ART. XXII.—*Descriptions of New, or Little Known, Polyzoa.*

PART VI.

BY P. H. MACGILLIVRAY, M.A., M.R.C.S., F.L.S.

[Read 13th December, 1883.]

Discoporella reticulata, n. sp. Fig. 1.

ZOARIUM orbicular, bordered, convex; cells connate, radiating in uniserial rows of irregular length; peristome with the outer border produced, pointed, and entire; centre of zoarium occupied by large shallow cancelli, separated by narrow raised walls; a single or double row of smaller rounded cancelli between the rows of cells.

Port Phillip Heads.

I have only a single specimen of this species, which seems quite distinct from any previously described. The most distinctive character is the number and large size of the shallow cancelli in the centre of the zoarium. There are no spines to be seen in the interior of any of the cells or cancelli.

Discoporella pristis, n. sp. Fig. 3.

Zoarium irregular in shape, bordered, adnate or partly free and raised at the edges; cells irregularly distributed; mouth elliptical, peristome entire, divided, or usually produced into a long point with a series of fine spines on one or both sides; interstitial cancelli rounded, irregular in size and distribution, frequently finely denticulate round the orifice.

Port Phillip Heads. Found also by Mr. J. B. Wilson.

The distinguishing character of this species is the peculiar development of the peristome, which in many of the cells is produced on one side into a long pointed process, one or both sides of which is armed with a series of sharp spines or teeth, giving the whole a marked resemblance to the beak of a sawfish. In many cells, where this prolongation is absent, there are several sharp, slender spines round the edge of the mouth. The cancelli are round, usually with the edge denticulate; but it is frequently difficult in this, as in some other species, to say what are cells without peristome and what cancelli. In some specimens portions of the zoarium are covered by a thin, calcareous, perforated pellicle,

which also occurs in several other cyclostamata, attention to which was first, I believe, called by Mr. Waters in his paper on the "Bryozoa of the Bay of Naples."

Discoporella echinata, n. sp. Fig. 4.

Zoarium usually orbicular, bordered; cells arranged in irregular rows or confused; peristome produced, entire, notched, or divided into several processes; numerous long, fine spines growing irregularly from the surface of the cells; cancelli numerous, rounded, denticulate at the orifice (as also usually are the cells).

Port Phillip Heads. Found also by Mr. J. B. Wilson.

I have some doubt whether this may not prove to be a variety of Busk's *D. fimbriata*, from which, as usually seen, it differs chiefly in the numerous spines springing from all parts of the cells, which give it a very distinctive appearance. These spines also spring from other parts of the zoarium.

Fasciculipora bellis, n. sp. Fig. 2.

Cells in small, cylindrical, erect fascicles, mostly opening at the summit by prismatic orifices; one or two series opening lower down, the upper of these frequently partly separated and their orifices reaching to the same level as those of the chief mass of the bundle; surface minutely punctate.

Port Phillip Heads.

A small and very beautiful species, of which I have only seen one specimen. In this there are six or seven fascicles spread over a small calcareous nodule, and connected by a calcareous punctate or perforated crust. When viewed vertically they suggest a resemblance to a composite flower on the end of its pedicle.

Fasciculipora fruticosa, n. sp. Fig. 5.

Zoarium branched, the main branches mostly horizontal, with numerous short branches turned upwards, the secondary branches consisting of bundles of cells, all opening terminally by closely packed prismatic orifices; surface punctate, longitudinally faintly sulcate and (especially in older parts and on the back) transversely corrugated.

Port Phillip Heads.

This species is closely allied to *F. ramosa* (D'Orb), of which also I have a small specimen, found by Mr. Maplestone at Portland, but from which it is evidently quite distinct,

the branches being much more slender and containing fewer cells. Some of my specimens form dense, shrub-like tufts almost an inch in diameter.

EXPLANATION OF PLATE.

Fig. 1. *Discoporella reticulata*, natural size. Fig. 1*a*. The same magnified.

Fig. 2. *Fasciculipora bellis*, natural size. Fig. 2*a*. Side view of one of the bundles magnified. Fig. 2*b*. Vertical view of the extremity of the same.

Fig. 3. *Discoporella pristis*, natural size. Fig. 3*a*. A portion magnified. Fig. 3*b*. A small portion more highly magnified.

Fig. 4. *D. echinata*, natural size. Fig. 4*a*. A portion of the same magnified.

