

their lobate paired fins, which have a thick axis beset with biserial fin rays. Their gill-clefts are covered by an operculum, and they have a well-developed air-bladder. Whilst they are in many respects more highly developed than the Elasmobranchs, and are intimately connected with the typical Ganoids and other bony fishes (all of which form a great, manifold side-branch of the general vertebrate stem), they stand in many other respects (notably, the structure of the paired fins, the vertebral column, and the air-bladder) nearer the main-stem of our own ancestral line.

14. This is shown by their intimate relation to the *Dipnoi*, which are still represented by the Australian, African, and South American mud-fishes: *Ceratodus*, *Protopterus*, and *Lepidosiren*. The genus *Ceratodus* existed in the Upper Trias, whence various other unmistakably dipnoous forms lead down through the Carboniferous (*e.g.*, *Ctenodus*) to the Devonian strata—*e.g.*, *Dipterus*. They