

pally in an increased laxness and lengthening of the parts, with little increase in the dimensions of the body anterior to the mouth; while the abdomen (or *posterior* extremity) is enlarged 10 to 50 times beyond the bulk it has in the Crab. Descending from a snail to an oyster, there is diminution anteriorly and great enlargement posteriorly, and the animal is little more than a visceral sac.

In less marked cases of the *amplificative* method, there is only an attenuation or lengthening of the body and limbs, as in many Neuropters, Orthopters, Homopters, wading Birds, etc. The Lepidopters, also, in their very great expanse of wing, exemplify this method. In species that are attached, as the Cirripeds, the young are usually free; and it is only when they begin to out-grow, amplificately, the minute life-system (Entomostracan in the Cirripeds) that they become fixed. As attached animals, they often attain great size.

Viewed on the ascending grade, this method is the *concentrative*; and it is exhibited in the increased abbreviation and condensation of the anterior and posterior members and segments, or of the whole structure.—For examples, see further volume xxii and the present, as already referred to.

6. *Multiplicative*.—Exhibited in an abnormal multiplication of segments or members; as in Myriapods, Worms, Phyllopod, Trilobites, etc. There may be—

a. *Simple multiplicative*; as in the superior Myriapods, the Chilopods, in which the body-segments, thus multiplied, have each its single or normal pair of members.

b. *Compound multiplicative*; as in the Myriapods of the Iulus division, or Diplopods (Chilognaths), in which there is a duplication of the pair of legs of a body segment. The name *Diplopod*, adopted by Gervais and some other authors, has the advantage of having thus a dynamical value.

The multiplicative method is, in general, a degradational one. When it affects only subordinate parts of the structure, as the length of the tail of Mammals, or of Reptiles, etc., the forms are not necessarily degradational. But when it affects the general structure, and the types are indefinite in segments, like the Myriapods, Worms, and Snakes (see page 4 of this volume), the forms are degradational. In Mammals, the tail may be said to have indefiniteness of limit; but, since this part is only an appendage to the body and has little functional importance, its elongation cannot properly be regarded as a mark of degradation, although one of inferiority. When, however, the posterior extremity is, in magnitude and importance, a part of the main body structure itself, as in Snakes and Fishes, the case is properly an example of multiplicative degradation.

The abnormal number of segments under the multiplicative