

But the Hydra is principally celebrated on account of its manner of propagation. It is of course like zoophytes in general, asexual; and every individual possesses the faculty of continuing and multiplying its race, principally, however, by the process of subdivision. During the summer season, a small tubercle rises on the surface, which lengthening and enlarging every hour, in a day or two develops in irregular succession, or in successive pairs,* a series of tentacula, and becomes in all respects, excepting size, similar to its parent. It remains attached for some time, and grows and feeds, and contracts and expands after the fashion of this parent, until it is at length thrown off by a sort of sloughing or exfoliation. These buds sprout, in the common species, from every part of the surface of the body, but not from the tentacula; and very often two, three or four young may be seen depending at one time from the sides of the fruitful mother, in different stages of growth, every one playing its part independent of the others:

“—where some are in the bud,
“ some green, and rip'ning some, while others fall.”

They are evolved with rapidity in warm weather especially, one no sooner dropping off than another begins to germinate; “ and what is most extraordinary, the young ones themselves often breed others, and those others sometimes push out a third or fourth generation before the first fall off from the original parent.”—Trembley found in one experiment that an individual of *H. grisea* produced forty-five young in two months; the average number per month in summer was twenty, but as each of these began to produce four or five days after its separation, the whole produce of a month was prodigious.†

“ No sooner is a young one furnished with arms, than it seizes and devours worms with all possible eagerness; nor is it an unusual thing to behold the young one and the old one struggling for, and gorging different ends of the same worm together. Before the arms come out, and even sometime afterwards, a communication continues between the bodies of the old and young, as appears beyond dispute by the swelling of either when the other is fed. ‡ But a little before the young one separates, when its tail-end begins to look white, transparent, and slender, the passage between them, I believe, is closed. And when the young one comes away, there remains not the least

* Baker's Hist. 35.

† Mem. pour l'Hist. des Polypes, 174—5. Also Baker, lib. s. cit. 53—4.

‡ By some clever dissections, Trembley demonstrated the reality of this communication. Mem. 161—2.