

From these considerations it is evident that a barrier reef indicates approximately the former limits of the land inclosed. The Exploring Isles (Feejee chart), instead of an area of *six* square miles, the whole extent of the existing land, once covered *three hundred* square miles; and the outline of the former land is indicated by the course of the inclosing reef. A still greater extent may be justly inferred. For a barrier, as subsidence goes on, gradually contracts its area, owing to the fact that the sea bears a great part of the material inward over the reefs; and, consequently, the declivity forming the outer limit of the sub-marine coral formation has a steep angle of inclination.

In the same manner it follows that the island Nanuku, instead of *one* square mile, extended once over *two hundred* square miles, or had two hundred times the present area of high land. Bacon's Isles once formed a large triangular island of equal extent, though now but two points of rock remain above the water.

The two large islands in the western part of the group, Vanua Levu and Viti Levu, have distant barriers on the western side. Off the north point of the former island, the reef begins to diverge from the coast, and stretches off from the shores till it is twenty and twenty-five miles distant; then, after a narrow interruption, without soundings, the Asaua islands commence in the same line, and sweep around to the reef which unites with the south side of Viti Levu; and, tracing the reef along the south and east shores, we find it at last nearly connecting with a reef extending southward from Vanua Levu. Thus these two large islands are nearly encircled in a single belt; and it would be doing no violence to principles or probabilities to suppose them once to have formed a single island, which subsidence has separated by inundating the low intermediate area. The singular reef of Whippey harbour, page 210, is fully explained by the hypothesis. We may thus not only trace out the general form of the land which once occupied this large area (at least 10,000 square miles), but may detect some of its prominent capes, as in Wakaia and Direction Island. The present area is not far from 4,500 square miles.