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THE SPECIES OF *CHIASTOSELLA* (BRYOZOA).

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(Plate xviii.)

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*Observations.*—The study of the species which obviously belong to this group has shown the necessity for certain emendations of the generic diagnosis. All the species are characterized by the hyperstomial ovicell opening above the level of the aperture. The central portion of the ovicell is usually sparsely porous, while the distal margin usually bears a crescentic depression with radiating rows of small pores. Canu and Bassler state that the sinus of the aperture is rectangular. In the genotype it is definitely subcircular, while in the other species its form varies. A single row only of aerolar pores may occur in *Chiastosella*.

Other constant features are the presence of spines on the distal margin of the peristome and the laterally-directed avicularia on the frontal proximal to the aperture. The zoarium in all the species known is unilaminate and either free or encrusting.

CHIASTOSELLA DAEDALA (Macgillivray, 1887).

(Plate xviii., figs. 1, 2.)

*Schizoporella insignis* Macgillivray (*non* Hincks, 1881), 1883, 132, pl. ii., fig. 11. Hincks, 1884, 281.

*Schizoporella conservata* Hincks (*non* Waters, 1881), 1882, 165, pl. vii., fig. 2. Stach, 1935, 343, pl. xii., fig. 4.

*Schizoporella daedala* Macgillivray, 1887, *a*, 180; *idem*, 1887, *b*, 211; *idem*, 1887, *c*, 146, pl. cxxxviii., fig. 4. Jelly, 1889, 225.

*Schizoporella vercoi* Livingstone, 1928, 117, figs. 32, 33.

*Chiastosella daedala* (Macgillivray), Bassler, 1934, 407. Not *Schizoporella daedala* Macgillivray, 1895, 84, pl. xi., fig. 15; Maplestone, 1904, 207 = *C. porosa* Canu & Bassler, 1935.

*Description.*—Zoarium unilaminate, foliaceous; dull-brown in colour when dry. Zoecia rhomboid in outline, usually broader than long.

The aperture, set within a shallow, smooth, subcircular peristome, is semicircular. The transversely oval sinus, limited by inwardly directed cardelles, equals in diameter about one-quarter that of the aperture. A narrow serrated plate, arising in the proximal corners of the aperture below the level of the cardelles, extends along the proximal rim on each side almost to the sinus. The operculum is strengthened by a median banded narrow sclerite, crescentic in outline and with a central unthickened area. The distal margin of the peristome bears four unjointed short spines articulated to circular spine bases.

The frontal is pierced by a varying number of tremopores (14-32) according to the size and number of avicularia on the zoecia. Areolation is often obscure, but, when distinct, a single row of areolar pores is developed. In older zoecia many of the tremopores become closed by calcification.

Large acute avicularia with entire rims occur on one side of the zoecia directed laterally below the level of the proximal rim. A corresponding large avicularium occasionally is developed on the opposite side of the zoecium. Small avicularia of similar type may appear on the proximal region of the frontal.

The triangular ovicell, not raised above the level of the frontal of the distal zoecium, is surrounded distally by a bordered depression containing eleven or twelve radiating rows of two or three small pores. The triangular smooth area distal to the peristome bears two to four large tremopores.

*Dimensions.*—Zoecium, length, 0.9 mm.; breadth, 1.0; aperture, diameter, 0.30; ovicell, height, 0.40; breadth, 0.55.

