the older results arrived at by comparative anatomy and ontogeny. Thirty-four years ago Carl Gegenbaur,\* the great living master of comparative anatomy, had demonstrated in a series of works how the skeletal parts of the various classes of Vertebrata. especially the skull and the limbs, still represent a continuous scale of phyletic gradations. Apart from the Cyclostomes, there are the fishes, and among them the Elasmobranchi (sharks and rays), which have best preserved the original structure in all its essential parts of organization. Closely connected with the Elasmobranchi are the Crossopterygii, and with these the Dipneusta or Dipnoi. Among the latter the highest importance attaches to the ancient Australian Ceratodus. Its organization and development is now, at last, becoming well known. This transitional group of Dipnoi, 'fishes with lungs,' but without pentadactyle limbs, is the morphological bridge which joins the

\* See note, p. 97.