

Samoa, along by the Hervey Group. Each of these extensions *trends parallel with the groups of islands*. It would seem, therefore, that the Society and Samoan islands were regions of less change of level than the deep seas on either side of them; that therefore, instead of a uniform subsidence over the subsiding area shading off toward the borders, there were troughs of greater subsidence, whose courses were parallel to the ranges of islands; that, in other words, there were in the ocean's bottom a few broad synclinal and anticlinal flexures, having a common direction nearly parallel to the axial line of the Pacific. The Marquesas and Fanning Groups lie in a common line, and thus may mark the course of a great central anticlinal in the oceanic basin.

The Hawaiian range has experienced its greatest subsidence to the north-west, where the islands are all atolls, and show some evidences of recent sinking; and this north-western extremity of the range is nearer to the axis of the area of subsidence, above laid down, than is the south-western.

*What is the extent of the subsidence* indicated by the coral reefs and islands of the Pacific? It is very evident that the sinking of the Society, Samoan, and Hawaiian Islands has been small compared with that required to submerge all the lands on which the Paumotus and the other Pacific atolls rest. One, two, or five hundred feet, could not have buried the many peaks of these islands. Even the 1,200 feet of depression at the Gambier Group is shown to be at a distance from the axis of the subsiding area. The groups of high islands above mentioned contain summits from 4,000 to 14,000 feet above the sea; and can we believe it possible that throughout this large area, when the two hundred islands now sunken were above the waves, there were none of them equal in altitude to the mean of these heights, or 9,000 feet? That none should have exceeded 9,000 feet in elevation is by no means probable. Hence, however moderate our estimate, there must still be allowed a sinking of many thousand feet. Moreover, whatever estimate we make that is within probable bounds, we shall not arrive at a more surprising change of level than our continents