

be easily explained by the fact that growth is not equally rapid in different sextants, or even in the separate parts of the same sextant. For example, in one sextant of a *Dysactis*, in which the first circle consisted of only eighteen tentacles, I found that the tentacles really corresponding to the septa of the third order were still in the second row, and that all the following tentacles were correspondingly a row in arrears; the first row in the said sextant only contained two tentacles instead of four.

Terminal openings are wanting in all the tentacles. In consequence of the strongly developed mesodermal muscles they are unusually thick-walled, on account of which I have named the species "*crassicornis*." The largest of them, the tentacles of the first row, are not 1 cm. long in a contracted condition, whilst they spring from a base of considerable size whose diameter in a radial direction nearly equals the height of the tentacle. The tentacles have therefore the form of short cones, flattened in a tangential direction; seen from the side of the radial chambers they extend like wide-mouthed pouches, running to a point.

The tentacles lying towards the outside not only become smaller but, above all, narrower at the base, and consequently more slender. The outermost tentacles are so small that they merely project like small knobs above the surface of the oral disk.

The oral fissure is bordered by twelve broad, swelling papillæ, of which two at either end enclose the entrance to the œsophageal grooves. They are stronger than the others, and are, moreover, divided by a horizontal furrow into two swellings lying one above the other. Whilst the œsophagus itself is short, its sagittal prolongations, the œsophageal lappets are very long, and extend nearly as far as the pedal disk.

The number of the septa is very large, and in the oldest animal amounted to ninety-six pairs, which were distributed in five cycles. In many places there were additional indications of the ninety-six septa of the sixth cycle, which however merely projected as thin folds between the wall and the pedal disk, and as yet had no mesenteric filaments.

We can generally distinguish two parts in the septa, one thick walled and muscular, the other delicate and veil-like (fig. 12). The former lies on the wall; its longitudinal fibres spring not only from the pedal disk but also from the lower part of the wall, and converge towards the oral disk and the œsophagus, especially towards the base of the tentacles. We cannot precisely talk of a special longitudinal muscle, but still the fibres are more thickly compacted in the middle of the lamella and united into thick cords, showing the following figure in transverse section (Pl. VII. fig. 6). Underneath each cord lies a thickening of the supporting substance of the septa, which sends out bushily branched folds of connective tissue in all directions, and these again bear the richly pleated muscular lamella. The whole is covered with epithelium, which also has hollows corresponding to the depressions between the ridges of connective tissue, so that the inequalities caused by the distribution of the muscles also become visible externally.

The transverse muscles, which run from the wall principally towards the stomach, but