

measures $1\frac{1}{2}$ inches in length, and its breadth at the base is the same. Its basal angles are separated from one another on the left wall of the tube by an interval of $\frac{3}{4}$ ths of an inch. Along this interval, the œsophageal rugæ, which elsewhere cease at the anterior border of the proventricular gland, extend backwards and become continuous with the rugæ lining the muscular portion of the stomach. Each of the orifices of the proventricular glands is placed on the summit of a little elevation of the mucous membrane covering the glandular patch, and here and there elevated ridges of the mucous membrane are seen to separate these orifices from one another.

The muscular portion of the stomach, from the posterior border of the proventricular gland backwards, measures 2 inches in length. It is lined by a thick but soft mucous membrane, which, when the stomach is empty, is thrown into rugæ. These for the most part are longitudinally arranged, but communicate freely with one another by means of short, more or less obliquely placed, mucous folds. The mucous membrane thus presents an irregularly convoluted appearance, which somewhat resembles that of the gyri of the cerebrum. The pyloric aperture is considerably smaller than the lumen of the intestine. It is defended by three small projections, which appear to be nothing else than the free ends of the longitudinal rugæ which line the muscular portion of the stomach.

Contents of Stomach.—In the stomach of one specimen of *Eudyptes chrysocome* from Tristan d'Acunha, I found a small number of the horny mandibles of cephalopods. With the exception of these the stomach was empty. It was observed that there was no trace of the small stones and grit, which in several other species constitute so remarkable an element of the gastric contents.

Variations in respect of the Stomach.

In *Eudyptes chrysocome* from the Falkland Islands, the stomach, in respect of size and form, agrees with that of *Eudyptes chrysocome* from Tristan d'Acunha. The proventricular gland is confined to the right wall of the viscus, and is crescentic rather than triangular in form. The horns of the crescent are directed backwards. The glandular patch, measured transversely to the long axis of the œsophagus, is $3\frac{1}{2}$ inches in length and $1\frac{1}{2}$ inches in greatest breadth. The left wall of the stomach is devoid of glands, the interspace between the two horns of the crescent measuring $1\frac{1}{2}$ inches in breadth.

In one specimen of *Eudyptes chrysocome* from the Falklands, the stomach was perfectly empty, while in another it was filled to distension with a dark pulpy mass, which careful examination proved to be composed of minute, half-digested portions of small crustacea. In both these stomachs there was a total absence of either fish bones or gravel.

In *Eudyptes chrysocome* from Kerguelen (Pl. XIII. fig. 3) the stomach measured