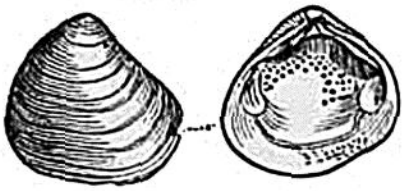
Although freshwater formations are often of great thickness, yet they are usually very limited in area when compared to marine deposits, just as lakes and estuaries are of small dimensions in comparison with seas.

We may distinguish a freshwater formation, first, by the absence of many fossils almost invariably met with in marine strata. For example, there are no sea-urchins, no corals, and scarcely any zoophytes; no chambered shells, such as the nautilus, nor microscopic Foraminifera. But it is chiefly by attending to the forms of the mollusca that we are guided in determining the point in question. In a freshwater deposit, the number of individual shells is often as great, if not greater, than in a marine stratum; but there is a smaller variety of species and genera. This might be anticipated from the fact that the genera and species of recent freshwater and land shells are few when contrasted with the marine. Thus, the genera of true mollusca according to Blainville's system, excluding those of extinct species and those without shells, amount to about 200 in number, of which the terrestrial and freshwater genera scarcely form more than a sixth.*

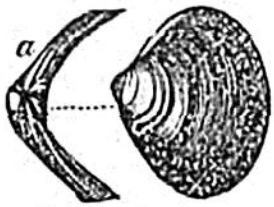
Almost all bivalve shells, or those of acephalous mollusca, are marine,

Fig. 25.



Cyclas obovata; fossil. Hants.

Fig. 26.



Cyrena consobrina; fossil. Grays, Essex.

about ten only out of ninety genera being freshwater. Among these last, the four most common forms, both recent and fossil, are *Cyclas*, *Cyrena*, *Unio*, and *Anodonta* (see figures); the two first and two last of which are so nearly allied as to pass into each other.

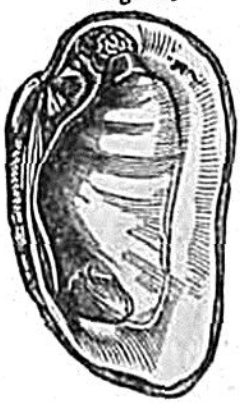
Fig. 27.

Anodonta Cordierii; fossil. Paris.

Fig. 28.

Anodonta latimarginatus; recent. Bahia.

Fig. 29.



Unio littoralis; recent. Auvergne.

* See Synoptic Table in Blainville's Malacologie.