

magnitude, indeed, and solidity of these relics of the colossal zeuglodon, are such as might well excite the astonishment of the most indifferent. Dr. Buckley informed me that on the estate of Judge Creagh, which I visited, he had assisted in digging out one skeleton, where the vertebral column, almost unbroken, extended to the length of seventy feet, and Dr. Emmons afterward showed me the greater part of this skeleton in the Museum of Albany, New York. On the same plantation, part of another backbone, fifty feet long, was dug up, and a third was met with at no great distance. Before I left Alabama, I had obtained evidence of so many localities of similar fossils, chiefly between Macon and Clarkesville, a distance of ten miles, that I concluded they must have belonged to at least forty distinct individuals.

I visited, with Mr. Pickett, the exact spot where he and Mr. Koch disinterred a portion of the skeleton afterward exhibited in New York under the name of *Hydrarchos*, or "the Water-king." The bones were imbedded in a calcareous marly stratum of the Eocene formation, and I observed in it many casts of the chambers of a large nautilus, which were at first mistaken by Koch for the paddles of the huge animal. Portions of the vertebral column, exhibited by him, in 1845, at New York and Boston, were procured in Washington County, fifteen miles distant in a direct line from this place, where the head was discovered.\* Some single vertebræ, which I found here, were so huge and so impregnated with carbonate of lime, that I could not lift them from the ground without an effort. Professor Jeffries Wyman was the first who clearly pointed out that the bones, of which the factitious skeleton called *Hydrarchos* was made up, must have belonged to different individuals. They were in different stages of ossification, he said, some adult, others immature, a state of things never combined in one and the same individual. Mr. Owen had previously maintained, that the animal was not reptilian, but cetacean, because each tooth was furnished with double roots, implanted in corresponding double sockets. After my return from America, a nearly entire skull of the zeuglodon was found by Mr. S. F. Holmes and Professor L. R.

\* See "American Jour. of Science," New Series, vol. i. p. 312.