

CHAPTER IV.

FUNCTIONS AND INSTINCTS OF THE INFUSORY ANIMALS.

As at the original creation of the animal kingdom, it was the will of the Supreme Being to begin at the *foot* of the scale and to terminate with man, who was at its *summit*, thus making a gradual progress towards the most perfect being it was his will to create, and ending with him: so I think it will best manifest his power and perfections if I endeavour to trace out the footsteps of the Deity in the same direction as he proceeded; and instead of beginning, as is usually done by systematical writers, with the *highest* grade of animals, if I ascend upwards from the *lowest*.

Our first inquiry must be what are these lowest animals? And are there any organized bodies that partake of *two* natures, that are either animal at one period of their existence and vegetable at another, or else are partly animal and partly vegetable? These doubtful forms must be sought for amongst what have been denominated *first-plants** and *first-animals*;† amongst the former is a certain genus or tribe‡ of plants, which are distinguished not only by their simple structure, but also by an oscillatory movement which seems to connect them, in some degree, with the animal kingdom. When collected in masses they resemble a piece of green velvet. Some cover considerable spots in moist places; others live in the water, either fixed to substances contained in it, or floating on the surface. They are generally based on a mucilaginous substance, the remains of those that, having fulfilled their functions, are become a *caput mortuum*. The filaments of which the living plant is composed, continually oscillate from right to left, or from

* Protophyta.

† Protozoa.

‡ Oscillatoria. Vauch.