

momentary and a certain death suddenly follows their capture. How this effect is produced is mere matter of conjecture. Worms, in ordinary circumstances, are most tenacious of life even under severe wounds, and hence one is inclined to suppose that there must be something eminently poisonous in the Hydra's grasp, as it is impossible to believe, with Baker, that this soft toothless creature can bite and inject a venom into the wound it gives. "I have sometimes," says Baker, "forced a worm from a polype the instant it has been bitten, (at the expence of breaking off the polype's arms,) and have always observed it to die very soon afterwards, without one single instance of recovery."* To the Entomostraca, however, its touch is not equally fatal, for I have repeatedly seen Cyprides and Daphniæ entangled in the tentacula and arrested for some considerable time, escape even from the very lips of the mouth, and swim about afterwards unharmed; perhaps their shell may protect them from the poisonous excretion.—The grosser parts of the food, after some hours' digestion, are again ejected by the mouth; but, as already mentioned, the stomach is furnished with what, in one sense, may be called an intestine to which, according to Trembley and Baker, there is an outlet in the centre of the base, and the latter asserts that he has, "several times, seen the dung of the polype in little round pellets discharged at this outlet or anus."†

* Hist. of the Polype, 33—comp. with 67–8.—"That insignificant and inactive insect called the fresh water polypus, of all poisonous animals, seems to possess the most powerful and active venom. Small water-worms, which the polypus is only able to attack, are so tenacious of life, that they may be cut to pieces without their seeming to receive any material injury, or to suffer much pain from the incisions. But the poison of the polypus instantly extinguishes every principle of life and motion. What is singular, the mouth or lips of the polypus have no sooner touched this worm than it expires. No wound, however, is to be perceived in the dead animal. By experiments made with the best microscopes, it has been found, that the polypus is neither provided with teeth, nor any other instrument that could pierce the skin." Smellie's Phil. of Nat. History, ii. 462.—The fact that fishes cannot be made to swallow Hydræ, seems to prove the presence of some irritating quality in the latter.—See Trembley, Mem. 137.

† Lib. s. cit. 27.—He adds,—"Much the greater and grosser part of what the polype eats, is most certainly thrown out again by the mouth, after lying a proper time to become digested in the stomach: and, for a good while, I imagined there was no other evacuation; but am now convinced, that the finer part, in small quantity, is carried downwards through the tail, and passed off that way. I believe however there is also another purpose to which this passage serves, and that is, to convey a mucus or slimy matter to the end of the tail, for its more ready adhesion to sticks, stalks, or other bodies."