

ZOOPLHYTOLOGY.

NOTES on two NEW BRITISH POLYZOA.
By FRED. D. DYSTER, F.L.S.

Sub-class. P. GYMNOZEMATA.

Order. CHEILOSTOMATA.

1. Fam. BICELLARIADÆ, Busk ('B. M. C.,' Part I, p. 41).

1. Gen. *Huxleya*, nov. gen., mihi.

Polyzoary flexible, corneous or sub-calcareous. Cells biserial, pyriform, alternate. Aperture small, sub-terminal, unarmed. No avicularia or vibracula.

1. Sp. *H. fragilis*, n. sp. Pl. XXI, figs. 1, 2. Sp. unica.*Hab.* Tenby, Dyster.

The polyzoary, in this species, is from half an inch to one inch high, flexible, and white. The cells wider and rounded above, attenuated below; the upper portion of one being closely appressed to the slender lower part of the cell above. The dichotomous branches usually spring from the upper and back part of a cell, and occasionally, though rarely, from the middle or side. The aperture is small, rounded or semicircular above, and straight below. The margin is wholly unarmed, and not thickened. No vibracular or avicularian organs exist in any part. The ovicells have not been observed. The polypide is ten-armed. The species was first noticed by me in a marine aquarium.

2. Fam. SCRUPARIADÆ, Busk ('B. M. C.,' Part I, p. 28).

2. Gen. *Brettia*, nov. gen., mihi.

Polyzoary erect, free, corneous, flexible. Branches given off behind and above the aperture of a cell.

2. Sp. *B. pellucida*, n. sp. Pl. XXI, figs. 3-5.*Hab.* Tenby, Mrs. Brett; Dyster.

The polyzoary, about half an inch high, is perfectly transparent; the cells are much elongated, fistular, with an oval aperture, rounded above, pointed below, and furnished with from five to nine marginal spines, irregularly placed. The polypide has ten arms; and the ovicells have not been observed. This species was also first noticed in a marine aquarium by Mrs. Brett.

It is singular that neither of the foregoing forms should

have been detected in their natural habitat. The *Huxleya* grew in a tank of my own filled, of course, with water from the Bay, which had not been changed for many months. The other beautiful Polyzoan was found by my friend Mrs. Brett, in a tank devoted to *Actinæ*, but of which the water was changed pretty frequently.

I had long observed the presence of the *Huxleya* in my tank, but fully believing it to be *Eucratea chelata*, had never taken the trouble to examine it, and, unfortunately, when I did so, the polypides were dead, and nearly decomposed. They appear to communicate very freely with the general sarcodæ of the polyzoary, as much so as in *Laomedæa* and other hydroid Polypes. The retractor muscles are very long. The nearest form to *Huxleya* would probably be *Hiatophila*, Gray ('B. M. Cat.,' p. 43, pl. xxx).

In the case of *Brettia*, its discoverer laid it aside after gathering it, and it was not examined till after death; but there is no reason to suppose that there is anything distinctive about the polypide.

On some MADEIRAN POLYZOA.
Collected by J. YATES JOHNSON, Esq.
(Continued from No. XXII, p. 129.)

WE here give figures and descriptions of some species of Madeiran Polyzoa, additional to those contained in a former part of the Journal.

I. FAMIL. BICELLARIADÆ, Busk.

1. Gen. *Bugula*, Oken.

1. *B. ditrupæ*, n. sp., Busk. Pl. XX, figs. 7, 8.

Cells biserial, elongate, fusiform. Aperture wide, elongated, with two or three marginal spines on the outer and one on the inner side of the aperture above. Avicularia capitate, attached to the side of the cell below the middle.

Hab. Madeira, Johnson. On the shell of *Ditrupa acuminata*.

The present species is distinguished from *B. flabellata* by the biserial arrangement of the cells, and from *B. dentata* by their elongated and fusiform shape. Independently, however, of these characters, the general habit and very peculiar site of growth of *B. ditrupæ*, formerly noticed, would alone suffice to indicate its specific independence.