being hurled far and wide, as most certainly would have happened if the safety valves in Askja had not existed. Professor Geikie some time back published a paper in *Nature* in which he said that it was his belief that the Faroes and some parts of Iceland consisted of remnants of an old tertiary formation, the basaltic plateaux of Northern Europe, which, prior to the disturbances of the glacial epoch, stretched far into the Arctic Sea. It was believed that during the glacial epoch upheavals and subsidences to the extent of 1800 or 2000 feet took place. It was his own opinion that immediately after those disturbances a scatter of islets were left on the site of Iceland, and that these had been united together by vast floods of molten rock issuing from some volcanic outlet or outlets in the midst of them. A rift in the earth's crust undoubtedly extended from south to north under those portions of the island known as the Vatna Jökull and Odádahraun, as far north as Krafla, and was clearly traceable at the present day by a range of volcanoes. These show signs of active volcanicity at several places, in the form of extensive solfataras; and in the years A.D. 1724, 1725, 1727, 1728, and 1729, no less than five of the volcanoes, on the line of this rift, were active at one time, or immediately after each other; and the phenomena of the eruptions were such as to afford almost irrefragable proof of the connection of the volcanoes with each other. Askja stands in the centre of the range, and probably marks the widest portion of the rift, and must be considered the focus of volcanic activity in Iceland. Mainly from this rift, in his opinion, issued the vast sheets of igneous rock that united the scatter of islets, left standing at the close of the tertiary period, into one island—the Iceland of to-day.

The CHAIRMAN, in concluding the discussion, said that Mr. Lock had given them some interesting suggestions regarding the geological formation of Iceland: but the impression left on his (the Chairman's) mind was that its foundations were very unstable. The inhabitants of the island were to him a more interesting subject of study than the geology. They were the most contented race on the face of the earth, apparently. Although they lived over what may be called a great cauldron, they were perfectly happy. There was nothing particularly attractive in the appearance of the soil, and yet they seldom wanted to emigrate. In this the 70,000 inhabitants showed upon the whole a great deal of wisdom, for they might possibly go much further and fare worse. He understood from Mr. Peek that it was almost an unknown thing for them ever to travel out of the island, and they knew nothing beyond it except what steamers occasionally brought them in the way of information and news. The Society might congratulate itself on the good work it was accomplishing by its system of instruction and in finding a gentleman who would devote a whole year to such training and then go to Iceland to test his ability in making scientific observations. Mr. Delmar Morgan too had shown no small enthusiasm and had also given them much additional information.

---

## *A Journey into the Nguru Country from Mamboia, East Central Africa.* By J. T. LAST.

**Map**, p. 192.

I HAVE just returned from a little journey into Nguru, and send you a short account of it, thinking you may find it interesting.

We started from Mamboia on the 11th of October (1881), our party consisting of Mrs. Last, myself, two native women, and 19 men and boys. After stopping for a short time at the Sultan's village to wish him good-

bye, we descended the mountain on which our station* is situated, into the great plain which divides this district from Nguru. We halted for a short rest at Bwagamoya, and then went on to a collection of some six or eight villages forming the principal part of a small district called Mguru. Here the chief kindly invited us to his village. Accordingly we pitched our tent, and enjoyed some much needed repose, the chief, who visited us in the course of the day, giving us information about the road, pointing out two ways by which we could go. The natives of the place are Wakaguru; but some few Wazeguha have settled down with them. The land is good, but they cultivate little, living, as they do, in continual dread of the predatory Wahumba and Masai, who at any time may come and turn them out of their homesteads. The next morning we were up early, and started at 5.30 A.M., hoping to reach Sabundila at night. We first went on to two deserted villages, called Ma Mbaya. Here we rested, had breakfast, filled the calabashes with water (for we were told there was none to be had on the road), and then started again. These two villages had been attacked last year by a chief, living some few miles off, called Milanda; many people were killed and the rest fled to the mountains. This chief, Milanda, died early this year, to the great joy of many living around. From Ma Mbaya we went on till 2 P.M., then rested. After a short time we resumed our journey, and went on till 4 o'clock, when the guide telling us that we should not be able to reach the village the same day, we resolved to camp out where we were. Some of the men were sent for water while the rest built up a grass hut for our use, and formed a fence round the camp with branches, as a protection against a probable nocturnal visit from feline animals. Footprints and signs of rhinoceros and hyenas were to be seen all around, and on the march we had seen a fine herd of zebra.

*Oct. 13th.*—We were up early, and started for Sabundila. After about two hours' travelling, we came to a place where some Wakamba had been hunting, close by which there was plenty of running water. Here we stayed and had breakfast. The country passed through had formerly been inhabited, as one could see by the grinding-stones lying about, though it must have been deserted for many years, as there was not a vestige of a hut visible. The land is of a good light soil, well adapted to native agriculture. Further on we passed through a splendid valley, which had formerly been a garden, but was now abandoned. Probably any amount of water could be got by digging a few feet. Leaving this valley we entered another, and soon came to the gardens surrounding the village of Sabundila. The people were afraid of us at first, thinking we had come to fight them, but after a short interval, finding that our intentions were peaceful, they laid aside their fear, and came to talk with us. The chief then told me that the Wakamba hunters had recently attacked him, and when he saw us he thought we were about to do the same.

* Mamboia is a station, recently established, of the Church Missionary Society.

We were soon, however, on very friendly terms, and he brought me a present of sugar-cane and a good goat, for which I gave him a suitable return present. Mrs. Last, by showing pictures and talking, soon gained the confidence of the women and children. The friendly disposition of the people (Wanguru and Wakaguru) induced us to prolong our stay here for another day; but the place is very poor, much cattle having been carried off by the Wakamba and Wahumba, and little land cultivated through fear of these raiders.

