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EAST AFRICA

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Foreign

1910

12 Feb

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Anglo-Abyssinian Boundary

Seeds for concurrence draft instructions to H.R. minister at Addis Ababa reop. discussion of question with Abyssinian govt.

W. Glaser - R. F. W. Kitchener

The accompanying maps show the boundary as last drawn by the 1907 agreement & the alternative plan that will not be in force.

Concur in the draft to H.R. govt.
 - & send copy to the D.A.S.S. of the S.A.R. & Uganda for their info. & if
 - & send 3 spec. copies of the maps to
 Uganda, & 10 spec. copies to the S.A.R.
 when they will be required by the officers
 who are administering the frontier districts.

Enclosed C 22 II. P.D. H.R. 7/II

Subsequent Papers

70
5769

In any further communication on the subject, please quote

No. 3276/10.

and advise

The Under-Secretary of State
Foreign Office,
London.

4551

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14 FEB 10

Postage Office

February 12, 1910.

SIR:-

In reply to your letter 36633/09 of the 28th ultimo relative to the Southern Frontier of Abyssinia, I am directed by Secretary Sir E. Grey to transmit to you herewith, for the information of the Secretary of State for the Colonies, a draft of the instructions which Sir E. Grey proposes to send to His Majesty's Minister at Addis Ababa respecting the discussion of this question with the Abyssinian Government.

Sir E. Grey will be glad to learn whether the Earl of Crewe concur in the terms of this communication.

I am,

Sir,

Your most obedient,

Humble servant,

Douglas

Under-Secretary of State,
Colonial Office.

3276/10.

C.O.
4551

Rec'd

WONSTRETT FEB 10,

FEBRUARY 10, 1910.

Mr. Thesiger

With reference to my Despatch No.

No.

of July 22nd, 1909, relative to the southern frontier of Abyssinia, I transmit to you herewith six copies of the map prepared by the recent Boundary Commission under Major Vans, showing the line which His Highness, the Governor-General should

In view of the present situation

and the present impossibility

of it being an arrangement Government

comes to any definite agreement until the

two parties have settled themselves

after consul's quoth, you are authorized

to select your own line for opening the

frontier negotiations. That of course

you will take advantage of any opportunity

that offers a reasonable hope of settling

have still a valid claim, on behalf of the
Gurra tribe, to the large and valuable
district of Cuba Gallgalle, south of the
River Dama, and that they consider that
the proposed rectification from G. Werda
to G. After is a very moderate price for
the Abyssinian Government to pay in order
to secure the Cuba Gallgalle territory.

The remainder of the frontier, from
D. Werda to the junction of the Akobo and
Bibor Rivers, practically follows the
100° line, and should raise no difficulty,
such slight modifications as there are
being nearly all favourable to Abyssinia.

Generally speaking, you should base
your discussions with the Abyssinian Gov-
ernment on the terms of Major Cwynn's re-
port, with which His Majesty's Govern-
ment entirely concur, and you should in-
sist

instal on the line as described by that
officer, with the exception of the section
from G. Wards to G. Arur, which should run as de-
scribed in the alternative proposal en-
closed in his letter of November 3rd. last.

Finally, it must be remembered that
the responsibility for introducing modi-
fications in the frontier line without
reference to the Abyssinian Government was
forced on the British Commission by the
action of that Government in retarding
the representatives to accompany Major
General and though His Majesty's Government
have every desire to act in the spirit of
friendship, which animates them towards
Abyssinia, they must adhere to Major
General's boundary, which appears to them
so far as possible, and indeed the only suit-
able, first for the administrative require-
ments of both governments.

have still a valid claim, on behalf of the
Gaua tribe, to the large and valuable
district of Guba Gallgalie, south of the
River Dama, and that they consider that
the proposed rectification from C. Werda
to C. Afar is a very moderate price for
the Abyssinian Government to pay in order
to secure the Guba Gallgalie territory.

The remainder of the frontier from
C. Afar to the junction of the Akobo and
Bibor Rivers, practically follows the
1907 line, and should cause no difficulty
such slight modifications as there are
being nearly all favourable to Abyssinia.

Generally speaking, you should base
your discussions with the Abyssinian Gov-
ernment on the terms of Major Owynn's re-
port, with which His Majesty's Govern-
ment entirely concur, and you should in-

instal on the line as described by that
officer, with the exception of the section
from G. Werda to G. Afur, which should run as de-
scribed in his alternative proposal en-
closed in his letter of November 3rd. last.

Finally, it must be remembered that
the responsibility for introducing modi-
fications in the frontier line without
reference to the Abyssinian Government was
forced on the British Commission by the
action of that Government in not sending
any representative to accompany Major
General, and through His Majesty's Government,
have every desire to act in the spirit of
friendship which animates them towards
Abyssinia, they most adhere to Major
General's boundary, which appears to them
to offer the best, and indeed the only suit-
able line for the administrative require-
ments of both governments.

1814 FEB 10

ABYSSINIA.

CONFIDENTIAL.

SECTION I.

41856

No. 1.

Colonial Office to Foreign Office. (Received November 13.)

Douglas Street, November 12, 1909.

Sir,
I AM directed by the Earl of Crewe to transmit to you, to be laid before
Secretary Sir E. Grey, a copy of a letter from Major C. W. Gwynn, C.M.G., D.S.O., R.E.,
enclosing a general report on the work carried out by the Anglo-Abyssinian Boundary
Commission, 1908-9, a description of the frontier as demarcated, a map in three sheets
of the frontier region, and a report by Mr. Zaphiro on the tribes inhabiting this
district.

I am, &c.

H. W. JUST.

Inclosure 1 in No. 1.

Major Gwynn, R.E., to Colonial Office.

Guernsey, November 3, 1909.

Sir,
I HAVE the honour to forward herewith a general report on the work carried
out by the Anglo-Abyssinian Boundary Commission, 1908-9, together with a detailed
description of the frontier as demarcated, and a map on a scale of 1:500,000, in
three sheets, of the frontier region. The map is a provisional issue, the Director
of Operations, War Office, having undertaken to produce it finally in three colours.

2. I also forward herewith a report recently received from Mr. Zaphiro on the
tribes inhabiting the frontier districts; to which I have added a note. In transmitting
the report to me, Lord Herbert Hervey requested that a copy might be supplied to
the legation at Adis Ababa.

3. Other survey work carried out by the commission in Abyssinia, not directly
connected with the frontier, together with technical and other reports, will be
submitted direct to the Director of Operations, War Office.

4. I wish to take this opportunity of bringing to notice the excellent work done
by the following members of the commission:

Captain R. C. Waller, R.E., had charge of the survey operations, and was an
indefatigable worker. He took and computed a great number of astronomical and
trigonometrical observations. The experience he has gained fully qualifies him to
take charge of a boundary commission.

Captain G. Condon was in charge of transport and of the Somali escort. He
was also responsible for all cash transactions on the road.

I found him a most loyal, hardworking, and conscientious officer. His varied
experience of natives and transport animals proved extremely useful.

I consider that the transport arrangements were efficient and economical under
exceptionally adverse conditions.

Corporal C. Carter, R.E., although at first inexperienced in the class of survey
required, quickly picked up the work, and subsequently produced excellent sketches.
He worked cheerfully and with great energy, and was always thoroughly reliable.
He should prove an exceptionally useful non-commissioned officer in a survey field
section on active service.

I regret to report that the other assistant surveyor, sapper C. Favier, R.E.,
proved a complete failure, and had it been possible I should have sent him home at an
early stage.

His work was so unimmaculate I could make little use of him, and his manner both
towards officers and natives was very bad. I strongly recommend that he should not
again be employed on similar expeditions.

I would also call attention to the remarkable services rendered by the Somali
headman, Mahomed Hassan, who was also spoken of in the highest terms by
Captain Maud in his report.

It is impossible to speak too highly of this man's tact, energy, resourcefulness, and loyalty, and I was perfectly satisfied with his honesty in financial matters.

He was equally good in dealing with men of our own party or with natives encountered on the journey, whether Abyssinian, Somalis, or others. His knowledge of the frontier region is thus very complete, and I consider he would be an invaluable agent when some regular form of administration is established there.

Afthough, for a native, he was very highly paid by me, he saved his wages many times over, and I think he hopefully earned some honourable reward from His Majesty's Government in respect of his services in the two expeditions connected with the southern frontier.

Mr. Zaphiro was not properly speaking, a member of the commission, but he was placed under my orders by Lord Herbert Hervey. I wish therefore to acknowledge the great assistance he gave me, and to testify to the admirable work he has done since his appointment on the frontier.

As I have elsewhere reported, I do not consider Mr. Zaphiro's present position can be looked upon as more than a temporary expedient, but it has been undoubtedly a thoroughly successful one, due to the talent and energy he has displayed, and also to his unique qualifications.

I understand that Sir John Harrington has recommended that his services should receive recognition from His Majesty's Government, and, from what I have seen of his work on the spot, I fully endorse the recommendation.

I am, &c.
C. W. GWYNN.

Inclosure 2 in No. 1.

General Report by Major Gwynn, R.E., respecting the Anglo-Abyssinian Boundary Commission, 1908-9.

EARLY in April 1908, Sir John Harrington telegraphed from Adis Ababa that the Emperor Menelik had agreed to the dispatch of a commission for the final delimitation of the southern frontier of Abyssinia, in accordance with the provisions of the treaty of December 1907, and suggested that the commission should leave England not later than the 15th May.

Unfortunately, owing to difficulties in obtaining Treasury sanction for the expenses of the expedition, it was impossible to start before the middle of June, an unfavourable date, as it necessitated traversing the Abyssinian uplands during the height of the rainy season. The most favourable date to start would have been about the middle of April, when it would have been possible to cross the uplands before the rains had reached their height, and arrive at the frontier in time for a full season's work.

In the central and eastern sections of the frontier the rainy season and months immediately following are the most favourable for movement, as water and grazing can be had, while in the western section, where the water difficulty is not so great, the main point is to finish work before the rains begin again. It will be remembered that Major Austin and Captain Maud were both prevented from exploring this region by the approach of the rainy season.

To have further delayed the start, so as to avoid the initial difficulty of crossing the plateau during the rains, would have necessitated two seasons' work on the frontier, and introduced many complications.

The following were appointed as members of the commission:-

- Major C. W. Gwynn, R.E., commissioner.
- Captain H. L. Waller, R.E., assistant commissioner.
- Captain G. Gordon, transport officer.
- Dr. H. J. Broadbalkman, medical officer.
- Lieutenant C. Carter, R.E., assistant surveyor.
- Sapper C. Favier, R.E., assistant surveyor.

