

occurrence in all such districts, (that is, limiting the observation to England); and that wherever they occur, they uniformly succeed each other in the order above described; but although a general identity of structure is thus apparent in all our coal-fields, yet in the detail there exists much local variety. This, indeed, is the general complexion of all geological analogies: beds which occupy the same geological position, usually present a near resemblance, if considered on the great scale; subject to much difference, if examined more minutely. The aggregate series of strata is marked by permanent features, but the individual strata composing that aggregate undergo frequent changes; for instance, the first series of rocks above described (that of the coal-measures) viewed as an whole, is an uniform assemblage of alternating strata of coal, shale, grit, and ironstone. But any attempt to trace any individual stratum of the above substances to a considerable distance, even in the same coal-field, is usually vain; and much less can the same individual strata be recognised in different coal-fields. The strata of the mountain limestone series are far more uniform than those of coal; and yet, as we shall presently see, these appear at one extremity of the same range of mountains, under the form of a thick series of limestone beds, divided only by three alternations of toad-stone; while at the opposite extremity of the chain they are divided into numerous beds of much less thickness, separated by alternations of grit and shale. This kind of general resemblance and partial difference is indeed exactly what we should be led to expect, whatever hypothesis of the formation of these strata we may adopt; for it seems impossible that any general causes which could be supposed to act in the formation of strata, should not, while prevailing over extensive tracts of country, have had their effects modified by many local circumstances.