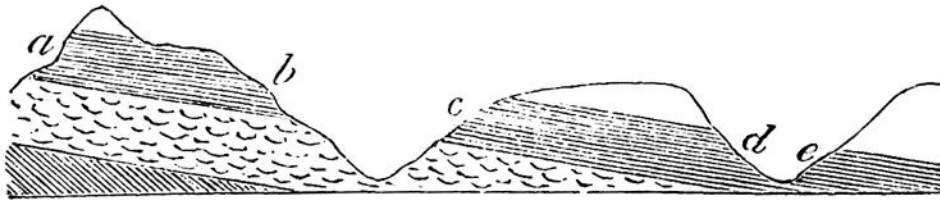


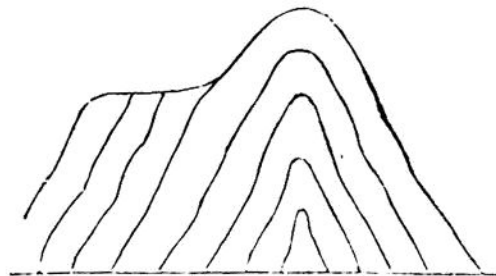
when walking over the country in which the rocks themselves occur, as in casting the eye upon a section, the beginner would very probably be deceived by such a result, and ima-



gine that there must be a great want of analogy between it and geological arrangements generally. The section, however, shows that the exposed parts *a b c d e* have been presented to view by the formation of two valleys: for if the line of inclination in one hill be carried on, it will be found to join on with that in the others. This fact is received by geologists as an evidence that the valleys were formed after the deposition of the beds.

But there are other difficulties of even a more serious character than those to which allusion has been made. The strata which compose the crust of the earth are not in precisely the same condition as when they were formed, but have been disturbed by a variety of powerful agents that have acted upon them in various ages. Sometimes rocks have been affected by violent volcanic agents, and at other times they have acted upon one another by pressure, or upon themselves by shrinking and subsidence.

Instead of regularly emerging and slightly inclined beds of which we have been speaking, strata are sometimes found in a position not unlike the roof of a house, piled up on their edges one against the other, forming a steep ridge of rocks.



Saddle-shaped stratification.

This form is called the saddle-shaped stratification. If we take a piece of some resisting substance, and fastening it at the ends, apply a force in the centre sufficient to raise up the central parts, it will either break or bend, and will remain in