Treasury sanction for the expedition was received on the 26th May, and the commission started from London at the 12.15 train, reaching Aden on the 28th June. Here we were met by Mahomed Hassan, who had been headman to Mr. Butter's

expedition, and to whom I had sent instructions to collect men and camels at Beleka.

As a trained escort was not available, I had decided to rely as far as possible on a purely Somali personnel. A mixed personnel of Somalis and Abyssinians is out of the question, as it leads to constant quarrelling and difficulties in the matter of food supply.

Seventy Martini-Henford carbines were brought from England with which to arm the men.

Somalis are practically useless as muleteers, and the choice of a Somali personnel entailed the adoption of camel transport.

To allow for the temporary employment of hired mules where camels were unsuitable all packages were arranged for use with either form of transport.

Stores for nine months on the road were provided for Europeans, and three months' rice and date rations for the Somalis. It was decided to use two months' supply of the latter at the beginning of the expedition to diminish the chances of desertion; and month's supply was reserved as an emergency ration, and for issue to small detached parties for whom it would not be economical to kill meat. During the remainder of the journey the Somalis were to subsist on a purely meat diet—camel, beef, mutton, or game, as found convenient. This arrangement worked very well, and the men did well on the diet, which for about half the time consisted of camel meat, frequently that of lame or worn-out transport animals.

Neither salt or cereals of any kind were eaten by the men for long periods and very little milk was obtainable, owing to the ravages of rinderpest in the Baran country.

Mahomed Hassan, having received final instructions, returned to Berbera, and marched the majority of natives and camels via Jig Jigga to railhead at Dire Dawa. The Europeans of the expedition, with the bulk of the stores and equipment, crossed to Jibuti, and thence by rail to Dire Dawa, where they arrived on the 4th July.

Pending the arrival of Mahomed Hassan, survey operations were undertaken at Dire Dawa, partly with a view to training the assistant surveyors who had no previous experience of the class of work required, and partly to furnish an origin for survey triangulation along the Danat River to join on Captain Maud's work. The chief triangulation along the Danat River to join on Captain Maud's starting point was, therefore, to link Dire Dawa and Adis Ababa (Captain Maud's starting point) together by triangulation, and from this chain to carry a reliable longitude value north or south either by triangulation or latitude and azimuth to the extreme eastern and western frontier. The detail survey of the eastern section of the frontier could then be adjusted between fixed terminals. It is hoped that the maps and sections fitted in this preliminary work will also be of interest to the War Office, as the existing maps are incomplete and inaccurate.

From Dire Dawa a visit was paid to Harrar, partly in connection with survey operations, and also to obtain information about our proposed route through the Amussi country between the Hawash River and Gimir.

From the information obtained it became clear that there would be great difficulty in getting the main caravan through the Amussi country till the end of the rains, which it was hoped would be about the middle of September. Having heard also from Sir John Harrington of the King's illness, and that there was no hurry owing to the impossibility of getting the Abyssinians to undertake anything during the rains, I decided to move very slowly from Dire Dawa to the Hawash Valley with a view to getting the animals in good condition and the whole party in working order. From the Hawash I proposed to send the main caravan by easy stages to Gimir, whilst I went to Adis Ababa to arrange with the Abyssinian commissioners.

Mahomed Hassan with the camels arrived at Dire Dawa the 28th July, and, as grazing was scarce in the neighbourhood, the expedition started on the 30th.

The expedition consisted of 6 Europeans, 1 Abyssinian interpreter, and about 90 Somalis, including servants, &c., with 100 camels. A small Abyssinian party and hired mules were also taken for my own journey up to Adis Ababa. During our stay at Dire Dawa a good deal of rain had fallen, one heavy storm carrying away two large railway bridges. After starting there was rain, more or less heavy each day, which made movement, even in the comparatively flat country, difficult for camels. Owing to weather and haze for survey work the Hawash was not reached till the 20th August. By this time the weather had improved, and the natives said the end of the rains had practically come. At the Hawash I left the main caravan and marched direct to Adis Ababa, arriving the 27th August.

As passes for the further movement southward had not yet been received, the main body was ordered to remain in the vicinity of the telegraph line from Adis Ababa until they heard from me, merely undertaking such movements as were necessary for survey purposes and to keep the Somalis employed.

On arrival at Adis Ababa I found that the King's illness had entirely upset the whole machinery of government. It was totally impossible even to obtain the passes for the caravan to proceed to Ginir, while no steps had been taken by the Abyssinian Government even to nominate their representatives.

The Hawash Valley was unhealthy, and I had received reports that the Somalis were becoming troublesome, so decided to order the main body to proceed to Ginir without waiting for passes, and telephoned to this effect on the 7th September. I also sent Mahomed Hassan back to the caravan, as his influence with the Somalis was required. No passes were ever obtained for the movement of the caravan, though at times fortunately no serious interference by Abyssinians was experienced. The physical difficulties of the march were, however, very great, as the Arussi Plateau proved to reach a height of over 8,000 feet, a rise of 5,000 feet out of the Hawash Valley. A somewhat lower route, passing between the Arussi and Harrar Plateaus, was impassable at the season owing to the rivers being swollen. To make matters worse the weather, which at the beginning of September greatly improved, suddenly broke again, and the rainy season prolonged itself well into October, a most unusual occurrence, which, it is interesting to note, is very clearly indicated in the diagrams of the Nile readings.

The cold and wet caused a great deal of sickness among the Somalis, in spite of their having been provided with tents and blankets. The camels, too, suffered severely, so that by the time Ginir was reached less than thirty were fit to carry loads. Fortunately Captain Condon was able to hire mules, which with the addition of those brought from Adis Ababa by Mahomed Hassan, enabled him to reach Ginir by the 1st November. If there had been any necessity for more rapid movement, and if there had been no delay waiting for passes, this party could have reached Ginir at least a month earlier.

Captain Condon, on whom the chief responsibility and labour at this time fell, deserves the greatest credit for getting as many animals through as he did, and for maintaining discipline among the Somalis.

While the main body were making their way slowly south I remained at Adis Ababa, hoping that the Abyssinian Commission would be appointed. Sir John Harrington left for England the 30th September without having been able to settle anything, and Lord Herbert Hervey, who became charge d'affaires, was no more successful. Lord Hervey, however, had interviews with Fitaurari Hafto Giorgis and the Nagadras Haile Giorgis, at which it became apparent that neither the Queen or any of the Ministers practically in charge of the Government intended to take any further action in the uncertain state of the Emperor's health. Meantime I was becoming anxious about the main body, as I realised that the uncertainty and delay would cause the discipline of the Somalis, while at any time difficulties might arise in procuring supplies or with the local Abyssinians. I represented this to Lord Hervey, who requested permission to join my main body.

After a reply had been received from the Foreign Office, to whom the matter was referred, some more days were spent in a final endeavour to secure the appointment of the Abyssinian Commission and in obtaining a pass instructing local Abyssinian officers not to interfere with the movements of the commission. It was characteristic of the difficulty in getting things arranged in Abyssinia that for several days none of the Ministers were transacting business, as they were employed in personally superintending their men cutting the Emperor's hay. On the 29th October the pass was received, and a special messenger was sent to the main caravan to prepare to move south. Final interviews were obtained with the Fitaurari and Nagadras, at which it was arranged that if the commissioners were appointed they would join me on the frontier, the 15th December in the neighbourhood of Maka Muri, on the Dama River, being given as a rendezvous.

On the 2nd October I started for Ginir, which I reached on the 3rd November, crossing the Hawash Valley, Arussi Plateau, and Wabi Shebeli Ravine on the road. Although travelling fast, it was possible to carry on a plan table sketch based on points fixed by Captain Waller's triangulation. This, together with Captain Waller's work, gives a good map of a part of Abyssinia which is very ill-represented on existing maps. While at Adis Ababa I was also able to establish a connection between Captain Waller's triangulation and a triangulation I had carried out at Adis

Ababa in 1906, point on which had also been used as the origin of Captain Maud's work.

The weather, which had cleared at Adis Ababa about the beginning of October, became again wet as I approached Ginir, and I found that we had arrived there just in time for a recognised local rainy season. I also found that the main body had experienced practically no fine weather on their march, as, when it began to clear in the north, they ran into this local rain to the south.

Under the circumstances, it is not to be wondered at that the state of the party was deplorable. All the Europeans were more or less out of health and were suffering from fever, while 35 per cent. of the Somalis were also down with fever of a severe character. The state of the transport was even worse. Of our original 100 camels about 60 survived, of which only 22 were able to carry full loads, and 16 to carry half-loads. The Abyssinians with hired mules, who had accompanied the main body so far refused to go farther. The small number which had come with Mahomed Hassan from Adis Ababa agreed to re-engage, but their animals were in a far from satisfactory condition. It had been hoped, from Dr. Donaldson Smith's accounts, that Ginir would form a good centre for replenishing supplies and obtaining camels, but the exactions of the Abyssinians had devastated the whole neighbourhood.

No transport animals, except a few donkeys, could be bought and the Abyssinian authorities would give no assistance. The latter, as a matter of fact, knew little about the country, which had only recently been handed over to their master, Dejaj Belela, ruler of Harrar, when the former governor, Dejij Lal Segad, was deprived of his province for his complicity in the raid which resulted in the death of two Italian officers near Luchi. Lal Segad's men before leaving had, as usual, stripped the country of everything they could lay their hands on. At Ginir we met Lieutenant Perduechi, the Italian officer who had been despatched to report on the new boundary recently agreed to between the Italian Benadir colony and Abyssinia. His movements had been thwarted by the Abyssinians appointed to accompany him, and he had been obliged to return to Ginir to receive further instructions from Adis Ababa. Lieutenant Perduechi gave me most valuable information about the route southwards, but was not reassuring as to the prospects of replenishing our transport. Captain Condon had, however, wisely sent a party of Somalis on to an Arussi chief named Fitaurari Dadi Tare, in charge of the nomadic tribes further south, with a view to collecting animals.

As there was clearly nothing to be gained by delaying longer at Ginir, which was proving very unhealthy, I decided to push on, in spite of the fact that the local Abyssinian officer threatened to stop us, as he had no authority from his immediate chief, who was absent. This man was, of course, shown the letter with the Emperor's seal, but he was the worst type of treacherous and insolent Abyssinian.

