become familiar with the nomenclature, which, taken partly from earlier authors, and founded to some extent upon my own observations, will be adopted in the following pages. I shall also be able to interweave short remarks upon the most serviceable methods of investigation.

The body of the Actinia is shaped like a hollow cylinder, which is usually very long in proportion to its breadth, but which can also be shortened to a discoid form under certain circumstances. It is limited by two terminal surfaces, the "oral disk" or "peristome," and the "pedal disk" or "base," whilst the body wall corresponding to the outer surface of the cylinder is termed the "mural layer," or shortly, the "wall"; the wall is usually separated from the pedal disk, always from the oral disk, by a sharp margin, the two surfaces here meeting at a right or even at an acute angle; the wall occasionally passes gradually inwards into the base, in such a way that we cannot speak of a separate pedal disk.

Towards its periphery the oral disk bears the tentacles, which are simply hollow evaginations of the disk. Besides these "marginal" tentacles there are also "circumoral" tentacles, which are united in a corona round the oral opening, and "intermediate" tentacles, which occupy a position between the oral opening and the margin of the disk. As the first are always present, and the last two only exceptionally, those may be termed the "primary" or "principal" tentacles, these the "secondary" or "accessory" tentacles.

The oral opening, placed in the middle of the oral disk, leads into a tube which hangs down a little way into the hollow space of the body, and in the older descriptions was held to be a stomach, a name which we may now suitably abandon and replace by the term "œsophagus." This ends before it reaches the pedal disk in a free margin, and communicates by a wide opening, the "gastric orifice" or "cardia," with the large hollow space which occupies the inside of every Actinia, and is developed from the primitive intestine of the gastrula, whilst morphologically and physiologically it replaces the intestine and body cavity (enterocœle) of the bilaterals. Leuckart's term "cœlenteron," or "cœlenteric space," is therefore specially appropriate to the Actiniæ.

The œsophagus hanging down in the cœlenteron is fastened to its place by the numerous septa (sarcosepta, Hæckel) which spring from the oral disk, wall, and pedal disk, and are attached superiorly to the œsophagus, whilst they end in a free margin below. They therefore divide the peripheral part of the cœlenteron into simple radial chambers, which are closed where they surround the œsophagus and where they pass into the hollow spaces of the tentacles, but which open downwards between the free margins of the septa into the "central stomach," *i.e.*, into that part of the cœlenteron which lies under the œsophagus and is no longer divided into chambers by the septa.

All the above-mentioned walls and septa of the body of the Actinia are lamellæ of no great thickness, and in many species the wall only is a tough sheath. The firmness of the lamellæ depends upon their fundamental substance of connective tissue,