progress by locomotion. This then, is an example beyond dispute, of a system overgrown through the vegetative process, so as to be too much for the motive energies within. The Lernæoids afford a similar illustration of this principle.

For the same reason, therefore, as in the Bopyri, the Medusæ, the Lernæoids, and the Limuli, we cannot compare the actual mean size of the adult Cirripeds with those of the other primary types. We should rather infer the mean normal size for such a comparison, from the size of the young before it becomes sedentary, or from that of free males, if such exist. Such males are announced by Darwin, as actually occurring in some species. Moreover, they are very minute, varying from a line to half a line or less in length. This, therefore, is some reason for taking as the mean normal size, the same as given for the Entomostraca.

A *fifth primary type* includes the ROTATORIA. In these animalcular species, the mouth includes a pair of mandibles and often a rudimentary pair of maxillæ; and consequently, the cephalic portion may contain the same number of annuli as in the Daphnia group, with which group many of them have near relations. They have usually an articulated abdomen, furcate at extremity, like the Cyclopoids. The grand point of inferiority to the Entomostraca, evincing the more infinitesimal character of the system of life within, is the absence of all thoracic appendages or legs. The organs of locomotion are simply ciliæ arranged about the head; and it is quite probable that two sets (or more) of them correspond to the second pair of antennæ, as these are organs of prehension and motion in many Entomostraca. In Callidina, there are two sets, some distance from the extremity of the head, which may have this relation; and the two sets in the true Rotifers may also be of this character. In others, the corresponding parts are actually somewhat elongated.

The species vary in size from a line to a sixtieth of a line. Probably *one-ninth* of a line is the average size.

The actual relation of the Rotatoria to the Entomostraca (which view the author sustained in his Report on Zoophytes (1845)), can hardly be doubted by those who have the requisite knowledge of the lower Crustacea for comparison. The structure of the body, the jointing and form of the abdomen, when it exists, the mandibles, and alimentary system, the eyes when present,—all are Crustacean; and