Owing to lack of transport it was necessary to move the caravan in relays till more animals were obtained, and on the 6th November Captain Condon started south with all the transport available, leaving the remainder of the Europeans in camp at Ginir. A superior Abyssinian officer, Gerasmaes Gubaa, had arrived at Ginir the evening before, and as I had acquainted him with my arrangements I anticipated no opposition; I took the precaution, however, to accompany Captain Condon through the town, and after seeing him, as I believed, well started, returned, calling on the Gerasmache on my way. He proved most friendly, but I had hardly left him when I received a message from Captain Condon that he had been stopped by an armed party of Abyssinians, who were most insolent, and that he could with difficulty keep the Somalis from firing. I at once got the Emperor's pass and returned to the Gerasmache's house. He accompanied me to the place where Captain Condon was stopped. We found the Abyssinians were acting under the command of the Balambares, who had been senior officer on our arrival. I called on the Gerasmache to punish this man on the spot, if he wished me to take no further action in the matter; this, however, he was afraid to do. I therefore informed him that the incident would be reported to Adis Ababa, and refused to have further dealings with him. He sent presents to try and make his peace, but these I returned, and withheld the present he would, under ordinary circumstances, have received.

No further opposition was offered, and Captain Condon having returned with the transport animals, the remainder of the party moved off next day. After the first day's march the track proved to be good, a wide clearing having been made through the bush, which was very dense, by the Abyssinians, to facilitate the passage of the great herd of animals they had collected in their raids to the south.

Before leaving Ginir we received a message from the Somali party which had been

sent to Lieutenant Dadi Tora, but this chieftain, though apparently friendly, would take no steps to provide camels till he had been reassured that we were moving with the authority of the Abyssinian Government.

Leaving the main party, therefore, so crossed slowly, Capt. in Condon and I went off to see what could be done. Our appearance and the production of our sealed pass had the desired effect, and we were able to purchase on the spot sufficient camels to enable us to carry all our loads without the necessity of making double journeys. Messengers were sent out to collect more, and a party of our own men were left to bring these on. Meanwhile, we continued our journey steadily south, though it was constantly necessary to leave detachments behind with the sick animals.

Very few natives were met, and these were at first of mixed Galla and Somali stock, and later pure Somalis. Dadi Tora is a Mahommedan of Galla family, though his mother was a Somali. According to their usual custom, the Abyssinians have given him an Abyssinian title and placed him in charge of all the nomadic tribes south of Gahr. His sympathies are entirely with his co-religionists, and this was only one of the many cases in which the fact of our party being Somali and Mahomedan secured us assistance.

As we moved south we experienced drier weather, and the health of both the Somalis and the animals improved. Our steady progress did much to improve the morale of the men, which had been much shaken by the slow and apparently objectless movements before reaching Gahr. The health of the Europeans remained, however, very unsatisfactory.

We took up along the left bank of the Web River. At first on high ground some distance away from the river, but from Haila Mido (latitude 5° 40') onwards on low ground fairly close to the river. On the 25th November we reached a large Somali village at Dintu, which had been founded by one El Kadeim, a holy man of a sayid family from the lower Juba district. Next day we passed a large detachment of the Ogaden Anilah (Rer Afghab and Rer Waifi), moving to escape the raids of the Multah from the Wabi Shebeli to the country formerly inhabited by the Dagoi (Hawash). The latter, escape the raids of the Abyssinians, had taken refuge in the country between the Dawa and Gantale Rivers, some even crossing into the Garre and Mexican country south of the former. The party of tribemen we met was apparently the northern detachment of a general movement of the tribes south and west, which will be referred to again.

On the 26th November we reached the junction of the Dawa and Gantale, two days in advance of the date I had given Lord Herbert Hovey.

There was no news of Mr. Zaphiro, whom Lord Herbert had instructed to meet us at this point, but we found a station of the Boma Trading Company established at Dolo, a small village at the junction of the rivers on their right bank. The Amurca Gantale Horneyold (Mr. Horneyold), the manager of the post, was away on a visit to the Italian post at Lugh when we arrived. Mr. Vincent, his assistant, was in charge. The latter kindly lent us two Bortoon boats belonging to the company, and in these all stores and equipment were crossed the following day, the river being still in flood. On the 1st December the banks were, without difficulty, swam across the river, and a number of porters were engaged where the banks were easier.

Captain Waller had been able to carry a satisfactory value for longitude to Dolo from his Dire Dawa-Absa triangulation by latitude and azimuth observations. We had therefore a value for the eastern terminal of the frontier in harmony with Captain Maud's value further west. A fresh base was measured near Dolo and an attempt made to carry the triangulation along the Dawa River. This, however, failed, owing to the absence of natural features and thick bush, which would have made triangulation prohibitively slow. A wheel and compass traverse, checked by frequent latitudes, was therefore used between Dolo and the point at which it became possible to carry on plane-table survey on triangulated points. Satisfactory results were obtained, and it has been possible to adjust the work of Bottego's expedition, and the time and compass traverses in the eastern portion of Captain Maud's work to the results obtained.

At Dolo we found considerable difficulty in obtaining supplies and transport, all of which we were still rather short. I had hoped to be able to send back all our hired Abyssinian mules from Dolo, but found they could not be spared. In any case the Abyssinians were afraid to leave us and to traverse alone the Somali country through which we had passed.

On the 2nd December, Mr. Horneyold returned to the station, and from him I

heard very unsatisfactory reports of the state of the country in British territory to the immediate south. It appeared that during the past nine detachments of the Rer Afghab had crossed the Juba, coming from the Wabi Shebeli districts to avoid the roads of the Multah and Abyssinians. The large raid made by the Abyssinians at the time they came in contact with the Italian detachment from Lugh was the origin of this south movement, but it has been stimulated by the more recent raids of the Multah. The Rer Afghab had come into collision with the Garre tribes settled near the Dawa, and with the Marchan tribes (Rer Hassan and Rer Isak) who occupy the right bank of the Juba for some distance inland. There had been much intertribal fighting, in which the aggressives were, in the first instance, either the Rer Afghab or parties of the Marchan, known as the Marehan Galti or New Marchan, i.e., individuals who, coming from the left bank of the Gantale, had attached themselves to the Marchan. One of the most aggressive leaders of the Marehan Galti was a man called Shire Jamia, who was for some time one of the Multah's chief leaders. This man openly professed his hostility to the British Government, and was consequently trying to obtain a position somewhat similar to that of the Multah, disregarding the authority of the old tribal chiefs. The Rer Afghab, Rer Hassan, and Rer Isak had all obtained a number of rifles. For the time being the Rer Afghab and Rer Hassan had patched up a peace, but Mr. Horneyold anticipated fresh trouble when the Juba fell sufficiently to allow it to be easily forded, many parties of the Rer Afghab in particular, and the Abyssinian territory being ready to cross. The Rer Isak, to whom the more remote Abyssinian districts were attached, had been raiding the Garre tribes along the Dawa, of the Marehan Galti were attached, had been raiding the Garre tribes along the Dawa, with the consequence that the latter had retired west, giving up all the country east with the exception of a few families who were living under the protection of the company's post. Mr. Horneyold was anxious that I should do what I could to establish order post. Mr. Horneyold was anxious that I should do what I could to establish order as the position of the post was distinctly precarious, and the disturbed state of the country affected trade prospects. The responsible tribal chiefs had all been in communication with Mr. Horneyold, whom they got unfortunately supposed to be in some way a representative of Government. The latter had done what he could to patch up a peace between the tribes by getting them to agree to payment of blood money, and to give up their cattle. He had no authority to sacrifice cattle, but he had, of course, to admit that we had no authority to sacrifice cattle.

Mr. Zaphiro was opposed—indeed, I consider—to his assuming a positive administration in the country.

On the other hand, Mr. Zaphiro, with his small party of untrained Abyssinians, could exercise no authority over the Somali tribes whom it is more than doubtful if he could have visited in safety.

I sent messengers to the tribal chief to come and see me, but he did not come, and no further steps could be taken till I had met Mr. Zaphiro.

On the 4th December Mohamed Hassan was despatched to the mesh bank of the Dawa to buy animals to load and transport from Somali tribes there, and Captain Waller with Dr. Drake-Brockman started up the Dawa by the south bank carrying stores. On the 6th Mohamed Hassan returned with sufficient animals for our immediate needs. He reported that the Somali settlements were being attacked by small parties of Abyssinians, and that it was reported that a large Abyssinian party was on its way to force the Dagaal bank to their original location, within convenient distance of the Abyssinian post. He had also been able to get hold of some Somalis originally employed by Sir John Harrington to assist the Garre in protecting them from Abyssinian raids prior to Mr. Zaphiro's appointment. These men proved very useful as guides and messengers.

Tiru Ali, chief of the old Marehan Galti, also came in this day, and professed his desire to live in peace and willingness to accept a settlement of outstanding quarrels. He complained that several British expeditions had passed through the country and claimed the allegiance of the tribes, but that each had passed on without leaving any permanent government to assist the chief in maintaining order. He admitted that the Somalis were rapidly arming themselves with rifles to protect themselves, and that this was the source of most of the intertribal raiding.

Leaving a letter in Amhara with the Boma Trading Company, to be shown to any Abyssinian party which attempted to force the Dawa, Captain Condon and I started on the night of the 6th, and on the following night overtook Captain Waller.

On the 10th, between Melka Dakka and Melka Sab, we met Mr. Zaphiro on his

road to meet me at D. o. He had brought with him all the chiefs of the Garre and various other tribes of mixed stock, who occupy the country on the British side of the frontier between the pure Somali tribes in the east and the black races near Lake Rudolf. Dabbir Uggash, chief of the Rer Afzab in British territory, had overakened me the evening before, having come in in obedience to my message.

Mr. Zaphiro returned with me to Maka Sala. The remainder of that day and the next were taken up in going into the question of the intertribal disputes, Mr. Zaphiro being anxious to avail himself of my party to attempt to restore some sort of order in the country. The outstanding quarrel between the Rer Afzab and Garre were settled by mutual payment of blood-money and undertaking to return looted stock, the chiefs been sworn to the agreement. It became apparent, however, that an agreement between these two tribes would be of little value unless the Marchur tribe also agreed to a general settling up. Mr. Zaphiro was strongly in favour of a surprise visit to the country, which would not give the chief's a chance of evading us, and might result in the capture of rifles. As Mr. Zaphiro had received no news of the appointment of Abyssinian commissioners, and was clear they could not possibly be at Maka Murri by the 15th, the date appointed, I sent a letter to Pitavari Waldi at Gardula (Pitavari Hapo, Giorgis's representative on the frontier) informing him of my arrival, and requesting him to send officers to meet me, to see the frontier in the event of regular commissioners not arriving.

While waiting for the delivery of this letter, I decided to make an expedition into the Marchur country with Mr. Zaphiro and about seventy rifles, leaving the remainder of the caravan and all the transport to proceed slowly to Ammissa, the headquarters of Ali Abdi, chief of the Garre. Unfortunately at this time all the other Europeans were suffering from malarial and Dr. Drake-Brockman was down with threatening symptoms of blackwater fever.

