of a decidua, but also in the external form of the placenta itself. In the Indeciduata it consists, in most cases, of numerous, single, scattered bunches or tufts of vessels, and hence this group may be called *tufted placental animals*, (Villiplacentalia). In the Deciduata, however, the single tufts of vessels are united into a cake, which appears in two different forms. In the one case it surrounds the embryo in the form of a closed band or ring, so that only the two poles of the oval egg bladder are free of tufts; this is the case in animals of prey (Carnaria) and the pseudo-hoofed animals (Chelophora), which may consequently be comprised as *girdled-placental animals* (Zonoplacentalia). In the other Deciduata, to which man also belongs, the placenta is a simple round disc, and we therefore call them *disc-placentals* (Discoplacentalia). This group includes the five orders of Semi-apes, Gnawing animals, Insectivora, Bats, and Apes, from the latter of which, in the zoological system, man cannot be separated.

It may be considered as quite certain, from reasons based upon their comparative anatomy and their history of development, that Placental animals first developed out of Marsupials, and that this very important development—the first origin of the placenta—probably took place in the beginning of the tertiary epoch, during the eocene period. But one of the most difficult questions in the genealogy of animals is the important consideration whether all Placental animals have arisen out of one or out of several distinct branches of Marsupials; in other words, whether the origin of the placenta occurred but once, or several times.

When, in my General Morphology, I for the first time endeavoured to establish the pedigree of Mammals, I here,