## HYDRA.

also made of the tentacula as organs of prehension for seizing and detaining their living prey, and for conveying it to the mouth, where it is quickly swallowed. On the other hand, when alarmed, or exposed to irritation, the hydra suddenly shrinks, by the gradual contraction of all the tentacula, and of the body also, into a small globule, which might easily escape notice, unless its previous situation were accurately observed.

It might be asked by what power is this animal, occupying so low a place in the scale of organization, enabled to perform these actions? To this question, however, no satisfactory answer has yet been given. The substance of the hydra, when examined by the microscope, appears to be nearly homogeneous, except that a number of grains are intermixed with the pulpy and gelatinous matter composing the principal bulk of the body. These grains, when pressed out of the flesh into water, are scattered indiscriminately; and appear to have been united in the living animal, by means of this glutinous material.

No perceptible fibres, either muscular, or of any other kind, can be detected in the flesh of the polypus: nor is there the least indication of the formation of transverse rings, similar to those which exist in worms, and which, in these latter animals, contribute to progressive motion. Every portion of the substance of the body is equally irritable and contractile, and its movements appear to be governed by some voluntary power belonging to the animal, and directed to the attainment of certain ends. The softness and pliancy which it possesses allow of its being closely fitted to all the inequalities of the surface of the bodies to which it is applied; and perhaps this cause alone occasions it to adhere with great force to these bodies, without the aid of any glutinous fluid. A conjecture, which has much appearance of probability, has been offered, that this power of adhesion is derived from the presence of a great number of exceedingly minute disks, interspersed over every part of the surface, constituting so many suckers, and resembling, though on a very diminutive scale, the sucking apparatus on the arms of the cuttle-fish.