

In *Eudyptes chrysolophus* (Pl. XIV. fig. 1) the tongue measures 2 inches in length and $\frac{1}{3}$ rd of an inch in greatest breadth. It resembles in form that of *Eudyptes chrysocome*, but differs in respect of the number of papillæ with which its surface is covered. The papillæ at the tip of the tongue are arranged in three rows, between which, when traced backwards, others are gradually interpolated, so that close to the base of the tongue there are observable no fewer than eight distinct lines of longitudinally arranged papillæ. As in *Eudyptes chrysocome*, they are recurved, and increase in size from the apex to the base of the tongue. The laryngeal pads together measure 1 inch in length and $\frac{1}{2}$ an inch in greatest breadth. The papillæ covering them are of small size. They are arranged in three irregular rows on either side of the laryngeal aperture, but become irregularly arranged, and of smaller size towards the external and posterior margins of the pads.

The buccal group of papillæ is of relatively larger size than in *Eudyptes chrysocome*. The papillæ composing it are also stouter than in that species.

The palate of *Eudyptes chrysolophus* (Pl. XIV. fig. 2), immediately behind the smooth quadrilateral plate which fills up the angle of the jaw, presents three rows of papillæ on either side of the middle line. The rows, as such, are traceable as far back as the gape, opposite which their number is increased to six. Behind the gape the papillæ again decrease in number as well as in size, and disappear entirely opposite the articulation of the lower jaw bone.

The floor of the mouth and the salivary follicles of *Eudyptes chrysolophus* resemble those of *Eudyptes chrysocome*.

In every species of *Spheniscus* which I have examined, the tongue differs from that of *Eudyptes*, inasmuch as it is of relatively smaller size. This difference in size of the tongue is most observable when the length of the organ is compared with that of the lower jaw (compare figs. 1 and 3, Pl. XIV.). In *Eudyptes* the tongue extends forwards almost to the symphysis of the lower jaw, whereas in every species of *Spheniscus* the free extremity of the tongue fails to reach that point. Accordingly in *Spheniscus*, the tongue instead of covering the entire floor of the mouth, as in *Eudyptes*, leaves a considerable portion of it (about an inch in *Spheniscus demersus*) exposed to view. The tongue of *Spheniscus*, moreover, differs from that of *Eudyptes* in respect of its form. In the former the tongue is of an elongated triangular form, and diminishes in breadth from base to apex, while in the latter the organ is of nearly uniform breadth throughout. Lastly, in *Spheniscus* the oral papillæ are of considerably smaller size than in *Eudyptes*, and in every species of *Spheniscus* the buccal group of papillæ is of smaller size than in any species of *Eudyptes*.

In *Spheniscus demersus* (Pl. XIV. fig. 5) the tongue measures $1\frac{3}{4}$ inches in length and $\frac{3}{8}$ ths of an inch in breadth at the base. The lingual papillæ are arranged in five rows. One of these occupies the middle line of the tongue, and the others are placed two on either side of it. As in *Eudyptes*, the papillæ of the central row are the largest. The