

PLATE IX.

J+B. Integument and basement membrane.
M. Body musculature.
Gt. Gelatinous tissue.
Prs. Proboscidian sheath.
LN. Lateral nerve-stem.

Int. Intestine.
Gs. Genital sacs, in many cases not yet in open communication with the exterior.
Prs.div. Lateral diverticula of proboscidian sheath.
br. Blood-vessel.

Figs. 1-6. Diagrams of different Hoplonemertea to elucidate (1) the relative extent of integument, muscular body-wall and internal gelatinous tissue; (2) the situation of the genital glands and their respective openings to the exterior.

Fig. 1. *Drepanophorus lankesteri*, n. sp. Middle of the body, diverticula of proboscidian sheath included in the section.

Fig. 2. *Drepanophorus lankesteri*, n. sp. Towards the extremity of the tail, between two pairs of diverticula of the proboscidian sheath.

Fig. 3. *Amphiporus marioni*, n. sp.

Fig. 4. *Amphiporus moseleyi*, n. sp. Numerous genital sacs, both dorsal and ventral, contained in one transverse section.

Fig. 5. *Drepanophorus serraticollis*, Hubr.

Fig. 6. *Drepanophorus serraticollis*, Hubr. In a further advanced stage of ripeness of the genital products (with distinct genital openings to the exterior); the diverticula of the proboscidian sheath not touched in this section. In all these sections the longitudinal blood-vessels are indicated, the median one below the proboscidian sheath, the lateral ones close to the lateral nerve-stems. In *Amphiporus moseleyi* the lateral nerve-stems are seen to lie *above*, in *Drepanophorus*, *below* the intestinal cæca.

Fig. 7. *Amphiporus moseleyi*, n. sp. Diagram of a horizontal section through the body. The intestine and its cæca are dark grey, the generative cæca light grey. The latter are seen to be very numerous and in no way regularly or metamerically arranged.

Fig. 8. *Amphiporus moseleyi*, n. sp. A specimen with flattened ventral surface. Natural size. A whitish line from the tip of the snout backwards along the lateral margin marks the exterior openings of the lateral glands (*cf.* Pl. XV. figs. 11, 12).

Fig. 9. *Amphiporus moseleyi*, n. sp. Head, seen from below. Longitudinal slit both for the intestine and the proboscis; terminal transverse sensory groove and lateral bent grooves into which the cavity of the posterior brain lobe opens.

Fig. 10. *Drepanophorus lankesteri*, n. sp. Diagram of the principal features of the nervous system. *B*, brain-lobes; *p.Br.*, posterior brain-lobes (side organs) with their cavity opening to the exterior at *e.o.*; *Ceph.ne.*, numerous cephalic nerves to the tip of the head, the eyes, &c., only a few of them are here indicated in outline; *Prn*, nerves for innervation of the proboscis (they are more numerous than is here indicated); *Va*, outline of vagus nerve springing from the lower brain-lobes and running forwards towards the œsophagus. The latter passes beneath the brain-lobes and their double commissure, but above the ladder commissures (*Comm*), which metamerically unite the longitudinal nerve-stems (*LN*) below the intestine; *pe.ne.*, peripheral nerves springing from these nerve-stems.

Fig. 11. *Amphiporus moseleyi*, n. sp. Stylet and accessory darts. *A* and *b, b'*, the central stylet and its two accessory sacs, in position; *b''*, bases of two accessory darts, viewed laterally (figure to the left), and perspective (figure to the right).