On the 15th October we started again. We made a short journey to Babala. Here we camped outside the village, in order to be a little more apart from the noise and inquisitiveness of the natives. The old man who is chief was very kind in his way. He brought us a small goat (of course hoping to get a much larger present in return) pleading poverty as a reason for not bringing a larger one. Both the chief and his wife remained with us in the tent for a long time, talking. We rested here the next day and had many visitors, with whom Mrs. Last soon became a special favourite, by her showing her pictures and talking to them. The chief and his wife came again to-day, and stayed some time. In the evening some six Wahumba paid us a visit. They very readily took and ate some biscuits we gave them, showing a degree of trustfulness far surpassing that of the ordinary natives. I had some talk with them through the medium of one of my men, who know their language. Here there is a running stream of good water, on each side of which the natives cultivate their gardens.

*Monday, 17th.*—We resumed our journey this morning, about 6 A.M. The Wahumba and a number of the inhabitants of the place came to see us off. I gave to the chief and his wife three cloths as a present, in return for their kindness. We had a rather long march, across a plain separating Babala from the district of Kiseru. About 2 P.M. we reached the banks of the Luseru river. All the villages on the south side had lately been attacked by the Masai, and the people driven to the mountains. We had to cross over to the north side, where there are several villages. The river was very low, the water being about a foot in depth and some 30 yards wide. We were well received by the natives, who invited us to one of their villages, an invitation which we gladly accepted. The people here (Wanguru) had a far better appearance than any natives we had hitherto met; their manner also was a little more civilised. This is accounted for by Kiseru being on the main road from the Masai country to the coast at Saadani. These Wanguru are continually going to and fro between here and the coast, and so get accustomed to the semi-civilised ways of Zanzibar.

The valley of the Luseru is very beautiful, having magnificent tall trees on either side of the river, and large tracts of good land suitable for native cultivation. The people build after the Kizeguha style. They clear some three or four acres in the middle of a very thick forest,

and then build their *misongi* (round huts). When all are built they surround the clearing with a fence of young trees about 12 to 14 feet long, placed close together. The entrance to the village is by a narrow path cut through the forest about 250 yards in length, which is fortified by three or four strongly barricaded doors, at suitable intervals. These are always fastened at night, thus preserving the inmates of the village from attack both of men and wild beasts. A species of Euphorbia is often planted round the villages, forming a hedge which few people would dare to break through. We stayed here all Monday and Tuesday. The people continued very friendly, and the chief brought me a good sheep, which I killed, giving part of it to my men. Mrs. Last as well as myself had to explain our objects in visiting them to large audiences. What surprised them and induced them to listen to us the more attentively was the fact that we did not trade in anything.

On Wednesday, October 19th, we started again. First, we went to Sagasa. The journey was through a country which had been formerly cultivated, but was now deserted. All along the banks of the Luseru, by which we travelled, there was plenty of good land. At Sagasa we rested for a short time. Whilst there a party of some twenty women came down from their villages to fetch water, under the escort of six men, who were supposed to guard them from the Masai reported to be in the district. After some talk with them we continued our journey towards Banda, walking most of the way up the valley of the Luiji. This river flows from the extreme north of Nguru down into the Luseru, and thence to the Wami. Both sides of the Luiji valley are thickly populated, there is, in fact, one long string of villages from Sagasa to Mgera, in the north of Nguru. There is a fair amount of land cultivated, chiefly Indian corn; but sugar-cane and bananas also abound. The people living in the valley are chiefly Wanguru, here and there a village of Wahumba being met with. On the tops of the very high mountains in this district are the gardens and villages of the Washambala. These people were probably the original possessors of the country, since driven up into the mountains by the Wanguru, who look upon them as much inferior to themselves. We were well received at Banda, all the women and children coming out to greet Mrs. Last, whom they saluted as their friend and mistress. We had much company, all the natives wanting to see the pictures, and also to express their opinion on what we said. Here, as well as at the other places we had visited, we were urgently requested to stay for a time; but this we could not do.

On Thursday, the 20th, we continued our journey up the valley of the Luiji, reaching, a little before noon, the village of Muwanga. Here we had an extra hearty welcome, for the chief of the village was the brother of our guide, and as they had not met for some three or four years, there was much rejoicing and gun-firing. We encamped on a nice clear spot near the village, and after a little rest had a number of

visitors, who were anxious to hear the news of the Wazungu (Europeans). In the evening one of the Wahumba brought us some fresh milk. It was so good, and the calabash in which he brought it was so clean, that I gave him two yards of cloth for his kindness. This pleased him very much, and he at once fired off his gun as a sign of his satisfaction. He then arranged the cloth flowing from his shoulder cloak-wise, and rushed off up the mountain for a long distance, showing off the leaps and darts of the Wahumba warriors when fighting. We stayed here all the next day, during which we had many visitors. A large number of Wahumba came to see us, and the chief made us a present of a fine goat. In the evening we went over to the Wahumba village, where we saw and talked with several people. After a while the Mhumba who had brought us the delicious milk, came home from a village where some of his friends were living. He was pleased to see us, and at once went into his hut, and brought us more milk. He came again the next morning, and I gave him a good cloth in return for his kindness, and also because he promised to take my message to his Wahumba brethren.

The next morning, Saturday, October 22nd, we were up early, gave a present to the chief, and bid farewell to Muwanga. Our path still lay up the valley of the Luiji. It was rather rough, for instead of following the banks of the river, it passed over the ends of the spurs which extend from the sides of the great ranges of mountains down to the water's edge. Some of these spurs are 400 or 500 feet high. We trudged for several miles over the hills; coming at length to a large village where the paths branch off, the main road going up to Mabgwa and Mgera, another going up the side of a very high hill to Mgola's village. We took this latter road, and in about two hours reached the village quite tired, and glad to get both rest and refreshment. Mrs. Last was very tired this journey; she had come along very bravely, for the path being so rough she had been able to ride her donkey but a very little way during the day.

