

often be procured from the quarries near Swanage ; it has also been found at Hildesheim, in Saxony, by M. Roemer. The detached scales abound in the limestones ; and the splendid fossil reptile from Swanage, figured *Wond.* Pl. I., is sprinkled with the scales and minute teeth of this fish. The habits of the Lepidoti, as indicated by the form and structure of the teeth, were those of fishes whose food consisted of crustaceans, shelly mollusca, &c.; for the dental organs are peculiarly adapted for the crushing and grinding of such substances ; and the teeth of the adult fishes are generally worn down by use.

PYCNODUS. Pl. I. fig. 3 ; *Lign.* 131, fig. 3.—The fishes of the family of Pycnodonts, so named from the thickness of their teeth, have an osseous skeleton, a flat and wide body, covered with rhomboidal scales, and flat or rounded teeth, disposed in several rows, on the palatine, vomerine, intermaxillary, and premandibular bones.* As in the Lepidotus, these teeth are constructed for crushing, and have generally a smooth, dense, convex, or flattened crown, with a highly polished surface. A perfect fish of the genus PYCNODUS (*P. rhombus*), from the Jura limestone, at Torre d'Orlando, near Castellamare, is figured in the frontispiece of the first volume of this

* The *intermaxillary*, *palatine*, and *vomerine* bones compose the vault, or roof of the mouth ; the vomer occupying the middle ; the intermaxillary the front ; and the palatine bones the sides : the *premandibular* bones belong to the lower border of the mouth.