

Between this second surface for maxillary attachment and the lower part of the overlap of the flange of the quadrate is the moderately large surface for the external application of the posterior expansion of the ectopterygoid. Above the contact with the maxillary process, for the full height of the anterior wing of the pterygoid, is the surface for the palatine which passes externally back over the pterygoid for a varying distance from its anterior border.

At the midlength of the superior border, between the wings, facing inward and backward, and occupying the upper end of the posterior, internal enclosure between the posterior flange and the posterior wing is a rugose, concave surface, oval in outline, which grasps the front lower convexity of the process of the basisphenoid.

The forward end of the anterior wing of the pterygoid is not complete, but here the bone thickens slightly downward and supplies a roughened narrow surface, directed forward and facing inward, which apparently indicates the union with the back termination of the vomer.

Measurements of Left Pterygoid of Edmontosaurus, Cat. No. 2289.

	Mm.
Maximum length above (imperfect antero-superiorly)	357
Maximum length below	184
Maximum vertical, anterior height above base-level	268
Maximum vertical, posterior height above base-level	217
Vertical height, above base-level, of superior border behind surface of contact with basisphenoid process	149

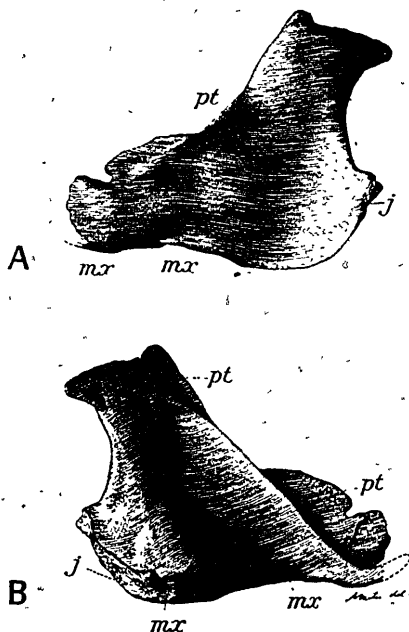


Figure 18. Right palatine of Edmontosaurus, Cat. No. 2289; $\frac{1}{2}$ natural size. A, outer aspect; B, inner aspect; j, surface of contact with jugal; mx, with maxillary; pt, with pterygoid.

Palatine. (Pal.). Figures 3, 13, and 18. This element is somewhat triangular in lateral outline, is highest near the front and narrows downward and backward to the nearly straight base. It is thin and plate-like and when in position is almost vertical above the postero-superior border of the maxillary. It is suturally united to the maxillary, the jugal, and the pterygoid. The anterior border is shallowly emarginated in its upper half to form the posterior curve of the posterior nares. In the lower half of the border is a roughened sutural surface facing forward and slightly outward and downward for contact with the jugal in the infero-anterior angle of the orbital rim. This surface has an irregularly oval outline and is about twice as high as broad. Behind its contact with the jugal the palatine fits on the narrow postero-superior border of the maxillary back to and extending slightly on to the posterior maxillary process. From here