We camped outside, but as a high wind arose in the evening we shifted into the village, where it was more sheltered and warmer. The next day, being Sunday, we stayed here. In the morning Mrs. Last and I went out for a little walk to see the villages and people. Coming to a place in the course of our ramble where the paths branch off, we saw at the junction two clay images of men about a foot high, in front of which were two little *vinu* or mortars, models of those used by natives in pounding corn. On asking about them I was told they were the guardians of the road, and that no beasts, or men having bad intentions, could pass by them. This is the second instance in which I have seen such images used. The other case is where figures of men and women cut out of wood are fixed on the top of the roof of the round native huts; several of which I have seen

in the villages at Nagubika and Mamboia. I do not think there is the least worship or adoration paid to them. One at Mamboia is adorned with beads, and has a large pipe put into its mouth. The Mhumba who was friendly with us at Muwanga, followed us to this place, Mgola, as a mark of honour. On Sunday morning he came to the tent, and placing his powder-flask, belt, and gun, by the side of Mrs. Last, asked her to take care of them, as he wanted to visit his friends. This showed his confidence in us, for he knew that if he had done such a thing with a strange native it would be a great chance whether he would get them back again. On his return in the evening, I gave him a little gunpowder to use, if necessary, on his return home.

On Monday, October 24th, we started for Panghai and Tangalata. The first part of our journey was very bad. We had to ascend the very high mountain, and then descend into the valley beneath. Soon after we started it came on to rain, which made the path very slippery. After an hour's very hard work we reached the top, in the midst of a Scotch mist. Though we were hot and tired we dared not rest for fear of getting a chill, so we slowly descended, slipping rather than walking down the other side. When about 400 feet from the top we came to a beautiful little lake. Here many birds had built their nests suspended from the branches of the trees overhanging the water. Had the weather been fine, we should have thought it a charming piece of scenery.

In a short time the mist cleared off, and we came to some native gardens, where we rested a few minutes, and then went down into the valley. The whole of the top, and the slopes for some distance on either side of the mountain, were covered with magnificent timber trees, besides beautiful shrubs, ferns, and flowers of many kinds. A botanist would have revelled amidst this varied and beautiful vegetation in a region which is still virgin ground to the naturalist. Reaching the valley we crossed a stream about 10 yards wide, and then rested for half an hour near some villages. This district is called Panghai, the people being all Wanguru. They are well dressed, and ape, as far as they are able, the manners of the Zanzibar freedmen. Having rested we moved on again, and a little before noon reached Tangalata. Here we set up our tent outside the village. We had not been long encamped before a man called Bwana Hamadi arrived. As soon as possible we admitted him to our tents. He was followed by an Mbarawa, who acted as his right-hand man. Bwana Hamadi was formerly a slave of Seyed Majid, of Zanzibar; when the Seyed died, Hamadi managed to return home; here he became a great man, and is now the chief of Tangalata. This chieftainship he has obtained chiefly by oppression and robbery; having a few followers, wherever he saw a good chance of success he would attack a weak village, take as many of the inhabitants as he dared to sell as slaves, and put the rest under his rule. He has now a large district, and his brother has the

neighbouring one of Mgombezi. These men were very polite in their manner, but as soon as I had occasion to go out to see one of my men, they began to beg whatever they saw, knives, spoons, cups, and all similar articles. I soon discovered that we had fallen into not very good company, and resolved to get out of it again as quickly as possible. When they left in the evening, I told them I should start in the morning; they said no, I had not permission, but to this I simply replied that I must go. Probably they thought that their declaring I had not permission would be sufficient to keep me. We went to bed early; during the night a lion visited the camp, but he slunk off when he saw the men moving about. Very early the next morning I had everything packed and the tent struck, so that just at daybreak we were ready to start. I then sent off all the loads, and whilst one man was despatched with a little present to Bwana Hamadi, I started with Mrs. Last for Diwala. Hamadi, we learnt, was surprised at our departure, but I was very thankful that I had thus got clear of him, for as he has rather a large following of men, and is not under the eye of Zanzibar rule, he could have made himself rather troublesome had he tried.

The journey next day, October 25th, was in some places very rough, our way leading over many hills which jutted out from the sides of the mountains. On one of these hills there was a large village of Wahumba, which these people in all probability had taken from the Wanguru, and appropriated to their own use. The Wahumba women brought us some very good milk, in return for which Mrs. Last gave the children some pice (a Zanzibar coin rather smaller than a halfpenny). Resting a short time, we then went on to Diwala. Here we camped in a valley, a short distance from the river Rukagura. In the afternoon some women from another village of Wahumba, distant about half an hour's walk, came and invited Mrs. Last to their place, an invitation which she at once accepted, and I went with them. The settlement was simply the outside tembe of a Nguru village, all the round huts having been pulled down to make room for the cattle; the enclosure was covered to the depth of about a foot with ox-dung, but smooth and level, and the women of the village were all sitting on it busily engaged in sewing together dressed goat-skins, which the women wear instead of cloth. Many of them understood Kinguru, and some the Swahili language, so we were able to talk to them, and tell them why we were travelling about. Our reception altogether was most pleasant; they seemed to appreciate our visit, and requested us to stay with them, but we could not as there were other villages to be seen, and we also wanted to be off on the morrow.

The whole of this country is very hilly, having small streams of water running in every valley. There is plenty of good land, much more of which might be cultivated than what is. There is an abundance of fine trees, especially by the river side.

*October 26th.*—We started about 6.30 this morning for Msunga. The road was all even and good till we reached the village. After a short rest we had some conversation with a large number of Wanguru and Wahumba who had come to see us. This over, we started again over the Msunga hill, hoping to reach Vyadigwa. In this we failed, but reached Wadikundi. After crossing Msunga hill we had a long journey over level country. At 3 P.M. we came to the first village, where I decided at once to stop for the day.

