

mark where it had been protruded."—"After a young polype once gets all its arms, it alters indeed in size, but neither appears to shift its skin, or undergo any of the changes most other insects do." *

Instead of buds or little protuberances, the body sometimes pushes forth single tentacula scattered irregularly over it, and these tentacula can be metamorphosed into perfect polypes, the base swelling out to become the body, which, again soon shoots out additional tentacula to the requisite number! †

This is a mode of generation which the term viviparous does not correctly embrace, unless we give to that word a signification so extensive as to include all generations which are not oviparous: It is an example of equivocal, or what some foreign physiologists denominate, the generation by the individualisation of a tissue previously or already organised, ‡—and seems to be the usual way of propagation among the *Hydræ* during the summer months. But in autumn the *Hydra* generates internal oviform gemmules which, extruded from the body, lie during the winter in a quiescent state, and are stimulated to evolution not until the return of spring and its genial weather. Few observations have been made on these apparent ova, so that their structure, their source, their manner of escape from the body, and their condition during winter are scarcely known. Trembley describes them as little spherical excrescences, of a white or yellow colour, attached to the body by a very short pedicle. He never saw more than three on the same polype. After some time they became separate, and fell to the bottom of the glass of water in which the creatures were kept, where they came to nothing, excepting one only which was presumed to have evolved into a polype, for although his experiment renders this conclusion probable, it was still rather an inference than an actual observation, so much so, that Trembley continued to entertain doubts of their nature. Jussieu, it seems, conceived that each little excrescence was a vesicle filled with ova of

* Baker, lib. s. cit. 50.

† Baker ut cit. 110—11 : 121—3.

‡ La génération n'est pas pour cela spontanée ; une *génération spontanée* doit être la production d'un être organisé de toutes pièces, lorsque des élémens inorganiques se réuniront pour produire un animal, une plante. Cette génération est impossible, et n'a jamais lieu. Une *génération équivoque* est celle où des tissus organisés préalablement par un être déjà pourvu de vie, *s'individualisent*, c'est-à-dire se séparent de la masse commune et participent encore, après cette séparation, de l'état dynamique de la masse, c'est-à-dire de sa vie, mais, à son propre profit. C'est ainsi qu'un tissu produit un Entozoaire. C'est de la vie continuée."—Ch. Morren in Ann. des Sc. Nat. an. 1836, Vol. vi. p. 90. *Part. Zool.*