

timber, &c., in the diffusion of the species, apart from the general laws which preside over the distribution of life.

Further light will no doubt be thrown on the relations of the Polyzoan fauna of the Islands when we know more of the history of the group of new forms recorded in this Report. We may venture, I think, to say, that they are not to any large extent Arctic. Are they southern coast-line emigrants, or do they occupy their original home?

EXPLANATION OF PLATE IX.

- Fig. 1. ? *Porella argentea*, n. sp.
 Fig. 2. *Schizoporella torquata* (D'Orbigny), Lamx.
 Fig. 3. *Cellepora*? n. sp. (*brunnea*); a cluster of zoecia, showing one of the marginal decumbent cells.
 Fig. 4. *Lagenipora spinulosa*, n. sp.; erect form, nat. size.
 Fig. 5. *Tubulipora Dawsoni*, n. sp., nat. size. 5 a. Portions of the stem showing the offsets from the dorsal surface, by which the zoarium is attached. 5 b. Portion of a branch, showing the disposition of the zoecia. 5 c. The extremity of a branch, showing the cellular capitulum and several of the scattered central zoecia.
 Fig. 6. *Tubulipora fasciculifera*, n. sp.; portion of the zoarium, showing the arrangement of the zoecia. 6 a. A colony, nat. size.
 Fig. 7. *Cellaria mandibulata*, n. sp.; avicularian cell. 7 a. Nat. size, showing a peculiarity in the ramification.
 Fig. 8. *Menipea compacta*, n. sp.; front view of an internode. 8 a. Dorsal surface.

XXV.—On *Schizoporella Ridleyi*, MacG., and *Schizoporella simplex*, D'Orbigny and Johnston. By J. J. QUELCH, B.Sc. Lond., Zoological Department, British Museum.

THE *Schizoporella Ridleyi*, MacGillivray, was originally described as *S. marsupium* by Mr. Ridley, who identified it with *Lepralia marsupium*, MacG., having been misled by the short and incomplete description of this species, which was, moreover, as stated since by Mr. MacGillivray, drawn up from a bad specimen. And certainly, if excuse were needed for such an identification, I may state that the agreement between the type specimen of the 'Alert' collection described by Mr. Ridley, and the description and figures of *L. marsupium* given by Mr. MacGillivray in the Prodr. Zool. Vict. decade iv., seems to me much closer than is the agreement between the figures given since by Mr. MacGillivray (Roy. Soc. Vict. 1882) for *Porella (Lepralia) marsupium* and his previous description and figures of the same species.

The 'Alert' species, being found by Mr. MacGillivray to

be distinct from his *Porella marsupium*, was named by him after Mr. Ridley; and as some misconception of the real characters of the species exists, I have deemed it advisable, after examining the type specimen, to give a more detailed description than has been given of a few of its leading features, in order to point out its specific distinctness from *Schizoporella (Escharina) simplex*, D'Orbigny, to which species Mr. Hincks has recently assigned it (Ann. & Mag. Nat. Hist. January 1884, p. 51).

The most striking feature of *Schizoporella Ridleyi* is the infraoral, bluntly-pointed projection on which the avicularian pore is situated. This is not merely a swelling of the common wall of the zoecium, for where the projection has been broken away a delicate membranous wall still remains beneath it in continuity with the zoecial wall. It seems rather to be the basal portion of the avicularian cell itself, which entirely occupies the large circumscribed area below the mouth of the cell, as originally pointed out by Mr. Ridley.

A clearer idea of this projection will be formed by viewing it from the side, so that it may be seen in profile, as it would be if a median longitudinal section of it were made. It will then be seen to arise, at its inferior part, somewhat above the middle of the zoecium, as a slightly convex line forming an angle of at least 45° with the surface-wall of the zoecium, continuing outwards and forwards until it is joined by a line drawn from the sinus in the lower lip of the mouth at right angles to the zoecial wall. The length of this perpendicular line gives the height of the projection above the zoecium; and this corresponds very nearly with the length of the cell-mouth, except in the youngest zoecia at the edges of the colony, where the projection is smaller, but still quite distinct and prominent. This raised portion, seen from the front, is nearly semicircular in outline, the curved portion terminating at the lateral angles of the mouth, while the straight, flat, superior portion forms a platform, so to speak, immediately below the mouth. At the outermost pointed limit of this platform is the avicularian opening, which can only be distinctly seen by looking down from the top of the zoecium, as it were.

The lower lip of the aperture of the zoecium in this species is straight, with a shallow median rectangular sinus; there is no sinus in the edge of the infraoral projection, that shown apparently in such a position in figures of the species being really in the lower lip of the aperture of the cell, supposed to be seen above the projection; the surface is glistening and

more or less hyaline, almost smooth or very finely and sparsely punctated; the zoecia are convex, nearly as broad as long, separated by rather deep depressions, the sutures being thin lines often slightly raised. In the type specimen I can find no distinct areolations, such as those mentioned by Mr. MacGillivray, around the margins of the old cells, but there are often faintly marked radiating lines; two short lateral spines are almost constantly present on the aperture, three or four longer ones being on the young zoecia.

On comparing this more complete description of the species with the description and figures of *Escharina simplex*, D'Orb., I think it must be considered that the two species are quite distinct. In this *Schizoporella (Escharina) simplex*, D'Orb., attention must be called to the rounded lateral angles of the mouth producing an oval shape transversely, to the rather deep rounded sinus of the lower lip, to the complete absence of spines, to the numerous and distinct punctures on the surface of the zoecium, and more especially to the nature of the "tubercle" below the mouth on which the pore is situated—this "tubercle" being present as a rounded protuberance of the wall, seen, in the lateral view that D'Orbigny gives in fig. 8, as being scarcely raised above the general surface of the zoecial wall, whereas in *Schizoporella Ridleyi*, MacG., this projection forms a comparatively immense rostrum.

Even making allowance for the probable incompleteness of D'Orbigny's description and figure, and for a possibly great variability in the species, it does not seem to me that differences such as those mentioned taken together can be safely regarded as being within the limits of specific variation; and hence it seems that the two species must be considered distinct.

In any case, however, *Schizoporella (Escharina) simplex*, D'Orb., seems to be sufficiently diagnosed to be recognized; and as, I believe, it claims priority over *Schizoporella simplex*, Johnston, this latter name must give way. D'Orbigny's species bears the date 1839 against it, and is printed in Part 4, vol. v. of the 'Voy. dans Amér. Mérid.,' which bears the date of publication 1839-46. Dr. Johnston's species was published in the second edition of the 'Zoophytes' in 1847.

For this form described by Dr. Johnston, which is thus destitute of a name, I propose that of the distinguished author, so that the species may be known as *Schizoporella (Lepralia) Johnstoni*.