

The only part of which sections were obtained consists of an elongate reproductive capsule, having a flattened oval outline about 0.23×0.14 mm. in diameter. At irregular intervals a short blunt lobe is pushed out from one side or the other, and distinct indications of an annular constriction have been noticed in one specimen. The structure is similar in all the sections examined. The wall of the capsule (Pl. XV. fig. 6) consists of fibrous tissue in which a large number of small oval germinal cells are imbedded. More internally the germinal cells are collected into groups of variable size, still supported by a fibrous stroma, and show various stages of subdivision. Apparently each germinal cell gives rise to a cluster of spermatozoa in most instances (Pl. XV. fig. 6, *l*), but in one of the specimens ova have also been observed. The ova are small and contain a relatively large nucleus with a central large nucleolus and a number of small ones distributed around the periphery.

A small infusoriform parasite has also been met with on several occasions, both associated with the larger vermiform one and in other specimens. It is pear-shaped or oval in outline, and usually contains a large circular hyaline area together with a number of densely stained masses, which are irregularly distributed through the protoplasm. In some of the sections of it the surface protoplasm appears more transparent and obliquely striated as if clothed with cilia. This form is usually met with in the angle between the body-wall and the skeletal sheath, or at the extreme apex of the coelenteron in the oral cone. A specimen is shown in the latter position on the left half of Pl. XIII. fig. 5.

Antipathella minor.

The ectoderm of *Antipathella minor* contains the same histological elements as that of *Antipathella subpinnata*, but the individual cells are grouped somewhat differently. The ectoderm of the tentacles consists as usual of batteries of nematocysts and groups of hyaline gland cells arranged alternately. The surface of the layer is raised into irregular rugæ, which are arranged transversely in interrupted series around a tentacle. The rugæ vary from 0.116 to 0.175 mm. or more in length, and have a mean diameter of about 0.03 mm. near the centre, but taper towards each extremity. In longitudinal sections of a tentacle the transverse rugæ are indicated by crenations of the surface. Unlike the usual arrangement in *Antipathella subpinnata*, the batteries of nematocysts are here the most prominent cells of the ectoderm, each raised ridge corresponding to an elongate battery of nematocysts. In sections the batteries are seen to form wedge-shaped groups of cells, limited laterally by two lines which gradually converge towards the base of the layer. The broad end of each wedge-shaped area is occupied by a number of closely-arranged nematocysts, which occupy the outer third of the band. Beneath the adult nematocysts a large number of deeply-stained oval nuclei occur, which are evidently imbedded in slender thread-like cells. The groups of