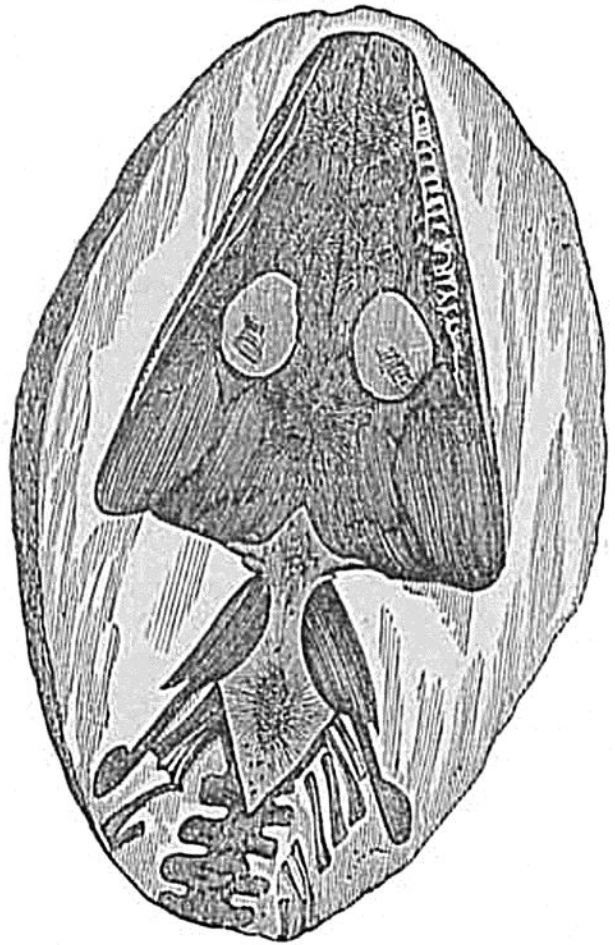


the skeletons of no less than three distinct species of air-breathing reptiles, which were described by the late Prof. Goldfuss under the generic name of *Archegosaurus*. The ichthyolites and plants found in the same strata

Fig. 510.



*Archegosaurus minor*, Goldfuss. Fossil reptile from the coal-measures, Saarbrück.

left no doubt that these remains belonged to the true coal period. The skulls, teeth, and the greater portions of the skeleton, nay, even a large part of the skin, of two of these reptiles have been faithfully preserved in the centre of spheroidal concretions of clay-iron-stone. The largest of these lizards, *Archegosaurus Decheni*, must have been 3 feet 0 inches long. The annexed drawing represents the skull and neck bones of the smallest of the three, of the natural size. They were considered by Goldfuss as saurians, but by Herman von Meyer as most nearly allied to the *Labyrinthodon*, and therefore, as before explained (p. 340), having many characters intermediate between batrachians and saurians. The remains of the extremities

leave no doubt that they were quadrupeds, "provided," says von Meyer, "with hands and feet terminating in distinct toes; but these limbs were weak, serving only for swimming or creeping." The same anatomist has pointed out certain points of analogy between their bones and those of *Proteus anguinus*; and Prof. Owen has observed to me that they make an approach to the *Proteus* in the shortness of their ribs. Two specimens of these ancient reptiles retain a large part of the outer skin, which consisted of long, narrow wedge-shaped, tile-like, and horny scales, arranged in rows. (See fig. 511.)

Fig. 511.



Imbricated covering of skin of *Archegosaurus medius*, Goldf.; magnified.\*

*Cheirotherian footprints in coal-measures, United States.*—In 1844, the very year when the Apaton or Salamander of the coal was first met with in the country between the Moselle and the Rhine, Dr. King published an account of the footprints of a large reptile discovered by him

\* Goldfuss, *Neue Jennische Lit. Zeit.* 1848; and Von Meyer, *Quart. Geol. Journ.* vol. iv. *Miscell.* p. 51.