

liar forms, such as the common glowworm, *Lampyrus noctiluca*, Linn., the dung-beetle, *Geotrupes stercorarius*, Linn., the ladybird, *Coccinella septempunctata*, Linn., the earwig, *Forficula auricularia*, Linn., some of our common dragon-flies, as *Libellula depressa*, Linn., the honey-bee, *Apis mellifera*, Linn., the cuckoo spittle insect, *Aphrophora spumaria*, Linn., and a long catalogue of others, to all of which Professor Heer has given new names, but which some entomologists may regard as mere varieties until some stronger reasons are adduced for coming to a contrary opinion.

Several of the insects above enumerated, like the common ladybird, are well known at present to have a very wide range, over nearly the whole of the Old World, for example, without varying, and might, therefore, be expected to have been persistent throughout many successive changes of the earth's surface and climate. Yet we may fairly anticipate that even the most constant types will have undergone some modifications in passing from the Miocene to the Recent epoch, since in the former period the geography and climate of Europe, the height of the Alps, and the general fauna and flora were so different from what they now are. But the deviation may not exceed that which would generally be expressed by what is called a well-marked variety.

Before I pass on to another topic, it may be well to answer a question which may have occurred to the reader; how it happens that we remained so long ignorant of the vegetation and insects of the Upper Miocene period in Europe? The answer may be instructive to those who are in the habit of underrating the former richness of the organic world wherever they happen to have no evidence of its condition. A large part of the Upper Miocene insects and plants alluded to have been met with at Oeninghen, near the Lake of Constance, in two or three spots embedded in thinly laminated marls, the entire