

motion propagated from one extremity of the body to the other, as in the earth-worms,* geometric caterpillars, and many other larves; the undulating movements of the flexile bodies of many aquatic animals, as fishes, particularly the serpentiform ones; and the gliding motion of serpents themselves over the face of the earth, as well as their undulations. Many of the animals here alluded to are provided with subsidiary organs—as the earth-worm with lateral bristles;† the geometric larves, with legs at each extremity of their body; the leech, with suckers, which, however, would be of little use without the expansion and contraction of its body;‡ and the fishes with fins: but if we consider the form and circumstances of all these animals, we shall see, in each case, the design and contrivance of Supreme Wisdom. Without the power of contraction and expansion, by which the Salpes, Pyrosomes, &c., alternately attract and repel the waters which they inhabit, they might indeed, from their absorbent structure, be saturated, but nutrition could not take place. The earth-worm again, a subterranean animal, but which occasionally emerges, by the annular motion of its body can much more easily wind its sinuous way, without obstruction, when it seeks again its dark abode under the earth. The denser medium compared with air, through which the aquatic animals pass, renders great flexibility a very important quality, to enable them to overcome the resistance it opposes to their progress.

Having premised these observations on motions produced by the action of the whole body, or successively propagated from one extremity to the other, I shall now proceed to consider those external organs, which are its obvious instruments in the great majority of animals, beginning with those that are found in the *lowest* groups.

1. *Rotatory Organs.* In some species of Infusories, even

* See Vol. i. p. 313.

† Ibid.

‡ Ibid. p. 309.