We were glad to learn that the village belonged to a few families of Wakamba, who had settled there. Wishing to have a better opportunity of talking with these people and at the same time give my tired men a good rest, I resolved to stay over the next day. These Wakamba cultivate a little land, just sufficient to supply them with the corn they need; when their harvest is over, they go off every year on hunting expeditions, some even as far as the south end of Lake Tanganyika. The ivory obtained is taken home, and when they have sufficient they make up a caravan for Mombasa, where they sell it to the Banyans. I spent a good part of the day with these people. In the evening Mrs. Last and I went into the village, and remained some time talking with a number of men and women, who wished to know more about us, and our work.

*Friday, 28th October.*—We started a little before 6 o'clock. The first part of our journey lay over some hills; these passed, we came to a level plain. Here we had a heavy shower which lasted until we had reached Vyadigwa. At the first village we came to, the natives very kindly allowed us to use their huts in order to change our clothes. Resuming our journey at 10.30, we had a long march over the plain avoiding the path across the hills. At 4 P.M. we reached Kapa, Kwa Kigola. We set up our tent in the village in order that our men might have a chance of sheltering in the huts should it come on to rain in the night. It was fortunate we did so, for we had some heavy showers in the early morning.

*Saturday, October 29th.*—At daybreak it was raining heavily so we could not start; at 8 A.M. it cleared off a little, and all being ready we departed for the French Mission Station near Kwa Mdolwa. During the day we were misled by the guide, who took us over some very high mountains and through deep valleys. We were ascending and descending the whole day, and in the evening found ourselves at the foot of the hill on which the villages of Kibanti stand. There was nothing left for us but to go up and seek a lodging for the night. This was rough work after a day's marching, for there was no path, and we could only tell the position of the villages by the lowing of the cattle. We reached shelter just past sunset, but not in time to escape a heavy mountain shower, which drenched us all to the skin.

The natives made us welcome to their huts, happily for us, as it was too wet and too dark to set up a tent, so we made ourselves as comfortable

as we could under the circumstances. We slept well, and the next morning persuaded a native to show us the way to the French Mission. The scenery through which we passed was most lovely; ferns of endless variety, the most beautiful being arboreal species with trunks from 14 to 16 feet high, from the tops of which radiated graceful leaf-fronds 18 to 20 feet long. Going a little lower down, we came to a thicket of wild raspberries, which were very nice. The people who were with us (not Wanguru) did not know the fruit, and were surprised to see us eat them; but when they tasted they soon acknowledged that they were very good. Thousands of fine trees grew all around, very many of them having a clean trunk nearly, and some surpassing, 100 feet in height, without a branch or knot; some of these magnificent trees were 10 feet in diameter at the base; they would be very highly prized as timber could they be taken to any centre of civilisation. Many rivulets rushed down from the mountains on all sides, forming the source of the Mvue river, which flows past Kwa Mkungu into the Wami. After a day's hard travelling we reached the French Mission at Kinyumbi about 4 P.M. The missionaries gave us a very hearty welcome, and after giving us some refreshments placed a house at our disposal, and wished us to make ourselves as comfortable as possible. They would have supplied us with food and everything necessary for all the time we might stay, but we could hardly think of permitting such kindness; they sent us, however, fowls and vegetables as soon as we entered their house, and kept us supplied with vegetables and fruit all the time we were with them.

We remained here until the following Wednesday, November 2nd. At 6.30 A.M. on that day all was ready, and having thanked Père Machon for his great kindness to us, and bid him and his colleagues farewell, we started for Kwa Mchiropa. The country here is very thickly populated, villages occurring all the way along the road. Besides many minor places we passed Kwa Mkungu, Kwa Masengo, Mto wa mawe (here we met some soldiers who were bringing us books, papers, and letters), and at about 3 o'clock reached Mchiropa. Here we camped.

The next morning we started early, and passing by Mbomero, Kwa Mpani, we reached Mkundi about 9.30. Here we rested for the day, and at midnight struck our tent and started to cross the Mkundi forest. It was a lovely moonlight night, and the journey was really delightful; there is something enchanting in a journey through a great forest at night; the rocks, trees, and shadows apparently changing their position so silently, makes one feel to be in some fairy-land. We reached Nagubika at 8.30, and at 9 we were at our old resting-place. Here we stayed and had breakfast, and at 11 A.M. started again for Mamboia; we arrived at 1.15 P.M., and were heartily welcomed both by the natives and our own people.

I have enclosed a rough map of our journey into Nguru. It pretends to be only a sketch-map, sufficient perhaps to give an idea of the

course we took, and the nature of the country. I used my prismatic compass for the bearings of the different places, and from the data so obtained drew the map. I have drawn on it also the roads and places which I passed last year (1880) on my way to Zanzibar from Mamboia, viâ Bagamoyo. Most of the places passed are not marked on maps of East Africa. If it would be thought useful I will send some account of that journey. In the whole of the country between Mguru and Kibanti a European had never been seen before. The whole distance travelled during the journey was about 250 miles.

MAMBOIA, E. Africa,
*Dec. 2nd*, 1881.

## GEOGRAPHICAL NOTES.

**Projected Expedition for the Search and Relief of Mr. Leigh Smith.**—The following answer was received on the 11th ult. from Lord Northbrook, to the letter addressed to him by our President on the 12th of December last,* supporting the appeal of Mr. T. V. Smith on behalf of a Government expedition in search of his relative, Mr. Leigh Smith:—

"ADMIRALTY, *11th February*, 1882.

