

- i. Deposits—irregularly formed, perforated simple plates alone, seldom together with small rosettes or rods; sometimes the plates are rod-like but with holes.

a. *Calcareous ring well developed, with posterior prolongations.*

*Cucumaria africana*, Semper, 1868.

Body nearly cylindrical. Radial pieces of the calcareous ring composed of a main part and two separate posterior prolongations. Deposits—large plates with short spines.

*Habitat.*—Querimba (Semper), Mauritius (Haacke, Ludwig).

β. *Calcareous ring well developed, but devoid of posterior prolongations.*<sup>1</sup>

*Cucumaria hyndmanni* (*Holothuria*), Thompson, 1840; Forbes, 1841; Düben and Koren, 1845; v. Marenzeller, 1874.

Body subcylindrical, slightly tapered posteriorly. Deposits—thick, nearly smooth perforated plates, all alike. Terminal plate of the pedicels incompletely developed or rudimentary; supporting rods pierced with one hole (or more) at the middle, and one at each end.

*Habitat.*—West coast of Scandinavia, south of the Arctic circle (Düben and Koren, Danielssen, Sars, Möbius, Storm, Ludwig), British Islands (Forbes, Norman, M'Intosh, Herdman, Thompson), Mediterranean Sea (Grube, v. Marenzeller, &c.).

(Mus. Holm.) Numerous specimens dredged off the west coast of Sweden. The crowded, perforated plates are of an irregularly rounded form, smooth, thick, solid, and swollen in appearance; among these are found some thinner and more finely constructed ones. Often the plates are slightly elongated or oval, with one end slightly narrower, bent obliquely outwards from the body of the animal, and rough from some minute spines or elevations. The numerous rods of the pedicels bear at the middle a short third arm, reminding one of a kind of spire. A single Polian vesicle and madreporic canal. Calcareous ring devoid of posterior prolongations.

“Porcupine” Expedition.—A few specimens dredged at Station 23, July 2, 1869, at a depth of 420 fathoms.

*Cucumaria exigua*, Ludwig, 1875.

Body cylindrical. Ventral pedicels more numerous than the dorsal. Deposits—large internal, and smaller external smooth perforated plates. Pedicels with rudimentary terminal plate, ×-shaped bodies and large perforated supporting rods.

*Habitat.*—China Sea and Chili (Ludwig).

<sup>1</sup> In *Cucumaria frauenfeldi* and *Cucumaria kirchsbergii* the calcareous ring is unknown.