

off horizontally, and out of the huge crater on the top arises towards one side of it a little secondary cone, which forms the highest point of the whole.

St. Michael's Island, July 4th to July 9th, 1873.—We neared the island of San Miguel. The island has mountains of from 2,300 to 3,500 feet altitude at either end, and a lower range of hills joins these together. Ponta Delgada, the capital of San Miguel, lies on the sea shore opposite, about the middle of the lower range of land.

The volcanic cones and slopes leading from these to the sea are formed of light pumice and ash soil, very friable and easily cut into by the action of water. Hence, water-courses have cut their way deep into the surface of the country, and as San Miguel is viewed from seawards, its most striking feature is formed by the numerous deep gullies which are seen running parallel to one another, and with almost straight courses from the high land down to the sea. Ponta Delgada is composed of houses similar to those of Fayal, but it is not nearly so pretty as the latter town, the land behind not being steep, and there being no bay shut in by hills. A breakwater is required to form a harbour.

I formed one of a large party which paid a visit to the valley of Furnas and its hot springs, distant about 30 miles from the port town. We travelled in carriages, each drawn by four mules. From the nature of the country already described, we had to cross numerous water-worn gullies, and our road led constantly up and down steep hills. We crawled up one side of the ridges, and made fearful dashes down the other, the mules going with great spirit. We passed between fields of maize and corn, with tall hedges of reeds (*Arundo donax*), planted round them to break the force of the wind, and a kind of lupine planted in geometrical patterns amongst the corn to be ploughed in after the crop was reaped, as manure.

We passed many fine flower gardens, planted with a large variety of Australian, New Zealand, and South American plants, and went by numerous hills, small volcanic cones, planted with firs and various timber trees with great care. The appearance of the island has been wonderfully modified by careful plantation, most of the work having been done by a Mr. Brown, a gardener from Kew, who was brought to the island 30 years ago by Don Jose de Canto, to superintend the laying out of his garden.

We halted for luncheon at a small stream under a clump of Australian blue gum trees, beneath which on the margins of the stream grew a profusion of ferns. Here flourished the cosmopolitan brake fern, and another *Pteris* (*P. arguta*);