

locomotion—as in climbing and burrowing—it will not be easy to consider the motive organs separately with regard to these functions, I shall therefore consider them generally, according to certain types or kinds, under which they may be arranged, and which present themselves very obviously, when, with this view, we survey from base to summit, or rather from pole to pole, the entire sphere which constitutes the animal kingdom.

Generally speaking, in this survey, as well as in the peculiar motions of the various groups of animals, we have no trouble in ascertaining what are the external organs by which the Creator has enabled and instructed each animal to accomplish them ; but there is one anomalous tribe, or, perhaps, it might be denominated *Sub-kingdom*, in one Class of which, at least, this is not so obvious. I allude to Ehrenberg's Tribe of *Plant-animals*,* particularly his first or polygastric Class,† in which the organs of their various locomotions, enumerated in a former part of this work,‡ remain unknown, and some, as those that have an oscillatory movement, one might almost suspect were moved by an *external* cause. The little Monad, parasitic on the eye-worm of the perch,§ which alternately spins round like a top, and then darts forward like an arrow,|| seems as if, like a watch, it required to be wound up before it could go.

Before I confine my observations to those motive organs which are local and planted in certain parts of the body of an animal, as legs, wings, fins, &c., I shall first mention those motions in which the whole body is concerned. Of this description is the alternate expansion and contraction of some, as the Salpes and Pyrosomes and other Tunicaries ;¶ the annular

* Phytozoa.

† Ibid. 166.

|| Vol. i. Appendix, p. 325.

† See Vol. i. p. 168.

§ Diplostomum volvens.

¶ See Vol. i. pp. 223, 226.