

relations to the Pachyderms, it has close affinities also to the Ruminants. It is a *Sthenomere* and not a *Sthenorhine*; but it stands in the group of *Sthenomeres*, between the Ruminants and the *Sthenorhines*,⁶ representing a Pachydermatoid division in the group.

The prosthenic species, it appears, are the *gross-amplificate*, and the metasthenic are the *long-amplificate*. But this distinction in amplification is not of that fundamental nature which would lead to its being an exclusive feature of either type; and yet the exceptions to its being so are remarkably few. In the *gross-amplificate* group, or that of the *Sthenorhines*, the *Macrauchenia*, if a Tapiridean (see p. 172), is one exception—the species having, according to Owen, a long neck, nearly as in the Llamas. The extinct *Paleotheres* are other exceptions; for in these Eocene associates of the *Anoplotheres* the metacarpals and metatarsals have about the elongation of those of the *Anoplotheres*. All the long-amplificate *Sthenorhines* are *extinct species* (p. 183).

The distinction of prosthenic and metasthenic observed in the *extremities* of the limbs, or the digits, which has given rise to the subdivision into *Imparidigitates* and *Paridigitates*, affords an indication of grade *under* the above two grand divisions—the paridigitate species being the inferior. Thus the Hog-group (paridigitate) stands below the Tapir-group (imparidigitate), and is, hence, at the foot of the *Sthenorhines*; and the Horse-group (imparidigitate) is at the head of the *Sthenomeres*. As this distinction is inferior in sthenic value to that of prosthenic and metasthenic manifested in the general structure (pp. 161, 162), it cannot properly be made the basis of the *principal* grand divisions of Herbivores, as proposed by Owen, unless all such sthenic characters are overruled by fundamental resemblances in type, which is here not the case; the type-resemblances bear the other way, and not to a separation of the Hogs and Tapirs, nor to a union in one group of the Hogs and Ruminants.

The existence in *Paridigitates* of two horns, one either side of the front, is mentioned by Owen as an example of *pairs* in these species, additional to that in the toes; and the occurrence in the *Imparidigitates* of a horn (or horns) only on the medial line of the front as an additional case in these Herbivores of an *odd* organ. This *odd* horn occurs only in the Rhinoceroses among the *Imparidigitates*, and on a *medial* organ, the nose; and with so small a range of facts to sustain the deduction, we may reasonably doubt the alleged connection between the odd or

⁶ It may also be here repeated that the Horse is related to the Ruminants in not having a *decidua* developed,—a *decidua*, as stated by Huxley, characterizing the higher Megasthenes, from Man through the Quadrumanes and Carnivores to the higher Herbivores (the Elephant and Hyrax, at least); but not the species of the Hog-group, the lowest of *Sthenorhines*, nor any of the *Sthenomeres*. (See Art. II, p. 13).