

of the numerous reproductive receptacles. These are not situated alternately between each pair of intestinal cæca right and left, as we find in the majority both of *Hoplonemertea* and *Schizonemertea*. In *Amphiporus moseleyi*, the distribution of the genital receptacles appears to follow a more primitive arrangement, and offers many points of similarity with what obtains in the Palæonemertean *Carinella*, where there is not yet a regular metamerial arrangement of the genital sacs, but where there are short independent cavities, irregularly distributed under the dorsal body-wall, which they pierce by means of short ducts. The outer openings of these ducts are seen on the dark dorsal surface of the animal as so many fine white dots irregularly spread between the transverse and longitudinal white lines that form such well-defined external markings in the species in question.

Amphiporus moseleyi, as will be seen on comparison of figs. 4 and 7 of Pl. IX., has its generative sacs distributed very much in the same way, with this difference, however, that generative pores are situated not only on the dorsal but also on the ventral surface of the animal. When the animal is very ripe and the generative sacs are overfilled, it is manifest that this specific character may be more easily detected in every transverse section than in young or unripe specimens. As many as seven separate sacs in one section were noticed. Both the male and female sex were found to agree in this respect.

Another character peculiar to nearly all *Amphipori*—the coalescence of the oral and the proboscidian aperture into a common wider opening, situated just below the tip of the snout—is also met with in *Amphiporus moseleyi*.

Amphiporus marioni, n. sp. (Pl. IX. fig. 3; Pl. X. fig. 1; Pl. XV. figs. 14, 15).

A second species of *Amphiporus* is represented in the Challenger collections by two specimens, the larger coming from Marion Island, and having been collected on December 26, 1873; the other from Christmas Harbour, Kerguelen, at a depth of 120 fathoms.

The place at which the first specimen was obtained was an inducement to dedicate this species, in preference to any other of the novelties of the Challenger, to the indefatigable naturalist of Marseilles, so well known by his numerous researches in the field of invertebrate morphology.

Amphiporus marioni, was one of the larger sized specimens, measuring $5\frac{1}{2}$ mm. in diameter anteriorly in its widest region. The body musculature may be said to be stronger than in most of the other *Hoplonemertea* (cf. Pl. IX. figs. 1–6); the longitudinal muscular layer shows a very marked pennate arrangement of the bundles (Pl. X. fig. 1) between which the gelatinous tissue penetrates, carrying with it massive nerve-stems which assume a more or less flattened, plexus-like arrangement, just between this longitudinal layer α and the circular layer β (Pl. X. fig. 1, *ne*). The proboscidian sheath is also very muscular; the proboscis has the stylet of the normal Amphiporean shape.

The nephridial system is comparatively short and has one pair of deferent ducts