

connective tissue, which surrounds the canal, some scattered, rather large, more or less straight spicula are found, the ends of which are frequently provided with smaller processes or spines. The madreporic tubercle is divided by the medio-dorsal mesentery into two halves, each being flat, of an ovate form, and strongly concave along its middle, and having a length of about 4.5 mm.; the free surface through which the ambulacral system communicates with the peritoneal cavity is uneven on account of a number of wrinkles and papillæ. The large and branched ambulacral cavities of the pedicels, which lie enclosed within the body-wall, give off each a short, wide, somewhat branched cæcal prolongation or vesicle, which depends freely into the peritoneal cavity (Pl. XLI. fig. 3). The processes of the dorsal as well as of the ventral lateral ambulacra communicate exclusively with these branched vesicles. The reproductive organ is composed of two fascicles, each consisting of about twenty larger and smaller oval cæca; those fascicles communicate with a short, wide tube on each side of the medio-dorsal mesentery, which tubes pass into a common efferent duct which opens externally by a pore situated about 25 mm. from the anterior extremity of the body.

*Ilyodæmon*, Théel.

*Ilyodæmon*, Théel, Preliminary Report on the Holothuridæ, pp. 11, 12.

Tentacles fifteen, rather large and non-retractile. The lateral ambulacra of the ventral surface with large pedicels, apparently disposed in a double row all along each side of that surface. The odd ambulacrum naked. The dorsal surface with a crowded series of very numerous, retractile, slender, rather long processes, disposed in three or four irregular, close-set rows all along each of its ambulacra. Integument with numerous wheels and dichotomously branched bodies.

*Ilyodæmon maculatus*, Théel (Pl. XVI.).

*Ilyodæmon maculatus*, Théel, Preliminary Report on the Holothuridæ, p. 12.

Body elongated, of almost equal breadth throughout, about thrice as long as broad. Mouth anterior, almost ventral. Anus posterior, subdorsal. Tentacles of nearly equal size, with large circular discoidal ends, bearing round their edge small rudimentary processes; the ventral tentacles of one individual a little smaller. Pedicels of each side of the ventral surface varying in number from about twenty-nine to about eighteen; the posterior pairs smaller. Pedicels of the inner row apparently alternating with those of the outer. Processes of each of the dorsal ambulacra very numerous, about one hundred and forty to one hundred and fifty, cylindrical or fusiform; the largest as long as the breadth of the body. Back naked along its middle between the processes of both the ambulacra, except anteriorly a little behind the tentacles, where there is a small genital process. Integument thick and soft, with three sorts of calcareous deposits very