

region of the body where the dorsal musculature passes into the ventral, and where the intervening layer of muscular tissue is either very thin or even (sometimes locally) absent, at least as a special layer. In every transverse section some three or four of these glandular flasks are simultaneously cut (Pl. XV. fig. 11). They show no further variety of structure, but are not found along the whole length of the body. In the hinder half at least I have not detected them. The histological constitution of these flask-shaped glands is difficult to make out in the spirit specimens. The epithelium clothing them had a very much changed and deteriorated aspect, and only in certain favourable regions could I definitely establish the fact that it was built up of largish cells with large nuclei (Pl. XV. fig. 12), the contents of the cells being granular like those of the cells of the median precerebral organ before described. Innervation was not so clearly traced here, though in the head these flask-shaped organs certainly receive fibres from the very numerous cerebral branches there present.

Having once determined the presence of the organs just described and their situation, it was found that their presence is even externally traceable in the specimens of *Amphiporus moseleyi* (see Pl. IX. fig. 8) by a white line running backwards from the tip of the head along the comparatively sharply edged margin of the body (see pp. 20, 21). When a transverse section is made in this region with a razor, the naked eye can trace this white line extending inwards for a short distance as if the pigment occasioning it were very thickly applied. Viewed with the microscope, it is then easily seen that this white spot breaks up into the accumulated flasks as above described, which are surrounded and supported by the gelatinous tissue. In such a section the latter tissue is much more transparent and homogeneous, thus bringing out the glands as white lateral spots in this transparent imbedding mass, in which also the rest of the internal organs may be seen to be suspended, and which is dorsally and ventrally limited by the body musculature and the integument.

It may finally be noticed that I have never succeeded in finding the necks of these flasks that lead to the exterior wholly free and open, as I have the canal of the posterior brain-lobe or the excretory duct of the nephridia. These very numerous necks of the flask-shaped organs are always filled with a mass that has a streaked and fibrous appearance. I mention this because it partly contributes to establish my conviction that the physiological significance may indeed be glandular, and that the secreted, viscid mass, passing out perhaps more copiously when the animals are immersed in spirit, remains fixed in this passage to the exterior.

If it be not premature—as I consider it to be—to establish any comparison between these organs and parts of the organism of Vertebrates, one would certainly be reminded of those canals in the head which are known as the “Schleimcanäle,” and which are continued along the sides of the body as the lateral line. The significance which of late has been more and more definitely assigned to these organs in the Vertebrates, as