Cranium. The cranium proper or brain-case of *Edmontosaurus* though small in proportion to the size of the head was strongly put together. The bones entering into its formation were thick and between many of them coössification took place; at least in the paratype, on which the present description is principally based, the brain-case, although excellently preserved with wonderful detail of structure and form, exhibits few of the sutures externally in the side walls and basicranial axis. In the brain-cavity none of the sutures have been detected.

In *Edmontosaurus*, and apparently in the Hadrosauridæ generally, ossification took place throughout the cranium, in fact the brain-case in the Hadrosauridæ appears to have been as complete as in the Ceratopsidæ, and in both groups an early closing of the sutures marked a departure from conditions in the typical reptilian skull in which the cranial elements tend to remain distinct throughout life.

In the paratype of *Edmontosaurus*, in the external surface of the sidewalls of the cranium, the suture between the alisphenoid and the proötic is preserved above the foramen ovale. In a large surface extending forward from the alisphenoid, representing the orbitosphenoid and the presphenoid no sutures are seen marking the separation of these bones from each other, although their upper boundaries are very distinctly and clearly defined, and in the case of the orbitosphenoid and the presphenoid their lower limits also.

Inferiorly the suture between the basi-occipital and the basisphenoid is visible on either side, but not near the midline, and it can be traced upward on the side walls for a short distance before trace of it is lost. Also in the occipital condyle the division between the basi-occipital and the exoccipital is clear and distinct not only beneath but externally and posteriorly as well.

An early and perfect union of the opisthotic with the exoccipital, and of the epiotic with the supraoccipital would be expected, but in the side walls behind the foramen ovale no sutures can be detected suggesting a division between any of the periotic bones. Nor is there a suggestion of the extent of the supraoccipital bone.

The cranial foramina are well preserved and, relying on them, with, the aid of the few sutures that are visible, the proportionate size and relation to each other of the elements entering into the formation of the brain-case are fairly well established.

Measurements of Skull of Type of Edmontosaurus.

	Mm.
Length of skull measured in a straight line from the posterior edge of the exoccipital process (paroccipital) to the centre of the anterior premaxillary margin	1114
Horizontal length from anterior premaxillary margin to a point vertically below the preoccipital edge	1066
Height from level of posterior end of nasal at the midline of skull to lower surface of dentary	541
Height of orbit measured vertically down from centre of frontal contribution to orbital rim	205
Width of orbit at midheight	180
Length of supratemporal fossa	153
Maximum width of same near its anterior end	85
Width of infratemporal fossa toward its lower end	60
Length of quadrate	420
Breadth (antero-posterior) of external face of same at midheight	76