

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

PART II.

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(WITH THREE PLATES.)

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*Membraniporella distans*, n. sp. Fig. 5.

CELLS remote, glistening; costæ, about eight or ten on a side, expanded and perforated at their inner ends; a narrow, slightly raised line down the middle of the cell; mouth straight below, arched above, with several (2—5) blunt spines round the upper margin; ovicell small, rounded, smooth, with an elevated ridge across the front:

Port Phillip Heads.

This species is closely allied to *M. nitida*, of which it may eventually prove to be only a variety. In the only specimen I have seen, the cells are irregularly scattered over a small fragment of Retepora; some are contiguous, although most are widely separated and arranged in no definite order. The retepore is very dirty and rotten, and it is impossible to make out the nature of the connection between the remote cells. The ribs are generally expanded towards the mesial extremity, and frequently there perforated. This is caused by the ribs, in growing, dividing dichotomously towards the inner part, and these divisions by again uniting, or by their union with those of the opposite side, leaving the round or oval openings. The ovicell is smaller and shallower than in *M. nitida*, and has a slight ridge separating an area from the smooth, round, superior part.

*Microporella renipuncta*, n. sp. Fig. 1.

Cells broadly ovate; surface smooth, or faintly granular, or areolated; a large, reniform, punctate plate below the mouth, toward the middle of the cell; mouth straight below, arched above, with four or five spines on the upper

margin; a transverse avicularium, with an acute mandible, between the lower lip and the reniform pore; ovicell large, prominent, the front with a semicircular area, smooth, or marked with radiating lines, the circumference being thickened, and nearly smooth or granular.

Port Phillip Heads.

This beautiful species is at once distinguished by the large, reniform, perforated plate and the transverse avicularium. The avicularium is absent in some of the cells, but seems to be present in all those supporting ovicells. The reniform plate is distinctly raised, and has the appearance of a thin membrane bulging forwards and pierced by numerous punctures. In old, calcified specimens, the surface is markedly areolated.

*Microporella stellata*, Smitt.\* Fig. 4.

Cells broadly oval or rhomboidal, slightly convex; surface thickly covered with rounded eminences, each of which is pierced by a stellate pore; mouth wide, shallow, slightly arched above and slightly projecting forwards below, margin thickened; at the summit of the cell and at each lower angle of the mouth is a rounded eminence, on which is situated an avicularium with the triangular mandible directed towards the mouth, the superior vertically downwards, the lateral obliquely upwards and inwards.

Port Phillip Heads, a single specimen, Mr. J. B. Wilson.

*Microporella Malusii*, var. *personata*. Fig. 8.

Cells pyriform, smooth; mouth arched above straight below, with slightly thickened edges; no spines; a transverse, lunate, dentate pore below the mouth with the sides elevated, especially inferiorly, into a mound-like prominence; ovicell large, granular, the lower angles produced across the front of the cell to form a large collar.

Port Phillip Heads, a single specimen, Mr. J. B. Wilson.

This differs so much from the normal form of *M. Malusii*, that it may be doubtful whether it ought not to be characterised as a new species. There are no lateral pores, the margin of the ovicell is not sculptured in the usual way, and the lower angles are produced across the front of the

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\* *Porina stellata*, Floridan Bryozoa, Part II., p. 26, Pl. V. Figs. 130—133.

cell to form, by their junction, a large collar, obscuring the lower part of the mouth. Busk's *L. thyreophora*, already shown by Hincks to be an unimportant variety of *M. Malusii*, also occurs at the Heads.

*Lagenipora tuberculata*, n. sp. Fig. 15.

Cells large, flask-shaped, erect or semi-erect; mouth rounded or oval, with a thickened projecting peristome; surface studded with large, hollow, pointed tubercles, which occasionally, owing to attrition, form raised pores.

Port Phillip Heads.

*Schizoporella lata*, n. sp. Fig. 7.

Cells quadrate or oval, arranged in linear series; front slightly convex, granulo-punctured; mouth large, with a rather wide, shallow-pointed sinus below; below the mouth is a small elevation bearing a minute avicularium; ovicell large, rounded, thickly punctate.

Port Phillip Heads.

*S. triangula* (Hincks), which also occurs here, differs in the cells being much flatter, the mouth wider, and the suboral avicularium larger and more distinct.

*Schizoporella insignis*, n. sp. Fig. 11.

Cells large, quincuncial, indistinct; surface deeply areolated; mouth semicircular, or rather higher than wide, nearly straight below, and with a deep rounded sinus; four or five spines above; avicularia very large, situated below and outside the mouth, on one or both sides, and with the mandible extending obliquely upwards and outwards to nearly opposite the centre of the upper margin of the mouth of the cell in the adjacent series; ovicell mitriform, deeply imbedded in the cell above, divided into two parts by a thick ridge parallel to the outer edge, the inner part nearly smooth but areolated at the edges, the outer sloping and also deeply areolated.

Dredged off Port Phillip Heads by Mr. Wilson and myself, always in the Hemeschara form.

The mandible of the avicularium is sometimes much narrower and more pointed, and also situated lower down, than in the specimen figured.

