

ozoic or Palæozoic rocks affords ample illustration of this result. The hills and prominent ridges are found to be where they are, not so much because they have there been more upheaved, but because they are composed of more durable materials, or because, by the disposition of the original drainage-lines, they have been less eroded than the valleys.

In this marvellous process of land-sculpture, we have to consider, on the one hand, the agents and combinations of agents which are at work, and on the other, the varying powers of resistance arising from declivity, composition, and structure of the materials on which these agents act. The forces or conditions required in denudation—air, aridity, rain, springs, frost, rivers, glaciers, the sea, plant and animal life—have been described in Book III. Part II. Every country and climate must obviously have its own combination of erosive activities. The decay of the surface in Egypt or Arizona arises from a different group of forces from that which can be seen in the west of Europe or in New England.

In tracing the sculpture of the land, we are soon led to perceive the powerful influence of the angle of slope of the ground upon the rate of erosion. This rate decreases as the angle lessens, till on level plains it reaches its minimum. Other things being equal, a steep mountain ridge will be more deeply eroded than one of the same elevation which rises gradually out of the plains. Hence the declivity of the ground, at its first elevation into land, must have had an important bearing upon the subsequent erosion of the slopes. It is important to observe that the depressions into which the first rain gathered on the surface of the newly upraised land would, in most cases, become the