Mr. Zaphiro and I started at midnight on the 15th, taking with us his party of Abyssinians and about fifty picked Somalis with Mahomed Hassan. This left the main body very short handed, but Mr. Zaphiro was able to arrange for some assistance from the local natives.

We took with us all the tribal chiefs, and arranged for a strong party of Garre to follow us. A report on our proceedings was furnished in my despatch on 29th December 1888, and only an outline of our movements will be given here for the continuity of the narrative.

Our first objective was a group of villages at Hara Faro. These belonged to a party of Marchur Gaiti attached to the Reg Haasan. This we reached on the 16th December, at 1 a.m., to find the villages deserted, as they had received news of our approach the evening before from a hunter who had seen our maddies camp on the hills.

We went into camp and took steps to get into touch with the natives. This was soon obtained, and parties of our Somalis were sent out with messages to the chiefs, and also to Sheikh Abdur Sherif, whom we heard was on his way through the country to a pilgrimage to Sheik Ahmad's tomb near Gimir. This man was known to be very friendly with Government at Kismayu, and was himself trying to establish power among the tribes. With his assistance all the head men of the Reg Haasan and Rer Isak within reach came in under safe conduct, and a sworn agreement between them and the Rer Afzab and Garre was arranged. The chiefs all professed a strong desire for the establishment of some sort of British administration in the country, and their willingness to surrender their rifles and pay taxes if this were done.

They would not, however, undertake to collect their rifles and hand them over to Mr. Zaphiro unless given armed assistance. They clearly recognised that Mr. Zaphiro's influence was not sufficiently effective to give them assistance in case of trouble with their own people. They also resented the idea of being interfered with by Mr. Zaphiro's Abyssinians.

On the 19th I left Mahomed Hassan and a party of twenty-five men to assist the chiefs in forcing their tribesmen to observe the terms of their settlement, and to receive rifles if the chiefs agreed to give them up. He was to obtain all the information he could about the situation, and a pretty free hand to act as he considered best according to developments, and finally to rejoin me at Chifre Moyale a month later. The results obtained by leaving him behind were not very tangible, as might be expected. The results obtained by leaving him behind were not very tangible, as might be expected. He was able, however, to recapture a herd of over 1000 camels which were seized by a raiding party from the left bank of the Omo. He reported that the Rer Afzab and Garre were carrying out their promise. He reported that the Rer Afzab and Garre were carrying out their promise. He reported that the Rer Afzab and Garre were carrying out their promise.

and Mr. Horneyold have both since reported that Dabbir Uggash (Rer Afzab) was loyally carrying out his engagements.* On the other hand, that Shire Jama and many of the Moyale Gaiti had moved across the Juba, declaring their hostility to the Government. Mahomed Hassan met several emissaries from the Mullah spreading his influence among the tribes along the river. The Gaiti Rer Isak are inclined to join them. Sheikh Ismail, chief of the old Rer Isak, has little influence left, and lives now near Bardera. The distribution of rifles among the tribes, according to Mahomed Hassan, is as follows: Rer Afzab, 200; Rer Hassan Gaiti, 210; and Rer Isak (Gaiti), 180, with about 100 more among the old Rer Hassan, Rer Isak, and Dagodi families. The Garre have few or no rifles. It was found on settling the various claims that, in spite of this, the balance of blood-money was against the Garre, though they had had much more of their stock stolen. The fact is that the moral effect of the rifles is so great that no resistance is offered at the time to raiding parties armed with them. This greatly increases the temptation to raid. On the other hand, loss of life is chiefly caused by individuals of the raided community seeking vengeance. They lurk round the villages till they find an opportunity to kill women or children quietly with a spear.

Mr. Zaphiro and I left Hara Faro on the 19th December with the Garre chiefs, and travelled rapidly through El Wak and Takabla, both of which places Mr. Zaphiro wished to take the opportunity of visiting. This gave him the opportunity of settling several outstanding disputes.

Water was now becoming very scarce. Between Hara Faro, where the pool was almost dry, and El Wak a large pond was found at Dumasas. At El Wak are numerous wells, some 40 to 60 feet deep, following the course of what is evidently an underground stream. The neighbourhood is very alkaline and the water tainted. The wells are spread over a large area and at the height of the dry season there is sufficient grazing and water for enormous herds. These wells are mainly frequented by the Garre tribes, but Ajuran and other tribes come there. Several of the wells were dry, and are still owned by Boran living in the Bisan highlands.

Between El Wak and Takabla is a long waterless stretch. At Takabla there are a number of wells round the bases of a group of low granite hills. These wells run very low at the end of the dry season, and few people remain in the neighbourhood. When water runs short it becomes the duty of the camel-breeding communities to leave, as they can perform the journey to El Wak better than cattle owners. The question of which families are to move is a constant source of dispute, and both here and at Dumasas Mr. Zaphiro had to issue orders in the matter.

After Mr. Butler's expedition had passed, the Abyssinians raided as far south as Fransha, and levied a tax of cattle to show the people that the Abyssinians were their masters not the English.

Leaving our men to rest a day at Takabla after their hard marches, Mr. Zaphiro and I left Takabla on the night of the 27th and reached Banissa the following day. 265 miles had been covered in the fortnight, and during this period halts for the purpose of settling native disputes had been made for four days at Hara Faro, at El Wak, and Takabla for a day each and for sixteen hours at Dumasas. This entailed very heavy marching on the men and Mr. Zaphiro. The latter had, in addition, to spend most of the periods of halt interviewing natives. The conduct of the men was excellent, and I was greatly struck by Mr. Zaphiro's mastery of the native dialects and his immense knowledge of the names and tribal history of the natives, even in districts he had never visited. His excellent memory enables him to make good use of his oriental training for interminable conversation with the natives.

The country we had traversed was singularly featureless, covered with dense thorn-bush and grass. It would be difficult to move for any distance except by the native tracks, and would prove a most difficult and dangerous country for military operations.

At Banissa I found that Dr. Drake-Brockman, ill at Maka Sala, had developed into a serious attack of blackwater fever. Fortunately the latter made a good recovery, though it had been necessary to carry him all the way to Fransha, a distance of 44 miles, the last 30 miles of which was through waterless country, a very difficult task for Captain Condon with his reduced party. Captain Walter and Corporal

* Mr. Zaphiro's notes on the frontier tribes dated 1st August, 1889, this man is reported to have returned to Abyssinian territory.

Carter had explored the course of the Dama to the point where Captain Maud's work stopped at Bissila. He had also carried the route survey through to Banissa.

It was quite clear that Dr. Drake-Brockman must be sent home at once, and fortunately this was easy to arrange, as he was strong enough to travel and we were now able to dispense with the hired Abyssinian transport, who could therefore be sent with him. He accordingly started for Adis Abeba on the 20th.

As there was no news of the Abyssinian commissioners, and no reply from Fitzauriel Waldi, I decided to go on with the demarcation of the boundary, relying on Mr. Zaphiro's information—information obtained from the chiefs on the British side of the frontier—and Captain Maud's reports to guide me in arriving at an equitable settlement. It was impossible to secure the attendance of natives from Abyssinian territory. Captain Waller proceeded westward into the Boran country to pick up Captain Maud's triangulation and carry it east to the frontier districts of Jara, which had been sketched before Captain Maud had started his triangulation. The remainder of the party, with the exception of a small detachment of Somalis who had been sent to graze our tired camels in the Gaddaduma district, marched to the Dawa River at Malka Murri.

Here the work of beaconing the frontier started. A full description of the line as beaconed is given separately.

From the information obtained from the chiefs and Mr. Zaphiro it was clear that Gaddaduma was essential to the maintenance of administration of the British side of the frontier, and of vital importance to a large number of the Garre; as explained in my memorandum on the subject already submitted.

It was therefore necessary to make some equivalent concession. The wells of Chinko and the grazing grounds north of the Malka Murri Hara, Dawa-Eil Mole-Jara road, coupled with the transfer of the Garre tribes to territory further north at Guha Gallgallo, provided this. The adoption of the above-named road as the administrative boundary provided an easily recognised frontier, which would otherwise have been most difficult to obtain in the featureless bush-covered steppe. It also avoided the insoluble problem of finding a definite tribal boundary between the Garre and Boran, which the terms of the treaty hindered the commissioners.

Ali Abdi, chief of the tribe, willingly surrendered his claims, provided his tribe would receive British protection at Gaddaduma.

The country was at this time becoming very dry. Most of the cattle-owning people had moved to the permanent water, and only a few camel-owning families were met with elsewhere. Almost all the burns, or semi-artificial reservoirs which provide water for some months after the end of the rains, were dry. The water obtainable in the few that were not was most insavoury. Rapid movement was consequently essential and in some cases, where material for the construction of cairns was difficult to obtain, temporary marks only were left, Mr. Zaphiro undertaking to erect permanent marks when the rains came. The "main" rains in this region correspond with the early "light" rains of the main Abyssinian plateau. Unfortunately in 1908 these early rains had been very poor, and the particularly heavy main rains of the northern districts had not extended so far south. The country was therefore abnormally dry all along the frontier. This, combined with the severe plague of rinderpest in the Boran and neighbouring country, had caused abnormal movements of the population, which made it difficult to verify some of the information received.

On arriving at Hara Reisa, in Jara, it was found that several Abyssinian elephant-hunting parties were in the neighbourhood, as usual maltreating and taking toll of cattle from the natives. One party fled from Hara Reisa on our approach, but a small party quartered in a neighbouring village were surprised and made prisoners the night of our arrival. They were subsequently taken to Charlie Morale, where their rifles were destroyed before they were liberated.

Reports also came in that Dejaj Tafari's men had come to Hara Dama and to Eil Mole after we had passed. Thinking these parties might be in some way connected with the Abyssinian commissioners, and being in any case unwilling to wear my men out in the heavy marching which would have been entailed in taking action against them, I contented myself with sending messengers to Eil Mole to ascertain the position and orders of the party there. The messengers reported that the party consisted of about thirty of Dejaj Tafari's soldiers on elephant hunting, although they professed to be in the employ of the Nagadras Haile Giorgis. They decamped on receipt of my message.

* I have since received a report from Mr. Zaphiro that this has been done.

The Jara hills are a group of granite kopjes, part of a line of similar hills scattered on the gradual slope joining the Golgo plateau to the Boran highlands of Durr. At their bases are a number of shallow wells, similar to those of Takabor, and other granite hills in the Golgo. These wells apparently are lodgments of water among the granite boulders, and are not fed by true springs; they therefore run dry almost every season. Jara contains some Boran villages, but is looked upon as Garre country.

