

in *Rhabdopleura* has also been carefully figured on a larger scale from life by Professor Lankester.¹ There are thus interesting points in analogy between the two forms in regard to the polypide-stalk, but at the same time important structural differences.

Professor Lankester again holds that the chitinous covering (his Caulotheca) of certain parts of this region is the true homologue of the cœnocœcium of an ordinary Polyzoan, and there is something to be said in favour of such a view. As already explained, however, I prefer to adhere to the term already in use, especially in the present uncertainty in regard to the development of the types under consideration. Nor do I fully share my friend's views concerning the "serious error" of confounding the pedicle in the forms just mentioned with the funiculus of the Eupolyzoa. The structural relations of the organ in the several forms no doubt differ, but the remarkable analogy in regard to the budding shows that from the "vagrant protean funiculus" of the Gymnolæmatous Ectoprocta to the pedicle and soft stalk of *Cephalodiscus* and *Rhabdopleura* there is at least one striking function carried out often on very similar lines. Variations, it is true, occur, in which the endocyst is associated with the funiculus in producing the buds in the marine Ectoprocta, but this does not affect the main point at issue, but rather brings the analogy closer with such forms as *Cephalodiscus*.

The pedicle on the other hand nearly resembles the stalk in *Loxosoma*. There is no pedal gland, however, in *Cephalodiscus*.

One of the most remarkable points of resemblance between *Cephalodiscus* and *Balanoglossus* is the occurrence of a pedicellate structure in the young of the latter (*Balanoglossus kowalevskii*) as described by Mr. Bateson.² This organ presents itself on the disappearance of the cilia as a small papilla, and is situated at the central part of the posterior surface. Moreover, it is directed ventrally, just as the pedicle of *Cephalodiscus* is, and, indeed, the general contour of the young form at this stage simulates the condition in *Cephalodiscus*. This conical process serves as a sucker by which "the animal can attach itself to foreign bodies sufficiently firmly to prevent being washed off by a stream of water from a pipette. The anterior surface of the proboscis is also slightly suctorial, and by thus fixing itself posteriorly, and extending the proboscis, it is able to creep slowly about, somewhat in the manner of a leech." The organ "subsequently attains a considerable size and is traversed by several wrinkles. It afterwards entirely disappears, but as to its mode of disappearance I have no certain observations. It would appear to occur very suddenly at the stage when the animal possesses seven to eight gill-slits. I have found animals with eight gill-slits which possess this sucker, and also animals of apparently the same age without it; hence it may be inferred that it undergoes a rapid atrophy at this point." Mr. Bateson further observes that similar suckers occur as larval organs in Tunicata, Ganoids and Amphibia, but these fall far short of the

¹ *Op. cit.*, pl. xl. fig. 12.

² *Quart. Journ. Micr. Sci.*; and *Stud. Morph. Lab. Univ. Camb.*, vol. iii. part i. p. 3, pl. i. figs. 1-4, 1886.