

against the elevations, is wholly insufficient to establish the theory of a fixed line of sea-level. The hollow might be formed, and yet the level affected notwithstanding. Until the elevation had risen above the line 3, 3 in the diagram Fig. I., and the corresponding hollow sunk to the line 3, 3 in the diagram Fig. II., the surface-line would remain unaffected,—the water displaced by the rising eminence would be contained in the sinking hollow; but immediately as the land rose over the surface, there would be a portion of it—the sub-aërial portion—which would displace no water. The hollow, if it took place in the exact ratio of the elevation,—and such is the stipulated condition of the theory,—would receive after this point exactly double the quantity of water that the land displaced, and the line of the sea-level would fall. When the elevation would have risen to the point A of the one diagram, and the hollowing depression sunk to the point A of the other, the amount of water received over water displaced would be equal in quantity to one of the parallelogrammic bands, 1 2, 2 1, or 2 3, 3 2, Fig. I.; and the sea-level would in consequence sink to the line 2, 2. The exactly *balanced* hollow would fail to preserve the *balance*.

And so I cannot continue to hold as a first principle, that the line of the sea-level is a fixed and stable line; seeing that ere I could do so I should have to believe, *first*, that the earth's radius has undergone no diminution since the earliest geologic periods in which an ocean existed; *second*, that for every elevation which takes place on the surface of the globe there takes place a corresponding depression upon it elsewhere; *third*, that if the elevation takes place within the bed of the sea, the depression *also* takes place within the bed of the sea; and, *fourth*, that the elevations and depressions bear always a nicely-adjusted proportion to each other in their contents,—different at two different stages of their formation,—being up