

strongly constructed, curved or straight, branched or unbranched perforated rods (Pl. IV. fig. 5, *g*). The terminal plates of the larger pedicels are mostly of greater circumference, though commonly not very well developed.

*Cucumaria multipes*, n. sp. (Pl. IV. fig. 4).

Body cylindrical, without any elevations or processes. Pedicels very crowded, disposed in a double row along each ambulacrum, rather long and probably not retractile. Tentacles, calcareous ring and inner organs unknown. Deposits—numerous densely crowded tables with irregularly rounded or mostly elongate, fusiform disks supporting an irregular spire which usually seems to be composed of four rods. The pedicels supported by terminal plates and closely packed transverse tables with the disks narrow and rod-like. Colour in alcohol, light grey.

*Habitat*.—Yokohama; depth, 8 to 10 fathoms; only a fragmentary specimen. From the scanty materials the description cannot be but very incomplete. When looking at the exterior of the body, one is almost tempted to believe the pedicels to be disposed in more than two rows on each ambulacrum, but examining the body-wall from the interior, it becomes evident that only two rows of pedicels are present. The pedicels are very closely placed, and do not seem to be retractile. Among those species of *Cucumaria* which are characterised by double rows of locomotive organs, there is only one form, so far as I know, furnished with tables alone in the perisome, *Cucumaria populifera*, Stimpson; but to judge from the descriptions of these forms, the calcareous deposits may have a form different from that of the species here described.

The deposits present only a single form, viz., tables (Pl. IV. fig. 4) which are very closely disposed. Their disks are sometimes irregularly rounded or multangular, but by far their most common form is oval or elongate, fusiform, with one or both ends slightly drawn out; they are completely smooth, penetrated by a varying number of holes, and measure 0.32 mm. in length. The spire is not very regularly formed, and from its state of solution it is difficult to get an exact idea of its appearance. It reaches a considerable length, 0.1 mm., and is composed of from two to four rods, united by several transverse beams and terminating in some irregular spines or teeth. In most cases it is impossible to distinguish the rods, but the spire seems to be perforated by a few longitudinal series of holes, and terminates in several curved or branched tops. The smaller disks support a spire of about the same size, or larger than that in the larger tables. In some of the larger elongate tables the spire is reduced to a central bridge, sometimes with a central hole.

Even the pedicels are strengthened by very numerous tables, but here the disks are much narrower, rod-like, transverse in position, with fewer holes, of which four or more are situated in the slightly dilated middle of the disks; their spire is more irregular.