Orcula cucumiformis, Semper, 1868.

Larger pedicels in a double row along the ambulacra, and a few smaller scattered on the interambulacra. Calcareous ring of ten simple pieces, the radial with two posterior prolongations composed of several separate pieces or joints. Deposits large scattered plates.

Habitat.—Cape York (Semper), Port Molle (Bell).

The following two species of Orcula are unsatisfactorily known:—

Orcula punctata, Selenka, 1867 and 1868.

Habitat.—Charleston (Selenka).

A very dubious form. Judging from the first description of Selenka, one must feel inclined to refer it to the northern form Orcula barthii, but lately in his "Nachtrag" Selenka declares Orcula punctata of Agassiz to be identical with Thyonidium productum, Ayres. Selenka, however, does not explain whether his Orcula punctata, described in 1867, represents the type of Agassiz mentioned by Selenka in 1868. Besides, it remains unexplained how Thyonidium productum, with twenty tentacles, and Orcula punctata, with fifteen tentacles, can be synonymous.

Orcula lapidifera (Holothuria), Lesueur, 1824; Semper, 1868. Phyllophorus (?) lepadifera, Verrill, 1867–1871.

Tentacles sixteen. Incomplete description. Possibly belonging to another genus. Habitat.—St. Bartholomew (Lesueur).

## Genus 13. Phyllophorus, Grube, 1840.

Tentacles forming two crowns, twelve to sixteen in the exterior and five to six in the interior. Ambulacral appendages almost without exception in the shape of pedicels, irregularly distributed all over the body.

- I. Pedicels cylindrical, all of the same shape.
- 1. Deposits in the shape of rods.
- Phyllophorus perspicillum (Urodemas), Selenka, 1867; Semper, 1868. Orcula perspicillum, Semper, 1868.

Fifteen larger tentacles in the exterior crown, and five smaller (?) in the interior Deposits—spectacle-like rods with a hole at each end, sometimes also with a