

sand has been found the first example of a fossil quadrumanous animal discovered in Great Britain, namely, the teeth and part of a jaw, shown by Professor Owen to belong to a monkey of the genus *Macacus* (see fig. 230). The mammiferous fossils, first met with in the same bed, were those of an opossum (*Didelphys*) (see fig. 231), and an insectivorous bat (fig. 232), together with many teeth of fishes of the shark family. Mr. Colchester in 1840 obtained other mammalian relics from Kyson, among which Professor Owen has recognized several teeth of the genus *Hyracotherium*, and the vertebræ of a large serpent, probably a *Palæophis*. As the remains both of the *Hyracotherium* and *Palæophis* were afterwards met with in the London clay, as before remarked, these fossils confirmed the opinion previously entertained, that the Kyson sand belongs to the Eocene period. The *Macacus*, therefore, constitutes the first example of any quadrumanous animal occurring in strata so old as the Eocene, or in a spot so far from the equator as lat. 52° N. It was not until after the year 1836 that the existence of any fossil quadrumana was brought to light. Since that period they have been discovered in France, India, and Brazil.

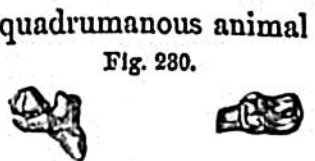


Fig. 230.
Molar of monkey (*Macacus*).



Fig. 231.
Molar tooth and part of jaw of opossum. From Kyson.*



Fig. 232.
Molars of insectivorous bats, twice nat. size. From Kyson, Suffolk.

Plastic or mottled clays and sands (C. 2, p. 208).—The clays called plastic, which lie immediately below the London clay, received their name originally in France from being often used in pottery. Beds of the same age (the Woolwich and Reading series of Prestwich) are used for the like purposes in England.†

No formations can be more dissimilar on the whole in mineral character than the Eocene deposits of England and Paris; those of our own island being almost exclusively of mechanical origin,—accumulations of mud, sand, and pebbles; while in the neighborhood of Paris we find a great succession of strata composed of limestones, some of them siliceous, and of crystalline gypsum and siliceous sandstone, and sometimes of pure flint used for millstones. Hence it is by no means an easy task to institute an exact comparison between the various members of the English and French series, and to settle their respective ages. It is clear that, on the sites both of Paris and London, a continual change was going on in the fauna and flora by the coming in of new species and the dying out of others; and contemporaneous changes of geographical conditions were also in progress in consequence of the rising and sinking of the land and bottom of the sea. A particular subdivision, therefore, of time was

* Annals of Nat. Hist. vol. iv. No. 23, Nov. 1839.
† Prestwich, Water-bearing strata of London, 1851.