

sive beds of gravel, clay, and loam, are found spread over the plains, or on the flanks of the mountain chains, or on the crests of ranges of low elevation; and in these accumulations of water-worn materials, are immense quantities of the bones of large mammalia.* These remains belong principally to animals related to the elephant, as the mammoth, mastodon, &c., and to various species of hippopotamus, rhinoceros, horse, ox, deer, and many of extinct genera; while in caverns and fissures of rocks filled with calcareous breccia, the skeletons of tigers, boars, hyenas, and other carnivorous animals, are imbedded. Fossil bones of this kind exist, in such abundance, all over Europe, Asia, and America, that it is impossible to enumerate the localities; they are found alike in the tropical plains of India, and in the frozen regions of Siberia; while there is no considerable district of Great Britain in which some traces of these remains do not occur.

9. CLASSIFICATION OF MAMMALIAN REMAINS.

—Dr. Buckland considers these remains as referable to four divisions.

First. Land animals, drifted into estuaries or seas, and associated with marine shells, such as those found in the Sub-Apennine formations; in the beds of gravel, sand, &c. provincially termed *crag*, in

* The term *diluvium* is commonly applied to these ancient alluvial beds; they are the newer *pliocene* in the classification of Mr. Lyell, as we shall hereafter explain.