	Paradoxides beds of Braintree, Mass., St. John, New Brunswick. St. John's area of Newfoundland. Lower portion of Wasatch section, Utah. The Ocoee conglomerate and slates of East Tennessee are somewhat doubtfully included.