from a comparative point of view, are of but little value. The descriptions indeed of all the authors mentioned, are so meagre and unsatisfactory, that I have felt justified in giving a more minute account of these organs than would otherwise have been necessary. For the sake of accurate comparison, I have selected *Eudyptes chrysocome* from Tristan d'Acunha as a type, and having in the first place described at length each portion of the alimentary canal of that bird, I have thereafter added comparative remarks on the anatomy of the other species which I have dissected.

THE MOUTH.

The tongue of Eudyptes chrysocome from Tristan d'Acunha, is elongated and somewhat rounded at its free extremity. It measures 15th inches in length and 3ths of an inch in greatest breadth. Its upper surface is covered by a series of stout conical papillæ, the free extremities of which are directed backwards towards the throat. The papillæ are arranged in nine longitudinal rows, one of which occupies the middle line of the tongue, while four others are arranged symmetrically on either side of the middle line. The papillæ composing the central rows are of larger size than those situated externally. The latter diminish in size from the middle line to the lateral margins of the tongue. The base of the tongue is separated from the rest of the organ by a groove, which is most clearly defined when the point of the tongue is depressed. The basal portion so separated is triangular in form, the apex of the triangle being directed forwards. It, like the rest of the organ, is invested by recurved papillæ.

The superior laryngeal aperture is placed immediately behind the root of the tongue, and presents the form of an elongated slit, bounded on either side by an elevated portion of the mucous membrane, which, for convenience of description, may be named the "laryngeal pads." These pads (Pl. XIII. fig. 1) together are of an oval form, and measure \$\frac{3}{4}\$ths of an inch in length, and 1 an inch in greatest breadth. They are slightly raised above the level of the adjacent mucous membrane. Like the tongue, they are covered with conical recurved papillæ, which, however, are of smaller size and more sparsely and irregularly distributed than on the dorsum linguæ. The papillæ are of larger size at the margins of the laryngeal slit than at the external margins of the pads. The laryngeal aperture has the form of an elongated slit, which at first sight apparently corresponds in length to that of the laryngeal pads. Upon closer examination, however, the aperture is seen to correspond only to the anterior half of the antero-posterior diameter of the pads, the posterior segment of the apparent aperture being merely a superficial groove between the pads of opposite sides. To their outer side the mucous membrane of the mouth is smooth and devoid of papillæ, presenting only the apertures of several buccal glands, the ducts of which open into the mouth in this region.

The floor of the mouth below the tongue is formed by a triangular portion of mucous