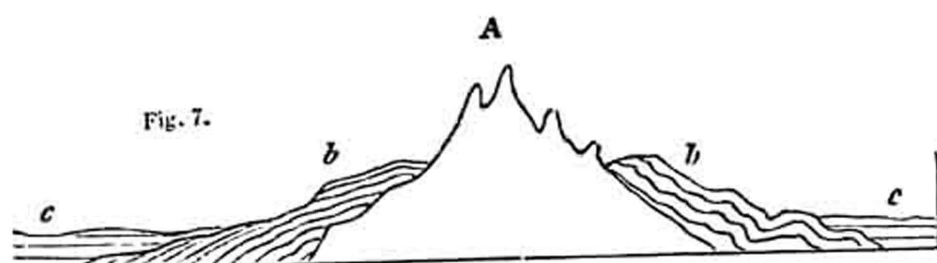
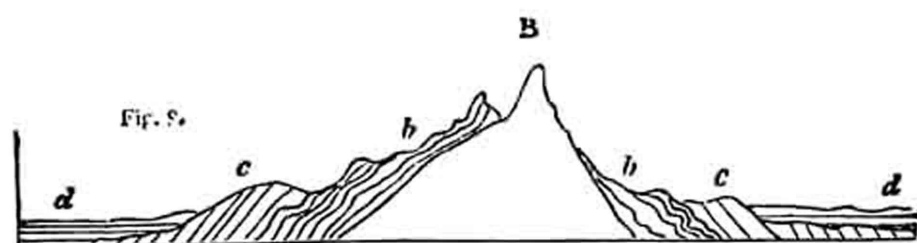


There are, therefore, in and adjacent to each chain, two classes of sedimentary rocks, the ancient or inclined beds, and the newer or horizontal. It is evident that the first appearance of the chain itself was an event "intermediate between the period when the beds now upraised were deposited, and that when the strata were produced horizontally at its feet."



Thus the chain A assumed its present position after the deposition of the strata *b*, which have undergone great movements, and before the deposition of the group *c*, in which the strata have not suffered derangement.

If we then discover another chain B, in which we find not only the formation *b*, but the group *c* also, disturbed and thrown on its



edges, we may infer that the latter chain is of subsequent date to A; for B must have been elevated *after* the deposition of *c*, and before that of the group *d*; whereas A had originated *before* the strata *c* were formed.

It is then argued, that in order to ascertain whether other mountain ranges are of contemporaneous date with A and B, or are referable to *distinct* periods, we have only to inquire whether the inclined and undisturbed sets of strata in each range correspond with or differ from those in the types A and B.

Now all this reasoning is perfectly correct, so long as the period of time required for the deposition of the particular local strata *b* and *c* is not made identical in duration with the period of time during which the animals and plants found fossil in *b* and *c* may have flourished, for that may have greatly exceeded, and probably did greatly exceed, the former period, and provided also that due latitude is given to the term contemporaneous; for this term must be understood to allude, not to a moment of time, but to the interval, whether brief or protracted, which elapsed between two events, namely, between the accumulation of the inclined and that of the horizontal strata.

But, unfortunately, no attempt has been made in the treatise under review to avoid this manifest source of confusion, and hence the very