

everywhere, decomposing the lava amongst which they passed; in most of the cracks were small quantities of sulphur. From the margin of the crater overlooking the town of Ternate there was a magnificent view, embracing the island of Halmahera (Gillolo), which lay spread as a map beneath us, and the peak of Tidore, and many far-distant islands. Our guides rejoined us when we came down to the outer crater. For the benefit of any future explorers of the Peak, which is very seldom ascended, I give the time required for the ascent. We left the house at 1000 feet altitude at 4.30 A.M., reached the margin of the outer crater at 8.30 A.M., and the summit at 9.30 A.M. The temperature of the air at an altitude of 4800 feet was 71° F. at 8.30 A.M., at the summit of the mountain it was 68°·5 F. at 9.30 A.M."

The rocks collected at Ternate were augite-andesite with pleochroic augites and probably with some hypersthene crystals.

From a record of the temperature kept at Ternate for eight years, it appears that the climate is very uniform, the mean temperature for each month varying only from 80° to 81°. Rain falls on an average 216 days in the year, or 18 days per month. The number of days' rain per month being rather under the average during the northerly, and over the average during the southerly, monsoon. The northerly monsoon commences in January and ends in March, the southerly monsoon in April and lasts until the beginning of November.

Each day whilst the ship was at Ternate the clouds banked up over the hills towards the afternoon, and about 5 or 6 P.M. a heavy rain squall was experienced, which lasted about three quarters of an hour, and produced a deliciously cool atmosphere after the heat of the day.

The rise and fall of the tide at springs is about 4 feet, but may vary with the season of the year.

The zoological collections at Ternate included a new species of Snake of the family Calamaridæ, and a new Butterfly (*Gerydus stygianus*, Butler), as well as a Sphynx Moth (*Protoparce cingulata* [Fabr.]), concerning which Mr. Butler remarks:—"The appearance of this New World species at Ternate is very surprising; it is probably only an accidental immigrant. The specimen was much worn and shattered, and may have been long on the wing. Some of the Sphingidæ have been taken at an almost incredible distance from land, showing that their flight is not only extremely rapid, but capable of being sustained for a considerable time."¹

The Medusæ.—Professor Hæckel, who has drawn up a Report on the Medusæ collected during the Expedition, has indicated the more important points in his Report² in the following notes:—"Few classes of animals appear so ill-suited for life in the deep

¹ *Ann. and Mag. Nat. Hist.*, ser. 5, vol. xiii. pp. 194, 199, 1884.

² Report on the Deep-Sea Medusæ, Zool. Chall. Exp., part xii., 1881.