*Schizoporella punctigera*, n. sp. Fig. 13.

Cells ovate, arranged in linear, radiating series, smooth or nearly so; mouth rounded above, nearly straight below, with a narrow deep sinus; four spines on the upper margin; a minute transverse avicularium on an elevated umbo immediately below the mouth; ovicell rounded, thickly punctate, and with a smooth rim.

Port Phillip Heads, dredged by Mr. Wilson and myself.

Closely allied to *S. lata*, but I think distinct. The mouth is narrower, the sinus is much narrower and sharper, and the ovicell is more prominent.

*Lepralia setigera*, Smitt. Figs. 2 and 3.

Cells pyriform or ovate, convex, smooth; a series of long, slender, rigid spines attached to the circumference of the cells except at the base; mouth higher than broad, arched above, straight or rather rounded upwards and forwards below, constricted at the junction of the middle and lower thirds by a projecting, pointed process, the edges bevelled inwards, especially on the upper border; a long, very slender vibraculum on either side, opposite the lower part of the mouth, extending downwards nearly the whole length of the cell: ovicell rounded, with a thickened rim.

Port Phillip Heads, dredged by Mr. Wilson and myself.

I have no doubt that this species is the *Escharella setigera* of Smitt\* and the *Lepralia Kirchenpaueri*, var. *teres*, of Hincks.† Heller's *L. Kirchenpaueri* is, probably, a different species. The chief peculiarity is the remarkable series of stiff, slender spines fringing the circumference of the cells which is found in perfect specimens; in older ones, however, they are not present, and their absence, as well as that of the delicate vibracula, with the more strongly calcified and shorter cells, gives it a very different appearance. The surface of the ovicell is divided into two parts, the circumference being thickened; sometimes the inner edge of this thickened part forms a distinct ridge, although I have not seen it so prominent as in Hincks' figure of *L. Kirchenpaueri*, var. *teres*. It can always be distinguished

\* Floridan Bryozoa, Part II., p. 58. Fig. 206.

† Annals and Mag. of Nat. Hist., July, 1880.



by the peculiar shape of the mouth and the vibracula, or the mark of their attachment, which in the oldest specimens is very conspicuous.

Hincks notices a form from Bass's Straits as *L. Poissonii* (Audouin), to which he doubtfully refers *L. setigera*. He does not describe it, but gives as its remarkable peculiarity the line of spines fringing the base of the cell for about half its length, which are not described or figured by Smitt. Smitt's and the present species are undoubtedly identical, and it is probable that they are referable to *L. Poissonii*; but as I have not seen Savigny's figure of the latter, I have thought it better to retain Smitt's name.

*Lepralia magnirostris*, n. sp. Fig. 6.

Cells large, confused, indistinct, surface with numerous perforations; mouth rounded above, nearly straight below, peristome raised; a very large avicularium on each cell opposite the side of the mouth with the mandible projecting upwards and inwards.

Port Phillip Heads.

In this species, of which all the specimens I have seen are in the Hemeschara form, the polyzoary is thick, and the posterior surface smooth. The cells are arranged in irregular quincunx, with no distinct divisions; they project slightly forwards superiorly; the mouth is raised, rounded above, and nearly straight below. There is a very large avicularium on each cell; it is situated opposite the middle of the mouth, the base being in the hollow between two adjacent cells, and the mandible is directed nearly transversely inwards, so that the point almost touches the summit of the mouth. In some specimens the mandible is much more slender than in that figured, and is pointed to the side or bottom of the mouth, although the normal arrangement is as represented.

*Lepralia striatula*, Smitt. Fig. 17.

*Gemellipora glabra*, forma *striatula*, Floridan Bryozoa,  
Pt. II., p. 37. Fig. 202.

Polyzoary encrusting; cells irregularly shaped, elongated, usually attenuated downwards or pyriform, arranged more or less in linear series, distinct, very slightly prominent; surface glassy, marked with irregular, mostly transverse, fine striæ, and thickly punctate with small white-bordered

pores; mouth horse-shoe shaped above, with a large, wide and deep sinus below; at the junction of the sinus and upper part there is a prominent sharp denticle on each side for the articulation of the operculum; a small, broadly oval avicularium on a separate punctured area at the base of the cell; ovicell large, slightly elevated, appressed to the cell above, punctate, and with an avicularium on the summit.

Port Phillip Heads, on *Eschara mucronata*.

*Lepralia longipora*, n. sp. Fig. 18.

Cells much elongated, distinct, arranged in linear series, convex, surface smooth and sparsely punctured; mouth nearly circular, with the lower lip slightly straighter, margin thickened; ovicell large, rounded, smooth.

Port Phillip Heads.

*Smittia oculata*, n. sp. Fig. 12.

Cells elongated, distinct; surface glassy, thickly covered with slight elevations, which, on deeper focussing, appear as large rounded pores; primary orifice horse-shoe shaped or rounded; secondary orifice, with the sides very largely raised and a thickening below, on which is a rounded avicularium, and inside a denticle; ovicell slightly prominent, with a slightly raised vertical ridge, on each side of which is a rounded pore, with a slightly thickened margin.

