

or vertical cut to some depth from the surface would present on its sides the appearance of the diagram, No. 6.



We may say that three fourths of the surface of the dry land of the globe is thus formed on the edges of moderately dipping strata: in all large districts the dip is found to be variable in amount and in direction, but, viewed on the great scale, always in harmony with one general law, which may be thus expressed:

The strata *dip from the chains and groups of mountains under the plains* which surround or divide them. Thus, from the group of Cumbrian mountains the stratified rocks dip W. at Whitehaven, N. at Hesketh, E. at Shap, S. at Ulverston; from the chain of the Lammermuirs, they dip N. W. under the great valley of the Forth, and S. E. into Northumberland. The most general dip in England is easterly, the principal mountains being situated on the western border: from Brittany, the Ardennes, and Auvergne, the dips of the strata converge toward the low ground of the Basin of Paris; from the plains of Languedoc the strata rise toward the Pyrenees and the mountains of central France; the Pyrenees, the Apennines, the Alps, the Carpathians, the Grampians, are *axes* from which the stratified rocks decline, to pass under the lower ground on each side. Diag. No. 7.



It is generally found that the dip of the strata, thus obviously related in direction to the axes and centres of mountain groups, is also related to them in amount, so that the angular value of the dip—or the number of feet in one hundred that the strata decline—decreases