

When the calcareous matter is removed by weak acid, the chitinous basis of the zoecia is seen to be very delicate and transparent; and in this condition the puncta visible in the wall of the zoecium in its natural state appear as oval rings, occupied by a delicate membrane (fig. 1, *e*), in the centre of which is a nuclear mass, consisting of five or six highly refractive globular particles. The puncta, therefore, as in many other cases, are not truly pores, but appear to be of the same nature as the common interzoecial discs or so-called "Rosettenplatten."

4. *Brettia*, Dyster.

Brettia, Dyster, Quart. Journ. Micr. Soc., vi., 1858, p. 260; Hincks, Brit. Mar. Polyz., p. 27.

Character.—Zoecium erect, corneous or subcorneous. Zoecia given off from the upper and back part of the subjacent one, above and behind the aperture; all facing the same way; uniserial, elongate, tubular or trumpet-shaped, with a large terminal or subterminal aperture, and a small semicircular orifice. (Margin of aperture with or without spines.)

(1) *Brettia australis*, n. sp. (Pl. XXXIV. fig. 3).

Character.—Zoecium very small, regularly dichotomising, each zoecium giving off a pair. Zoecia trumpet-shaped, slightly curved. Aperture oblique or subterminal, rounded or oval. Margin unarmed.

Habitat.—Station 196, lat. 0° 48' S., long. 126° 58' E., 825 fathoms, hard ground. (Parasitic on *Bicellaria bella*.)

Only a single minute specimen of this very elegant species has been noticed in the collection. It is excessively delicate and transparent, but at the same time presents a pearly aspect, showing that it is not wholly "corneous."

(2) *Brettia cornigera*, n. sp. (Pl. XXXIV. fig. 6).

Character.—Zoecium lax, composed of dichotomous branches, springing from a common stem formed of radical tubes. Lower internodes very long and tubular, with a rudimentary aperture and uninhabited. Upper ones trumpet-shaped, much elongated and tubular downwards, with an oval aperture nearly half the length of the cell; four small pointed submarginal spines above, in front, and two behind. Oecia, 0 (?) Avicularia, 0.

Habitat.—Station 23, off Sombrero Island, 450 fathoms, Pteropod ooze.