

(See further, for examples, this Journal, [2], xxii, 14, and xxxvi, 1.)

Viewed on the ascending grade, this method is the *preferent*.

3. *Pervertive*.—A subjection of an organ to any abnormal function inferior to that normal to it;—as in the adaptation of the nose of the Elephant to prehension; of the antennæ of many inferior Crustaceans to prehension or locomotion; of the maxillipeds of inferior Macrurans to locomotion; of the forehead in many Herbivores to purposes of defense.

The perverted nose of the Proboscideans is one of the indications of their inferiority to the Carnivores; but it is not necessarily a mark of inferiority among Herbivores themselves, as the faculty of prehension is one of those especially characterizing Carnivores and other higher Mammals, and nearly all Herbivores fail of it.

Viewed on the ascending grade, this method and the following may be included under the term, *perfunctionative*.

4. *Defunctionative*.—Exhibited in the defectiveness or absence of the normal function of an organ;—as in the absence of the function of prehension from the fore-limbs of Herbivores (this prehension in the fore-limbs belonging to the Mammalian type); and that of locomotion mostly from all the limbs in the Mutilates; that of locomotion from the female Bopyrus; that of locomotion from Cirripeds and other attached animals; that of the sense connected with the *second* pair of antennæ (and probably also the *first*, these organs being obsolete) in the Lernæas and Cirripeds, these antennæ being simply prehensile organs in a Lernæa, and constituting the base of the peduncle in an Anatifa.*

This degradation and loss of functions is connected often with the *elliptic* and *amplificative* methods of decephalization (see beyond). It is connected with the latter in the Bopyrus, and also in Cirripeds and other attached species.

C. INCREMENTAL.

5. *Amplificative*.—Exhibited in an elongation or general enlargement of the segments or members, and an increased laxness of the parts. Includes the cases—

a. Lengthening, widening, or laxness in the *anterior* portion of the body; the same in the *posterior* portion.

b. An abnormal enlargement of the general structure.

The elongation or enlargement which takes place with decline of grade is mainly *posterior*, it being small anteriorly, and sometimes none at all. In passing from the Brachyural to the Macrural type of Crustaceans, the change anteriorly is princi-

* See *Expl. Exp. Report on Crustacea*, p. 1393, and plate 96, where it is shown that the antennæ of the young Anatifa have a sucker-like organ for attachment, and become, in the metamorphosis, the bottom of the peduncle by which the adult Anatifa is attached.