

the Cordillera at an altitude of about 4500 feet above the sea. From the Capital we visited Dueñas, a village on the Pacific slope situated in a plain at the foot of the Volcan de Fuego and between it and the Volcan de Agua. Here we spent about three months, exploring the country and making frequent excursions into the forest of the Volcan Fuego, which furnished a great contrast to that near the coast; the high trees were the only corresponding feature, but both vegetation and climate were entirely different. Instead of the incessant noise of the buzzing of myriads of insects, life seemed almost extinct and a dead silence reigned throughout, broken only by an occasional gust of wind or the fall of some rotten tree. The mountain itself is furrowed with deep ravines, called 'barrancas,' the sides of which are exceedingly steep and quite impassable, and in ascending the mountain, care must be taken to keep on the top of the ridges between them. The forest shuts out the view of the surrounding country, consequently landmarks are not available, and as one ravine almost exactly resembles another it is an extremely easy matter to lose one's way by inadvertently following the edge of a new 'barranca.' The lower part of the forest up to about 7000 feet has been cleared for cultivation, but quickly reverts to a dense growth of scrub, above which is found a belt of evergreen-oaks followed by deciduous trees of various species, amongst which the remarkable *Cheirostemon platanoides* mingles in the highest range with alders. Then follows more open ground with pine trees and coarse grass, but the trees become stunted as the ascent increases, and finally disappear at an elevation of about 11,000 feet. From thence to the summit of the Fuego the cone is composed of cinders and ashes interspersed with short coarse grass. The mountain is divided into two peaks or cones near the summit, connected by a narrow ridge of cinders, the southern and higher peak is still active, and from it a perpetual column of thin smoke is always plainly visible. This cone is very steep, and the climb to the edge of the crater itself is exceedingly laborious, as the foot sinks at each step deep into the ashes. The view, however, from the point well repays the trouble of the ascent. Southward the eye travels a distance of 50 miles to the coast, far beyond again is seen in dim outline the horizon of the Pacific Ocean, while below on the other side lies the deep abyss of the crater itself. The northern cone is more or less covered with coarse grass extending to the summit, while the interior of the crater has been almost filled with the eruptions of the more recent southern volcano; but signs of internal fires are not wanting, as jets of steam and sulphurous vapour are still seen issuing from the fissures in the rocks. In one of the hotter crevices I found a vigorous plant of *Lycopodium clavatum* and a *Selaginella* taking advantage of the warmth and moisture and growing with wonderful luxuriance at an altitude of nearly 14,000 feet. The descent was by no means easy, as there was no track to mark our way, but we had fortunately taken the precaution of slashing the trees with our big knives or 'machetes' on our way up, which indicated our