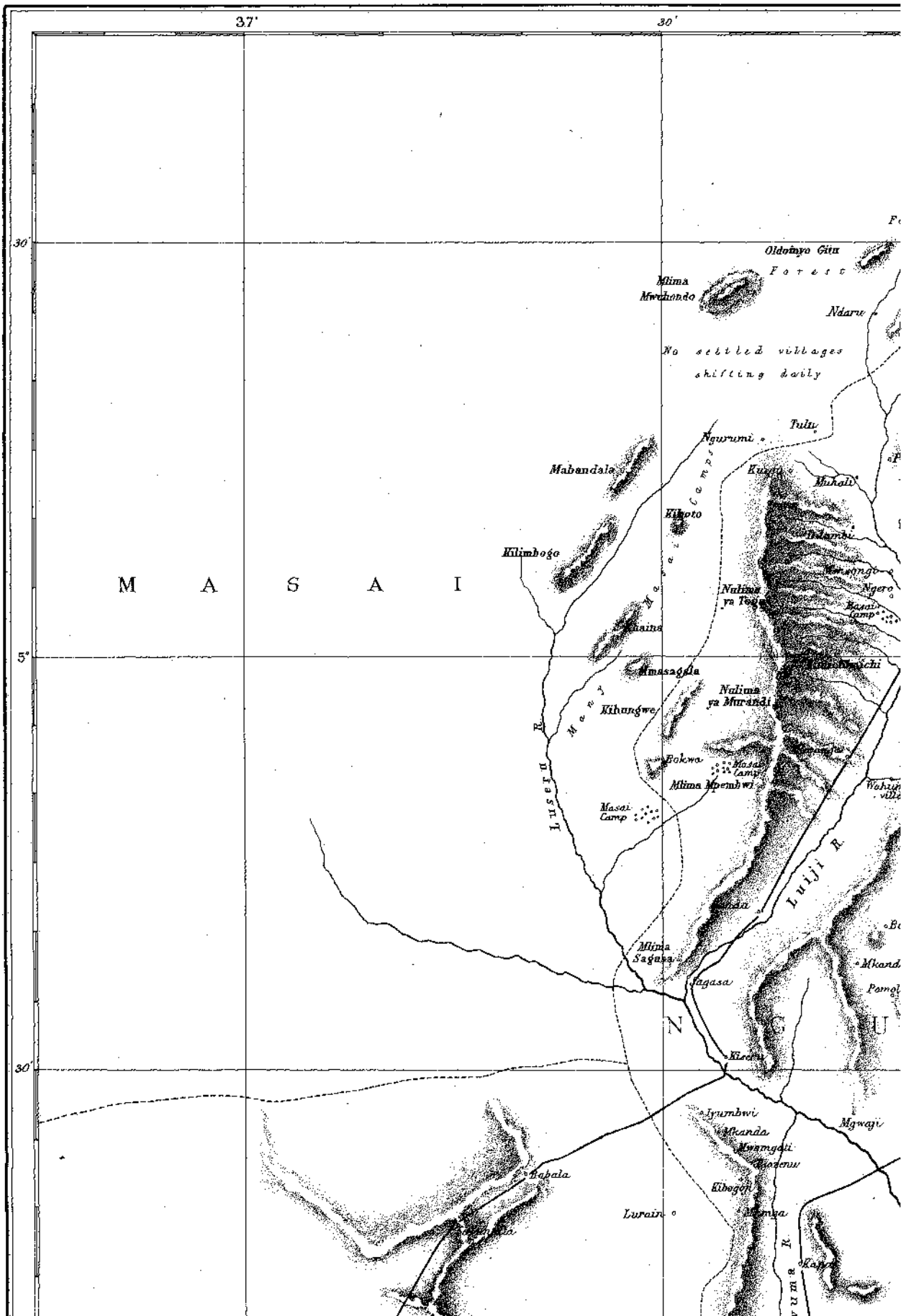
"MY LORD,—In December last your lordship addressed me a letter, with which was enclosed one addressed to you as the President of the Royal Geographical Society from Mr. T. V. Smith, on behalf of the relatives and friends of Mr. Leigh Smith, bringing to notice the detention and possible critical position of that gentleman in his steam yacht *Eira*, with a crew of twenty-four persons, in the Arctic Sea, near Franz-Josef Land, and urging that an expedition should be despatched by Government for their relief.

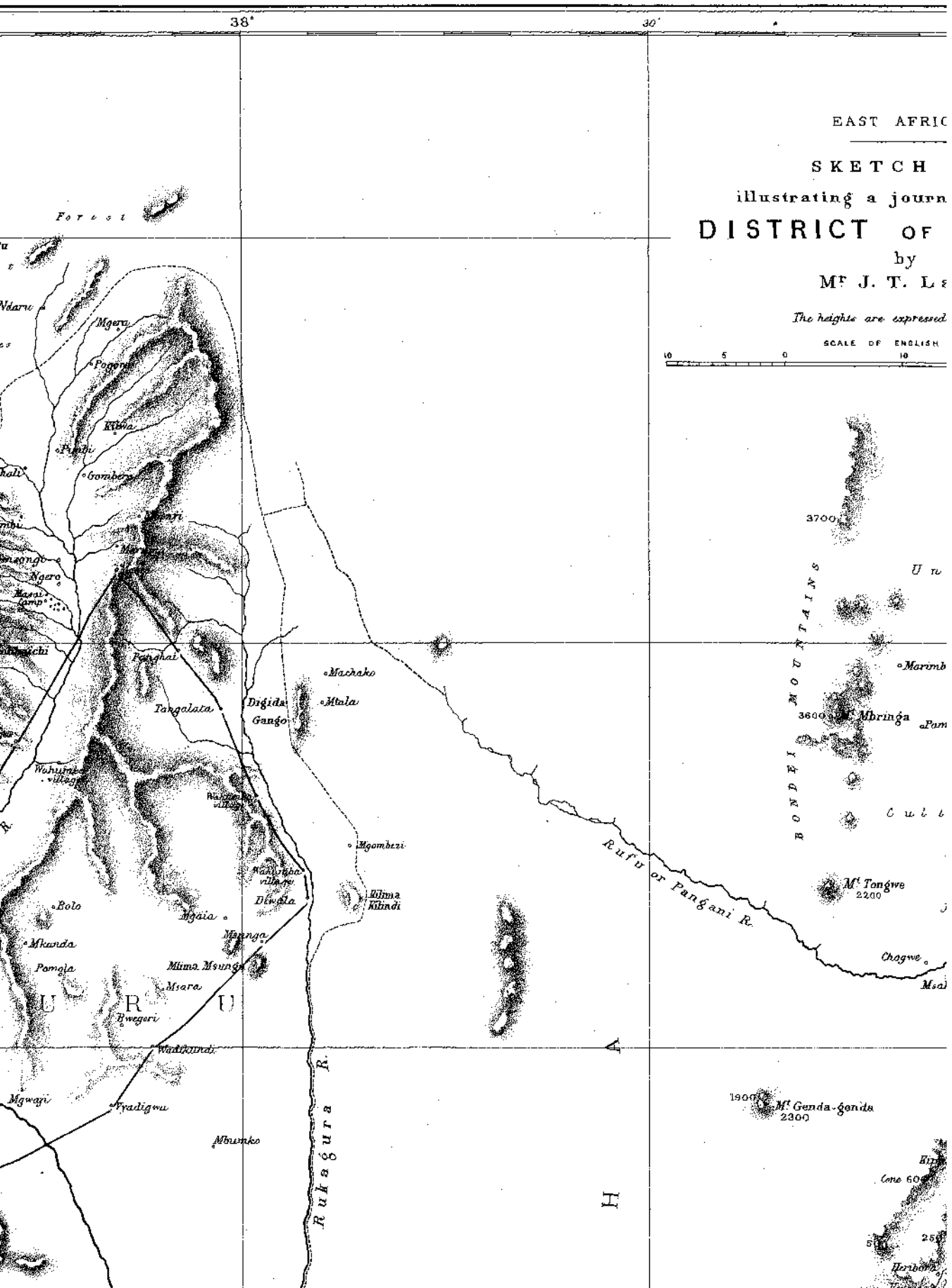
"I have the honour to inform your lordship that I have brought those letters, together with the particulars furnished by the deputation from the Royal Geographical Society, which I had the pleasure of receiving in furtherance of the proposal, under the consideration of Her Majesty's Government.

