CLASSIFICATION OF HERBIVORES.

Under the order of Megasthenes,* the tribe of Quadrumanes, as stated on p. 334, Art. I, is properly hypertypic, that of Carnivores superior typical, that of Herbivores inferior typical, and that of Mutilates (or Cetaceans) hypotypic.

1. Distinctions between Herbivores and the tribes next superior and inferior.

A. Herbivores show their inferiority to Carnivores, or the superior typical group of megasthenic Mammals, on the basis of the principle of cephalization, in the following ways:

(1.) In the fore-limbs being defunctionated of the power of

prehension and reduced to simple locomotive organs.

(2.) In the fore-limbs being not as much superior to the hind-limbs in strength as in the Carnivores, and even inferior to the hind-limbs in some species,—Herbivores, being less strongly prosthenic than Carnivores, and the species of the larger and most

characteristic group being metasthenic.

(3.) In the structure being strongly amplificate.—Taking the Lion as the standard of size for the highest grade of life among typical Megasthenes, the Elephant—certainly inferior in type, and, therefore, also in degree or quality of systemic force—exhibits inferiority likewise in its great bulk; it is a marked example of a gross-amplificate structure. Hogs and the related species are no less gross-amplificate, but on a feebler life-system. Again, the Horse and also all Ruminants are long-amplificate, as appears strikingly in their lengthened limbs, especially the extremities of the limbs, and, also, in the neck and body.

(4.) In the head being prolonged or amplificate.—Even the Elephant is here no exception; for the great tusks and trunk correspond to an elongation of the head extremity, their development being at the expense of the jaws and of part of the teeth. In the Horse, the facial part of the skull is four times as long as

the cranial portion. (See p. 165.)

² In order that the position of Herbivores, as recognized by the writer, may be clearly understood by the reader, I repeat here the arrangement of the higher divisions of Mammals proposed in the number of this Journal for January, 1863, (vol. xxxv, p. 65), presenting the tribes of Megasthenes and Microsthenes, as before, in parallel columns in order to exhibit their parallel relations.

Order I. MAN.

Order II. MEGASTHENES.

- 1. Quadrumanes.
- 2. Carnivores.
- 3. Herbivores.
- 4. Mutilates.

Order III. MICROSTHENES.

- 1. Chiropters or Bats.
- 2. Insectivores.
- 3. Rodents.
- 4. Edentates.

Order IV. Oörocoids.

Marsupials and Monotremes.