

inwards to form slight horizontal membranes projecting between the rows of stigmata (Pl. XXIX. fig. 3, *h.m.*).

The endostyle is large and conspicuous (Pl. XXIX. fig. 4, *en.*). Its course is very undulating. The dorsal languets are large and closely placed.

The œsophagus is a long narrow curved tube with the convexity dorsal (Pl. XXIX. fig. 4, *œ.*). The stomach is not large; its shape is almost spherical. The wall is thick, and is folded longitudinally; the folds are especially prominent at the anterior end (Pl. XXIX. fig. 4, *st.*). The intestine is narrow in its first part, which runs posteriorly from the stomach. It usually becomes dilated (see Pl. XXIX. fig. 4, *i.*) just at its most posterior part before turning ventrally and anteriorly to pass into the rectum; the intestinal loop is narrow. The rectum is a long wide thin-walled tube running up the ventral edge of the abdomen and thorax (Pl. XXIX. fig. 4, *r.*). It is usually filled with dark-coloured faecal matter, and is just visible to the unaided eye in making a dissection of the colony.

The post-abdomen (Pl. XXIX. fig. 4, *p.abd.*) has its edges very irregular, and usually sacculated in appearance. The spermatic vesicles are spherical in shape, and have each a fine duct which runs to the lower end of the vas deferens (Pl. XXIX. figs. 4 and 5, *t.v.* and *v.d.*). They stain a deep red colour with picrocarmine. The vas deferens is large and conspicuous, and of great length. The ducts from the vesicles are all attached along one side of it (Pl. XXIX. fig. 5). The ova are of a bright yellow colour. They are placed in the anterior part of the post-abdomen.

The lower end of the post-abdomen is usually somewhat swollen (Pl. XXIX. fig. 4, *v.ap'*), and it gives off two or three very short cæcal processes which are evidently rudimentary vascular appendages.

*Amaroucium complanatum*, n. sp. (Pl. XXX. figs. 16–17).

*The Colony* has the form of an ovate or pyriform mass attached by one end and much compressed laterally. The upper end is broad and rounded, but thin. The surface is rather uneven. The colour is a light grey.

The length is 3 cm., the breadth is 2 cm., and the thickness 5 mm.

*The Ascidiozooids* are fairly large and numerous. They are greatly elongated antero-posteriorly, and are placed vertically in the colony. The body varies from 5 mm. to 1 cm. in length, and is less than 1 mm. in breadth. It is not divided into regions externally.

*The Test* is firm and rather tough. It is of a light grey colour and is moderately transparent. The clear matrix is crowded with test cells which are small but very numerous. Most of them are of rounded form, and some are very granular. No pigmented cells and no bladder cells are present.