

about one-half of the thickness of the body-wall of the animal, and though somewhat differently magnified, the position of the nerve-stem and of the layer *cm* may easily guide us how to combine them.

It is then seen that in Pl. VI. fig. 9 the longitudinal trunk, situated in the circum-oesophageal blood-space, is not only cut through, but that even more than one nephridial lumen (*nep*) appears in this section, showing that there is a doubling or at least a branching of the principal nephridial duct in this region. Internal openings of this system, funnels or anything comparable to them, were not detected by me in *Eupolia giardii* or any other *Eupolia*; there were, however, very definite bends at right angles, piercing first the inner longitudinal and then the circular muscular layer, next the nervous plexus, and then arriving in the outer layer of longitudinal muscles. In this position the deferent branches of the nephridial system are seen in fig. 5, Pl. VII., which, moreover, reveals the important fact that sometimes more than one of them is found at exactly the same level. I could not make out whether this duplication is in any way related to that of the longitudinal tube; I can hardly conceive it to be so, the increase of the number of deferent vessels being also noticed in other cases, though hardly as a regular phenomenon. In *Eupolia giardii*, too, I find it to be exceptional in this sense, that most of the deferent ducts are single; one section of another species (*Cerebratulus truncatus*) contains the double duct on both sides, making the exceptional phenomenon at the same time symmetrical. The number of deferent ducts observed in the Challenger specimen of *Eupolia giardii* is seven on the right and five on the left side, the latter being opposite to and symmetrically placed with five out of the seven on the right. These numbers, however, only apply to that portion of the trunk behind the head which was transversely cut, and belongs to the same series. I have not followed up the nephridial apparatus to its posterior portion, but we may feel assured, on the authority of Oudemans' researches, that it will on the whole answer to the diagram given on pl. i. fig. 11 of his treatise. One point deserving mention is that the first trace of the nephridial apparatus of this *Eupolia* is visible in about the ninetieth section behind the tip of the snout. When I add that the upper brain-lobes occupy sections 25 to 45, the forward extension of the nephridia can more easily be imagined. Nothing special can be said of the deferent or of the principal ducts but that their epithelium is distinctly one cell thick, nucleated, and unmistakably ciliated. Nor have I any special discoveries to record with respect to the nephridial system of any of the Challenger Schizonemertea, and may refer the reader for certain specific peculiarities, number and disposition of deferent ducts, &c., to the description of the species where I have embodied these details when they did not appear to have any general significance.

I should like, however, to refer a little more fully to the conspicuous development at which the main, longitudinal canal of the nephridia has arrived in a certain species of *Cerebratulus* (*Cerebratulus macroren*), where its walls are unusually massive (Pl.