Captain Waller arrived at Hara Reisa, having successfully picked up Captain Maud's work and extended it thus far east.

Captain Waller on his march had been shooed off by all the Abyssinians, many of whom were absent, and he found the Borans apparently afraid to have any dealings with him. Guides and supplies were almost impossible to obtain.

The wheel traverses could now be checked between Dolo and Hara Reisa, and only slight adjustment was found necessary.

On the 11th January the whole party continued the march along the frontier, the next water supply being found at the large granite hill of Gamada. Portion of the hill has a table top with precipitous sides, and forms a natural stronghold, as there is a small well on top. The water at the foot of the hill was almost exhausted, but fortunately at this point we encountered the first of a series of thunderstorms, which greatly facilitated our movements.

The Gamada Hill was ascended and made a triangulation station.

On the treaty map the boundary between Garre and Boran is shown as running through the hill, but as both tribes use the wells and grazing indiscriminately it was considered advisable to secure unity of control.

Moreover, the place forms an important station on the road leading along the frontier from Jara to Gaddaduma.

This road should remain in the British sphere, as no alternative line which can be traversed in the dry season exists on the British side of the frontier.

A short march south of Gamada are the Gaggabha peaks.

Here also the wells had been replenished by the recent rains. All the natives had, however, left the neighbourhood.

The cauris dredged between G. Burdura and Gaddaduma place both Gamada and Gaggabha in British territory as well as the above-mentioned track.

At Gaddaduma a careful examination of the ground was made to secure the most suitable frontier.

The natural features are here of an intricate character, and had not been quite accurately represented by Captain Maud's surveyors.

Captain Waller visited Bor and found the wells there in use by the Boran villagers, although, owing to the unusually dry season, many had moved to Le.

The wells at Gaddaduma itself were exceptionally low and the grazing in the neighbourhood indifferent.

Partly for this reason and partly for fear of the rinderpest there were comparatively few natives about.

A fairly well-defined watershed was traced between the Gaddaduma and Bor valleys, and with the aid of the beacons erected it serves to mark the frontier.

The treaty line which had been departed from at Gamada was now almost rejoined at G. Roka. This mountain, which is a lofty spur projecting from the main plateau, proved, however, an indifferent feature to mark the frontier, as it separates and projects south of two valleys much used by the inhabitants of the Golgo for water and grazing. The boundary was consequently deflected so as to include the wells of Adele and Bute in the British sphere.

From G. Roka west to Churro Moyale, and thence to the Ura district at the head in the escarp close to G. Burdura, the treaty line ran practically tangential to the southern extremities of the spurs of the escarp, leaving the intermediate valleys in Abyssinian territory. These valleys, as has been pointed out in my previous memorandum, included the permanent water-supply on which the inhabitants of this part of the Golgo depend, and are also the scene of the wholesale destruction of elephants by the Abyssinians.

Moreover, without access to a certain number of the wells, it would be impossible to establish an east and west line of communication along the frontier in British territory.

A further deflection was therefore made in the frontier in order to include the wells of Godomma, midway between Roka and Moyale.

While at G. Roka we were rejoined by Mahomed Hassan and his party. We also

picked up the small detachment which had been sent from Banissa to graze their camels near Gaddaluma.

Unfortunately the neighbourhood contained a quantity of shrub poisonos to camels, and was also infested by the tsetse fly; consequently the animals had to be off rather than improved in condition.

Churie Moyale, where Mr. Zaphiro's head-quarters were established, and where the Boma Trading Company had also a representative, was reached on the 22nd January.

It was found that at this point the topography on Captain Maud's map was slightly in error, and that the name Churie Moyale did not apply to the large spur as shown on the map, but to the district on the crest of the escarp from which the spur projects. Owing to the resulting confusion Mr. Zaphiro had selected the site for his head-quarters in what was properly Abyssinian territory.

As the error was small, and the area affected of no great importance, it appeared a pity to waste all the labour Mr. Zaphiro had expended constructing Fort Harrington by a strict adherence to the terms of the treaty. I therefore arranged the boundary so as to include Fort Harrington with water supply in British territory.

The highest point of the spur, which Captain Maud called Churie Moyale, is really Q. Kiltar, and the spur itself is known generally as Tepeisa. In case the Abyssinian Government raise objections, it may be pointed out that the greater portion of Churie Moyale proper is left in Abyssinian territory.

It was necessary to halt some days at Churie Moyale to go thoroughly into this matter, also to reorganise the transport of the caravan, and to dismiss the Garre and other chiefs who had accompanied us to this point. They all belonged to the country east of Moyale, and there was therefore no necessity to take them further. Mr. Zaphiro had arranged that fresh camels should meet us at Churie Moyale, but on arrival we found that the natives in his absence had moved to Woijera, and some even as far as the Lorian.

This, I think, was chiefly due to the prevalence of rinderpest in the neighbourhood of the escarp, but may have also been due to some extent to fear that we should adopt Abyssinian methods of requisitioning transport.

From Mado to Moyale we had to a large extent employed animals provided by Ali Abdi, the chief of the Garre, and it had been my intention to pay merely for their use and for animals which died. It now however became necessary to purchase the animals outright, and even so far as we had barely enough animals to go on with, and we were running very short of food for the men.

So much was this the case that there was not sufficient transport available for Mr. Zaphiro and he was compelled to remain a short time longer at Moyale to get more animals joining us finally by an upland route through Abyssinian territory.

Mr. Zaphiro was very pessimistic about our getting animals on our route westwards. I consequently dispatched a small party of Somali with cloth to buy animals from the Rendille at Korro or Marsabit, with orders to rejoin us in the neighbourhood of Lakes Stephanie or Rudolf.

Another matter which had to be settled here was the disposal of the ivory Mr. Zaphiro had confiscated during the past year from Abyssinian hunters.

I did not consider it advisable to leave it with no better protection than the few Abyssinians Mr. Zaphiro proposed to leave behind. It was at this time my intention that he should accompany the expedition to Adis Ababa, partly to utilise his services as a doctor and partly to give him an opportunity of seeing the western portion of the boundary, which he did not know.

I consequently made a contract with Mr. Roy, the agent of the Boma Trading Company, for the transport of the ivory to Nairobi.

On the 29th January, leaving Mr. Zaphiro behind, the expedition moved west.

From Moyale westwards, as far as El Sardo in the Bulluh Valley (130 miles), the treaty line does not leave a single permanent well in British territory within many miles of the frontier.

As far as the Loran there is plenty of water just north of the line in the valleys, but these valleys are deeper and the water situated higher up than in a similar direction between Moyale and Roko.

It was therefore impossible to modify the line so as to include wells in British territory without making considerable deflections, in exchange for which there was no possibility of granting concessions elsewhere.

In this stretch of country there is no considerable population on the British side,

and the most serious fact to be considered is the destruction of elephants by Abyssinian hunting parties based on the wells.

The effect of the Boran escarp and the distribution of water supply on the movements of the elephants has been described in my previous memorandum, and it is between Moyale and Uran that they especially congregate.

This country was swarming with hunting parties, but practically all were met with in what, under the treaty, was Abyssinian territory.

As it was out of the question to modify the frontier so as to place the wells in British territory, I decided to provide only a patrol road as far west as Uran by including the detached hill of Burroo, and the pass between it and the escarp in British territory. There are wells at the foot of this mountain which would, I consider, always provide sufficient water to serve as a base for patrols watching for poachers.

From Uran the frontier leaves the escarp and runs through an arid plain dotted with rock kopjes. The water difficulties made it impossible for the main caravan to follow the frontier closely, but Captain Waller made a reconnaissance to the El Dantu and Furro Hill to test the accuracy of native report.

He found no regular track or sign of permanent occupation, though the country was evidently used as a grazing ground in the wet season.

The main caravan followed the line of the escarp, and even then experienced considerable difficulty for lack of water.

From Uran to its north-west extremity at Arballe the escarp runs parallel to the strata, and is therefore much less indented and drier than in its eastern section.

Such water-holes as exist are not easily accessible from the plain. The only exception is found at Mogado, where there is a good well some 3 miles from the escarp, among some small extinct volcanoes which strike out from the escarp towards Gil Farroo.

In this neighbourhood there are deposits of a salt used by the natives to mix with tobacco; this attracts a considerable number of native caravans from the north, and accounts for the comparatively good road down the escarp used by Mr. Donaldson Smith and Mr. Butler. There is a large settlement of Gabra at Mogado who own quantities of camels and sheep.

They appeared to consider themselves under Mr. Zaphiro's protection, and were apparently not interfered with by the Abyssinians.

I avoided the subject of the frontier as far as possible, as I had decided in the districts west of Uran neither to erect beacons nor in any way to encourage the natives to look for British protection.

From Mogado we still followed the escarp to Arballe intending to move west to Diho. At Arballe however, a letter arrived from Mr. Zaphiro reporting the receipt of a letter from Fittaurari Wadi, in which he announced that, acting under orders from Adis Ababa, he was moving with a large force against the elephant hunters on the frontier. He asked Mr. Zaphiro to accompany him as he had orders to cross the frontier. Mr. Zaphiro wrote that he would try and catch me up at Gerai, but that in his opinion, he ought to return to watch the movements of the Abyssinians. On receipt of this letter I moved to Golko, a point on Mr. Zaphiro's route, and met him there on the 8th February. We ascertained that Fittaurari Wadi was at the time within some six hours' march of us, and I accordingly sent him a letter requesting him to come to see us, or to inform me if he was unable to. His reply was to the effect that he could not come to me, and had no authority to discuss matters connected with the frontier.

I consequently despatched to send Mr. Zaphiro back to his post with orders not to allow the Abyssinian force across the frontier, except such parties as he could himself accompany, and that even then he should not allow to cross except for short distances in actual pursuit of hunting parties. I reported the Abyssinian movement to Adis Ababa, and found subsequently that it had been carried out in consequence of representations made there, though Mr. Zaphiro had not been informed that action was being taken by the Abyssinians.

I was very sorry to lose the services of Mr. Zaphiro, as I had hoped during the remainder of the journey to be able to put into intelligible form the mass of local knowledge he possessed. We were also deprived of his services as interpreter and

* Mr. Zaphiro has since then sent me the interesting and useful report on the frontier tribes which is attached.

Ambaick Rock. This left us without means of communicating in writing to the Abyssinians, except in places where Arabic was understood.

Mr. Zephino had also acted as medical officer since Dr. Deake-Brockman's departure with excellent results.

