

Œsophagus.—The firm and finely glandular œsophageal region (Pl. III. fig. 3, a little behind *æ*), which is characterised by the paucity of its folds, is comparatively short, for it merges into the gastric chamber a little behind the termination of the buccal shield (Pl. III. fig. 3).

Stomach.—The stomach forms a large cavity, which in some instances fills the whole of the body-space, with the exception of the dorsal area occupied by the intestine. In certain longitudinal sections the œsophagus forms a comparatively limited tube, while the stomach fills the entire body-cavity (Pl. III. fig. 3), but dorso-ventral flattening of the former may have occurred in such cases. The wall of this region is also somewhat thick, and when fully formed, is distinguished from the œsophageal region by its more numerous and often symmetrical folds, and sometimes by a differentiation into three pseudo-strata, viz., a deeply stained, granular, epithelial, superficial layer marked by close parallel striæ, a pale intermediate region with granular glands, and externally another deeply stained stratum of granular glands. It is not implied that there is separation in continuity between the three regions indicated, but rather that either from preparation or otherwise such a condition appears in the stomach. The colour of this region in life is probably as characteristic as in *Rhabdopleura*, where it is yellowish, but this feature cannot be made out in the spirit-specimens, for all are bleached. In the preparations it not unfrequently happens that rupture of the alimentary wall occurs along the middle region, so that the complexity of the folds in the body-cavity is increased. Externally the whole organ is surrounded by a firm basement-layer continued from the œsophageal region, and from its elasticity this probably subserves certain of the functions of a more elaborate contractile apparatus, for muscular fibres have not been clearly determined. The chamber narrows posteriorly towards the pedicle, and terminates in the intestine, the glandular wall, however, undergoing no change of note.

In *Rhabdopleura*, Sars¹ mentions that the stomach has tolerably thin walls, but in all probability he speaks comparatively, as from the nature of the glandular tissue such organs have proportionally thick walls.

Intestine.—As in *Rhabdopleura*, the stomach terminates at the posterior end of the body-cavity at the base of the pedicle by a wide aperture in the intestine. In favourable sections (Pl. III. fig. 3) the intestine is observed to leave the ventral side of the fundus of the stomach, and passing under it, curve forwards along the dorsal wall. The glandular lining of the ventral wall of the stomach passes evenly into the intestine and gradually diminishes in thickness, whereas the lining of the posterior wall shows a characteristic bend at the pylorus, and again a fold in the anterior wall of the intestine behind the fundus (Pl. III. fig. 3, near *vtl*). This peculiar fold in the wall of the canal probably indicates a tendency to the formation of a second or pyloric stomach, as in *Phoronis*, and is therefore of considerable morphological significance. The intestine

¹ *Op. cit.*, p. 5.