

Such species, strong in the hind-limbs, are well named *Sthenomeres* (from the Greek *σθενος* strong and *μηρος* thigh).

(2.) *In the extremities of the limbs.*—The sthenic distinction referred to under this head is the inferior of the two because it appears only in the *extremities* of those organs which in their general relations exhibit the former. The manifestation of it is confined to the hand and foot.

As the inner side of the hand or foot is the more central side in the system and the outer the more circumferential—a fact which any one will become aware of on looking at his open hand as it lies on a table—the higher species should have the principal strength in the inner fingers rather than the outer. The transfer of force from the innermost to the outer, with descending grade of species, is well exemplified among Herbivores and the higher Mammals.

In Man the *inner* toe is the strongest, and the order of strength is that of the toes, or 1, 2, 3, 4, 5. It is the same also in the hand. In the Gorilla it is the same for the foot, and for the hand there is only this difference that 1 and 2 are about equal. In the inferior Quadrumanes and the superior Carnivores the *third* is the strongest as well as largest digit, and in many Carnivores the first in the hinder pair is obsolescent. In the inferior Carnivores, as the Plantigrades, the *third* and *fourth* digits are often about equal, and the *fifth* as strong as the *second*: thus in *Ursus Americanus* (as figured in Blainville's *Osteologie*) 4=3, and 5=2; in *U. arctos (ferox)* 2, 3, 4, 5 are very nearly equal; in *U. labiatus* 4 and 5 are the longest, exceeding 3; in species of *Nasua* 4=3 and 5=2; in the *Cercoleptes* or kinkajou, one of the lowest of Carnivores, 4 is a little longer than 3 and 5 than 2; in *Gulo luscus* 4=3; in the Mustelids, *Lutra vulgaris* and *Mustela Foina*, 4=3, or 3 is scarcely the longer; in the Viverrids 3 is generally slightly longer than 4, but in the inferior aberrant species *Eupleres Goudoti* and *Bassaris astula* 4=3 and 5=2. These species are therefore essentially *paridigitate*, except that the first digit is present. Thus there is an outward diffusion of force in descending from Man to the lower Carnivores.

Under Herbivores, the higher species have the *third* toe the longest—or, they are *imparidigitate*, as these kinds are usually styled. Thus it is with the Proboscideans, Rhinoceroses and Tapirs, and it is so whether the number of toes be three or four, that is whether *even* or *odd* in number.

In the inferior Herbivores the force is still more circumferentially diffused; for the *fourth* digit is equal to, and sometimes

movement of the legs demanded of a beast of burden,—too little superiority in the posterior to the anterior limbs, or an ill-adjustment of muscles and lungs, etc., for the purpose. The Camel, one of the hypotypic or degradational Ruminants, is a case here included.