

ART. X. —*On some new Australian Polyzoa.* By P. H. MACGILLIVRAY, Esq., A.M., M.R.C. S.

[Read before the Institute 3rd August, 1859.]

(With a Plate.)

Sub-order Polyzoa Cheilostomata.

Fam. *Flustradae.*

Flustra denticulata, Busk. (Fig. 1). Of this species I have received specimens of a well-marked variety from Queenscliff, King's Island, and Port Curtis. It agrees with the normal form in the series of minute marginal denticles, but is peculiar in the constant presence of two stout, blunt spines on either side of the cell mouth. For this variety I would propose the name *quadricornis*.

Carbasa cyathiformis (Fig. 2). Polyzoary erect, cup shaped; cells oblong, slightly arching above, aperture entirely filled in; mouth lunate; back of cells thickly beset with small, rounded eminences. Avicularia 0.

Queenscliff, parasitic on *Bicellaria* and *Catenicella*—Mrs. Dr. Robertson.

The peculiar form of this elegant species sufficiently distinguishes it from all its congeners. Its nearest affinity is with the New Zealand *C. indivisa* (Busk.).

Fam. *Membraniporidae.*

Membranipora perforata, new species (Fig. 5). Cells very irregular in shape, generally obscurely hexagonal; margins raised, faintly grooved longitudinally; mouth narrow, with slightly thickened lips, and a stout spine at either side superiorly; surface of cell minutely cribriform, with a large round opening on either side, close to the margin; ovicells large, galeate, widely open beneath, granular; avicularia large, situated at the base of the cells.

Queenscliff, on seaweed.

The irregular form of the cells, and the lateral foramina, as well as the large size of the ovicells, and the peculiar position of the avicularia, sufficiently distinguish this from all previously described species.

Lepralia candida, new species (Fig. 4). Cells small, distinct, ovoid or roundish, prominent; mouth semicircular; front of cell smooth, with a central pore and several round markings, seemingly vacuities between the layers of the cell-wall, of which two are constant, and placed above the central pore.

Queenscliff, on mussel-shells.

A very small species of a beautiful pearly whiteness, which seems distinct from any hitherto recorded.

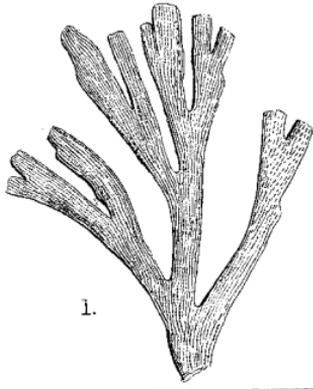
Lepralia canaliculata, new species (Fig. 3). Cells irregular, confused, immersed; mouth large, straight below, arched above, lower lip slightly thickened; five or six stiff spines produced from the upper border; a series of grooves extending inwards from the margin towards the clear suboral portion, in the centre of which is a round pore; a single avicularium situated on one side of the cell.

Queenscliff, on mussel-shells.

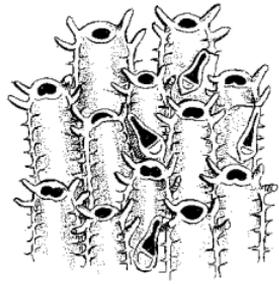
The only species with which this can be confounded is *L. alata* (Busk.), from which it may readily be distinguished by the suboral aperture.

Explanation of Plate.

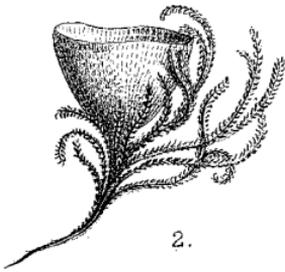
- Fig. 1. *Flustra denticulata*, var., natural size.
magnified.
- Fig. 2. *Carbasa cyathiformis*, natural size.
2a. ,, ,, front of cells, magnified.
2b. ,, ,, back of cells, magnified.
- Fig. 3. *Lepralia canaliculata*, natural size.
3a. ,, ,, magnified.
3b. ,, ,, single cell, still more magnified,
- Fig. 4. *Lepralia candida*, magnified.
- Fig. 5. *Membranipora perforata*, magnified.



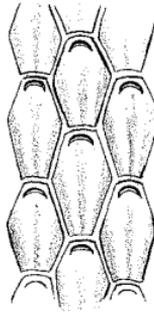
1.



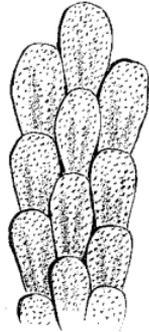
1a



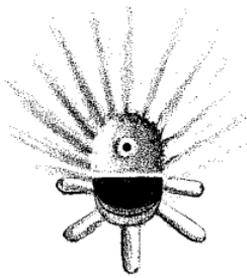
2.



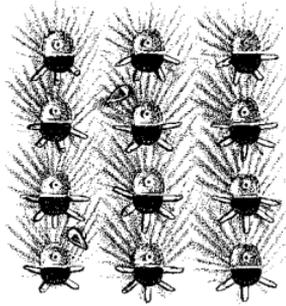
2a



2b



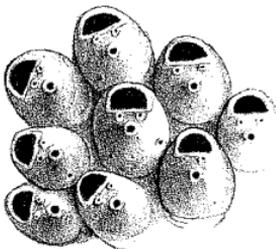
3^b
(inverted)



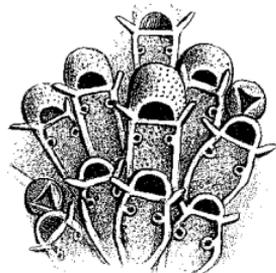
3^a
(inverted)



3.



4.



5.