



MOSASAURUS MAXIMUS, *Cope*.



**Article III.—DESCRIPTION OF A NEW CRINOID  
FROM INDIANA.**

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PLATE III.

***Actinocrinus semimultiramosus*, n. sp.**

Two individuals of the same species and of large size, but of somewhat different stages of thickening and development of the surface ornamentation of the plates of the calyx, occur in close approximation on a block of limestone. They are of the type of *Actinocrinus lowei* Hall, as published in his Iowa report, and also very similar to *A. multiramosus* W. & S., being more closely related to this than to *A. lowei*. There appear to be only three bifurcations of the ray on each primary division, as is the case in *A. multiramosus*, and only one of the arms from each side of the ray appears to bifurcate subsequently, while in that species a much larger number divide. The arm plates are of about the same size and closely resemble those of that species.

The plates of the body, in one individual, are marked by a transverse node with ridges passing from it to the adjoining plates. On the other specimen these nodes and ridges are only partially developed and the plates are much less thickened, but this is a feature only of age of the individual. The plates of the arms are in double series interlocking on the back, and on the inner ends bearing pinnulæ.

The pinnulæ are spine-bearing on the lower part of the arms to the third and fourth joint, decreasing upwards to one on the first joint only, and finally to none whatever.

The plates of the dome are not seen on either specimen, and both seem entirely destitute of a summit proboscis or tube.

Column round, large, the plates strongly alternating in size, and rounded on the edges for a considerable distance below the base of the cup, becoming more even in size as they recede from the cup, but still alternating in thickness with rounded edges, to a distance of six inches below the cup. All the plates of the

stem show strong but fine vertical crenulations on the edges. Canal small.

This species differs from *A. multiramosus* W. & S., which is the nearest allied species, in having fewer bifurcations; in being destitute of a central tube, and strongly in the form and character of the column or stem.

*Formation and Locality.*—In the Keokuk or Knob Limestone, four miles south of Salem, Indiana, on the New Albany road. In the collection of the American Museum of Natural History, New York City.

## EXPLANATION OF PLATE IV.

### *Mosasaurus maximus* Cope.

Fig. 1. View of the two jaws, slightly from above, and one-third natural size.

Fig. 2. Inside view, natural size, of two of the teeth and the intermediate socket of another. Below the teeth the partially developed or successional teeth are seen at *a, a*.







MOSASAURUS MAXIMUS, *Cope.*



## EXPLANATION OF PLATE V.

*Mosasaurus maximus* Cope.

Fig. 1. View of the right coronoid bone from the inside with a fragment of the articular bone below it, one-half natural size.

Fig. 2. View of the same bone from the outside, on the same scale as Fig. 1.

Fig. 3. View of the right coronoid bone of the Mosasauroid Reptile, *Tylosaurus proriger* Cope, on the same scale as the above for comparison.

