

now several separate lakes draining from one into the other, and finally ending in Lake Texcoco, which is greatly reduced in size; the water of this lake is brackish, while that of the other is fresh.

An account of my journey from Mexico City to Orizaba has been already given (p. 9), so, after stating that I found myself on a limestone formation surrounded by rich vegetation, with the high peak of Citlaltepētāl towering above, I will refer to Dr. Gadow for his description of the ascent of this volcano in company with his wife ('Through Southern Mexico,' chap. iii. 1908). He gives in some detail the change of climate at various altitudes, and its consequent influence on the Flora and Fauna, which is of special interest here, as conditions somewhat similar prevail on nearly all high mountains in the tropics.

Starting from Orizaba, Dr. and Mrs. Gadow camped near the village of Xometla at an altitude of 8600 feet, where they remained for a few days exploring the neighbourhood. On their way there they crossed a deep limestone gorge, with fertile vegetation consisting of a species of *Platanus*, magnolias, crotons, and various kinds of oaks, most of these supporting a luxuriant growth of bromelias, ferns, selaginellas, and orchids, interspersed with lichens and tillandsias which proved to be "hotbeds of life." Northward the open slopes were covered with pasture and clusters of trees and shrubs, including mimosas, acacias, yuccas, plane-trees, and bamboos. Here was reached the upper limit of coffee and cotton plantations, while in the damper ravines tree-ferns were plentiful. Higher up, at the level of the central plateau, maize fields became scarce, and tree-ferns and datura disappeared. At this altitude a great change in the vegetation takes place; there is now but little trace of tropical plants, and the climate is temperate, moist and fertile, coinciding with the cloud belt. The vegetation near the camp consisted chiefly of pines, *P. montezumæ* and *P. liophylla*, with open spaces bordered with deciduous and evergreen oaks, arbutus of two species, alder and *Fuchsia microphylla*, with tillandsias in abundance. The larger tillandsias occur up to a level of 9600 feet, where they suddenly disappear, and mistletoe then takes their place on the trees. In the 'barrancas' or gorges are high trees covered with creeping aroids and lianas hanging from the branches with abundance of bamboos and maiden hair fern. Here bird life was almost absent, and only a few tits, a tree-creeper, a woodpecker, and some blue jays were recorded. A few small mammals were not uncommon, and the armadillo, which is fairly plentiful in the lower and tropical country, still exists at an elevation of 8000 feet. Several species of amphibia and reptiles are also found at this altitude, living chiefly in the bromelias and other epiphytical vegetation. They have either no lungs or only tiny vestiges of them, respiration being chiefly carried on through the moist skin. One genus, *Spelerpes*, has a wide distribution in Mexico, and *S. orizabensis*, which leads only a partially arboreal life, ascends to an altitude of 12,500 feet. *Hylodes rhodopis*, which leads the life of a tree-frog, occurs at 10,000 feet, while it also inhabits the