

on its summit antero-posteriorly; also from each parietal, where it formed the anterior wall of the cranial box, a strong tubercle projected forwards. In the two smaller adult skulls the sagittal and occipital crests were very feeble, and the interfrontal was scarcely marked, and although the frontal bone at the anterior wall of the cranial box bulged forwards, it was not elevated into a tubercular process.

In the young Falkland Island skull, the crests were undeveloped, the summit of the cranium was smooth and the frontal region was only slightly constricted behind the postorbital processes, and its absolute width was about twice as great as the large male crania. The length of the brain-cavity, measured from the basion to the optic foramen, is given in Table IV., so that its proportional length to that of the entire cranium may be estimated, and in the young skull the antero-posterior diameter of the cranial box was more than one-half that of the entire skull, so that the more anterior part of the skull grows in its progress to adult life at a much greater rate proportionally than the brain-cavity.

The dentition in all the specimens was as follows:—incisors  $\frac{3-3}{2-2}$ , canines  $\frac{1-1}{1-1}$ , post-canines  $\frac{6-6}{5-5} = 36$ . The individual teeth in the adults possessed the characters which have so frequently been described in *Otaria*, so that I need not dwell upon them.

The teeth in the young male were so much smaller than the adult that they were apparently the milk series. In the upper jaw only two incisors on each side, each with an anterior and a posterior cusp, had cut the gum; in<sub>3</sub> being still concealed. Very small canines had erupted, and the points of the 1st and 2nd post-canines could be seen. In the lower jaw the incisors, canines, 1st and 4th post-canines had cut the gum.

As compared with the Elephant Seal, the zygomatic arches were much flatter, and the greatest width was towards the posterior end. The zygomatic and temporal fossæ were not so capacious relatively to the size of the skull, but the frontal region in *Otaria* was much more constricted immediately behind the orbits. In the two adult male skulls the distance from the anterior surface of the cranial box (the tubercular process not being included) to the antorbital process was about twice as great as the orbital diameter from the antorbital process to the orbital process of the malar. In the smaller adult from the Chincha Islands the orbital diameter was three-fourths that of the entire distance, and in the Maldonado skull two-thirds. In the young male from the Falkland Islands the two diameters were almost equal. It follows, therefore, that whilst in the young animal the back of the orbit is in close relation to the front of the cranial box, in the adult male it is separated from it by a wide interval, which marks the position of the temporal muscle and acquires its magnitude in relation to the use of that muscle in the masticatory process. The zygomatic process of the temporal did not curve upwards so abruptly as in the Elephant Seal, and did not reach the tip of the orbital process of the malar, which was much more stunted than in the Elephant Seal.

The nasal bones were relatively short and not ankylosed except in the Maldonado skull;