

extinct forms. This classification, though somewhat artificial, has, with various modifications and amplifications, been adopted for the Tertiary groups, not of Europe only, but of the whole globe. The original percentages, however, often depending on local accidents, have not been very strictly adhered to. The most important modification of the terminology in Europe has been the insertion of another stage or group termed *Oligocene*, proposed by Beyrich, to include strata that were formerly classed partly as Upper Eocene and partly as Lower Miocene.<sup>2</sup>

Some writers, recognizing a broad distinction between the older and the younger Tertiary deposits of Europe, have proposed a classification into two main groups: 1st, Eocene, Older Tertiary or *Palæogene*, including Eocene and Oligocene; and, 2d, Younger Tertiary or *Neogene*, comprising Miocene and Pliocene. This subdivision has been advocated on the ground that, while the older deposits indicate a tropical climate, and contain only a very few living species of organisms, the younger groups point to a climate approaching more and more to that of the existing Mediterranean basin, while the majority of their fossils belong to living species.<sup>3</sup>

The Tertiary periods witnessed the development of the present distribution of land and sea and the upheaval of most of the great mountain-chains of the globe. Some of the most colossal disturbances of the terrestrial crust, of which any record remains, took place during these periods. Not only was the floor of the Cretaceous sea upraised into low

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<sup>2</sup> Boyd Dawkins has proposed to use the fossil mammalia as a basis of classification (*Q. J. Geol. Soc.* 1880, p. 379), but his scheme does not essentially differ from that in common use founded on molluscan percentages.

<sup>3</sup> Hörnes, *Jahrb. Geol. Reichsanst.* 1864, p. 510.