

or new branches, which fall off on maturity, and adhere to any stone, shell, or other hard body, by which they are protected until the young are excluded. Now the outer coat of this egg or seed is of a *vegetable* nature, and it throws out from the sides in the manner of other seeds, certain little roots by means of which it remains permanently attached; but the internal part of the egg or seed is *animal*, and growing simultaneously with its vegetable covering, it is dispersed through all the ramifications and occupies their hollow interior, being developed into polypes in the lateral denticles and extreme cells. Such was the deduction he came to from observations made on the growth more especially of the *Sertularia abietina*, which he had kept alive for nearly four months in a vessel of sea water. When a new part was formed, there first emerged from the stem a minute tubular joint, which rose to four, five, or even eight lines in height: after some days some lesser buds, regularly disposed in an alternate manner, were seen on the sides of this branch, which in the course of four or six days grew into cells containing perfect polypes. Hence it is obvious to Baster that the stem of this and similar zoophytes grows in thickness and length as plants do, and that the medullary pith is animal, which it is not wonderful should assume a dendroidal form, when we see zinc and quicksilver do the same by the mere force of affinity. Trembley had already pronounced the cells of the fresh-water zoophytes (*Plumatella*) to be not the work of the polypes, but rather compartments in which they concealed a part of their body; and this fact, added to those already given, makes it certain that the animalcules of the *Sertulariadae* are entirely passive, and have no more to do with their polypidoms than the flower has with the increase and growth of the herb.*

There is some ambiguity in Baster's statement of his opinions, for it is not very obvious whether he believed the new formed branchlets to be themselves the eggs or seeds, or whether they only contained the eggs; but be this as it may, it appears scarcely doubtful that he knew nothing of the true ova and their curious ovaries. The phenomena observed in the production of new parts are correctly stated, but nothing but wilful prejudice

* Phil. Trans. Vol. lii. p. 108-118.—For Baster's works see Hall. Bib. Bot. i. 468.