

distribution of the detritus, must be still more affected by the agency of those powerful currents, to which allusion has already been made (page 55). Bearing in mind these elements of variation in the depositions that may contemporaneously take place within the same oceanic basin, we shall be prepared to find similar discrepancies in the contents of the beds of the ancient seas.

5. INCLINED AND VERTICAL STRATA. — But although the strata, whether accumulated in banks or ridges, or deposited in basins or depressions, have originally been consolidated in horizontal layers, yet this arrangement has frequently been disturbed by expansive forces from below, and the strata have been broken up, and thrown into every direction, from a slight degree of inclination, to a vertical position. The sections before us, (Plates 7, 8, 9, 10,) to which I shall hereafter have occasion to refer, exhibit strata in various states of displacement.

Although it is my wish to abstain as much as possible from technical language, yet as it cannot in all cases be avoided without much circumlocution, it will be convenient in this place to explain a few scientific terms which are commonly employed. Thus, parallel layers or strata, piled, as it were, horizontally upon each other, as *a, b, c, d*, in the following diagram (and in the *Section near Devizes*, Plate 9, No. II.) are said to be *conformable*; but when strata are superimposed on others which lie