

tion, they are deserving of that name: many exhibit a flow of lava into them. The mode of their formation seems very simple, and is just the effect that one would suppose to arise from a sudden undermining; but that they should always form nearly a true circle, with perpendicular walls, is remarkable, and cannot be easily accounted for.

As will have been seen, there have been copious eruptions from the sides as well as from the terminal crater of Mauna Loa, and among these may be reckoned that of Kilauea on its flank. It was proved satisfactorily to my mind that the craters have no connexion whatever with each other. An instance has been stated, where none apparently existed between Judd's and the large lake in the crater of Kilauea, although they were only two thousand feet apart, and it is equally evident that Kilauea has none with the top of the mountain. The eruption of 1832, from the terminal crater, and the one that has taken place since our visit, is sufficient proof of this. All these flows tend constantly to swell and increase the bulk of this mountain.

It has been remarked already, that a great deception in relation to the height of these mountains occurs when they are first viewed from the neighbouring sea. This is more particularly the case when the weather is clear; and the impression was hardly removed from my mind even after the fatigue and labour encountered during our visit to Mauna Loa. I still could not help wondering how they could possibly be as high as I had found them by actual measurement.

In addition to the information regarding the Hawaiian Group, which has fallen naturally under one or other of the preceding chapters, several miscellaneous matters attracted our notice, which require to be spoken of before we take our final leave of them.

Mr. Coan obliged me with the following account of the influx of the sea at Hilo, on the 7th of November, 1837. A similar occurrence, it will be recollected, took place at the island of Tutuila, in the Samoan Group.

At about seven o'clock, P. M., the sea at Hilo was observed to retire far below its usual low-water mark. In a few moments afterwards the water returned in a gigantic wave, rushing to the shore with great velocity, and breaking upon the beach with a noise like a peal of thunder. All the low grounds in the neighbourhood of the beach were instantly submerged, and a large number of houses were swept away. So sudden and unexpected was the catastrophe, that many of the inhabitants were engulfed in the flood, and compelled to struggle for their lives. The sea remained upon the land about fifteen minutes, when it retired beyond the line of low water, and after a short interval, returned again, but with less violence. It afterwards continued to