and differs from it in some characters of more or less importance. Generally it seems to be larger, up to 160 mm. long, with closely placed pedicels, and often with the ambulacra indicated by a longitudinal furrow. It almost appears to be a rule, that the tentacles deviate somewhat from what is the typical condition in this genus. The calcareous ring is rather high, up to 17 mm. in the largest specimens; its radial pieces are excavated posteriorly so as to give rise to two short prolongations, but, considering that the ring in the specimens examined by me is much contracted and wrinkled, I am by no means sure of it, nor whether the pieces are simple or composed of some secondary parts, which sometimes seems to be the case. Excepting terminal plates in the pedicels, the body should be devoid of deposits, but in some specimens I have found tables in the cervical portion of the body. A single madreporic canal and two or three Polian vesicles. Norman says that the true *Thyonidium commune*, Forbes, differs from the Scandinavian form, described under the same name by Düben and Koren, in having the skin covered with tables which have a nearly circular disk with numerous perforations and a spire built up of four rods. Now my own researches show that the Scandinavian form also has deposits in the shape of tables, though principally in the cervical portion of the body. Norman does not point out in what respects his *Thyonidium commune* differs from *Thyonidium pellucidum*, nor does he say whether he has examined the types of Forbes and Thompson. It appears very probable that his species is only a *Thyonidium pellucidum*.

Thyonidium productum (*Duasmodactyla*), Ayres, 1854 and 1873; Stimpson, 1854. (?) *Orcula punctata*, Agassiz, 1852 (according to Stimpson).

Habitat.—East Port (Ayres), Grand Manan (Stimpson).

Deposits in the shape of "irregular perforated plates" present only in the cervical portion. Probably this species is not distinct from the preceding one.

II. Deposits of the body-wall itself absent, or present in greater or smaller number in the form of spinous rods.

Thyonidium molle (*Pattalus*), Selenka, 1868; Semper, 1868. *Thyonidium peruanum*, Semper, 1868. *Pattalus peruvianus*, Verrill, 1867 to 1871. *Anaperus peruanus*, Verrill, 1867 to 1871.

Tentacles varying from sixteen to twenty-one, sometimes typical; often, however, a typical in being of nearly equal size. Calcareous ring of ten simple pieces, the radial much higher than the interradial, and devoid, as it seems, of true posterior bifurcate prolongations. Deposits, when such are present, irregular, slightly spinous rods pierced by some holes.