

ART. XLIII.—*Restoration of Mastodon Americanus*, Cuvier:
by O. C. MARSH. (With Plate VIII.)

THE great abundance and good preservation of the remains of the American *Mastodon* have led to various restorations of the skeleton. The best known of these is that made by Prof. Richard Owen, in 1846, based upon a skeleton from Missouri now in the British Museum.* Another restoration was made a few years later by Dr. J. C. Warren, based mainly on a very perfect skeleton from Orange county, New York.† This skeleton is now preserved in the Warren Museum in Boston. A third restoration was made by Prof. James Hall, from a skeleton found at Cohoes, New York, and now in the State Museum of Natural History, in Albany.‡ These restorations are all of importance, and taken together have made clear to anatomists nearly all the essential features of the skeleton of this well-known species.

Additional discoveries have since brought to light more perfect specimens, one of which, now in the Yale Museum, is perhaps in the best preservation of any skeleton of the American *Mastodon* yet discovered, and this has been used by the writer in the restoration, one thirty-second natural size, given on Plate VI, which is reduced from a large drawing made for the United States Geological Survey.

The position chosen in this restoration is one which seems especially fitted to bring out the massive proportions of the animal, and, at the same time, to show nearly all the characteristic features of the entire skeleton. The animal as thus represented was, when alive, about twelve feet in height, and perhaps twenty-four feet in length including the tusks.

This animal was fully adult, as the last molars above and below are in place and somewhat worn. The epiphyses of the vertebræ, moreover, are nearly all coössified with the centra, and in some of them, the sutures are obliterated. The epiphyses are also firmly united to the limb bones.

The tusks were very large, and considerably divergent. There were no inferior tusks, and no traces of their alveoli remain. The penultimate and last molars are present above and below in fine preservation, the former considerably worn.

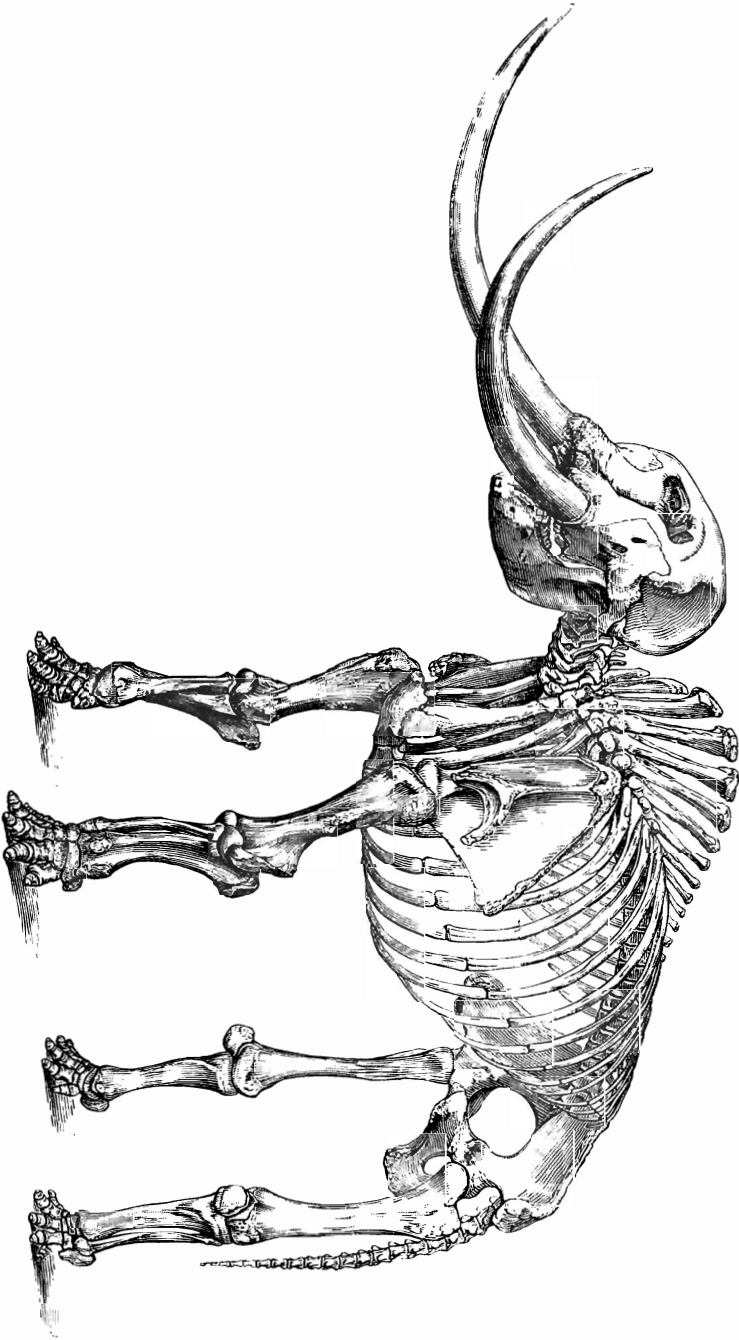
Other features of this skeleton, and especially the various new anatomical points it discloses, will be discussed by the writer in another communication.

New Haven, Conn., September 23, 1892.

* British fossil Mammals and Birds, figure 102, p. 298, London, 1846.

† Description of a skeleton of the *Mastodon giganteus* of North America, plate xxvii, Boston, 1852.

‡ Report of the New York State Cabinet of Natural History for the year 1867 plate vi, Albany, 1871.



Restoration of MASTODON AMERICANS, Cuvier. One thirty-second natural size.