

widest part of the zygomatic arch was at its hinder end, and the arch diminished in width when traced from behind forwards; in Weddell's Seal the width of the arch was a little greater at its mid-point than posteriorly. In *Stenorhynchus* the distance from the antorbital process to the most anterior surface of the cranial box as compared with the distance from the antorbital process to the orbital process of the molar was as 9 to 7; in Weddell's Seal the former diameter very slightly exceeded the latter. In both specimens of *Stenorhynchus* the total length of the skull both absolutely and relatively was greater than the breadth as compared with the same dimensions in Weddell's Seal. The skull was capacious in the parietal region, and comparatively flattened in all the crania, and became greatly constricted in the frontal region; this constriction was relatively longer in *Stenorhynchus* than in Weddell's Seal. In *Leptonychotes* the antero-inferior angle of the parietal articulated with the alisphenoid; in one *Stenorhynchus leptonyx* they were separated by an epipteric bone; in the other they directly articulated.

In all the crania the nasal bones were elongated and ankylosed together posteriorly and mesially. More than one-half of the length was received between the two divisions of the frontal, where they formed a triangular area, with the apex backwards, whilst the anterior part, lodged between the two superior maxillæ, was quadrilateral in form. The anterior edge of the mes-ethmoid was situated far back in the nasal chamber, and the spout-like vomer, which contained the septal cartilage, sloped downwards and forwards to the anterior nares. The ascending part of each premaxilla entered into the lateral boundary of the anterior nares, but in *Stenorhynchus leptonyx* it did not quite reach the nasal bone, whilst in Weddell's Seal it partially articulated with the anterior end of the outer edge of the nasal. The lateral boundaries of the anterior nares sloped obliquely downwards and forwards, so as to bring the floor of the opening close to the anterior end of the rostrum. The interval between the vomer and the side wall of the nose was occupied by a much subdivided maxillo-turbinal. In *Stenorhynchus* the antorbital process, though small, was distinctly marked, but in Weddell's Seal it was only a faint tubercle; in the former there was an indication of a postorbital process, which was not visible in Weddell's Seal. The antorbital process and infraorbital foramen in all these skulls were in almost the same transverse plane, and considerably behind the opening of the anterior nares. The ascending process of the superior maxilla was not received between the diverging frontals.

In all the specimens the hard palate was widest opposite the last molar, and its concavity was very slight. In *Stenorhynchus* it extended for 40 mm. from the last molar to the palato-pterygoid suture, and in Weddell's Seal for 36 mm., and its border was not raised above the general plane of the palate. The palatal surface of each premaxilla was triangular and the naso-palatine canal was large enough to admit a stilet. The palato-maxillary suture was transverse near the middle line and opposite the last molars, but then sloped backwards and outwards and terminated immediately behind the malar