

ZOOPHYTOLOGY.

Class. POLYZOA.

Sub-order. *Cheilostomata*.Fam. *Salicornariadæ*. Busk.Gen. *Onchopora*, Busk. ('Quart. Journ. Micr. Sc.,' vol. iii, p. 320.)1. *O. Sinclairii*, n. sp. Busk. Pl. XV, figs. 1, 2, 3.

Cells ovate, ventricose, attenuated at the bottom, slightly keeled in front, the upper part of which is occupied by a scutiform area, having in the centre a lunate pore; mouth large, sub-orbicular, the lower lip nearly straight; surface smooth; ovicell raised, globose, large, with a prominent central umbo, from which costæ radiate on the sides and summit.

Hab. New Zealand, *Dr. Sinclair, Dr. Lyall.*

The characters of the genus *Onchopora* will require to be altered to admit the present form, which is obviously too closely allied with those previously included in it, and especially with *O. mutica*, to allow of their being separated. The alteration will consist in the omission of the last part of the character given as above, or that referring to the ovicell, which in the present species is very large and peculiarly marked.

The polyzoary of the present species, which has something of the habit of a *Salicornaria*, is constituted of cylindrical branches of various lengths and usually dividing dichotomously. The whole forms a more or less dense rounded tuft.

2. *Lepralia*, Johnst.1. *L. thyreophora*, n. sp. Busk. Pl. XV, figs. 4, 5.

Cells ovate, upper half in front occupied by a scutiform area, in the centre of which is a lunate pore, and on either side a single row of punctures (?) which also extends across the front of the cell immediately below the mouth, which is rounded above with a straight lower lip; ovicell lofty, rounded, faintly punctated.

Hab. New Zealand, *Dr. Sinclair.*

This *Lepralia*, which is parasitic upon *O. Sinclairii*, in some respects resembles *L. Malusii* (B. M. Cat., pl. 103), differing from it, however, in its having a distinct scutiform area on the front of the cell, and in the arrangement of the apparent perforations or puncta, which exist only around the margin of the scutiform area and across the upper border of the cell, whilst in *L. Malusii* the entire front of the cell, except in the centre, is punctated.

Another species with which the present might also be confounded, and from which it appears to differ only in the absence of oral spines—is the *Escharina cornuta* of D'Orbigny ('Voy. à l'Amer. occid.,' plate v).

2. *L. Cecilii*, Audouin, Exp. I, p. 239. Pl. XV, figs. 6, 7.
Savigny, Egypt, pl. ix.

Cells ovate, with a central umbo, surface punctate; mouth rounded above, with a straight lower lip, in the middle of which is a narrow sinus; ocell raised, surface granulose.

Hab. Jersey, Mrs. Buckland.

This large and beautiful species, for which the British Fauna is indebted to Mrs. Buckland, corresponds so closely with Savigny's figure of *L. Cecilii*, that there can be little doubt of the two being identical.

Sub-kingdom. CÆLENTERATA.

Class. HYDRAZOA.

Order. *Hydroïda*.

Fam. *Sertulariadae*.

Gen. *Cryptolaria*, n. g. Busk.

Cells completely immersed in a cylindrical polypidom, composed of numerous tubes.

1. *C. prima*, n. sp. Busk. Pl. XVI.

Sp. unica.

Hab. New Zealand, Dr. Sinclair.

This curious Sertularian appears to constitute a peculiar type of the family to which it belongs.

The specimen from which the description and figures were made, collected by Dr. Sinclair in New Zealand, and now in the British Museum, is about six inches high, and consists of a single central stem or rachis, with alternate branches on either side in the same plane, and which become shorter as they approach the summit. The lower part of the rachis or stem is toothed on each side, the teeth evidently representing the roots of branches which have been broken off. Towards the lower part of the pinnate portion, one or two small branches also simply pinnate may be seen springing from the main stem.

The stem and branches are composed of small tubes; and the cells are completely immersed among these tubes; the mouth even, being depressed below the surface, and presenting itself in the upper part of an elongated pit, surrounded with a raised border, which arches above the mouth of the cell.

ZOOPHYTOLOGY.

DESCRIPTION OF PLATES.

PLATE XV.

Fig.

- 1.—*Onchopora Sinclairii*, natural size.
- 2, 3.—Magnified figures of the same.
- 4, 5.—*Lepralia thyreophora*.
- 6, 7.—*Lepralia Cecilii*.

PLATE XVI.

- 1.—*Cryptolaria prima*, half natural size.
- 2, 3.—Portions of a branch.
- 4.—Section of ditto.

PLATE XVII.

- 1.—*Bugula turbinata*, natural size.
- 2.—Front view.
- 3.—Back view.
- 4.—Ovicell.
- 5, 6, 7.—*Scruparia*.



