

specimens, and other regions have added to the number. Of the snake-like species, part without limbs, and others with feeble limbs, Cope has made out over a dozen species from Linton. *Phlegethontia linearis* of Cope had no limbs, and the proportion of a Whip-snake; and *Molgophis macrurus* was nearly of the size of the common Rattlesnake. One of these nearly snake-like species, *Ptyonius serrula* of Cope, is represented in Fig. 1112; it had hind-limbs, but no fore-limbs. A four-limbed, Salamander-like species, *Pelion Lyelli*, from Linton, described in 1857 by Wyman, is shown in Fig. 1109; and in Fig. 1108, another species, the *Amphibamus grandiceps* of Cope, from Illinois. *Leptophractus obsoletus* Cope, from Linton, of Alligator size, had stout teeth three fourths of an inch long.

Nova Scotia has afforded species of *Dendrerpeton* and *Hylerpeton* of Owen, and of *Hylonomus* of Dawson, the last peculiar in having a slender head. The Nova Scotia species come mostly from the South Joggins, where they were first discovered by Lyell and Dawson in 1851. They were found in the sandstone filling the once hollow trunks of large Sigillariæ, along with land-shells (*Pupa vetusta*, Fig. 1081) and Myriapods (*Xylobius sigillarice*, Fig. 1092); and leaves of Ferns and Cycads, and this mode of occurrence suggested the name *Dendrerpeton* (or tree-reptile). The conditions appear to show that the hollow stumps, the poor pithy wood of which had decayed as they stood in the marshes, were the resort of the Amphibians, and a catch-place for other species of the wet region; or, that the shells were the food of the Amphibians, as Dawson suggests, who states that he has found, in the stomach of a recent *Menobranchius* (*M. lateralis* Harlan), as many as 11 unbroken shells of the fresh-water snail, *Physa heterostropha*. In 1876, Dawson obtained at the Joggins, from a stump 18 inches in diameter, remains of 13 Amphibian skeletons, pertaining probably to six species. The *Baphetes planiceps* Owen, of Nova Scotia, had a head $3\frac{1}{2}$ inches broad.

The South Joggins has also afforded, about 5000 feet below the top of the Coal-measures, two biconcave vertebræ (Fig. 1111, with the cross-section, 1111 a), which are the basis of the species *Eosaurus Acadianus* Marsh. The vertebræ resemble those of an Enaliosaur (Sea-Saurian, page 785), but, as observed by Huxley, from his observations on the *Anthracosaurus Russellii* of the British Coal-measures, and, as recognized by Marsh, they probably belonged to a large Amphibian.

Footprints of Amphibians occur in the Coal-measures of Pennsylvania, Indiana, Illinois, Kansas, and Nova Scotia. Figs. 1113 to 1116 represent tracks of four out of five species described by Marsh from the middle of the Coal-measures in Osage, Kan. All are from one surface about 12 feet square. Between the right and left tracks in Fig. 1113, there is the impression of the tail. In the tracks of *Dromopus*, having long slender toes, the phalanges or joints are very distinct, and on account of the form, Marsh questions whether the species may not have been Reptilian; but he regards the sweep of the foot in walking, indicated by the lines between the two tracks to the right, as favoring Amphibian relations. So many kinds of