

has lately been discovered in Australia. During the dry season, that is in summer, these strange animals bury themselves in a nest of leaves in the dry mud, and then breathe air through lungs like the Amphibia. But during the wet season, in winter, they live in rivers and bogs, and breathe water through gills like fish. Externally, they resemble fish of the eel kind, and are like them covered with scales; in many other characteristics also—in their internal structure, their skeleton, extremities, etc.—they resemble Fish more than Amphibia. But in certain features they resemble the Amphibia, especially in the formation of their lungs, nose, and heart. There is consequently an endless dispute among zoologists, as to whether the Mud-fish are genuine Fish or Amphibia. Distinguished zoologists have expressed themselves in favour of both opinions. But in fact, owing to the complete blending of characteristics which they present, they belong neither to the one nor to the other class, and are probably most correctly dealt with as a special class of Vertebrata, forming the transition between Fishes and Amphibians. The still living Dipneusta are probably the last surviving remains of a group which was formerly rich in forms, but has left no fossil traces on account of the want of a solid skeleton. In this respect, these animals are exactly like the Monorhina and the Leptocardia. However, teeth are found in the Trias which resemble those of the living *Ceratodus*. Possibly the extinct Dipneusta of the palæolithic period, which developed in the Devonian epoch out of primæval fish, must be looked upon as the primary forms of the Amphibia, and thus also of all higher Vertebrata. At all events the unknown forms of transition—from Primæval fish to Amphibia—were probably very like the Dipneusta.