

STATION 89.—July 23, 1873; lat. 22° 18' N., long. 22° 2' W.; depth, 2400 fathoms; bottom temperature, 36°·6; Globigerina ooze. A single very deformed specimen. Length about 65 mm. Colour dark violet. Body probably with pedicels or rather papillæ in a row round its sides. Deposits of a peculiar shape; partly larger and smaller cruciform bodies (Pl. X. fig. 12), composed of four more or less strongly curved spinous arms and an outwardly directed central spinous process, partly more scattered, very strongly constructed, cruciform bodies with the curved arms slightly spinous and branched, and with a very long, straight, outwardly directed, central column, terminating in four hooks, like an anchor with four flukes.

STATION 298.—November 17, 1875; lat. 34° 7' N., long. 73° 56' E.; depth, 2225 fathoms; bottom temperature, 35°·6; blue mud. One specimen.

STATION 299.—December 14, 1875; lat. 33° 31' S., long. 74° 43' W.; depth, 2160 fathoms; bottom temperature, 35°·2; blue mud. One specimen.

The two forms, obtained from the above mentioned Stations, closely resemble *Pseudostichopus villosus*, but, in spite of the most careful examination, I cannot find any pedicels or processes, excepting some small elevations at the anus. Notwithstanding this, the radial ambulacral vessels seem to be present, and I have also observed some small lacunæ within the perisoma, which doubtless are in communication with those radial vessels. Even the elevations in the neighbourhood of the anus contain lacunæ. Here and there some very minute darker points are visible, and these possibly may form a kind of ambulacral appendage. It seems hardly credible that these two forms, which bear such an obvious resemblance to *Pseudostichopus*, especially *Pseudostichopus villosus*, can be totally in want of pedicels. That which makes the investigations of the ambulacral appendages difficult and their results very dubious, is the absence of calcareous deposits in the perisoma.

The two specimens in question are very large, from 220 to 280 mm. long, and of an oval form. Their colour is pale dirty grey, inclining to brownish. The mouth is almost terminal, though turned toward the ventral surface. The anus is almost terminal and enclosed between two vertical folds of the body-wall. The twenty tentacles seem to be discoidal and carry some small retractile processes. The body-wall is very thin, excepting along the sides of the body, where it is slightly thicker. The longitudinal muscular bands are broad and simple. The retractors are absent. The calcareous ring (Pl. X. fig. 14) is devoid of any posterior prolongations, and is notched anteriorly for the longitudinal muscles, &c. A single ventral Polian vesicle and dorsal madreporic canal are present. A bundle of short, thick, slightly branched genital tubes is situated on each side of the dorsal mesentery; the branches of these tubes terminate in oval sacciform dilatations, which in the individual examined by me contained eggs. The respiratory-trees are comparatively well-developed. It is impossible to decide whether deposits have been present in the perisoma or not, though I believe the former to be the case.