

passes to the chrysalis and butterfly states. The latter becomes a more and more perfect animal, whilst the worm remains in its inferior state.

380. Similar instances are furnished by animals belonging to all the types of the Animal Kingdom. Who would think, at first glance, that a Barnacle or an *Anatifa* were more nearly allied to the crab than to the oyster? And, nevertheless, we have seen, (372,) in tracing back the *Anatifa* to its early stages, that it then bears a near resemblance to a little Crustacean, (Fig. 148, *d.*) It is only when full grown that it assumes its peculiar mollusk-like covering.

381. Among the Cuttle-fishes there are several, the *Loligo*, (Fig. 47,) for example, which are characterized by the form of their tentacles, the two interior being much longer than the others, and of a different form; whilst in others, as the *Octopus*, they are all equal. But if we compare the young, we find that in both animals the tentacles are all equal, though they differ in number. The inequality in the tentacles is the result of a further development.

382. Among the Radiata, the *Pentacrinus* and the *Comatula* exemplify the same point. The two are very different when full grown, the latter being a free-swimming star-fish, (Fig. 151,) while the former is attached to the soil, like a Polyp. But we have seen (377) that the same is the case with *Comatula* in its early period; and that, in consequence of a further metamorphosis, it becomes disengaged from its stem, and floats freely in the water.

383. In the type of Vertebrates, the considerations drawn from metamorphoses acquire still greater importance in reference to classification. The Sturgeon and the White-fish, before mentioned, (306,) are two very different fishes; yet, taking into consideration their external form and bearing merely, it might be questioned which of the two should take the highest rank; whereas the doubt is very easily