

of which must be determined almost entirely as a matter of convenience. If it be convenient to geographers to draw the line proposed by Mr. Markham, by all means let them do so, but they can hardly expect that geologists will be content to recognise that line as defining their own territory. Since geology may be regarded as the history of this Earth, whatever is necessary for the elucidation of that history will be claimed by the geologists as part of their domain. Only as they understand what is going on at the present day can they ascertain what took place in past time. If you take away from the geologist the study of all that is taking place now, and maintain that this study is not geology but physical geography, he will answer, "I do not care what you call it, I must be at liberty to investigate the processes that are operating now in order that I may be able to explain what has happened in past time." But there is another point of view which shows how inextricably interwoven are the tasks of the geographer and the geologist. Not only is the present the key to the past, but it is equally true that the past is the key to the present. I do not think that this aspect of the question is sufficiently recognised with regard to the present surface features of the globe. The subject has been referred to by several speakers, but much detailed work is needed to show how the present surface of a country has been shaped. The history of a land-surface is often a long and complicated one, only decipherable with all the helps that modern geology can supply. I think it hardly possible to draw a line of division that shall be entirely satisfactory to both classes of investigators. Such a hard-and-fast line between the respective sciences does not appear to me to be either necessary or desirable. Good progress has already been made without it, and, even if it remains still undrawn, I cannot doubt that in the future, as in the past, geographers and geologists will co-operate cordially in promoting the advance of truth and knowledge.

EAST AFRICA—MR. ASTOR CHANLER'S EXPEDITION— LIEUT. VON HÖHNEL.

THE following communication, dated Daicho,* September 20th, 1893, has been received at the Society from Mr. W. Astor Chanler. The unfortunate accident to Lieut. von Höhnel is to be deplored. Though it has compelled him to return to Europe, Mr. Astor Chanler has determined, it will be seen, to carry out his expedition:—

This letter is taken to the coast by the men who are carrying my

* No doubt the "Dhaicho" of Lieut. von Höhnel's, in Vol. I. *Geographical Journal*, p. 576. It lies north-east of Mount Kenia, a few miles north of the Equator, and about 38° 14' E. longitude.

companion, Lieut. von Höhnel, who was severely injured by a rhinoceros on August 26th. His wound is a serious one, and necessitates his immediate return to Europe. My grief at this accident will be easily understood, and I feel sure it will be shared by all who have the interest of geography at heart. Without Lieut. von Höhnel's assistance and skill, what information I can give you will, I fear, be worth little. However, I shall continue my journey, and hope, with a little good fortune, to be able to throw some light, at least upon the manners and customs of the peoples living to the north of this place.

I will now give you an account of our work since my last letter written in June. We left Daicho with sixty-eight men on June 5th. We returned to this place on September 18th. Lieut. von Höhnel up to the time of his accident made a thorough map of all the country traversed. He has promised to send you a copy of this map as soon as he has completed it. Our object in leaving Daicho was twofold—viz., to discover and trade for beasts of burden with the Rendile, and to find a road to the north suited for the whole expedition. I had procured a guide here who promised to lead us to the Wandorobo, and who knew the whereabouts of the Rendile. We started with thirty-nine donkeys carrying seventy-two days' food; but these soon died of the same plague which had destroyed our beasts here in April and May. Up to the date of this letter I have lost one hundred and fifty donkeys, besides fifteen camels, since leaving the coast. After some hard marches we reached Mount Lolokwui. This mountain is called Walke on Lieut. von Höhnel's former map. It is at least 6000 feet above sea-level, and is of peculiar construction. It is a narrow plateau, highest at its southern end where its front is sheer rock till its base. It slopes gradually to the north, and is, say, 5 miles long by $2\frac{1}{2}$ miles broad. Some 6 miles north-west of Lolokwui towers Gerguess, called Ngaroni on all Lieut. von Höhnel's former maps. Gerguess is 10,000 feet above sea-level. Both these mountains are inhabited by Wandorobo, who subsist almost entirely on honey and do not wander. From Gerguess to Mount Nyiro, the General Mathew's range stretches in a continuous chain containing the high mountains Lengiyu, Maloni, and Lasuran. This range has very little water, and is said to be inhabited by only a few honey-eating Wandorobo.

We were forced to wait ten days at Lolokwui for a guide. At the end of that time we procured a Burkaneji, or native of Samburu land, who had left his people and joined the Wandorobo. He told us that we should find the Rendile in the neighbourhood of a spring called Seran. He promised us long waterless marches, and the next few days proved his promise correct. The first water from Lolokwui is Lokolie, a dry river-bed where very bad water may be got by digging. This is nearly 25 miles due east from Lolokwui. Two marches from Lokolie, say, 18 miles, in a south-south-east (more pro-

are at peace with no tribes but the Marle north of Stephanie Lake and the Embe on the Jambeni range. They inquired anxiously as to the whereabouts of the Leikipia Masai, and seemed relieved when told they had vanished from Leikipia. I think that it is not improbable that in the near future the Rendile, harassed by Somali raids, may occupy the magnificent pasture-land left vacant by the Masai.

We left Kome on July 7th and reached Seran on the same day. Lieut. von Höhnel went to Lengayer, some 18 miles north of Seran, to see whether or not a road led from there to Marsabit. His guide said there was a road *via* Saraba and Lysammis; but as I learned there was no road from Marsabit to the north in this season we did not follow this route. I returned to Daicho in pursuit of runaways, and Lieut. von Höhnel pushed on to find Wandorobo to act as guides. I met him at Lolokwui. During my absence he had reached the base of the Leikipia plateau and had found Wandorobo. He had also discovered a river, hitherto unknown, called the Sayer. This river is some 40 miles long and is nowhere navigable. It rises in a swamp called Kissima situated on the Leikipia plateau near the Loroghi range and some 25 miles from the southern extremity of that range. It flows for about 20 miles almost due south, and then bends its course to the east, eventually drying up between the mountains Lengiyu and Lasuran of the General Mathew's chain. We discovered that there is a road to Nyiro from Sayer, and it was while waiting for a guide to lead us thither that Lieut. von Höhnel was attacked and wounded by a rhinoceros. I at once returned to Daicho which we reached on the 18th inst.

In returning from Sayer I followed the Guaso Nyiro and discovered that it receives two streams: one called the Ngare Ndare, flowing from Kenia and following the eastern base of the Donyo Lol Deiko range till it reaches the Guaso Nyiro. The other is called Isiolo, and flows from between Janyai and Msa'ara on the Jambeni. Neither of them are considerable streams. Now the Guaso Nyiro's course and end are known, for there can be no doubt that the river ends in Lorian Swamp; though a small stream is said to flow out of the swamp to the eastward during the rains. The country lying to the north of the Guaso Nyiro is nearly a desert. It is entirely of gneiss formation. Game is plentiful about the water-holes, and here are many Wandorobo who live on game. These people are now numerous as they have been joined by many Masai Burkeneji since the death of their cattle. I got the following information concerning the dispersion of the Masai from a woman of that race. When their cattle first began to perish, the Masai who had lost theirs attacked those of their brethren who were more fortunate. Thus countless internecine wars sprang up which destroyed nearly all the fighting men in Leikipia. When they were in this weakened state, the Masai called