Port Phillip Heads, Mr. J. B. Wilson.

The surface of the cell is covered with numerous large, slight elevations, which, in deeper focussing, are shown to be elevated pores, covered by a thin layer. The pores on the ovicells, which are probably of the same nature, are usually two, but occasionally three. It is allied to *S. Landsborovi*, which, as well as *S. trispinosa*, is abundant at the Heads.

*Smittia reticulata*, var. *spathulata*. Fig. 14.

Cells elongated, separated by distinct, raised margins, deeply punctured or areolated round the margins; mouth rounded in young cells, with three or four spines, the peristome in older cells produced on each side, leaving a narrow sinus below, inside of which is a squared denticle, with a smaller one on each side; a single large, spatulate avicu-

larium on one side, opposite the lower part of the mouth, with the mandible pointed downwards; ovicell prominent, thickly perforated by round foramina, and frequently with a thickened rim.

Port Phillip Heads.

Hincks (Ann. and Mag. Nat. Hist., August, 1881) has already noticed this variety, which, as he points out, differs only from the normal form in the position and shape of the avicularium. This is situated on one side of the mouth, with the large, spatulate mandible pointed directly downwards. The size of the mandible varies considerably, being sometimes very broad, and extending the whole length of the cell, while in other cases it is much shorter and narrower. Rarely there is another smaller one on the opposite side. There are occasionally small isolated raised patches of more prominent cells, with the avicularia enormously developed. I have not found the normal form of *S. reticulata*, but Hincks mentions it as occurring in Bass's Straits.

*Mucronella munita*, n. sp. Fig. 10.

Cells oval, indistinct, glassy; when young deeply areolated on the margins, when older smooth or with irregular elevations; mouth with a projecting denticle on each side, above which is a long, articulated, cylindrical spine, and sometimes one or two others on the upper margin; mucro squared above; usually a sessile avicularium, with the mandible pointed outwards, on one or both sides of the cell; ovicell large, frequently somewhat umbonate in front.

Port Phillip Heads, Mr. J. B. Wilson.

I am not sure that this may not prove to be a form of *M. coccinea*, from which it seems to differ in the smaller size of the cells, the greater development of the mucro, and the form and position of the avicularia.

*Mucronella laevis*, n. sp. Fig. 16.

Cells broadly ovate, arranged in linear series, slightly convex, smooth; mouth rounded above, a broad denticle deep in the lower lip; peristome raised round the lower lip, produced in the centre into a prominent square or blunt mucro; six stiff, articulated spines on the upper margin; ovicell

small, globose, smooth, three spines shewing on each side in front of it.

Sorrento, Mr. J. B. Wilson.

Allied to *M. Peachii*, from which it differs in the greater prominence of the mouth, the larger size of the mucro, the stouter spines (the articulations of which are usually dark-coloured), and the presence of three spines on each side in front of the ovicell. It is probably also closely related to *M. teres*, described by Hincks, from specimens dredged off Curtis Island.

*Mucronella serratula*, n. sp. Fig. 9.

Cells irregular in shape, rhomboidal or elongated, distinct, separated by faintly raised margins; front slightly convex, glassy, and more or less covered with distinct round granulations; mouth with margin smooth or usually with a rounded somewhat digitiform projection of the peristome, about the middle on each side; mucro large, upper edge straight and serrated, and seemingly with a transverse avicularium on its summit; a central and two lateral denticles inside the lip; ovicell large, granular.

Dredged at Port Phillip Heads, by Mr. J. B. Wilson and myself.



EXPLANATION OF PLATES.

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PLATE I.

- Fig. 1. *Microporella renipuncta*. Fig. 1a. A single cell, showing spines.  
Fig. 2. *Lepralia setigera*. The division on the ovicell ought to be more marked.  
Fig. 3. Older specimen of same, showing marks of attachments of vibracula.  
Fig. 4. *Microporella stellata*.  
Fig. 5. *Membraniporella distans*. Fig. 5a. To show growth of costæ. Fig. 5b. Outline of cell and ovicell.  
Fig. 6. *Lepralia magnirostris*.  
Fig. 7. *Schizoporella lata*.

PLATE II.

- Fig. 8. *Microporella malusii*, var. *personata*. One cell, showing young ovicell. Fig 8a. To show ovicells and collars.  
Fig. 9. *Mucronella serratula*.  
Fig. 10. *Mucronella munita*.  
Fig. 11. *Schizoporella insignis*.  
Fig. 12. *Smittia oculata*. Two marginal cells. Fig. 12a. Single cell, showing elevations on surface. Fig. 12b. Portion more deeply focussed, to show the pores, &c.

PLATE III.

- Fig. 13. *Schizoporella punctigera*.  
Fig. 14. *Smittia reticulata*, var. *spathulata*. Two young marginal cells. Fig. 14a. Older cells, showing the large lateral avicularia and ovicells.  
Fig. 15. *Lagenipora tuberculata*.  
Fig. 16. *Mucronella laevis*.  
Fig. 17. *Lepralia striatula*. Fig. 17a. Part of a cell more highly magnified, to show the form of the mouth.  
Fig. 18. *Lepralia longipora*.