

Another family of these singular Fishes of the ancient world, which was exceedingly abundant in the Oolitic or Jurassic series, is that of the Lepidoids, a family still more remarkable than the Pycnodonts for their large rhomboidal bony scales, of great thickness, and covered with beautiful enamel. The Dapedium of the lias (Pl. 1. Fig. 54.) affords an example of these scales, well known to geologists. They are usually furnished on their upper margin with a large process or hook, placed like the hook or peg near the upper margin of a tile; this hook fits into a depression on the lower margin of the scales placed next above it. (See Pl. 27, Figs. 3, 4, and Pl. 15, Fig. 17.) All Ganoidian Fishes, of every formation, prior to the Chalk, were enclosed in a similar cuirass, composed of bony scales, covered with enamel, and extending from the head to the rays of the tail.* One or two species only, having this peculiar armature of enamelled bony scales,

rhicas Lupus, and other recent Fishes of different families. M. Agassiz observes, that it is a common fact, in the class of Fishes, to find nearly all the modifications which the teeth of these animals present, recurring in several families, which in other respects are very different.

* The Pycnodonts, as well as the fossil Sauroids, have enamelled scales, but it is in the Lepidoids that scales of this kind are most highly developed. M. Agassiz has ascertained nearly 200 fossil species that had this kind of armour. The use of such an universal covering of thick bony and enamelled scales, surrounding like a cuirass the entire bodies of so many species of Fishes, in all formations anterior to the Cretaceous deposits, may have been to defend their bodies against waters