Length of the largest individual, 35 mm. Pedicels in simple zigzag rows along Two ventral tentacles smaller. Calcareous ring, like that in the ambulacra. Cucumaria hyndmanni and Cucumaria clongata, devoid of posterior prolongations. Deposits—more or less regularly formed, knobbed, perforated buttons; and The buttons are of a roundish form and unequal in size, in minute cups. number of holes and knobs; commonly the rounded knobs are rather prominent. Some of the buttons are of considerable size, almost plate-like, with numerous holes and knobs. The cups are in want of a true rim, the ends of the dichotomously branched curved arms or spokes, which constitute the cups, being never, or only seldom, connected with each other. Pedicels supported by perforated rods of the shape figured by Düben and Koren. Colour, whitish.

b. Deposits—oval knobbed buttons with four holes and undulated margin; larger plate-like ones with at least one complete circlet of smaller holes round the four central ones, and with uneven or knobbed surfaces.

Cucumaria vicaria (Ocnus), Bell, 1883.

Pedicels in pairs, like the typical forms of this group of *Cucumaria*, but so irregular that they present a zigzag arrangement in each ambulacrum. Some of the deposits attain to a great size; the smaller are developmental stages of the larger. The pieces of the calcareous ring delicate, without posterior prolongations (?). *Habitat.*—Antarctic Sea (Bell).

c. Deposits—slightly irregular, oval or oblong buttons, with a smaller number of holes, with knobs or spines, and with one end drawn out into a considerable spine or dentate perforated process.

Cucumaria leonina, Semper, 1868.

Body ovate. No anal teeth. The oblong buttons have, according to the figure given by Semper, about seven holes, two smaller of which are situated in the narrower dentate end. Even the knobs seem to be few, though about twice as many as the holes. Calcareous ring devoid of posterior prolongations (?).

Habitat.—Singapore (Semper).

Cucumaria miniata (Cladodactyla, subgenus Polyclados), Brandt, 1835; Selenka, 1867; Ludwig, 1881. Pentacta miniata, Stimpson, 1857. (?) Cucumaria albida, Selenka, 1867. Cucumaria fallax, Ludwig, 1875.

Body cylindrical. Anus surrounded by five small radially disposed plates or teeth. Calcareous ring not very well developed, without posterior prolongations (?). Deposits like those in Cucumaria leonina.

Habitat.—Alaska (Ludwig), Sitka (Brandt), California (Selenka).