species and genera, instead of such strong lines of demarcation, and often wide intervening gaps?

We may consider this objection under two heads: —

First, To what extent are the gradational links really wanting in the living creation or in the fossil world, and how far may we expect to discover such as are missing by future research?

Secondly, Are the gaps more numerous than we ought to anticipate, allowing for the original defective state of the geological records, their subsequent dilapidation, and our slight acquaintance with such parts of them as are extant, and allowing also for the rate of extinction of races and species now going on, and which has been going on since the commencement of the tertiary period?

First, As to the alleged absence of intermediate varieties connecting one species with another, every zoologist and botanist who has engaged in the task of classification has been occasionally thrown into this dilemma,—if I make more than one species in this group, I must, to be consistent, make a great many. Even in a limited region like the British Isles, this embarrassment is continually felt.

Scarcely any two botanists, for example, can agree as to the number of roses, still less as to how many species of bramble we possess. Of the latter genus, *Rubus*, there is one set of forms, respecting which it is still a question whether it ought to be regarded as constituting three species or thirty-seven. Mr. Bentham adopts the first alternative, and Mr. Babington the second, in their well-known treatises on British plants.

We learn from Dr. Hooker that at the antipodes, both in New Zealand and Australia, this same genus *Rubus* is represented by several species rich in individuals and remarkable for their variability. When we consider how, as we extend our knowledge of the same plant over a wider area, new