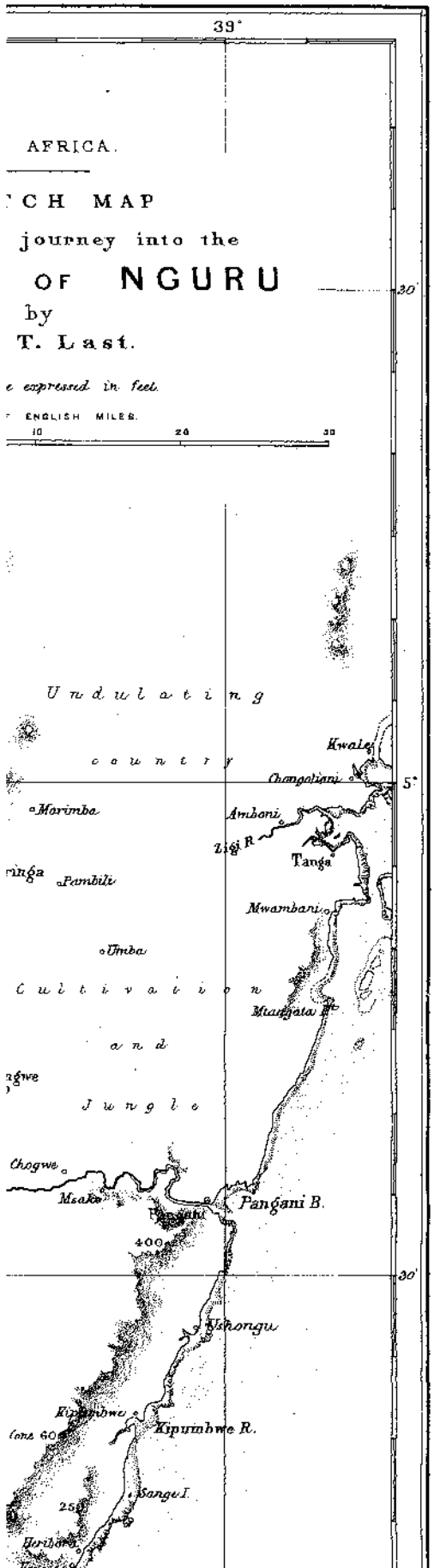
"Although it cannot be admitted as a general principle that Government would be justified in recommending the appropriation of public funds for the purpose of undertaking the relief of explorers who have embarked upon adventures of discovery upon their own account, yet Her Majesty's Government are of opinion that special circumstances exist in the case of Mr. Leigh Smith on account of his previous services to geographical knowledge in the field of Arctic discovery by expeditions equipped at his own cost, in which he has displayed high spirit and good judgment.

