

these aside, we can count in both cases twenty-eight almost equally distinct lines, which appear to be grouped in pairs.

Contrasted with the pedal disk the wall is very thick, as it measures 2–3 mm. in transverse section, and by reason of its cartilaginous hardness forms at the same time a most powerful protection for the parts covered by it. The surface is smooth and only traversed here and there by furrows, which may, however, be absent in the living animal; the upper margin ends in pointed knobs which project like battlements above the enclosed oral disk. The number of the knobs appears to be constant, as it amounted to twenty-seven in both the larger and the smaller specimen examined, though they differed in size. The larger and smaller knobs are placed irregularly, so that sometimes both kinds alternate, sometimes several knobs of the same size lie beside one another.

The oral disk, which springs from the wall at the base of the knobs, is as thin as tissue paper and correspondingly transparent. Numerous (probably fifty-four) white radial streaks denote the insertions of the underlying septa.

The tentacles, like the oral disk, are very thin-walled and delicate, and are 1.5–2.5 cm. long. The base is of medium breadth; they then diminish rapidly in size, and run out into a long fine point, through which even pressure cannot expel the contents of the tentacles, thus showing the absence of the terminal opening common to many Actiniæ. They are placed in two alternating rows of twenty-seven tentacles each. The outer tentacles spring immediately on the inside of the twenty-seven knobs of the wall, which may therefore be regarded as clasp-like thickenings of their basal sections; the inner tentacles alternate with the outer, and are placed so close to them that their bases are partially inserted into the interspaces between the outer tentacles.

The oral disk is covered by a thin ectodermal slightly pleated layer of radial muscular fibres, which extend as longitudinal fibres into the tentacles; in many places it had fallen away along with the epithelium lying above it. There were still fewer of the circular endodermal muscular fibres preserved.

The oral angle and the œsophageal grooves are very distinct in the oral fissure and the œsophagus. The œsophageal grooves are only a little longer than the rest of the œsophagus, but on the other hand they are of considerable breadth, and occupy about two-fifths of the whole extent of the œsophagus. The side walls of the grooves are repeatedly folded in a transverse direction. Longitudinal folds, nine in the one case, eleven in the other, which begin with the same number of knobs at the margin of the oral fissure, run on the two intermediate portions of the œsophageal wall. The oral margin itself projects as a ridge, just as the oral disk in *Sphenopus arenaceus* is very much raised before it passes at an acute angle into the œsophagus.

There are, altogether, twenty-eight septa inserted into the œsophagus—veil-like, extremely delicate, easily torn membranes, never pierced by septal stomata. It was impossible to arrive at any decided opinion as to their structure and arrangement, both