

tube has become too fine in its bore for the admission of water attenuated to its smallest possible stream,—how inconceivably slender may indeed be imagined, but there is no thread fine enough to equal it, seeing that the tentacula of *Hydra fusca* in tension can be compared to nothing grosser than the scarce visible filament of the gossamer's web.

The Hydra, though usually found attached, can nevertheless move from place to place, which it does either by gliding with imperceptible slowness on the base, or by stretching out the body and tentacula to the utmost, fixing the latter, and then contracting the body towards the point of fixture, loosening at the same time its hold with the base; and by reversing these actions it can retrograde. Its ordinary position seems to be pendant or nearly horizontal, hanging from some floating weed or leaf, or stretching from its sides. In a glass of water the creature will crawl up the sides of the vessel to the surface, and hang from it, sometimes with the base, and sometimes with the tentacula downwards; and again it will lay itself along horizontally.* Its locomotion is always very slow, and the disposition of the zoophyte is evidently sedentary; but the contractions and mutations of the body itself are sufficiently vivacious, while in seizing and mastering its prey it is surprisingly nimble; seizing a worm, to use the comparison of Baker, "with as much eagerness as a cat catches a mouse." It is dull and does not expand freely in the dark, but enjoys light, and hence undoubtedly the reason why we generally find the Hydra near the surface and in shallow water.

The Hydræ are very voracious, feeding only on living animals, †but

* "The position in which they appear to take most delight, is that of remaining suspended from the surface of the water by means of the foot alone: and this they effect in the following manner. When the flat surface of the foot is exposed for a short time to the air, above the surface of the water, it becomes dry, and in this state exerts a repulsive action on the liquid, so that when dragged below the level of the surface, by the weight of the body, it still remains uncovered, and occupies the bottom of a cup-shaped hollow in the fluid, thereby receiving a degree of buoyancy, sufficient to suspend it at the surface. The principle is the same as that by which a dry needle is supported on water, in the boat-like hollow which is formed by the cohesive force of the liquid, if care be taken to lay the needle down very gently on the surface. If, while the Hydra is floating in this manner, suspended by the extremity of the foot, a drop of water be made to fall upon that part, so as to wet it, this hydrostatic power will be destroyed, and the animal will immediately sink to the bottom."—Roget. Bridgw. Tr. i. 179. This passage is nearly a literal translation from Trembley's *Hist. des Polypes*, p. 37–8.

† In confinement however, Trembley found that they might be fed on minced fish, beef, mutton, or veal.—*Mem.* 104.