

body ovate, short, and about twice as long as broad. The mouth is terminal, slightly turned towards the ventral surface. The anus is large, of an almost triangular form. Only five tentacles are left, but traces are seen of five others which have been torn off; some of those of the ventral surface seem to be a little smaller. The tentacles are very hard, brittle, and non-retractile; their ends are rather large, bearing round the edge small retractile processes, the form and length of which are unknown. In consequence of their brittleness several pedicels are broken, but from the traces left on the body-wall they seem to be eighteen in number, nine along each side of the ventral surface. As the first pair is situated almost 20 mm. behind the tentacles, the anterior part of the body is destitute of pedicels. This first pair is comparatively the largest, about 9 or 10 mm. in length, and the others diminish gradually backwards, the hindmost ones being very small. The ends of the pedicels are slightly enlarged. As the processes on the dorsal surface are torn off, it is impossible to state their length and appearance, but the large holes in the body-wall indicate clearly that they must have been of great size and four in number. They project from the anterior part of the back and are arranged in pairs of which the first one is a little closer to the middle line of the back than the others. The integument, especially on the back, is of an unusual solidity and brittleness, in consequence of the presence of numerous crowded pyramidal papillæ (Pl. XXXIX. fig. 2), which are larger and visible to the naked eye on the back, but towards the ventral surface are almost indistinguishable. Each papilla contains a calcareous deposit (Pl. XXXIV. fig. 3) composed of four, up to 0.6 mm. long, spinose, arcuate arms, following the four edges of the papilla towards its base, and one or two rather long, straight, spinose processes directed outwards from the body; these processes run out from the centre of the deposit, that is to say, almost from the top of the papilla, where the arms are joined together. The integument is therefore rather rough. As the papillæ are largest and most distinct on the back, so the calcareous deposits also are largest there, their arms being more distinctly curved and directed inwards than is the case with those of the ventral surface. The pedicels as well as the tentacles are furnished with a great number of deposits, resembling those of the ventral surface of the body, but commonly a little smaller and with the arms more irregularly curved. Besides, several other kinds of deposits (Pl. XXXIV. fig. 4) are to be found, especially in the pedicels, viz., four-armed ones with the arms either unusually long and curved or short and straight; and smaller or larger, unbranched, straight or curved, more or less spinose spicula.

The polian vesicle is 4 mm. long. The alimentary canal is of a brownish colour. The cloaca is large and without any cæcal prolongation.

*Elpidia rigida*, n. sp.

Body subovate, nearly twice as long as broad. Mouth anterior, ventral. Anus posterior, subdorsal. Tentacles of apparently equal size, their terminal part bearing