

Fishes of the Muschelkalk, Lias, and Oolite Formations.

The Fishes of the Muschelkalk are either peculiar to it, or similar to those of the Lias and Oolite. The figure engraved at Pl. 27^c, is selected as an example of the character of a family of Fishes most abundant in the Jurassic or Oolite formation; it represents the genus *Microdon* in the family of Pycnodonts, or thick-toothed Fishes, which prevailed extensively during the middle ages of Geological History. Of this extinct family there are five genera. Their leading character consists in a peculiar armature of all parts of the mouth with a pavement of thick round and flat teeth, the remains of which, under the name of Bufonites, occur most abundantly throughout the Oolite formation.* The use of this peculiar apparatus was to crush small shells, and small Crustacea, and to comminute putrescent sea-weeds. The habits of the family of Pycnodonts appear to have been omnivorous, and their power of progression slow.†

* Pl. 27^c. Fig. 3. represents a five-fold series of these teeth on the palate of *Pycnodus trigonus* from Stonesfield; and Fig. 2, a series of similar teeth placed on the vomer in the palate of the *Gyrodus Umbilicus* from the great Oolite of Durrheim, in Baden.

† A similar apparatus occurs in a living family of the Order Cycloids, in the case of the modern omnivorous Sea Wolf, *Anar-*