

was, that in the lower tertiary strata, there were about  $3\frac{1}{2}$  per cent. identical with recent; in the middle tertiary (the faluns of the Loire and Gironde), about 17 per cent.; and in the upper tertiary, from 35 to 50, and sometimes in the most modern beds as much as 90 to 95 per cent. For the sake of clearness and brevity, I proposed to give short technical names to these sets of strata, or the periods to which they respectively belonged. I called the first or oldest of them Eocene, the second Miocene, and the third Pliocene. The first of the above terms, Eocene, is derived from *ἠώς* *eōs*, dawn, and *καινός* *kainos*, recent; because an extremely small proportion of the fossil shells of this period could be referred to living species, so that this era seemed to indicate the dawn of the present testaceous fauna, no living species of shells having been detected in the antecedent or secondary rocks.

Some conchologists are now unwilling to allow that any Eocene species of shell has really survived to our times so unaltered as to allow of its specific identification with a living species. I cannot enter in this place into this wide controversy. It is enough at present to remark, that the character of the Eocene fauna, as contrasted with that of the antecedent secondary formations, wears a very modern aspect, and that some able living conchologists still maintain that there are Eocene shells not specifically distinguishable from those now extant; though they may be fewer in number than was supposed in 1833.

The term Miocene (from *μείων* *meiōn*, less; and *καινός* *kainos*, recent) is intended to express a minor proportion of recent species (of testacea); the term Pliocene (from *πλείων* *pleiōn*, more; and *καῖνος* *kainos*, recent), a comparative plurality of the same.

It has sometimes been objected to this nomenclature that certain species of infusoria found in the chalk are still existing, and, on the other hand, the Miocene and Older