and among them in the Eocene occurred species of *Acipenser* or *Sturgeon*. Teeth of *Sharks* are also common, and are like those of America in genera and partly in species.

Among *Reptiles*, there were many true *Crocodiles*, — 18 or 20 species having been described. Over 60 species of Tertiary Turtles are known; and the shell of one Indian species from the Pliocene of the Siwalik Hills, *Testudo* (*Colossochelys*) *Atlas*, had a length of six feet.

A species of Snake, 20 feet long, *Palæophis typhæus* Owen, was discovered in the Bracklesham beds of the Middle Eocene, and another species, 30 feet long, in the Lower Eocene of Sheppey. Several species related to the common Black Snake (*Colubridæ*) occur in the Miocene.

Remains of a large number of Tertiary *Birds* have been found and described. According to A. Milne Edwards, the Miocene beds of the Department of Allier, in central France (between 46° and 47° in latitude), has alone afforded 70 species; and many of these Miocene birds are of tropical character. He thus speaks of them: Parrots and Trogons inhabited the woods. Swallows built, in the fissures of the rock, nests in all probability like those now found in certain parts of Asia and the Indian Archipelago. A Secretary Bird, nearly allied to that of the Cape of Good Hope, sought in the plains the serpents and reptiles which at that time, as now, must have furnished its nourishment. Large Adjutants, Cranes, and Flamingoes, the *Palælodi* (birds of curious forms, partaking of the characters both of the Flamingoes and of ordinary Grallæ) with Ibises frequented the banks of the watercourses, where the larvæ of Insects and Mollusks abounded; Pelicans floated in the midst of the lakes; and, lastly, Sand-grouse and numerous gallinaceous birds assisted in giving to this ornithological population a strange physiognomy, which recalls to mind the descriptions that Livingstone has given us of certain lakes of southern Africa.

The London Clay (Eocene) afforded Owen a bird, named by him *Odontopteryx*, having tooth-like dentations of the bony edge of the bill.

The *Mammals* of Europe were much like those of America in the characteristics of the earliest known species and in the lines of succession. The beds of the Lower Eocene of Europe, the Cernaysian, near Reims, and elsewhere, in France, have afforded kinds of Ungulates, Creodonts, and Quadrumana, related to those of the Puerco group. Remains of species of Zeuglodon have been reported from England, France, Germany, Russia, and even from New Zealand. The London Clay of the London basin, representing the Middle Eocene, has, like the Wasatch, its species of *Coryphodon* and *Hyracotherium*, genera first established by Owen from British species, and also new Creodonts; and the Upper Eocene, including the *Calcaire grossier* of Paris, is like the Bridger group in its Ungulates, Creodonts, and Quadrumana, the genera *Lophiodon*, *Hyrachyus*, being characteristic. Further, the Uinta beds, or those of the closing Eocene, have equivalents in the Gypsum beds of Montmartre of the Paris basin, the beds that afforded Cuvier the earliest known of Tertiary Mammals. These Parisian strata, the