PLATE I.

Fig. 1. *Carinina grata*, n. gen. et sp. A ventral view of one specimen. Terminal proboscidian opening visible, as well as the terminal ciliated groove, the lateral ciliated groove and the ventral mouth. × about 3½.

Fig. 2. *Carinina grata*, n. gen. et sp. A side view of same specimen, showing the terminal ciliated groove, the lateral ciliated groove and the ventral mouth. × about 3½.

Fig. 3. *Carinina grata*, n. gen. et sp. A ventral view of another specimen, showing the terminal proboscidian opening, and the terminal ciliated groove. × about 3½.

Figs. 4, 5. *Eupolia nipponensis*, n. sp. Right and left lateral view of one of the specimens. Natural size.

Fig. 6. *Eupolia australis*, n. sp. Ventral view of the head. The mouth is very small, the surface transversely wrinkled. × 4.

Fig. 7. *Eupolia giardii*, n. sp. Tip of head, viewed from above. × 2.

Fig. 8. *Eupolia giardii*, n. sp. Dorsal view of the head. × 2.

Fig. 9. *Eupolia giardii*, n. sp. Ventral view of the head. × 2.

Fig. 10. *Eupolia nipponensis*, n. sp. Another specimen, seen from below. The mouth is very small.

Fig. 11. *Cerebratulus truncatus*, n. sp. Side view. × 4.

Fig. 12. *Cerebratulus truncatus*, n. sp. Another specimen, ventral view of tip of head. × 8.

Fig. 13. *Cerebratulus macroren*, n. sp. Ventral view of tip of head of New Zealand specimen. × 15.

Fig. 14. *Cerebratulus macroren*, n. sp. Lateral view of do. do. do. × 15.

Fig. 15. *Cerebratulus angusticeps*, n. sp. Lateral view of the anterior portion of the lacerated specimen (1100 fathoms). Part of the proboscis protrudes through a rupture in the body wall. × 1½.

Fig. 16. *Cerebratulus longifissus*, n. sp. Lateral view. Natural size.

Fig. 17. *Cerebratulus corrugatus*, n. sp. Lateral view of a young specimen. × 2.

Fig. 18. *Cerebratulus macroren*, n. sp. Ventral view of the Japanese specimen. Natural size.

Fig. 19. *Cerebratulus macroren*, n. sp. Lateral view of do. do. do.

Fig. 20. *Amphiporus moseleyi*, n. sp. One of the specimens, seen in perspective. Natural size.

Fig. 21. *Amphiporus moseleyi*, n. sp. Anterior part, showing cephalic groove and subterminal opening (indicated by a cross fold) which leads into the proboscis and the intestine. Natural size.

Fig. 22. *Drepanophorus lankesteri*, n. sp. Dorsal view. Natural size.

Figs. 23–31. *Pelagonemertes rollestoni*, H. N. M., after Moseley, who explains the figures as follows :—

Fig. 23. "*Pelagonemertes Rollestoni*, enlarged, viewed from the dorsal surface; the proboscis is partly extruded; *Pr.S.*, sac of proboscis; *IP.*, invaginated portion of proboscis within the proboscis sac: *G*, superior nerve ganglion; *N.C.*, nerve cords; *V*, vascular trunk (the upper *V* points to an enlargement of the vessel lying just posteriorly to the superior nerve ganglion); *I*, intestine; *D*, diverticula of intestine; *A*, anus; *OO*, ovaries; *CM*, circular muscles; *LM*, longitudinal muscles.

Fig. 24. "*Pelagonemertes Rollestoni*, from the ventral surface, × 2 diameters. 1, Mouth, with œsophagus; 2, partly protruded proboscis; 3, nerve ganglia; 4, nerve-cords; 5, ovaries; 6, digestive canal. The sheath of the proboscis is seen through the body lying behind the digestive canal.

Fig. 25. "Sketch of the proboscis-sheath and contained retracted proboscis, from the dorsal aspect. Retractor muscles inserted into the commencement of the sheath.

Fig. 26. "1, One of the polygonal areas, enlarged, showing the wrinkles of integument producing the appearance. 2, Peculiar appearance of some of the folds of the integument.

Fig. 27. "Reticular appearance of the integument observed in certain parts of the body. Natural size.

Fig. 28. "*a*, Groups of brightly coloured fatty globules forming the contents of the diverticula of the intestine; *b*, portion of the vascular trunk, much enlarged.

Fig. 29. "Portion of the invaginated proboscis, much enlarged. *a*, External gelatinous layer; *b*, internal muscular layer; *c*, cavity continuous with that of the proboscis-sac; within these the invaginated portion of the proboscis with the layers reversed; *b*, internal muscular layer; *a*, external gelatinous layer[1]; *d*, central tube filled with dark amorphous matter (from the proboscis-sac ?).

Fig. 30. "The nervous ganglia and ring, much enlarged. *A*, Superior ganglion; *B*, inferior ganglion.

Fig. 31. "One of the ovaries, enlarged. The dark irregular line on the centre represents what is probably an aperture for the discharge of ova."

[1] This figure has been incorrectly lettered by the lithographer, *a*,*b*,*c* furthest to the right should be *c*,*b*,*a*.