

Such, then, is the order of nature as we see it now. The surface of this country, and indeed of all the great terrestrial areas of the planet, is undergoing a continuous process of denudation, during which many inequalities of contour are worked out, but the ultimate result of which, if unchecked by any counterbalancing natural agency, must be to reduce the dry land to the level, or rather a little below the level of the sea. The limit beneath which there is little effective erosion by waves and tidal currents probably does not exceed a very few hundred feet. Worn down to that limit, the degraded land would become a submarine plain, across the surface of which younger deposits might afterwards be strewn.

In speculating, however, from ascertained facts as to what may be or what has been the history of a land-surface, we are of course bound to take into consideration the effect of subterranean movements in modifying changes at the surface. It is evident that even if no disturbance were made in the drainage-lines of a country, upheaval, by increasing the declivity of the streams, would quicken their scour, and not improbably add to their volume by augmenting the rainfall. Subsidence, on the other hand, would have the contrary effect, and would carry down part of the land out of reach of atmospheric disintegration. It is certain that in the geological past there have been many uplifts, by which the solid terrestrial crust has been plicated and fractured on a colossal scale. Such a chain of mountains as the Alps, for instance, exhibits proofs of stupendous inversions and folds, whole mountainous masses of rock having there been thrown over bottom uppermost. But while the proofs of prodigious displacements are so clear, it is by no means so evident how they affected the surface of the ground at the time, or what