

jaw and inward in the upper one so that the worn surface of the teeth in the two jaws came together with a shearing action in an almost vertical direction. As a result of the curve in the vertical series, and of the overlapping of individual teeth therein, as many as three or even four teeth belonging to a series might be in use at the same time, viz., one worn down to a stump, and one, two, and sometimes three succeeding teeth in progressive stages of wear, providing a tessellated shearing surface of considerable breadth and having a length equal to that of the magazine. The dentary teeth succeed each other in both jaws from the inner side. In the dentary the enamelled face of the crown of the teeth is on the inside providing a continuous enamelled surface to the full extent of the magazine. The maxillary teeth bear enamel on their outer side and for this reason and in consequence of their inward curve the enamelled surfaces in the vertical series of teeth are not brought into juxtaposition after the manner of the mandibular teeth.

The teeth of *Edmontosaurus* conform to the general rules governing tooth implantation and succession in the Hadrosauridæ and are arranged in the usual closely fitting vertical rows of which there are forty-eight or forty-nine in the dentary with four or five teeth and sometimes the stump of a sixth in each row.

The dentary teeth are largest at the mid-length of the magazine and decrease in size toward either end of it, the posterior ones being considerably shorter but only slightly narrower than those in front. The inner enamelled tooth-surfaces, in lateral aspect, are nearly lozenge-shaped in outline, with the longer diameter vertical, and fit closely together quincuncially in a mosaic which is almost half covered from below by the thin alveolar wall. The enamelled portion of the teeth is evenly rounded above, and emarginated at the narrow base where the apex of the next succeeding tooth closely fits. It bears a high, broad-based, sharp-edged, median keel running its length, between which and the margin on either side, the surface is evenly concave transversely. The succession of keeled teeth from below results in the whole of the inner face of the dentary magazine being regularly fluted in a vertical direction. A slight elevation of the margin is developed in the apical curve of the larger teeth, and is also present, to a varying extent, in the smaller anterior and posterior ones along the sides. In the majority of the dentary teeth the margins are smooth, but in the first five or six vertical rows marginal papillations occur between the tooth's apex and the angulation at its maximum breadth.

Three dentary teeth, of the same vertical series, in progressive stages of wear, are in use in the cutting surface at the same time. This number toward either end of the magazine is generally reduced to two.

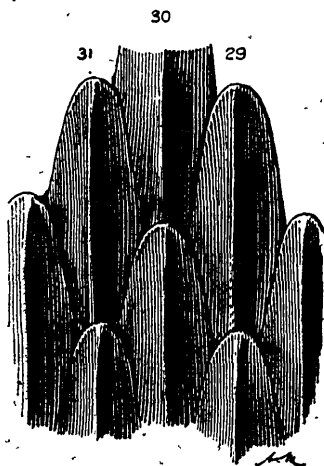


Figure 29. Enamelled face of teeth, in twenty-ninth to thirty-first vertical series from the front, in left dentary of *Edmontosaurus*, Cat. No. 2289; natural size.