Carinia internal communications between the blood-spaces and the nephridian channels exist, communications by which the cavity of the blood-spaces is thus directly connected with the exterior. As I have, however, remarked, I could not detect the presence of similar communications in my two specimens.

The aspect of the spongy portion of the nephridium and its connection with the canalicular portion, as well as of this with the exterior, is represented in Pl. IV. figs. 1, 2, 4.

As to the generative apparatus of Carinina, I can only observe that one of the Challenger specimens is a male, that the fragment contains only two sperm-sacs in its posterior portion, and that these communicate with the exterior, each by a separate pore. Whether in Carinina the sperm-sacs are disposed metamerically as in most Nemertea, or irregularly distributed beneath the dorsal integument as in Carinella, could not be made out from this specimen.

The general distribution of integumentary and muscular tissue, as well as of the cavities of the intestine (D), the proboscidian sheath (Ps), and the blood-space (bl) in the body of Carinina is indicated by the various figures of Pl. II. The proboscis itself is here indicated by Pr, the rhynchodæum by aPr.

Family EUPOLIIDÆ.

Eupolia, n. gen. Polia, delle Chiaje.

Integument generally thick in comparison with the body musculature, the two layers of contractile fibres of the integument never coalescing with the outer larger one of longitudinal body muscles as in certain Cerebratuli. Proboscis and proboscidian sheath thin and inconspicuous. Brain-lobes compact, posterior lobe long, wedged in between the superior and inferior ones. Often a commisssure of the longitudinal nerve-stems below the anus. No longitudinal cephalic slits but transverse grooves as in many Hoplonemertea.

The necessity for creating a new generic name for the species of Palæonemertea I am now about to discuss is evident from the following considerations. The generic name Polia, when it was applied by delle Chiaje to a genus of Nemertea which he introduced into science ($Polia\ delineata$ being the typical species of this genus) had already been preoccupied in Zoology by Ochsenheimer, who in 1826 so designated a genus of Lepidoptera. This reason alone suffices to reject it henceforth from Nemertean nomenclature, and this rejection is also facilitated by the fact that the same generic name has been used by other naturalists, such as Quatrefages (XXVIII.), Schneider (XXXI.), &c., for Nemertea widely different from delle Chiaje's type. It was an error of judgment on