

regarded as more primitive than those of the dog with four digits, the ox, with two digits, and the horse with one. This at least is the prevailing scientific opinion; but I shall venture presently, to contest it. Finally, most of the early Tertiary mammals were plantigrade; that is, they walked on the whole length of the foot, with the heel on the ground; while most mammals walk on the toes with the heel elevated—the “hock” being the heel. This also may be thought a mark of superiority, since man is a plantigrade; but digitigrade walking sustains the same relation as pentadactylism, to progressive advance.

Is man then, as a five-toed plantigrade lower than the horse, ox, and dog, which are digitigrade with fewer toes? As a whole, certainly not, since superior brain alone sets him on a pinnacle above them. Is he then inferior in his membral development? No. Development looks to use, function. Superior development implies more diversified or more dextrous, functions. Man's limbs compared with any others, show human superiority in a marked degree. What then, is the meaning of the more highly differentiated limbs of most of the mammals? Are we restricted to saying that with actually inferior development, they possess superior structures, simply become more highly differentiated structures? That seems to be the prevailing opinion of anatomists. They tell us man's limbs retain the primitive conformation, and they assume that this is an inferior conformation. It is allowable to take the opposite view. Differentiation generally takes an upward course; but sometimes it takes a downward course. We know a multitude of cases of degenerative differentiation. The paddles and the rudimentary pelvis of the whale; the flippers of the seal; the rudimentary hind limbs of certain lizards; the footless condition of other lizards and of snakes; the eyeless orbits of cavern fishes, are generally regarded as examples of degeneration. If the obsolescence of a whole limb, as in snakes, is a retrogressive differentiation, then why not the partial obsolescence of a limb, as in four-toed and two-toed mammals? If the high rank of the equine foot is signal-