

Before adopting, definitively, the conclusion obviously indicated by all the preceding facts, that the stratified rocks in the crust of the earth have been broken up, so that its disrupted masses have been placed in new positions, and that the unstratified rocks have been raised in consequence of such disruptions along the axes, and about the centres of mountain chains and groups, it will be proper to inquire further into the nature and origin of these two classes of rocks.

*Origin of stratified and unstratified Rocks.*

The great and leading distinction between these rocks, is the form of their whole masses; but, besides this, we observe, in other respects, very important differences, which facilitate investigations into their origin, — differences of internal structure, chemical character, mineral aggregation, and imbedded substances.

*Stratification* is a form of matter seldom produced in perfection among the effects of modern nature, except by the agency of water. The sediment from rivers, the deposits in lakes, the sandy and pebbly accumulations from the sea, all possess the true characters of stratification, for they tend to be produced in considerable breadths, with comparatively small thicknesses. And as among the ancient rocks we frequently find contiguous deposits of different chemical nature, as limestone succeeding clay or sandstone, so in these more modern products, similar *successions of strata* occur: clays and sands, and marly limestones of different colour, consistence, and chemical quality. Many of the ancient sandy strata are laminated parallel to the surface, so are the modern sediments from a river or the tide; others are irregularly composed of oblique laminæ, or ripple-marked on the surface, as are the deposits from agitated rivers and tidal currents.

All the comparisons which can be made between ancient strata and analogous products of modern nature,