

animal. Thus, in the *Cercaria*, we have seen an animal produced from a nurse afterwards transformed into a *Distoma*, by undergoing a regular metamorphosis.

353. In each new generation, as in each new metamorphosis, a real progress is made, and the form which results is more perfect than its predecessor. The nurse that produces the *Cercaria* is manifestly an inferior state, just as the chrysalis is inferior to the butterfly.

354. But there is this essential difference between the metamorphoses of the caterpillar and alternate reproduction, that, in the former case, the same individual passes through all the phases of development; whereas, in the latter, the individual disappears, and makes way for another, which carries out what its predecessors had begun. It would give a correct idea of this difference to suppose that the tadpole, instead of being itself transformed into a frog, should die, having first brought forth young frogs; or that the chrysalis should, in the same way, produce young butterflies. In either case, the young would still belong to the same species, but the cycle of development, instead of being accomplished in a single individual, would involve two or more acts of generation.

355. It follows, therefore, that the general practice of deriving the character of a species from the sexual forms alone, namely, the male and the female, is not applicable to all classes of animals; since there are large numbers whose various phases are represented by distinct individuals, endowed with peculiarities of their own. Thus, while in the stag the species is represented by two individuals only, stag and hind, the *Medusa*, on the other hand, is represented under the form of three different types of animals; the first is free, like the *Infusoria*, the second is fixed on a stalk, like a polyp, and the third again is free, consisting in its turn of male and female. In the *Distoma*, also, there are four