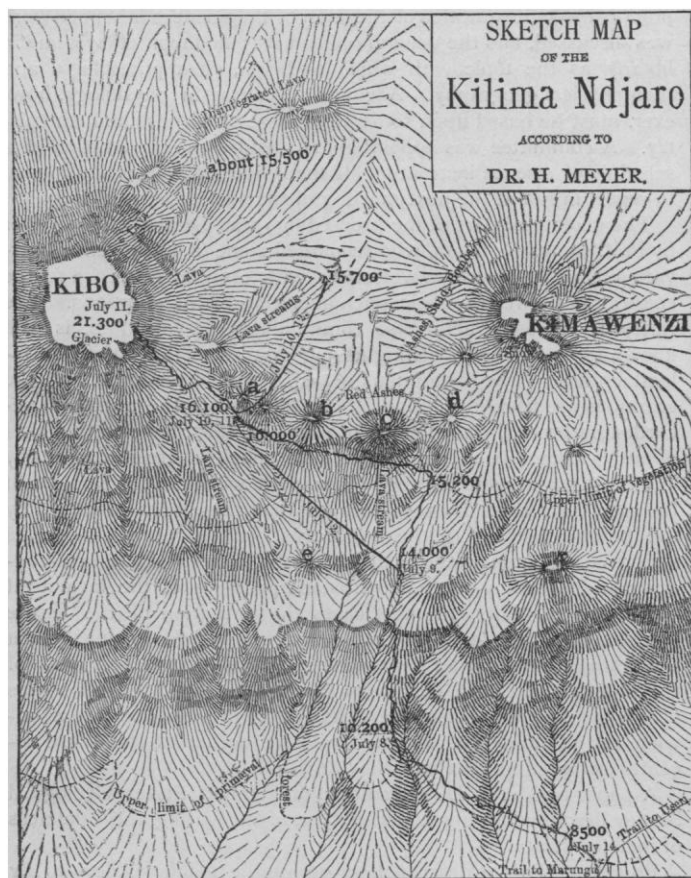


## EXPLORATION AND TRAVEL.

## Dr. H. Meyer's Ascent of the Kilima Ndjaro.

IN a letter to the Geographical Society of Leipzig, which has been published in *Petermann's Mittheilungen*, Dr. H. Meyer describes his ascent of the Kilima Ndjaro. On July 2 he left Taweta, and, after a two days' march through steppes and brushes, he reached, in company with Herr von Eberstein, the village of Mareale, a chief of the Marangu. He was kindly received, and Mareale gave him three guides, with whom and twenty-two men of his caravan he started for the Kibo, the higher summit of the Kilima Ndjaro. At a height of 5,700 feet they passed the last plantations of bananas, and entered the primeval forests, which are always full of mist, at a height of 6,600 feet. After two days, having passed these forests, they reached the grassy belt surrounding the upper part of the mountain. Here they left the trail which leads along the south-eastern slope of the Kimawenzi to Useri, and turned north-westward, following the upper limit of the forests. At the



end of the second day they reached the place where, in 1884, Johnston had staid for some time, at a height of 9,800 feet. Here part of the caravan remained, but eight men volunteered to carry tent, blankets, instruments, and provisions to the snow-line. The route led over grass-covered streams of lava, which were intersected by gulches of 150 feet depth, cut by the torrents which come from the snow-fields of the summit. From here the saddle between the Kimawenzi and Kibo appears almost horizontal. The travellers ascended a lava-stream, and soon reached a gently sloping region where meadows indicated the course of the brooks. Here the first patches of snow were met with, and Meyer left here his tent on the 9th of July, at an elevation of 14,000 feet.

On the 10th, when Meyer intended to strike camp, five of his servants refused to accompany him any farther, and therefore they were left behind, while the rest of the caravan continued their march. After a short time they reached the steep, fissured hill *c*, from which the lava-stream had come on which they travelled the preceding day. Here they discovered the series of parasitic craters *a*, *b*, *c*, *d*, from which numerous lava-streams have flowed southward.

