

from the sides of which equidistant, opposite pinnæ, also composed of geminate zoœcia, are given off at right angles. Zoœcia geminate, closely connate, subcompressed, the oral portion subtubular and twisted round to opposite faces, front and back, in each pair. Surface smooth, entire, with a row of four to six puncta on each side, and a few on the front. Peristome slightly thickened.

Habitat.—Station 122, lat. $9^{\circ} 5' - 10'$ S., long. $34^{\circ} 49' - 53'$ W., 32 to 400 fathoms, red mud. Station 24, off Culebra Island, 390 fathoms, Pteropod ooze. Station 23, off Sombrero Island, 450 fathoms, Pteropod ooze. Off Barra Grande, Brazil, 400 fathoms.

[Gulf of Florida, 120 to 127 fathoms, Pourtalès.]

This very remarkable form affords a striking example of dimorphism. Though well described in most respects by Prof. Smitt, in both its forms, that excellent observer does not appear to have noticed the precise way in which the two are connected. "The species," he says, "in its erect state, from its ivory-white aspect and delicate stem, to the naked eye much resembles a *Crisia*. But closer examination shows the zoœcia to be arranged much as they are in *Gemellaria*, back to back in pairs, and apparently spirally arranged round an imaginary axis, owing to the circumstance that the zoœcia in the same longitudinal series have their mouths turned alternately to right and left." The stem and branches, as observed by Prof. Smitt, are articulated or divided into internodes, which in the stem consist of two or three pairs of zoœcia, from the lower pair of which alone the lateral branches arise, exactly opposite to each other; each branch springing from one of the two zoœcia.

Prof. Smitt does not appear to have met with specimens showing the mode in which the erect portion originates, and his description of the adnate zoœcia, and of the stoloniform tubes on which they are formed, does not convey exactly the true nature of the latter. In the specimen of *Pasythea eburnea* procured off Sombrero Island, the mode of origin and the nature of the connection between the adnate and erect portions are beautifully displayed.

On a small fragment of Coral or *Myrionozoum*, four or five very young growths are seated, each of which arises from the centre of a circular, somewhat tumid disc, which is hollow, with thin, transparent, slightly calcified walls. The first internode of the erect stem consists of a double connate tube. The subsequent internodes are developed, each into two or three pairs of zoœcia, the lowermost one or two being more or less abnormally formed. From the outer border of this radical disc proceed four or five very slender and delicate, adnate stoloniform jointed tubes, upon which at rare intervals a decumbent Hippothoiform zoœcium, of the same size and form, as those in the erect part of the growth, is developed; whilst the tube itself connects one central disc with another. The occurrence of zoœcia in the course of the stoloniform tubes gives the growth very much the aspect, as Prof. Smitt remarks, of a dwarf *Hippothoa divaricata*.