We resumed our march shortly after midnight on the 22nd, and so joined the frontier in the neighbourhood of Gora. The country was now exceedingly hot and dry, and there was little nourishment left in the grass. Our animals in consequence rapidly lost condition. It was surprising that our few riding horses and ponies got along at all, as on several occasions they had to go over forty hours without water, at least of which time they were on the march. Nothing better than a foot-path could be got out of them, so that under the circumstances little deviation from the shortest route from water to water was possible.

Captain Maud's work of surveying was very complete, and required little revision, as we were now inside, and were previously moving along the edge of it. Captain Maud traversed the country after the rains had commenced, and could consequently move with deliberation. The Dilo and Gora craters are curious features, some hundreds of feet in depth, and about 1 mile in diameter, though their edges hardly rise above the surrounding plains. In the rains lakes are formed in the craters, but these dry; and water, very salt but potable, is obtained from wells in the dry bed. The whole formation of the district is highly volcanic.

There were large numbers of Hottu Boran and Gabra in the neighbourhood of these wells, with great quantities of sheep and camels. Through the energy of Mahomed Hassan we were able to buy some of the latter, which we badly needed, though the people were by no means willing to sell. They stated that the Abyssinians had requisitioned nearly all their draught animals, leaving them barely sufficient to carry water from the wells to the villages. Female and fat camels (i.e., animals cut with the object of fattening for food) were in plenty, but the latter were of little use for such purposes till they have been on some time on the march.

From Gora westwards no people were met with till Lake Rudolf was reached. As far as the L. Bullall grazing is fairly good, and there were signs that the country outside the rains. Two excellent groups of wells were found in the west back of the Buldulli, but they had evidently not been used for some time. The grazing in this neighbourhood is poor, and this may account for the absence of people. It is probable, however, that some Abyssinian parties in the camp at the place frequented by elephants.

As pointed out before this portion of the frontier leaves no line of communication or frontier between Uruh and Sardu, and for the establishment of such a line it might be necessary to deduce the frontier to include the Mocado and Gora wells. This would give a good natural frontier, and leave the Habra tribes of Somali origin, in the rear of the posts, in British territory.

As matters stand Abyssinian parties can penetrate into British territory from Mocado, Sardu, Sura, Lake Stephanie, or along Lake Rudolf, without fear of any post station at Churro Horne or neighbourhood. They could only be checked by a separate force based on Marsabit and Lake Rudolf. I can suggest no concession which might be made to compensate such a deflection.

From again to Lake Stephanie, as there is no track and no water was found, the march was a trying one.

Lake Stephanie was found to be even drier than when Captain Maud visited it.

A well-defined point on each side of the lake was selected and designated. The boson on the east side is close to a group of hot springs in British territory at the edge of lake sed. The water of the springs is potable, but salt and nauseating. Great quantities of zebra, hartebeest, and other game were found here, but no elephants.

Some fresh but muddy water was found close to the edge of the lake, some 4 miles south of the eastern boson, but there was no sign of the strip of water shown by Captain Maud along the south-east shore of the lake.

Owing to the extreme dryness of the country I sent Mahomed Hassan forward to look for water. The holes that had been dug by Mr. Butter's expedition were dried up, but we soon struck a small supply some way off the route. I sent the main caravan round to follow Mr. Butter's route, and took a small party direct across the lake bed to a well situated on the west side, on one of the most prominent spurs overlooking the lake. The lake bed was hard and dry, and can never have more than a few inches of water in it.

The country between Lakes Stephanie and Rudolf is very stony and rough. The

ground rises to some 3,000 feet, i.e., 1,000 feet above Lake Stephanie and 1,500 feet above Lake Rudolf. The watershed runs close to the former lake, and the escarp forming its western boundary is rough and precipitous.

Water was found in two places in the large watercourse which was followed by the caravan. The country was very dry, with no grazing, and no inhabitants were met with, though there were signs that it is at times frequented by nomadic people, probably Arbore.

Between Stephanie and Rudolf there are no well-marked features for the definition of the boundary. My first idea was to allow it to follow the course of the stream-bed we marched along, assuming that it flowed nearly east and west, as shown by Captain Maud. It proved, however, to turn considerably more to the south, and its junction with the lake is not well marked.

I therefore prefer a line running to the northern summit of the Loya Hill, which both Captain Maud and Captain Waller occupied as a survey station, and thence in a line directed on the prominent and unmistakable cone of Mount Lalibar to the margin of the lake. The shore of Lake Rudolf is low and sandy, and it was impossible to find material for a permanent beacon. Adopting the proposed line it is a simple matter without instruments to locate its position. If it would coincide with the Abyssinian Government at all there would be no objection to adopting the line of the stream as a boundary. I had no means, however, of ascertaining the name of the stream, and, as above stated, the exact position of the boundary at the edge of the lake would not be well defined.

We reached Lake Rudolf on the 22nd February, the weather still being very hot and dry. There was no sign of the detachment which had been sent to buy camels at Kohki, and all our animals, especially the mules, horses, and donkeys, were in bad condition from want of water and proper grazing. With the exception of a few donkeys, camels were the only animals obtainable since our arrival on the frontier, owing to our not being able to get into touch with the Abyssinians. So far camels had proved the only form of transport suitable to the country, but once we reached the high ground west of the Kibish River they would be useless. It was clear therefore that though we had reached Lake Rudolf in time to explore the western region it would be impossible to take the whole party through it for lack of transport. I therefore decided to send the bulk of the caravan by the easiest route they could find direct to Adis Ababa, knowing that the route by the lakes was feasible for camels.

We moved northward therefore along the lake, and found a considerable settlement of natives and an Abyssinian post near the north of the same. The people were called Gelaba, and are black. They cultivate the marshy ground near the Omo, and own sheep and cattle. They appear to be allied to the Lokob fishing tribes and are of a low type.

The Abyssinian post was manned almost entirely by old soldiers of Leontoff—Sudanese, Arabs, Somalis—all the sweepings of the Red Sea ports. They appeared to have little respect for the Abyssinian in charge, who was in mortal terror of the climate. The relations of the inhabitants with the men of the post were quite friendly, and there seemed to be no ill-treatment.

Captain Waller and I visited Captain Maud's survey station on Rocky Hill, with a view to continuing the triangulation westward, remaining Captain Condon at Marie. The north-western corner of Lake Rudolf was found to be dry and largely under cultivation, though there is some marsh land and several minor lakes. Probably when the Omo rises it floods up to the limits of the lake shown by Captain Maud.

At Marie I found that Captain Condon had been able to buy a few donkeys from the Gelaba, and I was consequently just able to provide enough transport to allow Captain Waller to accompany me westward. The crossing at Marie was an awkward one and the river infested with enormous crocodiles, so I went as far as Karre before crossing. At Marie there were no people on the left bank of the river, but in Karre there were villages on both banks, with a post of Dejaj Biru's men on the left bank and of Ras Waldo Giorgis' men on the right.

At this point the caravan separated, on the 2nd March, and I gave Captain Condon—with whom went the two non-commissioned officers—a rendezvous at Adis Ababa about seven weeks later. Captain Condon elected to follow a route through Lake Dejaj Biru's head-quarters, Walocho, and Kumbata (Dejaj Biru's province).

This route had not been previously explored, and the passage of the watershed between the Omo and the Sagan Rivers proved very difficult. Beyond that point, however, good going through a rich country was experienced, and the journey was

though the Abyssinians had invaded the country and established posts there for a year ago, no great harm had been inflicted till some six months before our arrival, when the Abyssinians proceeded to loot the natives, "everything they possessed, driving off great quantities of cattle." The majority of the natives fled westward, but practically lost everything. A small number, with their King, succeeded in maintaining themselves on the Tumna spur, some miles north of Nana Peak.

These people were carrying on sporadic raiding, with the Abyssinian raiding parties, and I was not able to ascertain definitely how they had escaped extermination. It may be accounted for by the fact that the position they occupy is extraordinarily strong, on a spur some miles long, crested with a series of steep hills separated by knife-edge cols. The sides of the spur drop precipitously some 2,500 feet, and are in the main thickly wooded, though cultivated where possible. Bolt holes lead down the spur to the bush-covered Kibish Valley.

The Abyssinians may not think the place worth attacking, and prefer to watch their opportunities of seizing cattle grazing on the open plateau. On the other hand, they may be taking the common course with them of leaving the headman of the colony comparatively immune, as a means of re-establishing communications with the people when desired.

I subsequently ascertained that the colony was located deliberately in the belief that this boundary treaty placed it in British territory, and at the same time that the Tigray and Boma countries were raided for a like reason.

The small permanent Abyssinian posts have apparently been abandoned for the present, owing to the hostility of the natives and the fact that there is little left in the country.

Presumably, when it is found that we are not attempting to occupy the country, the Abyssinians will encourage the natives to re-establish themselves. It seems, in dealing with the Abyssinians, to be futile and iniquitous to enter into discussions as to frontier lines, unless we are prepared to provide protection for the inhabitants of the territories we claim.

On the 13th March we moved south and on the 15th came upon the inhabitants of Tima. We found a man who had been for some time in Abyssinia, and from him we were able to obtain information.

Tima was visited, but the chief had fled into the valley. He was afraid to come back so far east of incuring the displeasure of the Abyssinians. Moving west we descended from the Macmillan, and obtained an extensive view of the south. Then we began a northward climb through uninhabited country to Central Peak known to the natives as Tama. The western half of the plateau was reported uninhabited and wild. A fair amount of water was obtainable in the central valley, and eland and buffaloes were seen. We ascended Central Peak and were able to locate the tributary of the Akobo up which the Leontief expedition had come. Although the topographical work produced by this expedition was evidently of very secondary value, the course of this tributary should be fairly accurate, as its terminals are well located. No better boundary than this stream suggested itself, and Central Peak itself makes an admirable boundary point. It is by no means an ideal arrangement dividing the Tima Plateau, but the line of natural features selected as boundary points coincides very nearly with the treaty line, and does not affect to any extent the tribal distribution.

To make further claims or concessions under present conditions would be equally useless.

I should have wished to push our survey further to the north-west to fill the gap between Major Austin's work in Boma and the Kain River. The work was, however, not essential in view of the Macmillan exploration, and to have undertaken it would have raised leading us into serious difficulties. Since our arrival on the plateau our few mules, which were our strongest animals, had been dying in an alarming way from eating poisonous plants. Our mules and donkeys were in a feeble condition, having been bitten by the ticks so prevalent in the Kibish Valley, and I realised that the first rains would cause heavy mortality among them. To have pushed further north-west would almost inevitably have entailed returning along the Akobo to the Sudan, as once the rains broke heavily it would be impossible to reach the Abyssinian stations on the high plateau. Moreover, in view of the recent Abyssinian raid, it might have proved most difficult to obtain supplies. I decided, therefore, to content myself with the extent of our journey, but to adhere to my original plan of returning via Adis Ababa. On the 18th March we descended Central Peak and the same night the first rain fell. For some weeks rain had been falling on the main plateau

to the north-east, which rises to a height of 8,000 feet, but on the Tima Plateau^a the rains were at least a month late.