Some of these are separated by deep valleys, while others form a continuous plateau which stretches out far northward between the Kimawenzi and Kibo. Meyer proceeded near the southern part of these hills at a mean elevation of 16,000 feet, and made his last encampment at the foot of the hill *a*. As the night promised to be very cold, he sent his three negro servants back to the previous camp, and ordered them to return the next day. Thus he and Von Eberstein were alone, and passed the following night at a temperature of  $-11^{\circ}$  C. ( $12^{\circ}$  F.) in their small tent. After a careful examination of the cone of Kibo with a spy-glass, Meyer concluded that an ascent on the south-eastern side was possible. But on the highest summit a light blue wall of ice was seen, which extended to a lower level on the south side of the mountain. In the beginning of the next day, after having passed lava-streams covered with large boulders, the travellers reached continuous steep snow-fields filling the rounded valleys between enormous lava-streams. Johnston had reached this point, and a little farther to the north Count Teleki had attempted an ascent a few weeks before Meyer's arrival. In the morning the weather was clear, the snow hard, and therefore the travellers succeeded in reaching a considerable elevation; but after three hours' climbing, fog set in. In the beginning the mist was light, and the summit of the mountain could be seen occasionally. Wherever a lava-stream crosses an older one, a new snow-field begins, steeper than the preceding. At such points the travellers staid for a few minutes, making barometrical observations and collecting rock specimens and lichens. They were careful not to ascend too rapidly, as work in elevations of more than 17,000 feet in height is extremely exhausting. Later in the day the fog became thicker, the highest parts of the mountain became invisible, and the sun disappeared. The temperature fell from  $8^{\circ}$  C. ( $46^{\circ}$  F.) to  $-30^{\circ}$  C. ( $27^{\circ}$  F.), and a snow-storm set in, which threatened to obliterate the track. About half an hour later, Herr von Eberstein began to fall back, and after a quarter of an hour more his strength left him. As they were not far distant from the rim of the crater, Meyer proceeded alone, and notwithstanding giddiness, breathlessness, and exhaustion, succeeded in ascending the last steep snow-field. Here the slope became less steep, and, after having climbed over a field of gigantic boulders of ice, he reached the ice wall which he had sighted from the last camp. It is about 100 feet high, and inaccessible without the help of several expert guides and a great apparatus of ropes, ladders, etc. Although Meyer did not reach the rim of the crater itself, he concludes that it is probably filled with ice, as the ice wall projects over it on all sides. After having observed the barometer and thermometer, he returned to where he had left Von Eberstein, who had meanwhile observed the boiling-point thermometer. After a rest of about a quarter of an hour, they continued their descent, and reached their tent after an absence of seven hours. On the following morning the northern part of the saddle was visited for making topographical observations, and, after the three negroes had returned, the party continued their descent of the mountain, and reached Mareale's village after a march of four days.

## NOTES AND NEWS.

ON Friday, Dec. 30, a meeting was held at the College of Physicians and Surgeons in New York City for the purpose of organizing an American physiological association. The association has for its object the promotion of physiological research and of social intercourse among the physiologists of the country. The association will meet as a section of the Medical Congress every three years. The meeting was presided over by Dr. S. Weir Mitchell and many prominent physiologists from all parts of the country were present. A constitution was adopted, and Prof. H. P. Bowditch of the Harvard Medical School was elected president, and Prof. H. N. Martin of Johns Hopkins University, secretary and treasurer.

— The seventh course of free lectures of the Cincinnati Society of Natural History will be given on Friday evenings in January, February, and March, 1888, in the rooms of the society. The following is the programme: Jan. 6, Charles B. Going, 'How the Chemist Works'; Jan. 13, George Bullock, 'Modern and Orthochromatic Photography applied to Natural History'; Jan. 20, B. Mer-