

in length. The almost cylindrical pedicels, 18 to 20 mm. long, measure at their base 6 mm. in diameter; their ends are truncated, slightly rounded, and measure about 4 mm. in diameter. The tentacles (Pl. XLIV. fig. 3), of which a dorsal one on the right side is rudimentary, terminate in several, commonly four, large, branched retractile processes, which carry a number of small papilla-like projections on their inner side which is directed towards the mouth.

The perisoma, though not particularly thick, is hard and rough on account of the great number of spinose calcareous bodies which it contains. The shape of these deposits (Pl. XXXIV. fig. 15) is very various, and they are generally made up of strongly spinose spicula, which are sometimes provided with one or several small holes. The dorsal spicula are slightly larger, about 0.14 mm. to 0.2 mm. in length, and more numerous than the ventral ones, and have their spines thicker and in greater abundance. Besides this form of deposit I have found some scattered straight or slightly curved rod-like spicula, which are considerably longer than the former ones, and are either totally destitute of spines or are furnished with some minute ones at their ends. These rods, which sometimes reach a length of 0.46 mm., are more thinly scattered in the dorsal perisoma, where they even attain a very considerable size. The deposits of the pedicels (Pl. XXXIV. fig. 16), likewise of two different kinds, consist partly of spicula of the same shape as those of the dorsal surface, though smaller and with shorter spines, partly of larger, about 0.9 mm. long, straight or slightly curved rod-like ones, which are smooth excepting their slightly enlarged and truncated ends. The former ones lie closely crowded in the outwardly directed wall, but are very thinly scattered in that part of the pedicel which is directed towards the ventral surface. The latter, the rod-like spicula, on the contrary, are arranged in two longitudinal series, one along the anterior side of the pedicels and the other along the posterior one, each series containing four to six such rods, side by side. The end of the pedicel is destitute of a terminal plate, but is supported by a number of larger or smaller, more or less curved spicula, the ends of which give off small spines. The processes, also, are strengthened by two longitudinal series of rod-like spicula resembling those in the pedicels; the spaces between those two series are extremely poor in deposits. The ends of the tentacles contain larger or smaller, more or less arcuated, spicula of the same appearance as those in the ends of the pedicels.

The polian vesicle, measuring about 65 mm. in length, is widest in the middle, and decreases almost equally towards its extremities. The madreporic canal runs upwards and forwards and terminates in a madreporic plate or tubercle (Pl. XXXVIII. fig. 10), which is composed of a solid calcareous network, and has coalesced with the inside of the dorsal perisoma about 15 mm. from the anterior extremity of the body. The canal being invested by the medio-dorsal mesentery is bond-like and strengthened by a network of fine calcareous threads along the one side, while the other side has no such network. In the