

paragraph that this jelly appears to be somewhat denser, and that at any rate it more strongly imbibes staining reagents, all round the circumference of the intestinal epithelium where this is implanted upon it.

As to the œsophagus of the Hoplonemertea, I wish to observe that it is less thick and massive than that of *Eupolia* and the Schizonemertea, and more resembles the simple arrangement of *Carinina*. Its wall is generally only one cell-layer thick, and a distinct cuticula, as was noticed in *Carinina*, may also be often observed here. Fig. 1, *Oe*, of Pl. X., representing a section of the œsophagus of *Amphiporus marioni*, gives a very fair representation of it. Outside the œsophageal epithelium there are indicated in this figure a layer of flattened cells which I at first expected to form an outer tunic to the œsophagus. Closer investigation revealed the presence of these cells in all the tissues—they may also be seen in the basement layer *B* of the same figure—and at the same time convinced me that these unicellular bodies are parasitic organisms. They infest all the tissues of their host, and are more abundantly heaped together just outside the œsophageal epithelium, where nutritive substances may be expected to be more plentiful. Curiously enough, they were also noticed in the smaller specimens of *Amphiporus marioni*. Similar cases of specimens of Nemertea infected with unicellular parasites were noticed by me on other occasions. There is another case amongst the Challenger material (see p. 48), but there the parasite is much larger than in *Amphiporus marioni*, and altogether differently constituted. It agrees with the former only in the fact of its presence in all parts of the tissues.

These parasites differ from others which are found in the lumen of the intestine, and which have already been noticed by former observers.

Another view of the Hoplonemertean œsophagus is given (in longitudinal section) in Pl. XV. fig. 20. Here, too, the comparative thinness of the walls is conspicuous, and the connection with the posterior gut portion which stretches forwards under it, is clearly indicated.

In *Pelagonemertes* the last mentioned phenomenon could not be observed. The sections through the mouth and œsophagus were, however, not intact, because of the macroscopic dissection to which the specimen had previously been subjected by M'Intosh.

As to the cœca of the posterior body region little remains to be noticed, but that they are more regularly distributed as we approach the tail, *i.e.*, the region where new cœca are being continually formed. Their metameric and paired arrangement is here more evident than further forwards, where the degree in which they are filled with food particles may be more or less different, and may thereby become the cause of a partial, but not very common, asymmetry.

The innervation of the intestine was for the greater part described in the paragraph treating of the nervous system. It may be remarked here, in addition, that in transverse sections of the foremost portions of the œsophagus it is very easy to detect the consider-