

gives clear indication of the constructive methods adopted by the great anatomist. We follow him in his attempts to identify the remains of fossil mammalia by comparison with existing mammalian species, and we realise with him the necessity of a thorough examination of the bony skeleton of existing mammals before such a comparison can be effected. Cuvier's style is clear and concise, and he has the gift of vivid description.

Eleven fossil species from the Pleistocene deposits of Europe, Asia, and North America are described in the second volume: a rhinoceros, two hippopotami, two tapirs, an elephant, and five mastodons. With the exception of the mastodons, all the species belong to genera which still exist in the tropics, but the geographical distribution of the Tertiary and the present species is very different. There may be a doubt in the case of the larger hippopotamus species (*Hippopotamus major*) whether the fossil and the present forms are specifically distinct, but in the other cases there can be no doubt that the forms belong to extinct species.

Cuvier makes these points clear, and proceeds to show that from the condition of the bones they cannot have been transported from any great distance, but that the animals must have *lived in the localities where their bones are found*. Hence these remains afford proof that the temperate zones were, in the period immediately antecedent to the present, inhabited by a terrestrial fauna whose nearest allies are now confined to tropical climates.

The third volume contains chiefly the description of the vertebrate remains which occur in Upper Eocene gypsiferous marls, in the vicinity of Paris. One or two fossil skeletons were found entire, and most of these remains found in the Paris gypsum beds were in a good state of preservation. But in many localities the mammalian remains occurred in poor preservation, and were irregularly distributed as confused heaps, or beds of bone fragments. It was in arranging such ill-assorted accumulations of bones belonging to different epochs that Cuvier achieved his most astonishing successes, and verified his laws of the correlation of parts. The investigation of certain scattered remains of very frequent occurrence led him to the determination of two extinct genera, *Palæotherium* and *Anoplotherium*. After he had ascertained the skull and teeth, Cuvier kept constantly comparing the other bones with those of existing genera—tapir, rhinoceros,