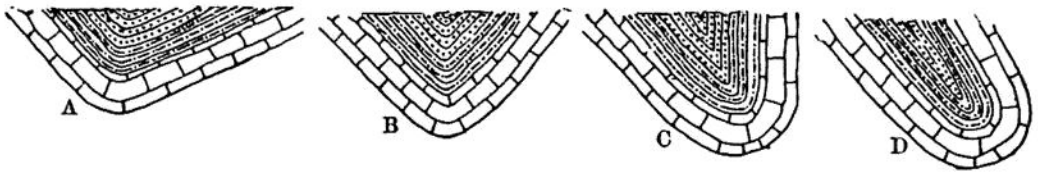
as in Fig. 103; that is, the dip is alike eastward on the east and west sides of the range, and it is not clear whether the overthrust flexure is anticlinal or synclinal. But toward the other end, the dips of the east side change, through the positions in C and B to that in A; and here they are plainly in opposite directions on the two sides, and indicate thus that the mountain is a synclinal flexure, basin-like at one end, and a careened trough at the other.

Flexures *have ordinarily, if not always, the ridge-line inclined* instead of horizontal. The making of horizontal flexures (that is, those with the ridge line horizontal) would require perfectly equable pressure along a region, and also perfectly equable resistance, neither of which conditions could exist, because of the varying texture in the rocks, if for no other reason, and hence horizontality seldom occurs.

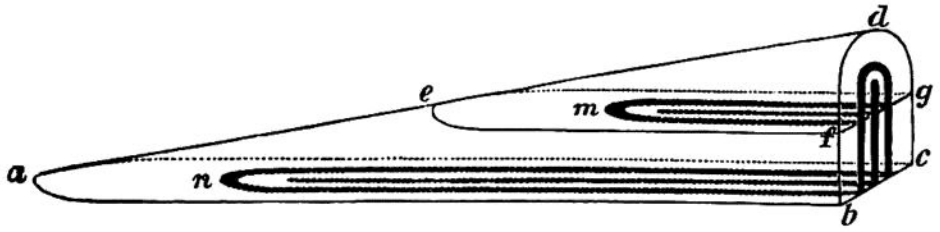
103.



Synclines of Mount Washington, Mass. D. '87.

In a single ordinary flexure, therefore, the strike may vary nearly 180°, and the dip as greatly. For the edge of the horizontal plane (*feg* in Fig. 104) is a horizontal line; hence it corresponds to the strike for each point it passes over through a circuit of 180°. Supposing the flexure to run north

104.



and south, the strike may vary from N.-S. through E.-W. to N.-S. again. Further: since the *dip* of the outer layer at any point is at right angles to the strike, it is at right angles to the line *str*. The dip of the beds is least along the axis of the fold.

Folds derive complexity also from torsion in the upturning movement. The following figure of a mountain scene in Colorado (Fig. 105) shows, besides the effects of erosion, those of a twist or torsion in the strata. The light-shaded stratum has opposite dip in the near and distant parts, and of course the strata either side participated in the torsion. The effect is probably far more common than is believed, for only in a region of bare, uncovered rocks is such a condition likely to be appreciated.

Besides the above-mentioned irregularities in a region of flexures, others come from variations in the length of parallel flexures, one flexure lapping