Fig. 5. *Fasciculipora fruticosa*, natural size. Fig. 5*a*. Portion of the same magnified.

ART. XXIII.—*Electricity as a Motive Power on Railways.*

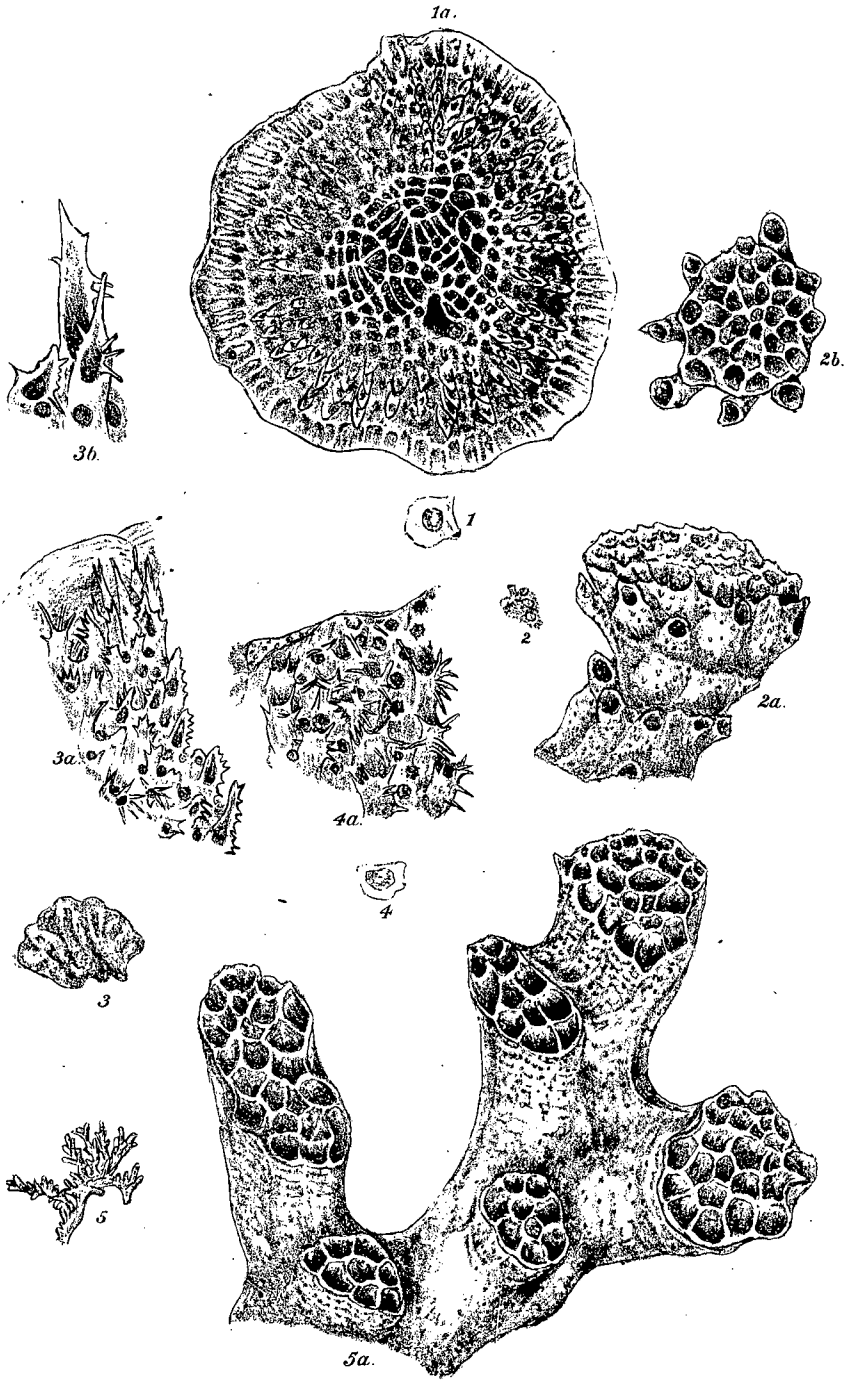
BY MR. G. W. SELBY, JUN.

[Read 13th December, 1883.]

ART. XXIV.—*Gas as a Motive Power.*

PROFESSOR KERNOT, M.A.

[Read 13th December, 1883.]



P.H.M.cG del & lith.

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