Colochirus as well as to Thyone, in consequence of the shape of its calcareous ring and calcareous deposits.

Thyone recurvata, n. sp. (Pl. V. fig. 7; Pl. VIII. fig. 6).

Body fusiform, tapered posteriorly into a long narrower caudal portion, curved, with the extremities turned upwards. Tentacles ten (?), retracted. Pedicels numerous, distributed all over the body, more densely crowded on the ventral surface, hard, stiff and not retractile. Anus without teeth. Perisome hard, brittle from close-lying, large, irregular, smooth plates with numerous holes; the plates overlap each other more or less. The exterior layer of the perisome contains a quantity of small cups, made up of an ×-shaped body with the arms curved and their ends united to a spinous rim. Pedicels strengthened by about the same kinds of deposits, though the plates are more deformed and rod-like towards the terminal plates. Colour in alcohol, light yellowish, whitish. Length about 55 mm.

Habitat.—Kerguelen Islands; depth, 10 to 100 fathoms; a single specimen.

The form of the body reminds one of that in Thyone raphanus, &c. The shorter dorsal surface and the posterior and anterior portions of the ventral surface have the pedicels about equally distributed, while those on the remaining middle part of the ventral surface are much more densely crowded. No arrangement of the pedicels in rows is discernible. The tentacles are small and completely retractile, consequently I have not been able to study their form and number; it seems as if some of them are considerably smaller than the others.

The calcareous ring is very small, only about 3 mm. in diameter, and its posterior undulating margin is devoid of any prolongations; it is composed of ten simple pieces. Three Polian vesicles and a single madreporic canal are present. The retractors are attached somewhat in front of the middle of the body, and some of them are remarkable by being bipartite or tripartite towards their posterior ends; moreover, the tripartite retractor is attached to three different longitudinal muscular bands, which doubtless is an abnormality. The reproductive organs consist of two small bundles of short simple tubes. The respiratory-trees are not very richly provided with short branches. The cups (Pl. V. fig. 7, b) have the ends of the curved arms of the \times -shaped central rod either simple or bipartite, in which latter case not four but eight holes are present; they have a diameter of 0.056 mm. The plates (Pl. V. fig. 7, a) overlap each other and form a continuous layer under the cups; they measure 0.6 mm. in diameter, and are usually provided with many holes. They have a very irregular form.

The species doubtless represents the Antarctic form of Thyone raphanus, but differs from it mainly by the absence of anal teeth.