

the dominant animals of the earth's surface, alike on land and sea, ever since the commencement of the Lias, now waned before the increase of the mammalia, which advanced in augmenting diversity of type until they reached a maximum in variety of form and in bulk just before the cold epoch referred to. When that refrigeration passed away and the climate became milder, the extraordinary development of mammalian life that preceded it is found to have disappeared also, being only feebly represented in the living fauna at the head of which man has taken his place.

Section i. Eocene

§ 1. General Characters

ROCKS.—In Europe and Asia the most widely distributed deposit of this epoch is the nummulitic limestone, which extends from the Pyrenees through the Alps, Carpathians, Caucasus, Asia Minor, Northern Africa, Persia, Beloochistan, and the Suleiman Mountains, and is found in China and Japan. It attains a thickness of several thousand feet. In some places it is composed mainly of foraminifera (Nummulites and other genera); but it sometimes includes a tolerably abundant marine fauna. Here and there it has assumed a compact crystalline marble-like structure, and can then hardly be distinguished from a Mesozoic or even Palæozoic rock. Enormous masses of sandstone occur in the eastern Alps (Vienna sandstone, Flysch), referred partly to the same age, but seldom containing any fossils save fucoids (p. 1570). The most familiar European type of Eocene deposits, however, is that of the Anglo-Parisian and Franco-Belgian area, where are found numerous thin local beds of usually soft and uncompacted