

same part as those of stratification among the stratified rocks, though with less definiteness and precision. The jointing of the more massive foliated rocks, such as the coarser varieties of gneiss, approaches most closely to that of granite; in the finely fissile schists, on the other hand, it is rather linked with that of sedimentary formations. Upon these differences much of the characteristic variety of outline presented by cliffs and crests of foliated rocks depends.

PART III. INCLINATION OF ROCKS

The most casual observation is sufficient to satisfy us that the rocks now visible at the earth's surface are seldom in their original position. We meet with sandstones and conglomerates composed of water-worn particles, yet forming the angular scarps of lofty mountains; shales and clays full of remains of fresh-water shells and land-plants, yet covered by limestones made up of marine organisms, and these limestones rising into great ranges of hills, or undulating into fertile valleys, and passing under the streets of busy towns. Such facts, now familiar to every reader, and even to many observers who know little or nothing of systematic geology, point unmistakably to the conclusion that most of the rocks of the land have been formed under water, sometimes in lakes, more frequently in the sea, and that they have been elevated into land.

But further examination discloses other and not less convincing evidence of movement. Judging from what takes place at the present time on the bottoms of lakes and of the sea, we confidently infer that when the strata now constituting so much of the solid framework of the land were formed, they were laid down nearly horizontally, or at least at low angles (*ante*, p. 839). When, therefore, we find them in-