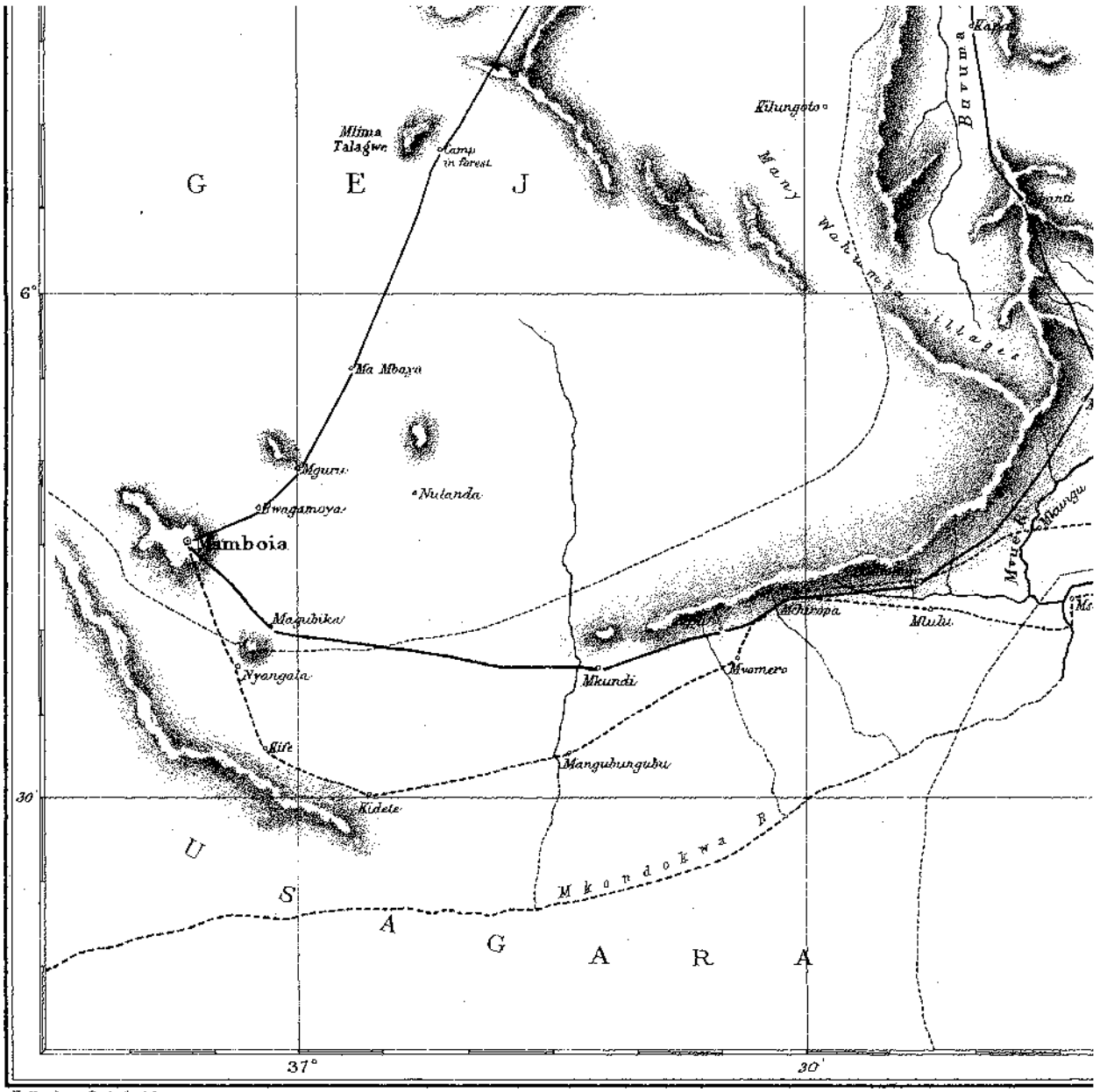
"On a review, therefore, of the contents of the letters and documents

* 'Proceedings,' Jan. 1882, p. 57.


37'
30'
30'
5°
30'
Oldonyo Gitu
Forest
Mlima Mwdundo
Ndaru
No settled villages
shifting daily
Tulu
Ngurumi
Mabandala
Kuroto
Muholi
Kiboto
Tadambi
Kilimbogo
Ngero
Nalima ya Tega
Kasai lamp
Plains
Masai Camps
M A S A I
Nalima ya Mirandi
Kihungwe
Many R.
Lusert R.
Bokwa
Masai lamp
Mlima Mpembwi
Masai Camp
Luiji R.
Mlima Sagasa
Sagasa
Mkand
Pomol
Kiora
Iyumbwi
Mwanda
Mgwagi
Myamgoli
Kibogoi
Babala
Lurain
Kamba
R.

