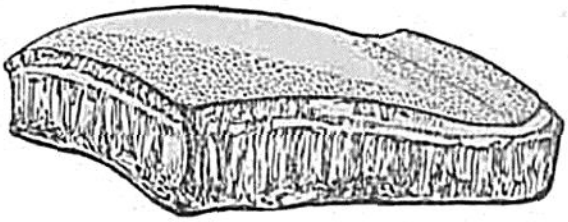
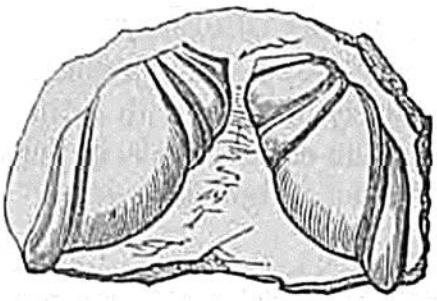
there is a celebrated "bone bed," almost entirely made up of ichthyolites; and the same may be said of the "fish-beds" of Armagh, in Ireland. They consist chiefly of the teeth of fishes of the Placoid order, nearly all of them rolled as if drifted from a distance. Some teeth are sharp and pointed, as in ordinary sharks, of which the genus *Cladodus* affords an illustration; but the majority, as in *Psammodus* and *Cochliodus*, are, like the teeth of the Cestracion of Port Jackson (see above, fig. 288, p. 249), massive palatal teeth fitted for grinding. (See figs. 532, 533.)

Fig. 532.



Psammodus porosus, Agas. Bone-bed, Mountain Limestone. Bristol; Armagh.

Fig. 533.

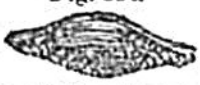


Cochliodus contortus, Agas. Bone-bed, Mountain Limestone. Bristol; Armagh.

There are upwards of 70 other species of fish-remains known in the Mountain Limestone of the British Islands. The defensive fin-bones of these creatures are not unfrequent at Armagh and Bristol; those known as *Oracanthus* are often of a very large size. Ganoid fish, such as *Holoptychius*, also occur; but these are far less numerous. The great *Megalichthys Hibberti* appears to range from the Upper Coal-measures to the lowest Carboniferous strata.

Foraminifera.—This somewhat important group of the lower animals, which is represented so fully at later epochs by the Nummulites and their numerous minute allies, appears in the Mountain Limestone to be restricted to a very few species, the individuals, however, of which are vastly numerous. *Textularia*, *Nodosaria*, *Endothyra*, and *Fusulina* (fig. 534), have been recognized. The first two genera are common to this and all the after periods; the third has already appeared in the Upper Silurian, but is not known above the Carboniferous; the fourth (fig. 534) is peculiar to the Mountain Limestone, and is characteristic of the formation in the United States, Russia, and Asia Minor.

Fig. 534.



Fusulina cylindrica, D'Orb. Magnified 3 diam. Mountain Limestone.

STRATA CONTEMPORANEOUS WITH THE MOUNTAIN LIMESTONE.

In countries where limestone does not form the principal part of the Lower Carboniferous series, this formation assumes a very different character, as in the Rhenish Provinces of Prussia, and in the Hartz. The slates and sandstones called Kiesel-schiefer and Younger Greywacke (Jungere grauwacke) by the Germans, were formerly referred to the Devonian group, but are now ascertained to belong to the "Lower Car-