

process of the superior maxilla. The posterior border of the hard palate was deeply emarginate, and the posterior border of the vomer was visible between the two diverging bones, though not to so great an extent in Weddell's Seal as in the other species. The angle of junction of the two palate bones in the mesial line of the hard palate was in the younger *Stenorhynchus* about opposite the last molar tooth, and in the older specimen further back and almost on a line with the posterior border of the zygomatic process of the superior maxilla. In Weddell's Seal again this angle was in a plane 11 mm. posterior to the same process. In both specimens of *Stenorhynchus* two small triquetral bones were situated at the antero-internal angle of the palato-maxillary suture, and in Dr. Gray's figure of the skull procured during the voyage of the "Erebus" and "Terror" a mesial triquetral bone is shown in the same region.

The alisphenoid canal was absent. The tympanic bulla was almost hemispherical and smooth in Weddell's Seal, and its antero-internal angle was truncated; in *Stenorhynchus* a keel-like ridge, not very elevated, was prolonged from the postero-external to the antero-internal angle, the latter of which was pointed. The carotid canal was separated from the foramen lacerum posterius in all three specimens by a distinct plate of bone as in the Elephant Seal. A deep fissure also separated the tympanic bulla from the mastoid part of the bone, and in it the stylo-mastoid foramen opened. The two optic foramina had a common opening into the cranial cavity in both *Leptonychotes* and *Stenorhynchus*. The hamular process was barely visible in *Stenorhynchus leptonyx*, but in Weddell's Seal it was present and directed outwards.

The occipital condyles converged and met anteriorly in one skull of *Stenorhynchus* but did not quite meet in the other, and in Weddell's Seal the cartilaginous covered surfaces of the two were continuous. In Weddell's Seal the basi-occipital was thin and perforated by a rounded hole, but in the other crania it was entire. A low par-occipital process was present in *Stenorhynchus*, but was scarcely visible in Weddell's Seal. In both specimens of *Stenorhynchus* the supra-occipital canals opened immediately within the posterior edge of the foramen magnum; in Weddell's Seal a single foramen only was present on the outer surface of the bone close to the foramen magnum.

The lower jaw in Weddell's Seal was proportionally more slender than in *Stenorhynchus*, which was in part due to the smaller size of the teeth, requiring a shallower alveolar border, and in part to the more limited surfaces for the attachment of the masticatory muscles. The body of the bone was straight and smooth, and with no eversion of the lower border. The mandible had scarcely any ascent behind to the condyle, and had no angle; the *subcondyloid process* was absent in *Stenorhynchus leptonyx*, but in Weddell's Seal it was a faint incurved tubercle. In Weddell's Seal the mandible was much more slender than the lower jaw of *Ommatophoca rossi*, or Ross's large-eyed seal, figured in pl. viii. of the Voyage of the "Erebus" and "Terror."

*Spine.*—Vertebral formula, C 7, D 15, L 5, S 2, Cd 11=40. As the animal