

Figure 10 gives the form of an animalcule, that may be found occasionally in the waters of the purest springs, but which I shall not attempt to name. It is remarkable for the rapidity of its movements when seizing its food, and when thus engaged fastens his tail to some fixed point, (as does the *metapidea lapadella*,) with the point of attachment as a centre, it darts circumference-ward, again and again, with the rapidity of lightning, until it has devoured all those minute forms of animalcula life, that have ventured within the "circle of my acquaintance." This animalcule resembles those peculiar to vinegar, though very much more minute.

The different figures to which I have been referring, are enclosed in a circular disc, which represents the field of the microscope; this field, however does not include a whole drop of water; with an object glass of high power, only a minute portion of a drop will be in the field at any one time, yet in this small portion, not unfrequently, countless multitudes of the forms figured above, can be seen.

I have not, however, exhibited the forms of all the animalcules thus occurring, several other forms of the *navicula*. are to be seen, and some species of animalcules, not yet well understood.

The character of animalcules contained in water, will depend in a great measure upon the condition of the latter. The waters of the clear spring, differ materially, in their animalcular contents, from the waters of the stagnant pool; the waters of the ocean from those of the running stream, and this difference is not one of numbers merely, but a difference in habits.

It will hardly seem possible that these invisible creatures can work any perceptible changes in water; yet is their influence marked and extensive, considered as one of the geological causes concerned in producing changes upon the earth's surface, animalcular life—or rather death—has left, indelibly, "footprints on the sands of time." Those vast deposits of infusorial shields, which have already been alluded to, are striking mementos of the influence that the minutest forms of life, may, in the lapse of time, exert. Singly, either when living or dead, their influence is imperceptible; but en masse, they produce results the most extraordinary. The living animalcules of the sea or lake, often give color to the wave, and as they suddenly appear and disappear, so do the waters change their hue—now tinged with sombre green—now paling to transparency, as the flood of living creatures ebbs and flows.

The phosphorescence, too, of the waves of ocean, is produced by these