

posterior border of the hard palate. In the young Falkland Island male the hard palate differed in some respects from the adult; it had scarcely any concavity in its posterior part, but anteriorly it was somewhat hollowed out; the anterior part of the palato-maxillary suture was opposite the penultimate molars; the length of the palatal surface of the palate bone was equal to the length from the palato-maxillary suture to the incisive canal; the widest part of the hard palate was immediately behind the last molars. The posterior edge of the hard palate and the posterior nares in the two large skulls were in the same transverse plane as the anterior border of the glenoid fossa, but in the smaller adults they were a little anterior to that plane, and more so in the young skull from Stanley. The hamular processes were curved and projected downwards, inwards, and then outwards.

The great elongation of the palate in *Otaria jubata* is therefore due to the remarkable antero-posterior diameter of the palatal plate of the palate bone, which completely concealed both the sphenoidal articulation and the posterior border of the vomer, the latter of which was falciform, and did not articulate with the palate, but passed forwards to reach the vomerine crest of the superior maxilla. As the hard palate was covered by the mucous membrane when the skull reached me, I took the opportunity of examining it when softened prior to its removal. This membrane possessed numerous short papillæ, which, in the part of the palate situated between the molar teeth, were arranged in seven low ridges, which were not quite transverse, but with a slight inclination backwards. Between and in front of these rows similar dwarf papillæ were scattered over the mucous surface, but behind the last molars the membrane was smooth.

All the crania possessed alisphenoid canals and mastoid processes. In all, the tympanic bulla had a process projecting vertically downwards from the inferior surface. In the larger adults it was thick and truncated, in the smaller adults it formed a sharp ridge; in the young male, although the ridge did not project so much as in the smaller adults, it was quite as thick. The tympanic cavity was opened into in the Maldonado specimen, and consisted of a large chamber, dilated below, which suddenly narrowed as it ascended to the outer side of the petrous-temporal. The carotid canal opened within the boundary of the jugular foramen. The occipital condyles were not continuous anteriorly in the adults but separated by a definite interval, and their inner borders in front lay in a plane running almost directly from before backwards; in the young skull, however, the condyles were continued into each other in front, and the cartilage was prolonged from one to the other. No supra-occipital foramen was visible either at the foramen magnum or below the occipital crest. The inferior surface of the basi-occipital had in the four adult crania an elevated ridge running antero-posteriorly, and there was no mesial perforation in any of the skulls. The carotid canal opened immediately within the boundary of the jugular foramen. The par-occipitals were stunted.

The skulls from the Falkland Islands were the only specimens which possessed a lower