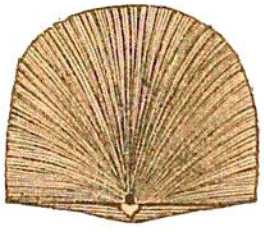
occur in the Lower Silurian, 30 in the Upper Silurian, 72 in the Devonian, 38 in the Carboniferous, 11 in the Permian, 30 in the Trias, 83 in the Oolite, 127 in Chalk, and 34 in the Tertiary.

Another Brachiopod of the Silurian rocks is the Orthis (Fig. 163), of which Bronn gives 54 species in the Lower Silurian, 31 in the Upper Silurian, 43 in the Devonian, 12 in the Carboniferous Limestone, 3 in the Permian, and 2 in the Trias, where it died out.

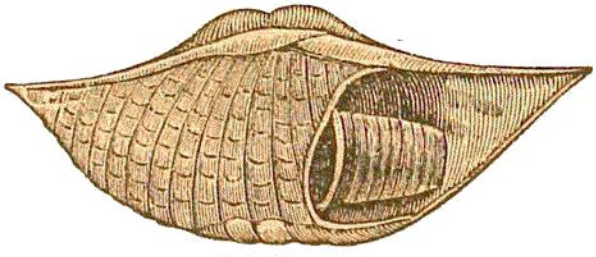
Of the Spirifer, Fig. 163, characterized by a peculiar spire within its valves, shown in our figure, 16 species occur in the Lower Silurian, 18 in the Upper Silurian, 56 in the Devonian, 59 in Carboniferous Limestone, 7 in the Permian, 8 in the Trias, and 4 in the Oolite, where they terminate.

Fig. 163.



Orthis retrosistria.

Fig. 164.



Spirifer.

The number and variety of the preceding Brachiopods that have been described are now so great, that the above genera are regarded as families, such as Terebratulides, Spririferides, etc., each embracing several genera. But details on this subject can not be here given. They will be found in the large works on Palæontology, such as those of Pictet, D'Orbigny, Hall, McCoy, etc.

Other interesting Brachiopods occur in the Lower Silurian; as for instance, Atrypa, Fig. 165.

Conchifera. Numerous representatives of this class of shells appeared early. For examples we give Ambonychia (Pterinæ), undata, Fig. 166, from the Trenton Limestone; Avicula demisa, Fig. 167; from the Hudson River Group, and Modiolopsis modiolaris, Fig. 168, from the same.

Fig. 165.

Fig. 166.

Fig. 168.

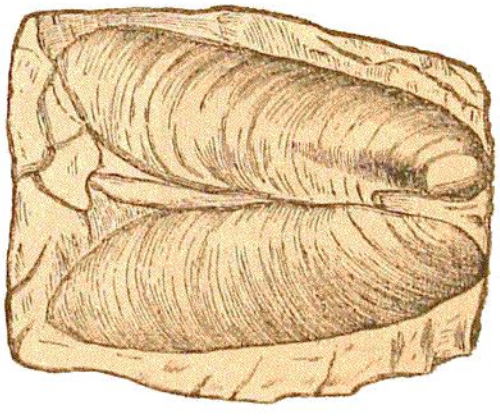


Fig. 167.