elongated conical form, and are capable of being retracted. In some of the specimens they seem to be rather inflexible, though they mostly possess a high degree of pliability, this is especially the case in the individuals from Station 299. The animals from that station are also distinguished by the enormous length of their processes, which being about 125 mm. are nearly of the same length as the body. The processes, often brittle and easily broken off, have sometimes the tops bipartite. The specimens from Stations 146 and 157 are provided with processes of comparatively small size.

The perisoma is more or less strongly developed, and is sometimes pliable, sometimes very hard, brittle, transparent, and clear like glass. It is strengthened by numerous calcareous deposits which have the form of larger or smaller, more or less distinctly circular plates (Pl. XXXI. fig. 1), and are in some individuals closely crowded and overlap one another, the perisoma becoming thus more solid and brittle than in other specimens, where the plates lie side by side at greater or smaller distances from one another. The position of the calcareous deposits doubtless greatly depends upon the extent to which the perisoma is contracted; they seem usually to be more closely crowded on the dorsal than on the ventral surface, though sometimes the contrary is the case. The plates do not lie closer than to form two layers, of which the exterior one is distinguished by the smallness of its deposits. It is a remarkable fact that while some of the individuals possess two layers of deposits, others have only one. The plates, varying greatly in size, sometimes measuring about 2·2 mm. or more in diameter, are flat, discoidal, slightly convex outwards and perforated by a great number of usually somewhat circular holes, of which those at the middle are of a considerable size, attaining about 0·32 mm. in diameter; the size of the holes diminishes towards the circumference of the plates, and are consequently only visible as small points round the periphery. The convex side of the plates carries one or more small processes or spines situated close to or at some distance from the the centre; those spines are partly simple, partly give off small branches at their top, which running parallel with the plate itself are in connection with similar branches from other spines, thus forming a network upon the original plate. Here and there plates are found without any projections; several of the individuals obtained at Station 157 are remarkable from having all their plates quite smooth and destitute of spines. Besides the fully developed plates I have found a multitude of others in stages of development. The individuals dredged at Station 157 have the plates extremely firmly constructed and with comparatively small holes.

The pedicels contain a great number of calcareous deposits (Pl. XXXI. fig. 3), of almost the same shape as the above-described plates, though usually smaller; towards the ends the deposits become more simple in form, consisting of longer or shorter rather straight spicula or rods, the ends of which are branched or dilated and perforated. Those spicula have a transverse position. The large circular sole-like end of the pedicels has, besides those more important deposits, a greater number of small almost unbranched spicula, but is