

externally by the aperture just described. This aperture in section is thick and slightly mammillate. The inner half of the outer wall of the organ is more closely grained and streaked than the outer, the fine hypodermic tissue being probably ciliated during life. The other wall of the organ, *i.e.* that adjoining the second whorl, is uniformly finished with a fine margin—also probably covered with cilia. A little mucus, which stains deeply, occurs in the centre of the chamber.

In young examples the above-mentioned free flaps are simple, and the central chamber is rudimentary. In function this structure is probably connected with sensation.

In sections immediately behind the nerve-centre, the massive basement-tissue forming the axis of the fan on each side is perforated by the anterior end of the posterior body-cavities, which form narrow spaces—at first directed obliquely outwards and backwards, and finally expanding into the great chambers exterior to the intestinal area.

### *Nephridia.*

The external apertures of the nephridia, which perform the function also of generative ducts, occur on each side of the anus, on a lateral elevation a little internal to the skeletogenous elements of the branchial apparatus. These apertures are not readily observed, since they are situated quite at the anterior end of each ridge. They are somewhat spout-like, and carry the ova near the papilla of the hypodermic flap, placed at the base of the second whorl. The exact connections of this aperture with neighbouring parts could not be clearly ascertained, and it is possible a functional connection with the hypodermic process may exist. At any rate the ova would issue conveniently for finding their way to the internal whorls. Each aperture leads into a spacious chamber lined by a coat of closely-arranged epithelium, resembling a modification of the hypoderm, and it may be ciliated during life, though Dyster, who examined a British species in life, says that it is not ciliated. A thin basement-layer occurs outside this layer. It is wide at the posterior and outer edge in section in this region, but slit-like anteriorly (*i.e.* towards the oral region). The channel at this level is more or less free. Just behind the nerve-centre—where the basement-tissue forms a floor or support—the channel forms a firm rounded tube (Pl. II. fig. 1, and Pl. III. fig. 2, *np*), its basement-tissue being continuous with that supporting the central nervous system. Externally (posteriorly) is a thick layer of hypoderm with dark pigment towards the free edge. The channel suddenly widens into a transversely elongated chamber, then contracts so as to form a rounded aperture in section in the dense basement-tissue of the region, and, approaching the inner edge of this tissue, debouches into the lateral chambers of the body-cavity outside the division for the intestine, but within the marginal cavity on each side continuous with the vascular lacunæ at the base of the branchial system. A considerable amount of basement-