turn our attention to the history of the different orders of Placental animals, whose pedigree can often be very accurately established in detail.

We must, as already remarked, consider the order of *Hoofed animals* (Ungulata) as the primary group of the Indeciduata, or Tuft-placentals; the two other orders, Whales and Toothless animals, developed out of them, as two diverging groups, probably only at a later period, by adaptation to very different modes of life. But it is also possible that the animals poor in teeth (Edentata) may be of quite a different origin.

Hoofed animals are in many respects among the most important and the most interesting Mammals. They distinctly show that a true understanding of the natural relationship of animals can never be revealed to us merely by the study of living forms, but in all cases only by an equal consideration of their extinct and fossil blood-relations and ancestors. If, as is usually done, only the living Hoofed animals are taken into consideration, it seems quite natural to divide them into three entirely distinct orders, namely: (1) Horses, or *Single-hoofed animals* (Solidungula, or Equina); (2) Ruminating animals, or *Double-hoofed* (Bisulca, or Ruminantia); and (3) Thick-skinned, or *Many-hoofed* (Multungula, or Pachyderma). But as soon as the extinct Hoofed animals of the tertiary period are taken into consideration—of which animals we possess very numerous and important remains—it is seen that this division, but more especially the limitation of the Thick-skinned animals, is completely artificial, and that these three groups are merely top branches lopped from the pedigree of Hoofed animals, which are most closely connected by extinct intermediate forms. The one