

important influence, in this respect, is even yet exercised by water at every moment. As it falls down as rain, trickling through the upper strata of the earth's crust, and flowing down from heights into hollows, it chemically dissolves different mineral parts of the ground, and mechanically washes away the loose particles. In flowing down from mountains water carries their débris into the plains, or deposits it as mud in stagnant lakes. Thus it continually works at lowering mountains and filling up valleys. In like manner the breakers of the sea work uninterruptedly at the destruction of the coasts and at filling up the bottom of the sea with the débris they wash down. The action of water alone, if it were not counteracted by other circumstances, would in time level the whole earth. There can be no doubt that the mountain masses—which are annually carried down as mud into the sea, and deposited on its floor—are so great that in the course of a longer or shorter period, say a few millions of years, the surface of the earth would be completely levelled and become enclosed by a continuous sheet of water. That this does not happen is owing to the perpetual volcanic action of the fiery-fluid centre of the earth. The surging of the melted nucleus against the firm crust necessitates continual alternations of elevation and depression on the different parts of the earth's surface. These elevations and depressions for the most part take place very slowly; but, as they continue for thousands of years, by the combined effect of small, interrupted movements, they produce results no less grand than does the counteracting and levelling action of water.

Since the elevations and depressions of the different parts