

Transverse diameter	5. mm
Antero-posterior diameter of distal articulation of third metatarsal	9.2
Transverse diameter	6.
Antero-posterior diameter of distal articulation of fourth metatarsal	9.
Transverse diameter	5.5

This specimen indicates a bird about as large as a loon, and apparently of similar habits. The locality of the only remains at present known is in Western Kansas, in the same Cretaceous beds that contain the *Odontornithes* and *Pteranodontia*.

ART. XIII.—Notice of a new and Gigantic Dinosaur; by Professor O. C. MARSH.

THE Museum of Yale College has recently received from the Cretaceous deposits of Colorado a collection of reptilian remains of much interest. Among these specimens are portions of an enormous Dinosaur, which surpassed in magnitude any land animal hitherto discovered. The most characteristic bones preserved are portions of the sacrum, and posterior limbs. The former is represented by the last two vertebræ with their transverse processes, nearly complete, and by other fragments. The last sacral vertebra has its centrum moderately concave below on each side of the median line, but only near its anterior end can indications of a keel be observed. The next sacral vertebra has its inferior lateral surface so deeply concave as to materially lessen its bulk. This is also true of the next anterior centrum, and may be considered a distinctive character of these vertebræ. A more important character of the same centra is a very large cavity in each side, connected with the outer surface by an elongated foramen, below the base of the neural arch. The inner surface of this cavity indicates that it was not filled by cartilage, and it probably was a pneumatic opening, designed to lessen the weight of the enormous sacral mass. The transverse processes of these vertebræ are very stout, and of moderate length. Their distal ends are firmly coössi-fied, forming a powerful support for the ilium. Between these processes are large oval openings.

The following measurements give the more important dimensions of these interesting fossils:

Length of centrum of last sacral vertebra	300. mm
Transverse diameter of distal end	270.
Vertical diameter of distal end	250.
Distance between extremities of transverse processes ...	850.

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Length (approximate) of next sacral vertebra	280 mm
Transverse diameter of posterior end	200
Least transverse diameter of centrum	85
Distance between extremities of transverse processes	680
Antero-posterior diameter of opening between transverse processes of above vertebrae	150
Transverse diameter	115
Antero-posterior diameter (approximate) of shaft of femur	230
Transverse diameter	350

These dimensions would indicate for the entire animal a length of probably fifty to sixty feet. It was apparently an herbivorous reptile, and as it is quite distinct from any hitherto described, the species may be called *Titanosaurus montanus*. It was perhaps a distant ally of the comparatively small *Hadrosaurus agilis* Marsh, the only Dinosaur hitherto found in the Cretaceous of Kansas.

With the remains here described were found portions of a much smaller carnivorous reptile of the same order, which apparently belongs to the genus named by Cope *Laelaps*.* These remains, with those already noticed, will soon be more fully described by the writer. Their locality is in the Dakota group of Colorado, on the eastern flanks of the Rocky Mountains, where they were discovered by Professor Arthur Lakes and Captain H. C. Beckwith, U. S. N.

Yale College, New Haven, June 20th, 1877.

* This name *Laelaps* is preoccupied, having been used by Koch in 1835, and again by Walker in 1843. It may, therefore, be replaced by *Dryptosaurus*. This genus is allied to *Megalosaurus*, and is represented in American Cretaceous strata by several species, among them *Dryptosaurus aguilunguis*.

