

column of smoke seen by day and the series of small fires visible at its summit by night. Nearly all the inhabitants of Camiguin, the population of which formerly amounted to 11,000 had left the island in consequence of the outburst. The volcano, a dome-shaped mass standing on the sea shore, was found red and glowing with heat in cracks at the summit, and smoke was ascending from it. There appeared to be no crater, and Mr. Buchanan, who was one of the landing party, drew attention to the fact that the lava of which it was composed was entirely trachytic. It recalled in form at once some of the smaller trachytic domes of the Puy de Dome district, in the Auvergne, concerning the mode of formation of which there has been much doubt. The mass in this case appeared never to have had any crater, but rose with steep walls directly from the soil, formerly covered



FIG. 220.—New Volcano, Camiguin Island.

with vegetation which it had destroyed, and it appeared as if the trachytic lava had issued from a central cavity and boiled over, as it were, till it set into the form of the dome. The rocks collected at the volcano were amphibolic andesite containing some crystals of augite, and augite-andesite with hornblende, the specimens showing often transition between the two types of rocks.

The ground around the crater was still almost bare of vegetation, but some plants were beginning to colonize the denuded soil, strongly impregnated as it was with various volcanic chemical products. Three species of ferns, as first colonists, grew as isolated plants here and there; and along the courses of two small streams fed by hot springs, issuing from the base of the volcano, where the poisoned ground was constantly washed, a good deal of vegetation was to be found, amongst which were several sedges and grasses