fig. 2, *pl*; Pl. VII. fig. 5, *pl*), that covering the ventral surface being denser and more finely granular, and with a more definite margin, which is probably richly ciliated. This denser and somewhat regularly streaked hypoderm (which also stains more readily) shows several prominent frills or rugæ where it joins the oral region, and it just turns the outer edge of the lamella all round and then ceases. The dorsal layer of hypoderm on the other hand is more lax, and is thrown into a series of frills or crenations in the preparations, the streaks in it being more conspicuous than the granules. It resembles, indeed, the somewhat lax hypoderm observed on the pedicle, and like the latter contains numerous pigment-corpuscles which do not readily stain. So far as the structure can form a guide, the ventral surface would seem to be more important functionally than the dorsal.

The oral region therefore has a different environment from that in *Rhabdopleura*, though the plan of structure follows parallel lines. Thus in the excellent figures of Lankester,[1] a well-marked plate situated behind the mouth, and running into the buccal disk in front of it, is apparently the homologue of this lamella. When the disk is folded backwards (*op. cit.*, fig. 2) the two surfaces come more or less into contact, and would thus send currents more surely into the mouth. Lankester does not allude to this region, which lies just in front of his thoracic division in *Rhabdopleura*. In the flattened surface of the post-oral lamella the buccal shield is closely applied in the preparations, though in life they can of course be separated at will, thus permitting the currents caused by the cilia of the opposed surfaces to reach the oral aperture. As its posterior face has perhaps only to perform the function of separating the currents connected with the mouth from those of the gill-slits, the differences in structure are thus explained.

The post-oral lamella may have some relation to the Molluscan foot, and also to the post-oral ring of cilia in *Polygordius*, especially as a ciliated groove in the latter runs between it and the mouth. Harmer's view that it is homologous with the operculum of *Balanoglossus*, as described in Bateson's valuable and suggestive papers[2] on this form, appears to be well founded.

Digestive System.

Mouth.—The margin of the oral lamella leads on each side (Pl. III. fig. 3; Pl. VI. fig. 2, *m*) into the mouth, and in some ventral views it passes straight inwards to the sides of the latter, and forms a transverse margin anteriorly. The edges of the mouth are slightly raised or frilled laterally and posteriorly, the latter often being spout-shaped.

[1] *Op cit.*, pl. xxxviii. figs. 1, 2.

[2] *Quart. Journ. Micr. Sci.*, April 1884; also Studies from the Morph. Lab. Univ. Camb., vol. ii. part i., and vol. iii. part i. The author has overlooked some remarks previously published in this country on *Balanoglossus*. *Vide* Nemerteans, *Ray. Soc.*, 1873, p. 144.