

racter of the rocks, and the general topographical features of the central district, remind us of Tahiti and Kauai, and, as far as the facts go, they favour our referring the whole to the same distant era.

Change of Level.—Some partial subsidences have already been alluded to. I refer to the bluff mountain side, back of the Falifa plains, and the long wall, three to six hundred feet high, fronting the sea on the southeast side of the island. The former appears as if all the northern declivity of the mountain, except a small portion at top, had been removed by an extensive subsidence. The wall is five or six miles long, and its height about a thousand feet. The other is a still more remarkable example of subsidence. The wall is not less than seven miles long, and cuts off the greater part of the northeastern declivities of Fanganga. The usual slope of five or six degrees commences just below the upper hundred feet to stretch away to the southward and westward; but it is suddenly broken off by the high precipice. (Figure 2, page 325.) There is a narrow plain at foot bordering the sea, which is the site of several native villages.

We have been unable to discover any proofs of a recent rise of the island. The black ledges of basaltic rock along the shores are perfectly clean from coral, to the water's edge. The layers of beach limestone on the shores sometimes extend a foot above high water mark; but this is not beyond their ordinary height. The layers have the usual character, and incline outward at an angle of seven or eight degrees (p. 44). The reefs of Apia lie nearly at the level of low tide; there is not the slightest reason to suppose that a rise is in progress, or that any has taken place since the coral reef first fringed these shores. If there has been any change it is one of subsidence; but though we have some reason for suspicion, we cannot decidedly prove it.* The fact that the surface slopes gradually beneath the sea, instead of being bordered by a cliff, is evidence of some weight in favour of a subsidence of a hundred feet or more; for on Hawaii, wherever recent lava streams have entered the sea, there is usually a cliff of one or two hundred feet, and never a slope of solid lava continuing on uninterrupted beneath the water.