

integration is exhibited among the "buttes" and "bad lands" of Wyoming and the neighboring territories of North America. Colossal pyramids, barred horizontally by level lines of stratification, rise up one after another far out into the plains, which were once covered by a continuous sheet of the formations whereof these detached outliers are only fragments.

As a consequence of this inequality in the rate of waste, depending on so many conditions, notably upon declivity, amount and heaviness of rain, lithological texture and composition, and geological structure, great varieties of contour are worked out upon the land. A survey of this department of geological activity shows, indeed, that the unequal wasting by rain has in large measure produced the details of relief on the present surface of the continents, those tracts where the destruction has been greatest forming hollows and valleys, others, where it has been less, rising into ridges and hills. Even the minuter features of crag and pinnacle may be referred to a similar origin. (Book VII.)

§ 2. Underground Water

A great part of the rain that falls on land, sinks into the ground and apparently disappears; the rest, flowing off into runnels, brooks, and rivers, moves downward to the sea. It is most convenient to follow first the course of the subterranean water.

All rocks being more or less porous, and traversed by abundant joints and cracks (p. 521), it results that from the bed of the ocean, from the bottoms of lakes and rivers, as well as from the general surface of the land, water is continually filtering downward into the rocks beneath. To what depth this descent of surface-water may go is not