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A New Species of Polyzoa. By CHAS. M. MAPLESTONE.

[With Plate.]

[Read 29th May, 1879.]

I wish to bring under the notice of the Society a new species of cheilostomatous polyzoa, which presents peculiar features.

BICELLARIA ANNULATA *n. s.* plate III., figs. 1, 2, 3, 4.

Cells elongated, contracted in front below; aperture oval; four to five marginal incurved spines on outside edge; one spine on summit of aperture extending behind superior cell; one spine on lower portion of aperture extending inward underneath marginal spines; back of cell with a bifurcate elevation; cells growing on a corneous, tubular, spindle-shaped growth, with annulated branches bearing cells.

The drawing sent with this shows at fig. 1 the shape of the cells, some of the spines being left out, with the arrangement of the spines as seen from the front. Fig. 2 shows back view of cells, with the upper spine growing up behind the superior cell. It will be seen that the cells from the back view show that they are adnate, not free, as is usual. Fig. 3 shows the spindle shaped main stem, and the annulated branches springing from it. Fig. 4 shows the natural size.

The great peculiarity of this species is the structure upon which the cells grow; and from the ringed appearance of the individual spindles and the more strongly annulated branches I have derived the specific designation. In fact, I almost think a new genus is requisite for its reception. It is rare at Portland. I have a portion of a tuft about three inches high.

On a New Species of Polyzoa. By J. R. Y. GOLDSTEIN.

[With Plate.]

[Read 29th May, 1879.]

The new species of polyzoa herein described belongs to the second order GYMNOLEMATA of *Allman*, sub-order 3, *Glenostomata*, family 1, *Serialaridæ*, and was first found by me at Portland in 1864. It was not until 1874 that I figured and described it in MS., and would have sent the paper to this Society but was prevented by illness. Being the first new species I had found, gratitude for much valuable aid

and direction in the study of the class, received from the Rev. J. E. Tenison Woods, naturally induced me to bestow that gentleman's name upon the species.

Genus, SERIALARIA—*Lamarck*. Character: Polypidom confervoid, horny, fistular, and branched; cells, tubular, uniserial and unilateral, dislosed in close parallel companies in internodes at stated intervals.—Johnston, "British Zoophytes," vol. i. p. 368.

SERIALARIA WOODSII, *n. s.* plate III., fig. 5.

Polypidom of a brown colour, light to dark; horny, fistular, branched, forming dense tufts three to four inches in height; branches alternate, spreading, subdichotomous towards the extremities; basal tube corrugately jointed between the internodes; cells tubulous, *biserial*, unilateral, adnate to each other, gradually shorter outwards, apertures thickened, arranged in companies of five to ten pairs on each internode, straight, and much inclined outwards. Two tapering, slender, hollow processes, jointed to basal tube immediately behind the outer cells of an internode; not constant, sometimes a fresh branch taking the place of one. These setaceous processes frequently have septæ across them at irregular intervals, and are sometimes branched. Their length varies much, often three times the length of an internode, sometimes quite short, one of a pair frequently much shorter than its fellow, and sometimes club-shaped. Masses are frequently found cast upon the beach without these appendages, as they soon drop off when dead. Ovicells not seen. The animal has eight tentacles.

The only species with which it has any affinities is *Serialaria Australis*, described by Rev. J. E. Tenison Woods, in a paper read before the Royal Society of N.S.W., 4th July, 1877, and, like it, has peculiar characteristics, notably the fact of the cells being biserial, which will necessitate a modification of Lamarck's generic description given above.

My friend, Mr. Chas. M. Maplestone, was fortunate enough recently to find the animal alive, and hopes to obtain it again at Portland, so as to be able to make more extended observations thereon. He writes me that, on a cursory examination, the tentacular crown seemed to arise from a calyx, as in the fresh-water polyzoa. A most interesting fact, if verified.

Plate III.



Fig. 1 $\times 25$



Fig. 2 $\times 25$



Fig. 4 nat. size



Fig. 3 $\times 8$.

Bicellaria annulata

Chas. McPherson Del.

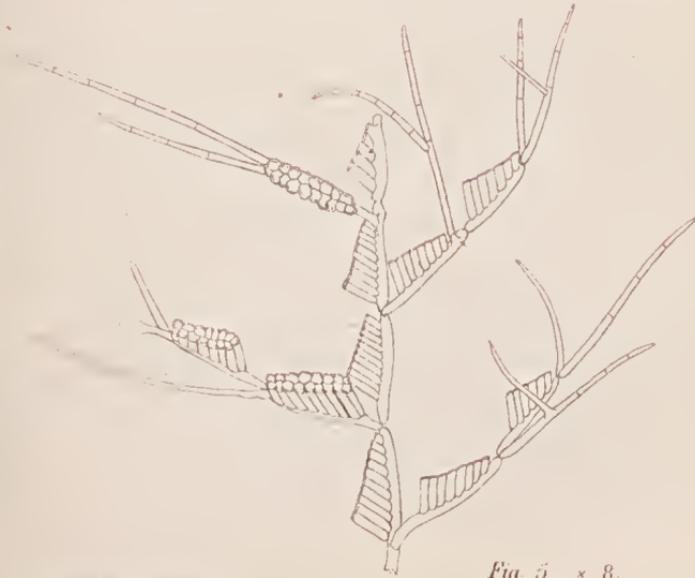


Fig. 5 $\times 8$.

Serralaria Woodsii

J. R. Y. Goldstein Del.

Hamel & Ferguson Lith.