

discus, apparently because the polypides are not restricted and regulated in their labours by the contractile stalk, but are free to wander throughout the cœnœcium, and to add layer upon layer to strengthen their protective investment. The buccal shield is in all probability the chief secreting organ, the great sheets of membrane, consisting of the secretion hardened in sea-water, being formed by its agency, but the shape of the spinous processes or fimbriæ suggest some other assistance, such as might be obtained from the enlarged and glandular tips of the plumose arms.

While there can be little question that the protective house of *Cephalodiscus* differs materially from the thickened cuticle of the posterior region of the polypides in the ordinary Polyzoa, and which collectively is termed zoœcium, yet it seems unnecessary to complicate the subject by the introduction of new nomenclature.¹ The term cœnœcium, instituted by Professor Allman, which was used in the preliminary description, points to an obvious character, and gives that amount of significance which it is always well to preserve if possible in scientific terms. The term tubarium, proposed by my friend Professor Lankester, is very appropriate in the case of *Rhabdopleura*, but does not apply to the condition in *Cephalodiscus*, in which the common abode of the polypides is more aptly indicated by the already existent term cœnœcium.

It is not a matter for surprise that creatures so minute should secrete so conspicuous a home for themselves, or that it should assume the algoid or zoophytic outline, especially when the productions of sponges and other forms are remembered, or when we reflect that even a transparent structureless fluid inside a smooth capsule (as in the Nemertean stylet-pouch) can produce, in countless examples of each species, precisely the same form of solid crystalline stylet. The enlistment of numbers in the present case supplies any deficiency likely to arise from minute size. The secretions, indeed, both of this form and *Rhabdopleura*, are most interesting, and indicate a degree of skill and persistence of pattern quite as marked as in much more elevated types. The condition in *Cephalodiscus* is perhaps the more striking of the two, on account of the perfect freedom of the polypides, the spinous processes or fimbriæ of the surface, and the numerous anastomoses of the cœnœcium. The peculiar shape of the latter, moreover, has probably been found to be that best adapted for the preservation of the animals, by its resemblance to seaweeds or allied structures in the neighbourhood, on the one hand, and on the other, by its affording complete aeration, abundant supply of food, and security to the little architects and their delicate plumes.

II. POLYPIDES.

The rounded cavities and canals of the semitransparent cœnœcium contain numerous opaque masses (the polypides) and large ova slightly attached by their peduncles. The former often occur in groups, each individual, however, except in the case of buds,

¹ *E.*, Edicularium.