

acters and the interior of the ventral valve tend to remove it from the typical forms of the genus *Orthis*.

§ 107. The *Rhynchonellidæ* appears thus far to be restricted to the genus *Camarella*, which makes its first appearance in the Middle Cambrian of Labrador and Vermont. The Vermont species is somewhat doubtfully referred to the genus, and the Labrador species is yet undescribed. It is very much like *Triplesia primordialis* of the Upper Cambrian (Potsdam) horizon of Wisconsin and Texas.

#### LAMELLIBRANCHIATA.

§ 108. M. Barrande suggests that the little shell *Fordilla Troyensis* may be the valves of a crustacean, but, at the same time, calls attention to its resemblance to shells of the genus *Nucula*; and Mr. Ford noticed the resemblance of the single valves to a small *Modiolopsis*. I think that it is a lamellibranchiate shell, but there is an element of uncertainty owing to the obscure character of the muscular impressions. If a true lamellibranch it is the earliest now known, and the record of the class is not taken up again until the passage beds between the Cambrian and Lower Silurian (Ordovician) are met with. It cannot be that *Euchasma Blumenbachi* Billings of the Calciferous formation (Geol. Can., Pal. Foss., vol. i, p. 361, fig. 348) is the first of its class, judging from its size and its relation to the genus *Conocardium*. *Eopteria typica*, *E. Richardsoni*, and *E. ? ornata* Billings (Ibid., pp. 221, 306, 307) complete the list of the Calciferous species, and, like *E. Blumenbachi*, are far in advance of what one would anticipate of the first of the family to which they are referred (*Aviculidæ*).

#### GASTEROPODA.

§ 109. The type represented by *Stenotheca rugosa* ranges throughout the Cambrian, and is found on both sides of the Atlantic basin in the Lower Cambrian and from Labrador to New York in the Middle Cambrian. Its representative in the Wisconsin Potsdam sandstone has not yet been described. Both the genera *Stenotheca* and *Scenella* are *Patella*-like shells, with unbroken margin and surface and with the apex turned forward, as far as we now know from the Middle Cambrian species.

Mr. G. F. Matthew considers *Stenotheca Acadica* as nearer the genus *Parmophorus* of the *Fissurellidæ* than to the *Patellidæ* (Canadian Rec. Sci., vol. ii, p. 10, 1886).

The minute shell referred to *Platyceras primævum* is, as far as known, the first representative of the genus *Capulus*, which, increasing in numbers very slowly through the Lower Silurian (Ordovician), reaches a great development in the Devonian, and, diminishing in the Carboniferous, comes down to the present with a few widely-distributed species.

All the gasteropods appear to have been shallow-water forms, although we now find them preserved in compact limestones.