central hole, or with only one end perforated. Mouth stellate, closed by five groups of eight to ten papillæ in each. Calcareous ring of ten simple, flexible, spongy pieces, each bifurcated posteriorly; the pieces are not united with each other.

Habitat.—Sydney (Selenka), Port Denison and Port Stephens (Bell).

The relative size of the tentacles and their position are not fully clear, wherefore further investigations are required to prove whether this species really belongs to the genus in question or is to be referred to *Orcula*, in which case the diagnosis of the latter genus must be changed.

Phyllophorus ehrenbergii (Urodemas), Selenka, 1868; Semper, 1868.

Fifteen larger tentacles in the outer crown, and five smaller in the inner. Deposits—numerous spinous, not perforated rods, arranged three and three; one always thicker and longer than the other two. Calcareous ring, as it seems, of ten simple pieces, the radial considerably larger and carrying two posterior prolongations, which are simple and not divided into joints.

Habitat.-Red Sea (Selenka).

Phyllophorus frauenfeldi, Ludwig, 1875. Phyllophorus, n. sp., Semper, 1868.

Fifteen larger tentacles in the outer crown, and five smaller in the inner. Deposits like those in the preceding species, consisting of rods with four simple or bifurcate spines round the middle and four simple ones at each end. Calcareous ring of ten simple pieces, the radial slightly larger and bearing posteriorly two slender prolongations divided into joints.

Habitat.—Red Sea (Ludwig, Semper).

Semper also figures a rosette-shaped body found in the perisome, but there is nothing mentioned about such in the description of Ludwig; he only refers to the figures given by Semper. For my own part I cannot refrain from supposing that Phyllophorus ehrenbergii and Phyllophorus frauenfeldi are very nearly related, and that they may prove to be identical.

2. Deposits—plates either of a more common shape, or button-like, or rosette-shaped.

Phyllophorus dobsoni, Bell, 1883.

Twelve tentacles in the exterior crown and six in the interior. Pedicels irregularly distributed, but scarce or absent in the central portion of the ventral surface. Deposits—numerous thick, discoidal bodies, with serrate margin, with a few (about four) small perforations and a number of minute conical knobs.