as possible, and filled up the other half which was still more torn. I have only given the bases of the tentacles, as they were either only preserved in short pieces or were torn away close to the body of the animal.

The pedal disk is much smaller than the oral disk, and is covered with numerous radial ridges, somewhat in the same way as in *Polysiphonia tuberosa* (Pl. IX. fig. 5). The wall is smooth and tolerably thick-walled; its upper part contains a mesodermal circular muscle, which is very weak in proportion to the size of the animal, both in extent and in the number of its bundles of fibrillæ and the strength of the single fibres. On the other hand, powerful masses of muscle are accumulated in the oral disk. The latter is covered with deeply sunk furrows, which begin between the bases of the tentacles and run in a radial direction towards the oral opening. The furrows end in the periphery of the mouth, which is somewhat swollen, and at which two adjacent furrows are sometimes united. The swellings between the furrows, which are sometimes narrow sometimes broad, are caused by the deposition of strong mesodermal muscles. Their structure resembles that already described in *Ophiodiscus annulatus*, except that the bundles of fibrillæ are much more numerous, and form a layer which is at least twice as strong. The number of the radial swellings in the well-preserved half amounts to twenty-four, therefore to forty-eight in all.

There are likewise forty-eight tentacles which spring exactly from the junction of the wall and the oral disk, one of their walls representing a prolongation of the former, the other a prolongation of the latter. The thick muscular cords therefore only pass on to one side of the tentacle walls, whilst the other consists merely of supporting substance.

Though only a few of the septa were preserved, these were sufficient to show that they are distributed in alternate pairs of muscular and genital septa. The genital septa are thin-walled, whilst the muscular are strengthened by a thick supporting lamella. As there are in all forty-eight tentacles, the number of the muscular septa also amounts to forty-eight or twenty-four pairs.

The above statement suffices to prove that *Ophiodiscus sulcatus* is very closely allied to *Ophiodiscus annulatus*, but distinguished from it by the absence of annulation of the wall and by the strong formation of furrows in the oral disk. The two forms may even represent one and the same species, and the differences merely arise from difference of age. At any rate they were both taken at a great depth in two localities, geographically not far apart.

It is also well worthy of our consideration that in no other Actinia did I find the tentacles so shattered as in the two species before me, not even in specimens dredged from still greater depths. This may perhaps have to do with the fact that the animals attach themselves to foreign bodies by their muscular tentacles. I have already specially remarked that the tentacles are probably of great length in the living animal, so that they would be especially adapted for holding on to other objects.