Thyone poucheti, Barrois, 1882.

Habitat.—West coast of France (Barrois).

This species, if it be really distinct, seems to be one of the nearest relatives of Thyone raphanus, from which it differs mainly in the calcareous plates being of a more irregular form, and provided with knobs on their upper surface. "Porcupine" Expedition dredged one specimen at Station 6, 1870, from a depth of 358 fathoms, which may probably be referred to this form. The form of the body, the anal teeth, &c., are like those in Thyone raphanus, but the skin is rougher. The deposits partly resemble those described by Barrois, being irregular and plate-like with numerous holes and small knobs; a few become scale-like in that the knobs are united so as to form a thicker reticulate network composed of superposed layers. Length 20 to 30 mm.

III. Calcareous ring composed of ten pieces, each made up of a number of small parts; posteriorly it carries five bifurcate prolongations.

Thyone buccalis, Stimpson, 1856; Semper, 1868.

Deposits—closely crowded, oval knobbed buttons with four holes. Calcareous ring very long, composed of numerous small pieces, and sending posteriorly five long slender, bifurcate prolongations.

Habitat.—Port Jackson (Stimpson), Rockhampton and Port Mackay (Semper), (?) Port Denison (Bell).

(Mus. Holm.) Two specimens from Rockhampton. Body fusiform, indistinctly four or five angled. Mouth with five ridges like that in Colochirus. Tentacles ten, Pedicels equally distributed Anal teeth minute. three or four ventral smaller. all over the body, the dorsal apparently running out from low warts. careous ring made of a great number of small pieces, carrying anteriorly ten shorter processes and posteriorly five long slender bifurcated prolongations. Body-wall thick to eight Polian vesicles and numerous small madreporic canals. and hard from crowded oval buttons, which are knobbed round the margin, and, as a rule, pierced with four holes; an arch rises vertically to the buttons themselves from each surface. Some of the buttons much smaller and more finely Pedicels supported by large curved rods, enlarged and perforated constructed. with several holes at the middle, and even pierced at the slightly dilated ends; some of the rods are three-armed. Terminal plates are also present in the Length of the largest specimen 75 mm. Colour in alcohol, darker or lighter brown; tentacles blackish.

The species completely resembles Thyone sacella, excepting that the latter is devoid of anal teeth, which are present in Thyone buccalis, though they are very rudimentary. Possibly they may be proved to be identical.