

in violent intermittent splashes; and there is also one deep chasm, from the depths of which boiling hot blue mud is jerked out in similar splashes. The mud hardens on the sides of the cavity into a crust made up of successive laminæ.

The natives use the natural hot water to heat sticks or planks in, in order to bend them. They also sometimes dig holes in the mud and set their kettles in them to boil. As at the other springs, there are cold springs issuing from the ground, close to the boiling ones. One spring has its water charged with carbonic acid and effervescing. All the springs empty into one small stream, which then runs down to the sea, with a complex mixture of mineral flavours in its water, and retains its heat for several miles.

In the shores of the lake there are large extents of geyser deposit, forming strata 40 or 50 feet in thickness, and evidently resulting from hot springs, now worked out, but with a few small discharge pipes of heated gas remaining active here and there. Near the seaward end of the lake is a hole, where, as in the Grotto del Cane, an animal, when put into it, becomes stupefied by inhaling the carbonic acid gas discharged.

I made an excursion from Ponta Delgada to the Caldeira des Sette Cidades, or Cauldron of the Seven Cities. It is a marvellous hollow of enormous size, with two lakes at its bottom and a number of villages in it. One slowly climbs the mountains from the sea and suddenly looks down from the crater edge upon the lakes, 1,500 feet below. On the flat bottom of the crater, which is covered with verdure and cultivated fields, are several small secondary craters, the whole reminding one of a crater in the moon. One of these small craters has been so cut up by deep water-courses, that between them only a series of sharp radiating ridges is left standing, and the crater has thus a very fantastic appearance.

San Miguel, at the time of our visit, was suffering from a drought which had been of long duration. A grand procession therefore took place in order to procure rain, in which a miraculous image, the "Santo Christo," the jewels presented at the shrine of which are reputed amongst the people to be worth one million sterling, was carried round the town. The figure is apparently of wood, and is in a squatting posture with the legs crossed. It was borne in a litter, with a canopy over it, on men's shoulders. Next day, from seawards, we saw clouds hanging low over the island, and it seemed as if the image had been again miraculously successful.

The most complete account of the geology of the Azores is that of G. Hartung, "Die Azoren." Leipzig, Engelmann, 1860. See also F. Du Cane Godman, "Nat. Hist. of the Azores." London, Van Voorst, 1870.