

tional sense. Contiguous to them in earlier time, lived only water-breathing fishes; next following them in time, were the air breathing reptiles. Here you notice a certain succession in geological history which is reproduced in the life-time of the individual amphibian. Why this parallelism? What causes it? I shall try to answer these questions in due time. For the present we only stick a pin.

Let us look a little more closely at some of these Coal Measure Amphibians. At Linton, Ohio, and Morris, Illinois, and at the Joggins in Nova Scotia, we find their blackened bones in greatest abundance. There is one type in which the animal was but a few inches long and had the shape and aspect of a salamander—that is, with a long tail and four limbs. Another type was similar, but was covered with scales or small bony plates. Still another had no limbs, or at most only two, and the form was long and snake-like. All this is ascertained from the ruins of skeletons found in the Coal Measure shales.

The most characteristic and striking of all Coal Measure types of animals was the *Lab-y-rinth'-o-dont*. In size, some were as large as an ox, and larger. The head of one species was three feet long and nearly two feet broad. The teeth of Labyrinthodonts, like those of all Amphibians, were conical, but on making a cross section, the cement and dentine—the two substances of which the tooth is composed, are found intricately infolded in a labyrinthine fashion, and hence the name of this type. In some of the Labyrinthodonts, the figure was somewhat frog-like, with hind limbs much the largest. Whether they practiced leaping we do not know. That they sometimes walked as quadrupeds is certain, for in some instances, their footprints have been preserved on the surface of sandstones. They were found, for instance, near Greensburg, Pennsylvania, and also in other American localities. The print of the hind foot is four-toed, with a thumb standing out at right angles; and the appearance is so much like that of the human hand, that when the animal was only known from its footprints, it was named *Cheir-o-the'-ri-um* or “hand-beast.” In