Genus *Thyonidium*, Düben and Koren, 1844.

Thyonidium cebuense, Semper (Pl. IX. fig. 4).

Habitat.—Station 201, October 26, 1874; lat. 7° 3′ N., long. 121° 48′ E.; depth, 82 fathoms; stones and gravel; one specimen.

This specimen, which is 11 mm. long, is ovate and of a light yellowish-brown colour. The pedicels are comparatively long and their sucking-disks well marked; they seem to be disposed in five longitudinal series, but from the contracted state of the animal the arrangement is not very clear. The specimens examined by Semper have an arrangement of the pedicels in rows which is distinct only in the posterior extremity of the body, but it must be kept in mind that the Challenger specimen is younger, and that young forms are often characterised by having the pedicels more distinctly arranged in rows. I only counted nineteen tentacles. A single Polian vesicle and madreporic canal are present. The five interradial pieces of the calcareous ring (Pl. IX. fig. 4, *a*) are simple; each of the radial, on the contrary, consists of a larger main-piece and two posterior prolongations, each composed of two or three joints. Semper seems to have found only one kind of tables; in the Challenger specimen, however, I have observed, in addition to the small tables, large ones scattered among the former. The small tables (Pl. IX. fig. 4, *b*, *c*, *d*) have a rounded disk with the margin undulated and regularly perforated by eight peripheral holes and a slightly larger central hole; the diameter of the disks measures 0·08 mm. The spire of these tables, when fully developed, consists of four rods and one transverse beam, and terminates in about eight small teeth. Often, however, the spire is more or less incompletely developed. The larger tables (Pl. IX. fig. 4, *e*) have the disk more irregular and the spire mostly devoid of teeth; the disk measures 0·16 mm. in diameter or more. The pedicels are strengthened by deformed tables which have the disks elongate and rod-like, and the spire more or less irregular; their shape will be best understood from the figures (Pl. IX. fig. 4, *f*).

Since some small differences exist, and since, moreover, Semper's description of the calcareous deposits is very unsatisfactory, I cannot be fully convinced of the identity of the Challenger specimen with those examined by Semper.

Thyonidium rugosum, n. sp. (Pl. V. fig. 5).

Body tapered posteriorly into a conical caudal portion. Tentacles eighteen, five small pairs alternating with three pairs of large tentacles and two unpaired large ones. The smaller tentacles several times smaller than the larger. Pedicels very closely crowded, and distributed over the ambulacra as well as the interambulacra; no arrange-