## Mammalia of the Eocene Period.

In the first great fresh-water formation of the Eocene period, nearly fifty extinct species of mammalia have been discovered by Cuvier; the greater number of these belong to the following extinct genera, in the order Pachydermata,\* viz. Palæotherium, Anoplotherium, Lophiodon, Anthracotherium, Cheropotamus, Adapis (see Plates 3 and 4). †

• Cuvier's order Pachydermata, i. e. animals having thick skins, includes three subdivisions of Herbivora, of which the Elephant, Rhinoceros, and Horse are respectively examples.

Palæotherium.

The place of the genus Palæotherium (see Plates 3 and 4) is intermediate between the rhinoceros, the horse, and tapir. Eleven or twelve species have already been discovered; some as large as a rhinoceros, others varying from the size of a horse to that of a hog. The bones of the nose show that, like the tapir, they had a short fleshy trunk. These animals probably lived and died upon the margins of the then existing lakes and rivers, and their dead carcases may have been drifted to the bottom in seasons of flood. Some perhaps retired into the water to die.

Anoplotherium.

Five species of Anoplotherium (see Plates 3, 4) have been found in the gypsum of the neighbourhood of Paris. The largest (A. Commune) being of the size of a dwarf ass, with a thick tail, equal in length to its body, and resembling that of an otter; its probable use was to assist the animal in swimming. Another (A. Medium) was of a size and form more nearly approaching the light and graceful character of the Gazelle; a third species was nearly of the size of a Hare.

The posterior molar teeth in the genus Anoplotherium resemble those of the rhinoceros; their feet are terminated by two large toes, like the ruminating animals, whilst the composition of their

GEOL.

t

81