as the above, are:—The existence in the chitinous epithecal membrane, on each side close below the mouth, in all three species known to me, of a very minute chitinous furcate spiculum, as it may be termed, which is lodged within the thickness of the epithecal membrane. These spicula are probably to some extent homologous with the chitinous trabeculæ on each side the orifice in all the Salicornariadæ, and which in that Family serve as supports for the articulation of the elaborate opercula with which all its members are furnished. Another circumstance should also be mentioned, though not as by any means a distinctive character, as it will probably be found of frequent occurrence, viz., the existence of a delicate chitinous hollow filament, which also, as in the Salicornariadæ, follows the contour of the frontal areas, and is apparently continuous throughout the zoarium, serving, it may be imagined, as a channel of communication throughout the entire zoarium, or where the latter is divided into internodes, throughout each separate segment.

Steganoporella magnilabris, Busk (sp.) (Pl. XXIII. fig. 2).

Membranipora magnilabris, Bk., Brit. Mus. Cat., p. 62, pl. lxv. fig. 4.

Steginoporella elegans, Smitt, Florid. Bryoz. (nec. Eschara elegans, M. E.).

Steganoporella magnilabris, Hincks; Waters; Macgilliv., Nat. Hist. Vict., Dec. vi. p. 43, pl. lx. fig. 1.

? Biflustra crassa, Haswell.

Steganoporella neo-zelanica (sp.), Waters.

Character.—Zoarium polymorphous; erect, foliaceous, expanded or branched, unior bi-laminar (escharine form); or subcrustaceous or decumbent (membraniporidan form); or tubular (siphonella-form). Zoœcia oblong, arched above; border thick, rounded, granular, usually a broad tooth-like articular projection on each side about the middle. In the natural state, the frontal area is covered in by a delicate chitinous membrane, the upper half of which is free and contains the external oral orifice and operculum, and towards each side a minute furcate trabecula; the lower half closely adnate to the subjacent calcareous perforated lamina. Opercula suborbicular, of two kinds, one larger (oœcial?), in which the membrane is supported by a chitinous framework, consisting of two convergent rods; and the other smaller (zoœcial), in which the rods are represented by a continuous chitinous bow. In both the margin of the operculum is furnished on the posterior aspect with a row of acute, conical, flexible spicules.

Habitat.—Off Honoruru, Sandwich Islands, 20 to 40 fathoms (ramose or escharine form).

[Abrolhos Islet, Darwin; Algoa Bay, Bowerbank; Port Dalrymple, Voy. of Rattles., (hemescharine form); Gulf of Florida, Pourtalès (escharine- and siphonella-forms), Smitt; ? Miocene fossil, Gipps Land, Waters (escharine form); Tongatabou, Sir E. Home.]

In his account of the Floridan Bryozoa, Professor Smitt gives Eschara elegans of