

ness, sometimes only a few feet or even inches, but usually many hundreds or several thousands of feet. Stratification must be distinguished from homogeneous lamination, which is a frequent character of single strata, presenting at their edges the appearance of leaves, like those of a book or a bundle of pasteboards. Taking some general resemblances of mineral composition as a principle of classification, the whole of the existing beds may be distributed into a small number of groups, in a measure according to the convenience of the geological observer, describer, or reasoner; though most acquiesce in making about twelve divisions, which, for the most part, have very distinct natural characters. Such a distribution is, at least, useful as an aid to the memory.

V. These beds of deposited earthy substances are not to be conceived of as concentric spheres, spread universally over the earth, the outermost including lower ones, and thus embracing the globe; as the paper and varnish which cover artificial globes, or the coats of liliaceous bulbs, commonly but inaccurately called bulbous roots. Such an idea would be quite erroneous, and would betray into great misapprehensions. But each layer is of some limited extent; considerable, it may be, in reference to the superficial divisions of country, but not exceedingly great in comparison with the whole surface of the earth. Each usually thins off towards its edges, or the edges are abruptly broken by the up-heaving and dislocating force: and the highest strata generally lie in hollows of various form and extent, which may be called troughs or basins, the edges of which are made by the elevated ridges of the oldest formations, so beautifully called in Scripture, "the great mountains, the everlasting hills, the pillars of heaven."

VI. The lower strata, manifestly the most early, are generally of the greatest extent in length and breadth, and