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(Abstract)

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The skeleton known as the Warren Mastodon, discovered in Newburgh, N. Y., in 1845, and monographed by John Collins Warren, has been remounted recently in the American Museum of

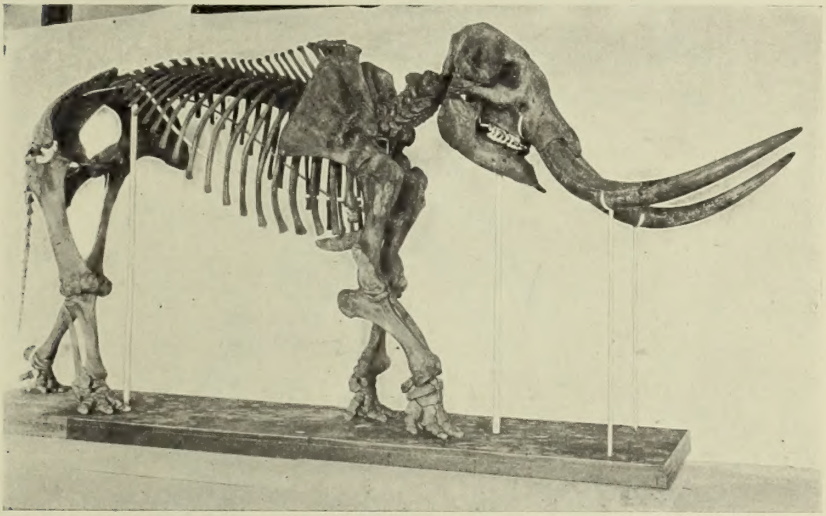

Fig. 1.

Natural History. In repairing the tusks, the outer sheathing of the dentine was found in large part absent. The inner sheathing exposed a series of concentric constrictions and expansions which were observed to be approximately symmetrical on the two sides, as indicated by the series of + signs in Fig. 3, *A* and *B*. Secondly, it was noted that the intervals between these constrictions are broader in the middle and fore part of the tusks (corresponding with the youthful stage of growth of the tusk) and become narrower toward the base of the tusk (corresponding with the mature or adult stages of growth). Eighteen of these rings are preserved on one side and thirteen on the

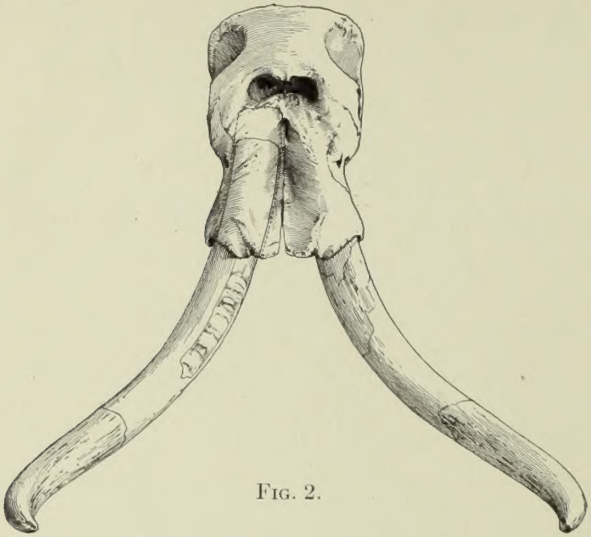

Fig. 2.

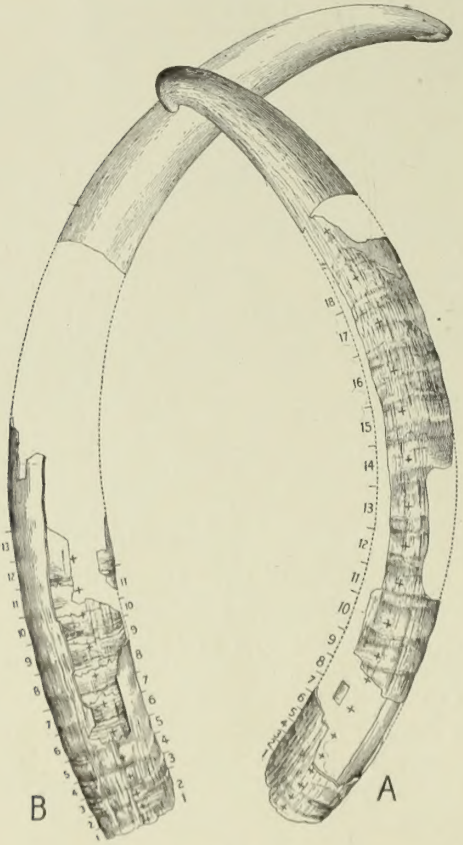

Fig. 3.

other. They are faintly indicated also in the waving surface of the dentine of the tusk (Fig. 3).

On the hypothesis that these are actual annular increments of growth, the right tusk (Fig. 3, *A*) consisted of about twenty-eight segments, which allowing for the milk dentition and for the part worn off at the tip would assign to the Warren Mastodon an age of perhaps thirty years.

Similar annular constrictions are observed in the tusks of the mammoth from Alaska; and are also indicated in the tusks of the African elephant. Since the age of the Indian elephant and the rate of tusk growth is definitely known, the identification of similar concentric annular growths would be the means of testing the value of this hypothesis.

FIG. 1. Skeleton of Warren Mastodon as recently mounted in the American Museum of Natural History.

FIG. 2. Anterior view of skull of Warren Mastodon showing the true position of the tusks in the mastodon.

FIG. 3. Inferior and external views of the right and left tusks, showing the supposed annual growth segments.
A, right tusk viewed from the outside and somewhat from below.
B, left tusk, direct external or outside view.