

sideration of the second. But we find no indication in the rocks of any general break in the continuity of the processes of sedimentation and of life which we have seen to be recorded among the Palæozoic rocks. On the contrary, so insensibly do the Palæozoic formations in many places merge into the Mesozoic, that not only can no sharp line be drawn between them, but it has even been proposed to embrace the strata at the top of the one series and the base of the other as parts of a single continuous system of deposits.

Nevertheless, when we look at the Mesozoic rocks as a whole, and contrast them with the Palæozoic rocks below them, certain broad distinctions readily present themselves. Whereas in the older series mechanical sediments form the prevalent constituents, piled up in masses of graywacke, sandstone, conglomerate, and shale often many thousands of feet in thickness, in the newer series limestones play a much more conspicuous part. Again, while in the Palæozoic formations a single kind of sediment may continue monotonously persistent for many hundreds or even thousands of feet of vertical depth, in the Mesozoic series, though thick accumulations of one kind of material, especially limestone, are locally developed, there is a much more general tendency toward frequent alternations of different kinds of sedimentary material, sandstones, shales, and limestones succeeding each other in rapid interchange. Another contrast between the two series is supplied by the very different extent to which they have suffered from terrestrial disturbances. Among the Palæozoic rocks it is the rule for the strata to have been thrown into various inclined positions, to have been dislocated by faults, and in many regions to have been crumpled, pushed over each other, and even metamorphosed. The exceptions to this rule are