which approach more or less the medio-ventral line. The ambulacral vesicles of the processes (Pl. XLII. fig. 3) resemble large sacks, from 10 mm. to 15 mm. long, which hang freely into the peritoneal cavity. A number of more or less spacious cavities and lacunæ which are found in the perisoma ought probably to be considered as belonging to the water-vascular system. The reproductive organ (Pl. XLVI. fig. 1) is composed of numerous bundles of cæca forming two fascicles, separated from one another by the medio-dorsal mesentery; its common efferent duct opens externally at the top of the above-mentioned genital process, which is situated immediately behind the pores of the madreporic canal; the organ attains a length of 40 mm., and its walls contain scattered spicula.

As the above description is taken from the largest individual, obtained at Station 209, it is necessary to note the peculiarities which characterise the specimens from the other localities. Those dredged at Station 219 attain a comparatively small size, the largest measuring about 80 mm. in length; their dorsal processes are not very numerous and are disposed in a single slightly irregular row along each ambulacrum; one of the individuals has only twelve tentacles, which evidently must be regarded as an abnormity; the large wheels are more numerous than in the large specimen dredged at Station 209. As is pointed out above, the individuals from Station 192 differ slightly from the typical form; their pedicels are not so obviously arranged in double rows, and only two distinct rows of dorsal processes are present along each ambulacrum; their deposits are made up of an enormous number of dichotomously branched bodies, which are not aggregated in such masses as to form white spots; their small and large wheels are very scattered. The alimentary canal, which is uninjured in these individuals, has no cloaca of importance.

Pannychia,¹ n. gen.

Tentacles twenty, rather large and non-retractile. The lateral ambulacra of the ventral surface with large pedicels, disposed in a single row all along each side of that surface. The odd ambulacrum with a double row of pedicels. The dorsal surface with a crowded series of very numerous, slender processes all along each side. Integument with numerous wheels and small wheel-shaped plates.

Pannychia moseleyi, n. sp. (Pl. XVII.).

Body elongated, almost cylindrical, several times longer than broad. Mouth anterior, subventral. Anus posterior, terminal. Tentacles of nearly equal size; their large, circular discoidal ends bearing round their edge small rudimentary processes. Pedicels thirty along the left side of the ventral surface, and twenty-nine along the right one. The odd