

figure of the organization of a Cestoid is given, which corresponds with plate B in the treatise published by the Academy of Brussels in 1850; and by the side of it a similar ideal figure of a Trematode is now added. The work deserves to be perused and studied, and must always be recorded with honour amongst the zoological and anatomical literature of our age.

[This notice, by the Leyden Professor of Zoology, is translated from the 'Nederlandsch Tijdschrift voor Geneeskunde,' 1859.]

XXXVI.—Descriptions of three new species of Sertularian Zoophytes. By JOSHUA ALDER, Esq.

[With three Plates.]

Plumularia halecioides. Pl. XII.

Polypary about an inch high, irregularly branched. Stem compound, giving off branches, which are also compound for a part of their length, becoming single as they rise upwards, and having two joints above the insertion of each branchlet or pinna; pinnae alternate, frequently short, terminating in a single cell, but in full-grown and luxuriant specimens extending to a greater length, and bearing three or four rather distant, moderately sized, cup-formed cells on the upper side. There are two, or occasionally three, joints at the origin of each pinna, as well as between the cells, and a small tubule above and another below each cell. Sometimes there is a tubule on the stem above the origin of the pinna. The polypes are rather large in proportion to the cell, rising a little out of it, and having from fourteen to eighteen mucronated tentacles. The ovicapsules are large, ovate, with a broad truncated top, and are strongly ribbed or wrinkled transversely; they are set on the stem singly or in clusters by a very short pedicle.

I found two specimens of this very distinct and beautiful little *Plumularia* on stones near low-water mark, at Cullercoats, North-umberland, in the summer of 1857, and again met with it at the same place in the following year. Mr. Albany Hancock has also obtained it at Roker, on the Durham coast. In its young state, or when partially denuded of its cells, it has very much the appearance of a *Halecium*, which genus it resembles in its mode of growth. The ovicapsules are similar to those of *Campanularia Johnstoni*—the only instance within my knowledge of this form of capsule being found in a *Plumularia*. Pressed between plates of glass, the capsules showed the ova in a very early stage. I unfortunately did not succeed in keeping the specimens alive so as to observe their further development.

Halecium labrosum. Pl. XIII.

Polypary between 3 and 4 inches high, irregularly branched and rather flaccid. Stem compounded of several tubes, and fixed at the base by numerous fibres; the larger branches compound and generally dividing dichotomously, bearing alternate branchlets or pinnæ; jointed, and more or less ringed or transversely wrinkled above each joint. The cells arise singly or in pairs below the joints, and are also jointed and ringed at the base, above which a short tubular portion bears the cell, which is moderately deep and much expanded and everted at the margin. Capsules ovate, broad below and obtusely pointed above, without any tubular aperture; they are of a purplish-brown colour, and set unilaterally on the stem by a short pedicle of about two rings.

This *Halecium* has occurred to me occasionally from deep water on the Northumberland coast; but I have never had an opportunity of seeing it alive. Its distinctness from the other British species, however, cannot be doubted. It differs from *H. halecinum* in its more lax and irregular mode of growth, as well as in colour, which has somewhat of a purplish hue when fresh. The branches, too, are more ringed and wrinkled, and the capsules more regularly and broadly ovate, than in that species*. But the best distinction is found in the form of the cell, which is deeper than in any of the other species, and has a remarkably expanded lip, which usually turns over at the margin. I may here remark that what Dr. Johnston calls the cell in this genus consists of two portions, the upper and shallower of which constitutes the true cell, and contains the polype. The cells in this species, as in others of the genus, are often seen to rise one within the other, occasioned probably by the polype being renewed at intervals, and each fresh polype forming a new cell within the old one.

I have met with what appears to be the young of this species, parasitical on *Tubularia indivisa* and *Sertularia abietina*. In this state it is remarkably delicate and beautiful, and might be taken for a distinct species. The stems rise from a creeping fibre, and are very strongly and profusely ringed; they give off branches from the base of each cell, and sometimes two from one cell.

A specimen of the adult form, without capsules, has been sent me by Mr. Macdonald of Elgin, obtained in the Moray Frith; and Mr. Barlee has also met with it lately in Shetland.

* It has been pointed out by Mr. Hincks, that the male and female capsules are of different forms in *H. halecinum*. Should this be the case in other members of the genus, those of *H. labrosum* now described may belong to the former sex.

Halecium nanum. Pl. XIV.