Our object now was to make our way as quickly as possible back to Adis Ababa, carrying out the best survey we could consistent with rapid movement. Following track beaten by cattle driven off by the Abyssinians we crossed our original track on the 21st, and found the route up the escarp used by the Abyssinians. It proved to be unexpectedly good, and we had missed it in ascending the Kibish Valley owing to its crossing the stream at a point much beaten by elephant tracks. The district of Tangu between the two branches of the Kibish had been cleared of inhabitants by the Abyssinians. The eastern branch of the Kibish proved to be a beautiful perennial stream, and from this point onwards water was plentiful. The ascent of 5,000 feet from the Kibish to the Abyssinian station of Maji, where Fitaurari Dampti's headquarters are established, was quite beyond the strength of our animals. Half-way up, however, we were able to enlist the services of a number of black porters.

The Abyssinians have collected a number of blacks to cultivate in the neighbourhood of the station, where there is good soil and plenty of perennial water. We now found ourselves on the true Abyssinian plateau, although to my surprise I found the indigenous inhabitants are all low grade black races who go about ~~as~~^b naked, in spite of the cold. Most of the villages are at altitudes of from 7,000 to 8,000 feet, and temperatures of between 40° and 50° Fahr. It were experienced morning and evening. The black population extends as far as Kaffa, although settlements of Abyssinians have been established in the neighbourhood of the posts.

At Maji we found that Fitaurari Dampti was at Adis Ababa, and Kenyazmach Rata was in charge. This is the station where Mr. G. Clerk organised the Abyssinian expedition into the country west of Lake Rudolf. The principal garrison of the place must consist of several thousand men, but many detachments and raiding parties were away in the country south and west, as well as the following Fitaurari Dampti had taken to Adis Ababa.

Kenyazmach Rata received us well, and assisted us in hiring sufficient guides to take us to Birn in Jimma, although there was some difficulty in obtaining black animals, as the negadi (merchant) caravans had ceased trading owing to the want of animals.

Before starting I went with the Kenyazmach to a hill on the edge of the escarp, whence a wide view of all the country was obtainable. He pointed out all the districts to which he laid claim, and this included Homa, all of Tima, and some three days' march beyond that plateau, and practically the whole of the western slopes of Lake Rudolf. He based the claim on Leontief's and more recent maps. He said that permanent posts had been established in the country, though he admitted some of the garrisons had been withdrawn when they had given up the idea of a boundary commission coming, our arrival having been unexpected. I told him we did not admit these claims, but that as he was only in temporary charge, he had no instructions to discuss the frontier, it was useless to go further into the question with him. I, however, pointed out that he was gaining nothing by looting the unfortunate people of Tima, as it was admittedly Abyssinian territory.

Starting on the 27th March we followed generally the line of the watershed between the Omo and Nile Valleys through a very hilly country. Rain fell heavily almost every day, and interfered considerably with survey operations. The country had been in many parts completely devastated by the Abyssinians, but in the neighbourhood of Abyssinian posts were considerable settlements of black slave cultivators, the condition of these people depending largely on the deposition of the Abyssinian officers in charge. The triangulation was carried by Captain Waller into Kaffa. Beyond that point clouds made triangulation impossible, and only a plane-table sketch could be executed, checked by occasional latitudes and observations.

The route led through Sherada, the chief station of Ras Wallo Giorgis. This place is connected by telephone with Adis Ababa, and the line runs further east into Kullo, but the bad condition of the line made it impossible to get messages through in wet weather.

In Kaffa the dividing line between the black population of the southern districts and the brown people of Kaffa is very sharply marked.

The latter are entirely distinct from the Galla tribes which spread in a broad band across Abyssinia from Hawar in the east through Shoa to the western escarp overlooking the Omo Valley. The Gallas, whether Mahomedan or pagan, pastoral

^a This seems to be the Abyssinian name for the whole of the slope of high land west of the Kibish and south of the Aabo Valley.

or agricultural are of a remarkably uniform type, and their language appears to vary comparatively little. The Kaffa people, though of much the same colour as the Gallas, differ in texture and physique, and their language has no points of resemblance.

It would seem that they belong to an older stock, which has been forced into a confined area by the Galla invasion.

The Walamo people, from what I can gather, are also a brown race distinct from the Gallas, but whether of the same stock as the people of Kaffa I could not ascertain.

The Kaffa country is evidently extraordinarily fertile, and contains also magnificent forests; but it has been to a large extent ruined by the Abyssinian invasion some ten or twelve years ago. It is probably one of the most favourable sites in Abyssinia for rubber cultivation, and is famous for the quality and quantity of its beeswax.

Crossing the Gojeb River by a bridge we entered Jimma, a Mahomedan Galla State, whose King goes by the title of Abagifer. The slopes draining to the Gojeb are not thickly inhabited, probably as the result of the old feuds between Jimma and Kaffa, but once into the valley of the Gibbe River, which drains north to the Upper Omo, the country presents the appearance of great prosperity. It is thickly inhabited and cultivated, and there are also great quantities of fine cattle, mules, and ponies. The Abagifer bought off the Abyssinian invasion at the price of a heavy yearly tribute and active assistance in the war against Kaffa. Menelek has apparently kept his engagement faithfully, and no Abyssinian troops are stationed in the country. Those who pass through to Kaffa and beyond are not allowed to misconduct themselves.

The Abagifer has an elaborate semi-fortified enclosure at Jireh, but his people seem to be for the most part without rifles.

The Abagifer is exceedingly intelligent, and was very nervous about his fate should Menelek die. He was just starting for Adis Ababa, ostensibly to deliver his annual tribute, but he admitted his main object was to procure rifles. This is the only district I have come across in Abyssinia where the roads are more than mere mule tracks.

Although there is no wheeled traffic, the roads are wide enough to take it, and considerable skill is shown in grading and aligning the roads; cuttings are formed on hills and swampy hollows are banked. There is a large market at Jireh, and a Swiss trader, of the firm of Dubois, has started a wax refinery, apparently doing well.

There were also employees both of the rubber company and rubber estate.

At Jireh we hired a fresh lot of mules, those from Mire not wishing to go further. Thence to Adis Ababa there is nothing to record.

Adis Ababa was reached on the 20th April, where we found Captain Condon and the main caravan had arrived a few days earlier.

We waited there a week in the hopes of securing an interview with the Emperor, or to persuade the Abyssinian authorities of the utility of allowing the Abyssinian commissioners and Lieutenant Schubert to proceed to the frontier.

Lieutenant Schubert was then only some four days' march to the south, waiting for the Abyssinian commissioners who had not yet started.

Lord Herbert Hervey was not able to secure an interview with the Emperor, and Fitauari Hapti Giorgis and the Nagadras, whom we saw, were clearly determined that Lieutenant Schubert must go on, though they evidently had no idea what he should do when he got to the frontier.

There was nothing to be gained by further delay, so we started for the coast. Dire Dawa was reached on the 10th May.

Here the men were paid off and arrangements made for their march to their villages in Somaliland, equipment was sold, and the Europeans left for Jibuti by rail on the 17th, whence they returned to England via Aden.

In the nine and a half months between the start from and return to Dire Dawa, in spite of the delays before getting away from Ginir, the main body of the caravan had traversed over 2,100 miles, without allowing for minor windings of the track or movements of the main line of march to survey stations.

The party which accompanied Captain Waller and myself west of Lake Rudolf had made a considerably longer round; while those men who had come to Adis Ababa with me in the beginning, and also visited the Marchan country, had covered about 3,000 miles.

As some form of survey was continuously carried on, except on the final march from Adis Ababa to Dire Dawa, I think it will be apparent that a high standard of work was exacted from both Europeans and natives.

Yet the work was most cheerfully done without the necessity of any driving on my part.

Whatever may be the final settlement with the Abyssinian Government, I think that the survey work accomplished will meet all future requirements, and it will be unnecessary to send again an elaborately equipped survey party. Even should it be desired to slightly modify the line demarcated, the maps produced could be amplified to illustrate it by an officer with an elementary knowledge of military sketching.

I should like to take this opportunity of acknowledging the excellence of Captain Maud's maps and the substantiated accuracy of his reports. The maps submitted herewith are to a large extent taken direct from Captain Maud's field work, and it was due to the correctness of the survey methods he adopted that the task of extending and revising his work proved so simple. It will be seen, too, that Major Austin's work has been largely used in compiling the western sheet of the map.

C. W. GWYNN, Major, R.E.

November 1, 1909.

Inclosure 3 in No. 1.

Description of the Frontier as Demarcated.

THE frontier between British East Africa and Abyssinia commences in the east at the junction of the River Juba (Ganale) and the River Dawa.

Thence it follows the thalweg of the Dawa to the point immediately up stream of Malka Murri, where the dry watercourse of Gedda Dama joins it.

Thence it ascends the latter watercourse for about a mile, to a point immediately west of the cairn erected on the north side of the track leading to Malka Murri.

Thence it runs in a straight line to the cairn erected at Chalalaka Tarbo Murri, where the tracks from Banissa and Chilika join.

Thence to the cairn at Hawila Ow Gubo.

Thence to the cairn about 500 yards north of Hara Dawa.

Thence to the cairn on the Chilika road immediately north of El Mole Tika.

Thence to the summit of the southern hill of Gauded.

Thence to the cairn on G. Hindali.

Thence to the summit of G. Burduras.

Thence to the cairn on T. Kaefti.

Thence to the cairn about 1 mile west of Kuf Tika, on the track from Gaddaduma to Gaggala.

Thence to the cairn on G. Faiyu.

Thence it follows the watershed between the Gaddaduma and Addde Valleys on the one side, and the valleys of Bor and Dembi on the other, to the cairn erected on the hill south of the Bura of Dembi.

Thence it follows the same line of watershed to the cairn on G. Gaitu.

Thence it crosses the Bute Valley to the cairn on G. Goro Wirra.

Thence it runs to the summit of the Dimbi Dakara Hill.

Thence to the cairn on the summit of G. Halaki Halo.

Thence to the cairn on a spur on the east side of the Godoma Valley and north of the wells of Godoma.

Thence to the cairn on the summit of G. Chabi.

Thus the track leading from Chalalaka Tarbo Murri to Malka Murri is entirely in British territory.

