

the time of, or after the eruption. It has been mentioned, that some slight shocks were felt in the neighbourhood of Nanavalie, but they are reported as being very frequent and violent at Kealakeakua Bay, on the opposite side of the island, though much more remote from the scene of destruction than Hilo.

Two of the missionaries were once on the black ledge, looking down on the burning lake, when an earthquake took place which was felt over the whole island: no change took place in the lake, or elsewhere in the crater, excepting that some pieces of stones were shaken down from the surrounding walls.

From all the information I could obtain, the causes of the earthquakes do not appear to be connected with the action of the volcanoes. The accounts, however, are contradictory, and depend principally upon native testimony, which is not to be relied on in such observations. It is to be hoped, that the resident missionaries will endeavour to devote a small portion of their time to the interesting phenomena of these eruptions.

Dr. Pickering reached Kilauea on the 22d of January, where he found the large lake, according to his estimation, still about thirty feet below the rim, to which height it had again risen. If this estimate was accurate, it would prove a rapid formation of lava, for only ten days had elapsed since we had seen it many feet lower. About 9 P. M. of the same day, a large part of the southern bank fell in at once, producing a great light, and surging to and fro for some minutes, the surface of the fluid rising sometimes even with the rim.

According to the native account, the crater is more active at night than in the day, but this probably arises from its greater apparent brilliancy.

The small or Judd's Lake, was still overflowing in all directions, and this action had continued for the last ten days. According to Dr. Pickering's account, it was not as active as on its first outbreak. A vast quantity of lava had been poured out since our last visit, and there was a very perceptible increase of it in the crater.

I have before remarked the great difficulty of retaining a knowledge of the situation and relative position of things, on first descending on the "black ledge." This was evident from Dr. Pickering's not recollecting objects which must have been seen by him.

The way he accounts for this is, that every thing at first was so novel, and excited so much wonder and astonishment, that it made no lasting or distinct impression; but after proceeding for some time, this appears to have worn off, and the eye became accustomed to the