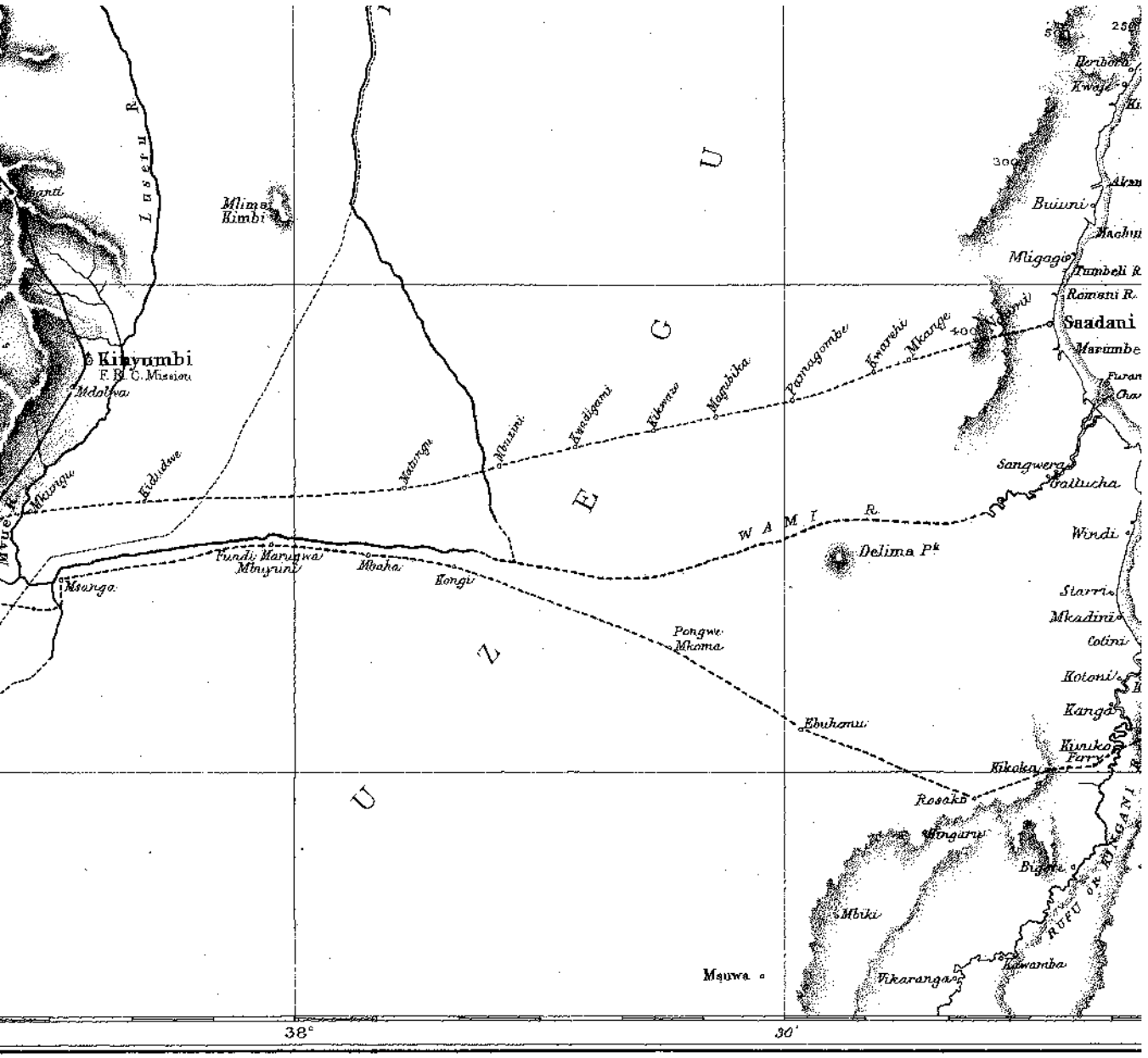

38°
30'
EAST AFRIC
SKETCH
illustrating a journ
DISTRICT OF
by
Mr J. T. L
The heights are expressed
SCALE OF ENGLISH
10 5 0 10
Forest
Mgeru
Kibwa
Gombera
Ngara
Panghai
Machako
Digida
Mtala
Gango
Takalata
Mgombezi
Kasiriba village
Dimbila
Kilima Kibadi
Mgaia
Mpanga
Mimia Msunga
Msara
Bwegeri
Waddoundi
Mbumko
Ruhagura R.
Rufu or Pangani R.
Bondei Mountains
3700
3600
Mbringa
Mt Tongwe
2200
Chagwe
Mt Genda-genda
2300
1900
Cone 60
Rolo
Mkanda
Pomola
Mgwagi
Tradigwa
Wohuma village
U R U
H A


39°
AFRICA.
CH MAP
journey into the
OF NGURU
by
T. Last.
e expressed in feet.
ENGLISH MILES.
10
20
30
30'
Undulating
country
Kwale
Chongoliani
5°
Marimba
Amboni
Zigi R.
Tanga
Pambili
Mwambani
Umba
Cultivation
and
Jungle
Mtangata
Chogwe
Mzaka
Pangani B.
400
30'
Ushongu
Kipumbwe
Kipumbwe R.
Sangu I.
25
Buribara

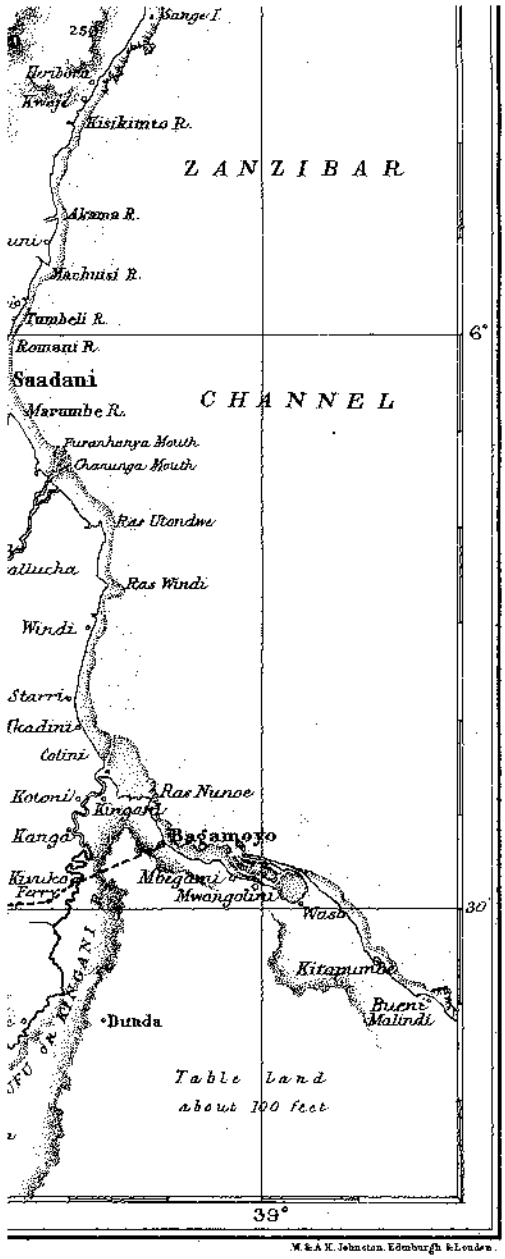



H. Sharbau, R. G. S. del.

Pub.ª




Pub.d for the Proceedings of the Royal Geographical Society 1862.


Bange I.
25
Uribora
Kwaje
Kisikimto R.
ZANZIBAR
Akasa R.
Machuisi R.
Tumbeli R.
Romani R.
6°
Saadani
CHANNEL
Marambe R.
Puranhanya Mouth
Chanuga Mouth
Ras Utondwe
Ras Windi
Windi
Starri
Ukadini
Colini
Kotoni
Ras Nunoe
Kingani
Kango
Bagamoyo
Kiruko
Ferry
Mbegani
Mwangolini
30'
Wasi
Kitamumbi
Buene
Malindi
Dunda
Table Land
about 100 feet
39°
W. & A. K. Johnston. Edinburgh & London.