

genus were figured and more fully described by him in a paper published in 1860¹. From these figures and descriptions it is most probable, in the light of our present knowledge of the dentition of Cretaceous carnivorous dinosaurs, that at least two carnivorous forms, one large and the other small, are included under this generic term. In all probability the small tooth with a U-shaped transverse section, Figures 41-45, does not belong with the large sized teeth, Figures 21-40. Referring to all of these teeth Dr. Leidy wrote (p. 73 of his 1856 paper) "having been discovered together, and possessing the same structural appearances, I suspect them to have belonged to one and the same species." In this opinion Dr. Leidy was probably correct, if we exclude the smallest tooth mentioned by him (Figures 41-45), which to all appearances did not belong to *Deinodon*.

Later, in 1868², Leidy separated the U-shaped, posteriorly truncate teeth from the others, proposing the genus *Aublysodon* for their reception. That this course was erroneous is probable from the evidence of the discoveries of recent years. We know that the Jurassic *Allosaurus*, and *Gorgosaurus* and *Tyrannosaurus* of the Cretaceous have the upper anterior teeth truncate posteriorly. In the case of *Gorgosaurus* the first maxillary tooth in addition to those of the premaxillary is of this shape, the remainder of the maxillary teeth and those of the dentary having the well known trenchant, laterally compressed form with a lenticular cross section near the tip.

If the majority of the teeth described by Leidy belonged to a single individual, and the name *Deinodon* is retained, a form clearly distinct from *Gorgosaurus* is represented differing from the latter in having larger and more robust upper anterior teeth in comparison with which those of *Gorgosaurus* are remarkable for their slenderness.

If on the other hand these teeth belonged to two separate individuals, the trenchant teeth to one and the truncate to another, then in neither case are sufficient diagnostic characters available for generic or specific differentiation.

POSITION OF THE SKELETON OF GORGOSAURUS AS FOUND.

The skeleton of *Gorgosaurus* was discovered in a thick bed of tough clayey sandstone. The phalanges of the left hind foot were first noticed lying as they had fallen, after having weathered from the rock, at the base of a low bluff. What proved to be abdominal ribs, and the metatarsals of the left foot were observed protruding slightly from the steep

¹ Trans. Am. Phil. Soc., "Extinct vertebrata from the Judith River and Great Lignite formations of Nebraska," p. 143, pl. 9, figs. 21-48.

² Proc. Acad. Nat. Sc. Phila., vol. XX, p. 198.