

Towards the hinder edge of the mouth the trabecular structures in the left division of the labial plexus become more and more delicate, their cellular covering thins out, and the true spongy organ appears, with the characters described above. It is formed almost entirely from the network on the left side of the mouth in which the plexiform gland ends (Pl. LIX. fig. 9, *xv*). It remains throughout nearer to the left than to the right of the two posterior ambulacra, gradually becoming more compact again, and finally passes into the plexus of intervisceral and genital vessels.

The spongy organ of the type which is generally called *Antedon rosacea* varies very much in its structure. In some cases it is almost as reticular as in *Antedon eschrichti*, while in others it is hardly differentiated from the rest of the labial plexus, and consists of a mass of twisted tubules, which have well defined epithelial walls. It is possible that these variations may be due to specific differences, but upon this point I can, as yet, offer no opinion.

The labial plexus of *Pentacrinus*, at any rate of the two species which I have studied (*Pentacrinus decorus* and *Pentacrinus wyville-thomsoni*), is much more highly developed than in the Comatulæ, but it contains nothing like the spongy organ of *Antedon eschrichti* and its allies. It extends outwards for some little distance from the peristome, both beneath and between the ambulacra. In the former case it is connected with the radial blood-vessels, beneath the middle line of the groove, thus keeping apart the converging water-vascular trunks at its sides as already described (Pl. LVII. figs. 1, 3, 4, *lr*).

Its histological condition in the individuals of both the species which I have examined is not such as to facilitate the observation of minute structural details, but from what I have seen of the better preserved portions of it, I have no reason to think that it differs essentially from the corresponding organ in *Antedon*. The epithelial lining of its cavities is often fairly distinct, as shown in Pl. LVII. fig. 4.

As the ambulacra recede from the peristome and thus diverge more and more, the vascular plexus underlying the interpalmar area which separates them gradually thins out, until it is only represented by the uppermost intervisceral vessels and the genital vessels of the rays, both of which originate in it. The former belong to the circumvisceral layer of the peritoneum, and the latter to the parietal layer; but the two systems are in free communication with one another (Pl. LVII. fig. 3, *gv, ib*).

The tubules depending from the radial blood-vessel and entering the subambulacral plexus gradually become less and less abundant, and finally disappear altogether, shortly before the limit of the water-tubes is reached. In the anal interradius the labial plexus is specially developed, as is well shown in transverse section in *Pentacrinus wyville-thomsoni* (Pl. LVII. fig. 1, *lp*), lateral extensions of it being connected with the radial blood-vessels by the tubules above mentioned. [See Appendix, Note D.]

The subdivision of the upper end of the plexiform gland into numerous branches which terminate in the labial plexus, can generally be made out without any difficulty