

and therefore presents the usual reticular structure after the limestone has been removed ; and even those bands of ordinary connective tissue (both in *Comatulæ* and in *Pentacrinus*) which contain irregular limestone deposits have a totally different facies from the blood-vessels (Pl. LVII. fig. 5). They meet at different angles, and have no internal cavity which is lined by epithelium and frequently contains coagulum.

The relation of the plexiform gland to the intervisceral blood-vessels is especially well seen in *Actinometra*.

Owing to the excentric position of the mouth, the characters of the plexiform gland are considerably different from those of the same organ in the regular Crinoids. I have studied it more particularly in the two species *Actinometra parvicirra* and *Actinometra pulchella*, the latter having the mouth much nearer to the centre of the disk than the former. It is also radial in position, while that of *Actinometra parvicirra* is interrarial. In both types the labial plexus is most developed behind the mouth, and especially towards the left or eastern angle, where it contains an imperfectly differentiated spongy organ ; and it also extends outwards between the ambulacra farther than on the right side.

It is the right anterior portion of the labial plexus, however, which is more especially connected with the plexiform gland, while the spongy organ at the left posterior angle of the mouth passes backwards into the intervisceral vessels.

In *Actinometra pulchella* with its radial, and but slightly excentric mouth (Pl. LXI. fig. 1), the relations of the parts are, as might be expected, much more like those of *Antedon* than is the case in *Actinometra parvicirra*, with its nearly marginal and interrarial mouth (Pl. LXI. fig. 2). In the former type the plexiform gland rising out of the calyx ascends nearly in the vertical axis of the disk for some little distance and then divides into two principal portions. The left hand one is little more than a bundle of vessels which runs forwards, upwards, and a little outwards till it comes to lie above the gullet immediately in front of the base of the anal tube, and terminates in the spongy part of the labial plexus at the left posterior angle of the mouth. The right division, which is connected with the intervisceral vessels of the anterior half of the disk, retains its glandular character, and passes upwards between the coiled gut and the central rectum to join that part of the labial plexus which lies beneath the origins of the ambulacra of the right side.

The fore-gut of *Actinometra parvicirra* passes more directly backwards and downwards than that of *Actinometra pulchella*, until it comes to lie immediately above the base of the posterior ray, rather to the left of the centre of the disk (Pl. LXI. fig. 2). The spongy organ at the left posterior angle of the mouth is continued downwards and backwards slightly above the gullet, between it and the three inner coils of the gut, as a gradually diminishing bundle of vessels, with which the intervisceral vessels of the left half of the disk are connected. This corresponds to the left division of the plexiform gland in *Actinometra pulchella*, though not quite in the same position as regards the digestive