

The relation of the genital organs to the alimentary canal is seen in a transverse section of the abdomen (Pl. XVII. fig. 10). This section must have been cut obliquely with the dorsal edge more anterior than the ventral, as the spermatic vesicles do not usually extend so far forward as the stomach. Probably a line connecting *g.* and *st.* in figure 9 would be nearly in the plane of the section. The vas deferens in the transverse section (Pl. XVII. fig. 10, *v.d.*) lies further from the intestine than it generally seems to be in surface views and dissections. The space between the stomach and intestine is occupied by the heart, in the walls of which cross striped fusiform muscle fibres are distinctly visible.

*Colella murrayi*, var. *rubida*, nov. (Pl. XVII. figs. 12-14).

The collection contains a small colony which was dredged from Station 162,<sup>1</sup> in Bass Strait, at a depth of 38 fathoms, and which I was at first inclined to regard as belonging to *Colella murrayi*. A closer examination, however, revealed several points of difference, so that I have thought it best to place this specimen as a variety of that species. It is unnecessary to give here a formal description; that belonging to the last species will serve, if the various differences to be enumerated presently are borne in mind.

The colony (Pl. XVII. fig. 12) consists of a short, somewhat triangular head, borne on the summit of a short thick peduncle. The head is flattened laterally, and has a truncated appearance at the top, which is the widest point. The sides slope downwards, the head tapering gradually into the peduncle. The extreme length of the head is 7 mm., the greatest breadth almost 10 mm., while the thickness varies from 5 mm. at the base of the head, where it joins the peduncle, to 3 mm. at the top. The peduncle is between 6 and 7 mm. in length and about 5 mm. in thickness. It expands considerably at the base where attached. It is not flattened laterally.

From the above description it is clear that this colony (Pl. XVII. fig. 12) agrees very closely in general form with the specimens described under the last species. The colour, however, is very different. In the present case the whole colony is of a somewhat ruddy brown colour. There is no distinction between the tint of the peduncle and that of the head, but the extreme top of the colony (Pl. XVII. fig. 12) is slightly lighter and more transparent than the rest. There is no white pigmentation in any part of the specimen. The surface is even, but distinctly rougher than in the last species, being finely granulated all over both head and peduncle.

The Ascidiozooids are comparatively few in number, and seem smaller than in the last species. They are arranged in the same manner, but the vertical rows are not quite so distinctly marked off into pairs (Pl. XVII. fig. 12). There are about one hundred and twenty Ascidiozooids altogether in the colony, and they form twelve pairs of vertical

<sup>1</sup> Station 162, April 2, 1874; lat. 39° 10' 30" S., long. 146° 37' E.; depth, 38 fathoms; bottom, sand and shells.