evidence of position, that the uppermost beds are the most recent; and if, in ascending from the lower to the upper part of the series, we find the proportion of the species increase, that are analogous to what now live in the Mediterranean, we obtain the evidence of position, to support some of the conclusions of M. Deshayes. The evidence from position forms, however, the fundamental basis of our conclusions respecting the relative age of the secondary and tertiary formations; and we can only proceed safely when we have the aid of this evidence.

M. Elie de Beaumont proposes a division of the tertiary strata into three groups, according to the organic remains of large mammiferous animals which they contain. He supposes that each of these groups indicates a period of tranquillity, intermediate between two periods of change and convulsion; and that each generation of animals was destroyed by a different convulsion. His first period extends to the marls above the gypsum, in the Paris basin. The second to the Fontainebleau sandstone, the upper fresh-water formation, the calcareous beds at the mouth of the Rhine, and the molasse of Switzerland. The third period extends to the diluvium (terrain de transport) of Bresse, to the beds of Œningen, the sandstone of Aix, the upper marine formation of Montpellier, and the ranges of sub-Apennine hills in Italy, to the tertiary beds of Sicily, and to the Crag of Suffolk.

The first or lowest group is characterized by the remains of Palæotheria; the second, by those of mastodons; and the third, by the remains of elephants. It is admitted, however, that in marine tertiary depositions, these periods seem to pass insensibly into each other. In the marls of the Loire, and the calcareous beds of Montpellier, the bones of the Palaeotherium are found mixed with bones of the mastodon and hippopotamus; and in the Plaisantin, the bones of the elephant are added to the above. Without admitting at present that the division of M. Elie de Beaumont is supported by sufficient evidence, (and the exceptions stated prove that it is not,) yet we may still allow that there is a considerable degree of probability, that each of the three genera of animals, flourished most at the different epochs he has stated, but not exclusively of other genera. In England, we have only a few traces of animals of the Palæotherian age; these occur in the fresh-water formation at Binstead, in the Isle of Wight: and in the second group we have only two known instances; they occur in the Crag, in which two teeth of the mastodon have been found. In the third, or elephantine group, we have numerous instances; for teeth and bones of elephants have been found in clay, marl, or gravel, in almost every county in England. The instances cited above, in the two lower groups, are too few to support any hypothesis; but it is only fair to admit, that, conjointly with the elephants in the third group, they are conformable to the divisions of M. Elie de Beaumont. Should these divisions be more