

conspicuous than in *Carinina*, where we have already pointed out the apparent absence of any sharp or distinct boundary line between the cellular brain-tissue and the surrounding cellular tissue of the integument.

We cannot pass on to the description of the peripheral nerves without first referring to the terminal portion of the lateral nerve-stems, known to terminate at the posterior end of the body, right and left of the anus in the Schizonemertea, but also known to meet in a connecting commissure *above the anus* in several Hoplonemertea (IX). This commissure was found by me in several Challenger species, but at the same time I was able to verify the unexpected fact that in *Eupolia* the fibrous cores of the longitudinal nerve-stems are also posteriorly united by a commissure. What most especially deserves attention in this posterior commissure of *Eupolia* is, that it is found *below the anus*, the longitudinal stems and the commissure, together with the brain, thus forming an immensely elongated ring round the intestine, whereas in most of the Hoplonemertea alluded to, all the portions of the nerve-system may be said to remain above the intestine. This is, indeed, very emphatically the case in *Amphiporus moseleyi*, where we find (Pl. IX. fig. 4) not only the brain and the anal commissure above the intestine, but also the longitudinal stems, that take their course above the intestinal cæca. Nevertheless, in *Drepanophorus* the anal commissure is above the intestine, although here the longitudinal stems are diametrically opposite in position, *i.e.*, below the intestinal cæca. They were for this reason considered (IX) to furnish a transition stage to the ventral cord and circumoesophageal ring of Annelids and Arthropods, a consideration which derives very strong support from the existence of transverse commissures that will hereafter be described. At all events, these very curious differences—the anal commissure of *Eupolia* is figured on Pl. VII. fig. 8—furnish another proof of the extraordinary plasticity which we meet with in the group of the Nemertea, with respect to the morphology of the most important components of the system; a plasticity and diversity which are at the same time indicative of the primitive and low scale on which the Nemertea may be said to find themselves.

Coming now to the peripheral nerve-system, I may note that I have already, some years ago (X), stated that it is difficult to apply this name in its generally accepted significance to the arrangement which we find in Schizonemertea and in Palæonemertea. It is, however, applicable to that of the Hoplonemertea. Here only we find distinct metamerial peripheral nerves leaving the longitudinal nerve-stems at regular intervals, and innervating the body musculature, the integument, the internal organs, &c.

In the Schizonemertea and Palæonemertea the cephalic nerves, starting from the brain, are directly comparable with those of the Hoplonemertea, but the rest of the peripheral system is here represented by the plexus and its innumerable branches and twigs, which are directed upwards and downwards, serve for the same purpose, and render the peripheral arrangement in this group so primitive and so important. Still, in very large specimens