

The Alcyonella, if I have correctly sorted the synomymes, was discovered by Trembley in the spring of 1741. It seems necessary to give a copy of his figures here, (wood-cut, No. 48,) since on them is founded the second variation of the species, and they exhibit it in a guise very different from that represented in our Plate xliv. His history of the animal is marked with much of that excellence which distinguishes the inquiries of this naturalist. He correctly describes the connection and relationship between the polype and the common mass ; the arrangement of the tentacula, and the structure of the alimentary canal, although he failed to detect the anus. He overlooked the cilia of the tentacula from employing magnifiers of too low a power, and attributed the whirlpools created in the water by their play to the motion of the tentacula themselves, which he says were also used separately to force the animalcular prey into the mouth. He knew that the polypes were not contractile, and believed their retraction within the tubes was dependant on the play of a muscular thread which descended from the body in the common mass. The gemmiparous mode of increase in the polypidom is also detailed with some minuteness, but he had not seen the ova, at least in a state of maturity.\*

Immediately after Trembley's discovery, Reaumur and Bernard de Jussieu found this animal in the neighbourhood of Paris, and detected its ova, from which they saw the young issue. Reaumur's account of the growth of the compound animal appears to me to corroborate the opinion of the sameness of the Plumatella and Alcyonella. He says that while the polypes à panache are still very young, they increase in the same manner that the locomotive polypes do, with one difference only which it is essential to note, since it explains clearly the formation of those polypidoms that resemble plants. The tube of a newly evolved polype continues as it were permanently grafted upon the tube of that which has given birth to it : from the polype tube he has seen germinate by little and little another which contained a nascent polype ; he has seen this tube elongate itself, and the polype tenant at length show itself outwards to follow out the destined tenor of its life. Scarcely had a few days passed until this again gave birth to a young one whose tube was in connection with

\* It is even doubtful whether the bodies he took for *immature* ova were really so. " J'ai vu dans plusieurs des Polypes à panache, sur lesquels j'ai fait mes observations, de petit corps sphériques de différentes grandeurs, blancs et transparents. J'ai seulement soupçonné que ces petits corps étoient des oeufs, mais je n'ai pas eu occasion d'examiner si ce soupçon étoit fondé, ou non." p. 219.