

material above mentioned, to *Hadrosaurus* was recognized⁴ by Leidy, who also suspected that the ceratopsian tooth which he had included in the description of *Trachodon mirabilis* might not properly belong there⁵. He suggested that the best preserved tooth originally referred to *Trachodon* might be included with *Hadrosaurus*, reserving for the ceratopsian tooth the generic term *Trachodon*. If this suggestion were acted on *Trachodon* would necessarily become a genus of horned-dinosaur. The term *Trachodon*, however, has passed extensively into the literature of the North American dinosaurs in connection with bipedal, herbivorous Cretaceous forms and, if retained as a name denoting a genus, had best remain with this association. Unfortunately it has been used for the reception of inadequately represented and imperfectly understood diverse forms of these dinosaurs from different horizons of the Cretaceous.

The tooth of *Trachodon*, first mentioned in Leidy's original description, and later figured first in his plate of illustrations and referred to as being the most important of the specimens should be considered the type of the genus. On the characters of this tooth, therefore, must the validity of the genus *Trachodon* rest. The tooth is from the lower jaw, and if the figure illustrating it be correct, and there is every reason for believing it so, it is very pointed above. As regards the lithographic illustrations of Dr. Leidy's paper of 1860 in the Transactions of the American Philosophical Society, vol. XV., their artistic merit is so pronounced, and all the figures of the three large plates have so much the appearance of being accurate portrayals of the fossils themselves that it appears reasonable to assume that the type tooth of *T. mirabilis* is not shown too pointed at the apex.

Since the days of this pioneer work many new forms of hadrosaur dinosaurs have been described from excellent and wonderfully complete material collected in the Cretaceous of the west both in Canada and the United States, particularly in recent years from the Belly River and Edmonton formations of Alberta. In none of the Belly River genera best known from unusually perfect skulls, such as *Stephanosaurus* Lambe, *Gryposaurus* Lambe, and *Prosaurolophus* Brown, are the teeth acutely pointed as in *Trachodon* Leidy. It is necessary, therefore, to conclude that the genus *Trachodon* is as yet unknown in the Belly River, and fully or partially synchronous formations, except from this single mandibular tooth. Nor is this genus recognizable in the Edmonton and Lance formations, or their equivalents, of the later Cretaceous, in such forms, known from nearly perfect skulls, as *Diclonius* Cope, "*Claosaurus*" Marsh, *Saurolophus*

⁴Smith. Contr. Know. vol. XIV, p. 84, 1855.

⁵Remarks on a jaw fragment of *Megalosaurus*, by Joseph Leidy, M.D., Proc. Acad. Nat. Sci. Phila., vol. XX, p. 199, 1868.