

below with the plexiform gland rising alongside the fore-gut. But it is very marked indeed in transverse sections behind the mouth (*i.e.*, between it and the anus), as is well shown in the case of *Pentacrinus wyville-thomsoni* (Pl. LVII. fig. 1, *lp*), *Antedon eschrichti* (Pl. LX. fig. 5), or of any *Actinometra*. It gradually diminishes in size as the distance from the mouth increases, occupying an intermediate position between the two posterior ambulacra. It is usually rather nearer to the left one (*C*), but is sometimes closer to the other (*D*). The genital vessels of these ambulacra are derived from it (Pl. LVII. fig. 3; Pl. LX. figs. 1, 2—*gv*), and it finally passes insensibly into the inter-visceral vessels of the hinder part of the disk. In the specimen of *Antedon carinata*, one section of which is represented in Pl. LX. fig. 2, the labial plexus lies, as usual, rather nearer the left posterior ambulacrum, continuing very close and compact until just in front of the anal tube, where its meshes open out, and it passes into the ordinary network of intervisceral vessels.

In like manner the examination of a series of longitudinal sections shows that the labial plexus is denser, and extends farther from the peristome on the left side than it does on the right. In the specimen of *Antedon rosacea*, a section of which is figured in Pl. LIX. fig. 5, the plexus is much more developed, both anteriorly and posteriorly, at the left edge of the mouth-slit than at the right edge, or even than in the median plane which traverses the anterior ambulacrum. The section figured (Pl. LIX. fig. 5) passes through the left angle of the peristome, from which the two lateral ambulacra diverge; and the labial plexus is seen as a broad band (*lp*), which lies between the water-tubes depending from the water-vascular ring (*wt*), and the fore-gut (*fg*); it diminishes in size as the distance from the mouth increases, and loses its individuality when the two ambulacra become differentiated.

Unfortunately I do not know the locality of this specimen; but it is singularly devoid of the dichroic pigment which so unpleasantly increases the difficulty of accurate observation in the Naples variety of *Antedon rosacea*.

In *Promachocrinus kerguelensis*, in *Antedon eschrichti* and its allied species *Antedon quadrata* and *Antedon antarctica*, a portion of the labial plexus between the mouth and the anal tube differs very considerably in structure from the rest of this organ. The limits of this portion are so well defined, and it differs so much from the remainder of the labial plexus, that I propose to designate it by the name "spongy organ." Its relations to the rest of the labial plexus in *Antedon eschrichti* are shown in Pl. LX. figs. 3, 5, *so*. The former represents a longitudinal, and the latter a transverse section of it; while in Pl. LIX. fig. 8, a portion of the spongy organ of *Promachocrinus kerguelensis* is shown more highly magnified. It lies between the mouth and anus on the left or eastern side of the gullet, and therefore is slightly nearer to the left posterior than to the right posterior ambulacrum.

In its most fully developed condition, only found between the mouth and anus, the