Polypary creeping over the surface of *Sargassum bacciferum* and forming an irregular network of fibres, throwing up short stunted stems at each bifurcation or intersection. The stems consist of little more than the tubular portion or pedicles of the cells, which arise above each other in a zigzag order, each springing alternately from the side of the last. The cells are broad and shallow, and scarcely at all expanded at the rim. The portion of the stem beneath each cell is nearly of the same width as the latter, short, a little wrinkled at the base, and having a single joint near its junction with the cell below. Frequently there is only a single cell at each joint of the creeping fibre, or a succession of cells developed one within the other. The ovicapsules are very large, and generally set in clusters of two or three together on the stem or the sides of the cells; they are irregularly ovate, bulging out more on one side than the other, and terminated by an oblique aperture with two lips; they are fixed by short pedicles of two or three rings. Height of stem seldom above $\frac{1}{10}$ th of an inch.

This curious little parasite of the Gulf-weed is worthy of notice from its showing an interesting variation in size and form in a genus of which so few species are yet known, and those nearly all inhabiting the British shores.

It appears to have hitherto escaped observation, unless it is the "*Campanularia*?" very imperfectly figured (but not described) in Dana's 'Zoophytes of the United States' Exploring Expedition,' p. 690, pl. 61. f. 9.

The specimen from which the present description and accompanying figures were taken was found on Gulf-weed collected by Mr. William Wright in lat. $34^{\circ} 48'$ north and long. $34^{\circ} 25'$ west, and presented to me by his brother, Mr. Joseph Wright, of the Newcastle Museum.

EXPLANATION OF THE PLATES.

PLATE XII.

Figs. 1 & 2. *Plumularia halecioides*, natural size and magnified.

Fig. 3. A portion more highly magnified.

Fig. 4. Ovicapsules.

Fig. 5. A portion of the compound stem.

PLATE XIII.

Fig. 1. *Halecium labrosum*, natural size.

Fig. 2. A portion magnified: a, capsules.

Fig. 3. A portion of a variety magnified.

PLATE XIV.

Fig. 1. *Halecium nanum*, natural size.

Fig. 2. A portion magnified, showing its mode of creeping over the *Sargassum*.

Figs. 3 & 4. The stems, with cells and ovicapsules, more highly magnified.

XXXVII.—*Notices of British Fungi*. By the Rev. M. J. BERKELEY, M.A., F.L.S., and C. E. BROOME, Esq.

[Continued from vol. xiii. 2nd Series, p. 469.]

[With three Plates.]

785. *Agaricus* (*Lepiota*) *gliodermus*, Fr. *Hymenomyces*, p. 31. Amongst sticks, &c. Wothorpe Grove, Stamford, Aug. 1857, M. J. B.

A very beautiful species, of which we have a figure copied from the collection of drawings of *Hymenomyces* now deposited by Fries in the Swedish Museum at Stockholm.

786. *A.* (*Tricholoma*) *bufonius*, Fr. *Ep.* p. 40 (*Bull. t.* 545. f. 2). Coed Coch, Denbighshire, Nov. 1858, Mrs. Wynne.

This interesting addition to our flora was made by Mrs. Wynne, of Coed Coch, who has been induced to study the *Agarics* in consequence of the beauty and profusion in which they are produced in her neighbourhood.

787. *A.* (*Tricholoma*) *cinerascens*, *Bull. t.* 428. f. 2. In woods. Mossburnford (Jedburgh), Aug. 1857, A. Jerdon, Esq.

Cæspitose; pileus 2–3 inches across, convex, of a dirty pale ochre, slightly streaked with watery lines, firm but not brittle, clothed with very obscure matted down; flesh thin, white. Stem curved, slightly streaked, tinged like the pileus, paler above and slightly pulverulent, solid, stringy. Gills moderately distant, at first attenuated behind, at length rounded and easily separating, as in *Paxillus involutus*, white or very slightly ochraceous, stained like the pileus when old and bruised, very slightly anastomosing behind. Spores certainly not cinereous. Smell rather disagreeable, pungent; the stem, however, when broken, smells like new meal.

788. *A.* (*Mycena*) *pelliculosus*, Fr. *Ep.* p. 116. Mossburnford, Oct. 25, 1858, A. Jerdon, Esq.

Remarkable amongst its allies for the viscid separable cuticle.

789. *A.* (*Entoloma*) *Placenta*, Batsch, f. 18; Fr. *Ep.* p. 144. On the ground in pastures. Swanage, Dorsetshire, Oct. 1857, C. E. B.

790. *A.* (*Entoloma*) *elodes*, Fr. *Ep.* p. 144. On heathy pastures. Denbighshire, M. J. B.

Pileus and stems livid. Smell like that of fresh meal.