so few that they are always signalized as of special interest. Among the Mesozoic rocks, on the contrary, the original stratification-planes have usually been little deranged, faults are generally few and trifling, and it is for the most part only along the flanks or axes of great mountain-chains that extreme dislocation and disturbance can be observed. A further distinction is to be found in the relation of the two series to volcanic activity. We have seen in the foregoing chapters that every period of Palæozoic time has been marked somewhere in the Old World by volcanic eruptions, that in certain regions, such as that of the British Isles, there has been an abundant outpouring of volcanic material again and again in successive geological periods within the same limited area, and thus that masses of lava and tuff thousands of feet in thickness, and sometimes covering hundreds of square miles in extent, have been thrown out at the surface. But in the European area, with some trifling exceptions at the beginning, the whole of the Mesozoic ages appear to have been unbroken by volcanic eruptions. The felsites, rhyolites; porphyrites, diabases, basalts, and other lavas and eruptive rocks so plentiful among the Primary formations are generally absent from the Secondary series.

But perhaps the most striking, and certainly the most interesting, contrast between the rocks of the older and the newer series is supplied in their respective organic remains. The vegetable world undergoes a remarkable transformation. The ancient preponderance of cryptogamic forms now ceases. The antique types of Sigillaria, Stigmaria, Lepidodendron, Calamites, and their allies disappear from the land, and their places are taken by cycads and conifers, while eventually the earliest monocotyledons come