clearly by how high a figure we must multiply the time in order to express the distance between the Miocene period and our own days.

## $Species\ of\ Mammalia\ recent\ and\ fossil. -- Proboscidians.$

But it may perhaps be said that the mammalia afford more conspicuous examples than do the mollusca, insects, or plants of the wide gaps which separate species and genera, and that if in this higher class such a multitude of transitional forms had ever existed as would be required to unite the tertiary and recent species into one series or net-work of allied or transitional forms, they could not so entirely have escaped observation, whether in the fossil or living fauna. zoologist who entertains such an opinion would do well to devote himself to the study of some one genus of mammalia, such as the elephant, rhinoceros, hippopotamus, bear, horse, ox, or deer; and after collecting all the materials he can get together respecting the extinct and recent species, decide for himself whether the present state of science justifies his assuming that the chain could never have been continuous, the number of the missing links being so great.

Among the extinct species formerly contemporary with man, no fossil quadruped has so often been alluded to in this work as the mammoth, Elephas primigenius. From a monograph on the proboscidians by Dr. Falconer, it appears that this species represents one extreme of a type of which the Pliocene Mastodon Borsoni represents the other. Between these extremes there are already enumerated by Dr. Falconer no less than twenty-six species, some of them ranging as far back in time as the Miocene period, others still living, like the Indian and African forms. Two of these species, however, he has always considered as doubtful, Stegodon Ganesa,