

"Our fields are full of such degenerate flowers, with green or brown corollas, sometimes carefully tucked out of the way of the stamens, so as hardly to be seen unless you pull them out on purpose; for, *contrary to the general belief, evolution does not by any means always or necessarily result in progress and improvement. Nay, the real fact is that by far the greater number of plants and animals are degenerate types—products of retrogression, rather than of any upward development.* Take it on the whole, evolution is always producing higher and still higher forms of life; but, at the same time, stragglers are always falling into the rear as the world marches onward, and learning how to get their livelihood in some new and disreputable manner, rendered possible by nature's latest achievements. The degraded types live lower lives, often at the expense of the higher, but they live on somehow; just as the evolution of man was followed by the evolution of some fifty new parasites, on purpose to feed upon him."—(*Vignettes from Nature, Art. II.*)

Respecting the crab, which he considers a degenerate lobster, Allen writes :

"The crab, on the other hand, lives on the sandy bottom, and walks about on its lesser legs, instead of swimming or darting through the water by blows of its tail, like the lobster, or the still more active prawn or shrimp. Hence, the crab's tail has dwindled away to a mere useless historic relic, while the most important muscles in its body are those seated in the network of shell just above its locomotive legs. In this case, again, it is clear that the appendage has disappeared because the owner had no further use for it. Indeed, if one looks through all nature, one will find the philosophy of tails eminently simple and utilitarian. Those animals that need them, evolve them; those animals that do not need them, never develop them; and those animals that have once had them, but no longer use them for practical purposes, retain a mere shrivelled rudiment, as a lingering reminiscence of their original habit."—(*The Evolutionist at Large, Art. VI.*)

According to Allen, it is this "lingering reminiscence"—this "historic relic" of a tail—which makes it clear that the crab is a degraded lobster.

This conclusion of Grant Allen, if it be accepted by scientists—and it seems to be supported by the same sort of evidence that other conclusions embodied in the hypothesis of genetic evolution are—will seriously modify that hypothesis. Evolution, in its latest phase, as this may be called, will be a very different thing from evolution as Darwin taught it. If retrogression is as frequent as upward development; if evolution downward from the lower end of the animal kingdom takes place as frequently and as rapidly as evolution upward from the upper end, as illustrated in the contemporaneous evolution of man and the "fifty new parasites to feed upon him"—then the true starting-point of that kingdom is to be sought, not in "some one or more primordial forms," as Darwin taught; or some "low speck of protoplasmic matter," as Huxley supposes; but in some animal form halfway between the two extremities—some one of the lower Sauria, or higher fishes, if we take Darwin's evolutionary genealogy of man as our guide in determining this matter.

Whether such evolutionists as Huxley and Spencer will care much for the hypothesis in this, its latest phase, we do not know. Certain