

dra, while adhering firmly by the mouth, detaches its foot, and, making it describe a semicircle, throws it over its head, and places it foremost in the line of progression. Having attained this situation, the foot is then fixed, and a similar semi-revolution is performed by the head, the body continuing all the while elongated.

By these and other manœuvres these animals contrive to walk with equal facility in any direction, either on the bottom or sides of the vessel, or along the stems of aquatic plants, to which they are most frequently found attached. 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.

While in this state of suspension from the surface, the hydra is capable of performing several curious evolutions, and with the assistance of the tentacula, by which it lays hold of objects within its reach, is able to cross over from one side of the vessel to the other. It does not appear that these animals ever employ the tentacula as instruments for swimming; but they frequently use them as cables, or anchors, to enable them to retain their positions in security, however violently the water may be agitated. Great use is