From Chalalaka Tarbo Murri to El Mole, for administrative purposes, the frontier may be taken as following the well-marked track connecting the two places, but the water at Hawila Dawa, and at El Mole is entirely in British territory.

This leaves the Chilika well in Abyssinian territory, and the San Kurar well in British territory.

Thus the district of Jari, with its wells, are in British territory.

This leaves the road from Gaddaduma to Jira and the mountains of Gamadds and Gaggala in British territory.

Thus Gaddaduma and Addde are British and Bor and Dembi Abyssinian.

This leaving the wells of Rola and Kute British.

This leaving the Godoma wells British.

though the Abyssinians had invaded the country and established posts there some six months ago, no great hardship had been inflicted till some six months before our arrival, when the Abyssinians proceeded to ~~lose~~^{burn} the natives of everything they possessed, driving off great quantities of cattle. The majority of the natives fled westward, but practically lost everything. A small number, with their King, succeeded in maintaining themselves on the Tumur spur, some miles north of Natta Peak.

These people were carrying on spasmodic fighting with the Abyssinian raiding parties, and I was not able to ascertain definitely how they had escaped extermination. It may be accounted for by the fact that the position they occupy is extraordinarily strong on a spur some miles long, crested with a series of steep hills separated by knife-edge cols. The sides of the spur drop precipitously some 2,500 feet, and are in the main thickly wooded, though cultivated where possible. Bolt holes lead down the spur to the bush-covered Kibish Valley.

The Abyssinians may not think the place worth attacking, and prefer to watch their opportunities of seizing cattle grazing on the open plateau. On the other hand, they may be taking the common course with them of leaving the headman of the country comparatively immune, as a means of re-establishing communications with the people when desired.

I subsequently ascertained that the country was located deliberately in the belief that the boundary treaty placed it in British territory, and at the same time that the Turkana and Boma countries were raided for a like reason.

The small permanent Abyssinian posts have apparently been abandoned for the present owing to the hostility of the natives and the fact that there is little left in the country.

Presumably, when it is found that we are not attempting to occupy the country, the Abyssinians will encourage the natives to re-establish themselves. It seems, in leaving with the Abyssinians, to be full of illusory intentions to enter into discussions as to frontier dues, or to prepare to provide protection for the inhabitants of the country we claim.

On the 13th March we moved south, and on the 15th encamped the inhabitants of Tima. We found a man who had been for some time in Abyssinia, and from him we were able to obtain information.

Tima was visited, but the chief fled into the valley. He was afraid to come, but the desire of preventing the destruction of the Abyssinians. Moving west we descended from Mountain, and obtained an extensive view of the south. Then we descended through uninhabited country to Central Peak known to the natives as Boma. The western half of the plateau was reported uninhabited and there a fair amount of water was observable in the central valley, and eland and buffalo were seen. We ascended Central Peak, and were able to locate the tributary of the Akobo upon which the Abyssinian position had come. Although the topographical work produced by that position was evidently of very secondary value, the course of this tributary should be fairly accurate, as its terminals are well located. No better boundary than this stream suggested itself, and Central Peak itself makes an admirable boundary point. It is by no means an ideal arrangement dividing the Tima Plateau, but the line of natural features selected as boundary points coincides very nearly with the treaty line, and does not affect to any extent the tribal distribution.

To make further claims or concessions under present conditions would be equally useless.

I should have wished to push our survey further to the north-west to fill the gap between Major Austin's work in Boma and the Kafa River. The work was, however, not essential in view of the Macmillan exploration, and to have undertaken it would have forced us into serious difficulties. Since our arrival on the plateau our few camels, which were our strongest animals, had been dying in an alarming way from eating poisonous plants.¹ Our muley and donkeys were in a feeble condition, having been bitten by the tsetse fly prevalent in the Kibish Valley, and I realised that the first rains would cause heavy mortality among them. If we had gone further north-west it would almost inevitably have entailed returning along the Akobo to the Sudan, as once the rains broke heavily it would be impossible to reach the Abyssinian stations on the high plateau. Moreover, in view of the recent Abyssinian raids, it might have proved most difficult to obtain supplies. I decided, therefore, to slightly extend the extent of our survey, but to adhere to my original plan of terminating at Adis Ababa. On the 16th March we crossed Central Peak, and the same night the first rain fell. For some weeks rain had been falling on the main plateau

to the north-east, which rises to a height of 8,000 feet, but on the Tima Plateau² the rains were at least a month late.

Our object now was to make our way as quickly as possible back to Adis Ababa, carrying out the best survey we could, consistent with rapid movement. Following a track beaten by cattle driven off by the Abyssinians we crossed our original track on the 21st, and found the route up the escarp used by the Abyssinians. It proved to be unexpectedly good, and we had missed it in ascending the Kibish Valley owing to its crossing the stream at a point much beaten by elephant tracks. The district of Tima, between the two branches of the Kibish, had been cleared of inhabitants by the Abyssinians. The eastern branch of the Kibish proved to be a beautiful perennial stream, and from this point onwards water was plentiful. The ascent of 5,000 feet, however, we were able to enlist the services of a number of black porters.

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Before starting I went with the Kenyazmach to a bill on the edge of the escarp, whence a wide view of all the country was obtainable. He pointed out all the districts to which he laid claim, and this included Boma, all of Tima, and some three days' march beyond that plateau, and practically the whole of the western shores of Lake Rudolf. He based the claim on Legatifi's and my recent raids. He said that permanent posts had been established in the country, though he admitted some of the garrisons had been withdrawn when they had given up the idea of a boundary commission coming, our arrival having been unexpected. I told him we did not admit these claims, but that as he was only in temporary charge, he had no instructions to discuss the frontier; it was useless to go further into the question with him. I, however, pointed out that he was gaining nothing by looting the unfortunate people of Tima, as it was admittedly Abyssinian territory.

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The route led through Sherada, the chief station of Ras Woldi Giorgis. This place is connected by telephone with Adis Ababa, and the line runs further east into Kaffa, but the bad condition of the line made it impossible to get messages through in wet weather.

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The latter are entirely distinct from the "Galla tribes" which stretch in a broad band across Abyssinia from Harar in the east through Shoa to the western escarp overlooking the White Nile. The Gallas whether Mahomedan or pagan, pastoral

¹ This seems to be the Abyssinian name for the whole of the block of high land west of the Kibish and south of the Akobo Valley.

though the Abyssinians had invaded the country and established posts there some years ago, no great hardship had been inflicted till some six months before our arrival, when the Abyssinians proceeded to loot the natives of everything they possessed, driving off great quantities of cattle. The majority of the natives fled westward, but practically lost everything. A small number, with their King, succeeded in staying themselves on the Tima spur, some miles north of Namak.

These people were carrying on sporadic fighting with the Abyssinian raiding parties, and I was not able to ascertain definitely how they had escaped extermination, it may be accounted for by the fact that the position they occupy is extraordinarily strong, on a spur some miles long, crested with a series of steep hills separated by knife-edge cols. The sides of the spur drop precipitously some 2,500 feet, and are in the main thickly wooded, though cultivated where possible. Bolt holes lead down the spur to the lush-covered Kibish Valley.

The Abyssinians may not think the place worth attacking, and prefer to watch their opportunities of seizing cattle grazing on the open plateau. On the other hand, they may be taking the common course with them of leaving the headman of the country comparatively immune, as a means of re-establishing communications with the people when desired.

I subsequently ascertained that the country was looted deliberately in the belief that the boundary treaty placed it in British territory, and at the same time that the Tigrinya and Boma countries were raided for a like reason.

The small permanent Abyssinian posts have apparently been abandoned for the present owing to the hostility of the natives and the fact that there is little left in the country.

Fortunately, when it is found that we are not attempting to occupy the country, the Abyssinians will encourage the natives to re-establish themselves. It seems, by dealing with the Abyssinians, to be futile and iniquitous to enter into discussions with the frontier unless we are prepared to provide protection for the inhabitants of the claim.

On the 1st March we moved south, and on the 13th camped on the inhabited Tima. We found a man who had been for some time in Abyssinia, and from him we were able to obtain information.

Tirana was visited, but the chief had fled into the valley. He was afraid to come and was in fear of recovering the depredations of the Abyssinians. Moving west we descended Famulus Mountain, and obtained an extensive view of the south. Then we moved west through uninhabited country to Central Peak, known to the Abyssinians as Boma. The western half of the plateau was reported uninhabited and there was a fair amount of water in the streams in the central valley, and eland and buffaloes were seen. We ascended Central Peak, and were able to locate the tributary of the Akobo up which the Macmillan expedition had come. Although the topographical work produced by that expedition was evidently of very secondary value, the course of this tributary should be fairly accurate, as its terminals are well located. No better boundary than this stream suggested itself, and Central Peak itself makes an admirable boundary point. It is by no means an ideal arrangement dividing the Tima Plateau, boundary point, but the pair of natural features selected as boundary points coincides very nearly with the treaty line, and does not differ to any extent the tribal distribution.

To make further claims or concessions under present conditions would be equally useless.

I should have wished to push our survey further to the north-west to fill the gap between Major Austin's work in Boma and the Kaiu River. The work was, however, not essential in view of the Macmillan exploration, and to have undertaken it would have merely led us into serious difficulties. Since our arrival on the plateau our few animals, which were our strongest animals, had been dying in an alarming way from one or two poisonous plants. Our mules and donkeys were in a feeble condition, having been beaten by the热带 fever prevalent in the Kibish Valley, and it was evident the first rains would cause heavy mortality among them. To have attempted to move north-west would almost inevitably have entailed returning along the Akobo, and the south. It would be impossible to reach the Sudan, as soon as the rains broke heavily. It would be impossible to reach the Abyssinian stations on the high plateau. Moreover, in view of the recent Abyssinian raiding, I decided, therefore, and thought have proved most difficult to obtain supplies. I decided, therefore, to content myself with the execution of my original plan of

ascertaining Adis Ababa. On the 18th March we crossed Central Peak, and the same night the first rain fell. For some weeks rain had been falling on the main plateau.

to the north-east, which rises to a height of 9,000 feet just on the Tima Plateau⁸ the rainfall was at least a month later.

Our object now was to make our way as quickly as possible back to Adis Ababa, carrying out the best survey we could consistent with rapid movement. Following our original track on a track beaten by cattle driven off by the Abyssinians we crossed our original track on the 21st and followed the route up the Ascar used by the Abyssinians. It proved to be unusually good, and we had crossed it in exceeding the Kibish Valley owing to its crossing the stream at a point much beaten by elephant tracks. The district of crossing the stream between the two branches of the Kibish had been cleared of inhabitants by Tirana. The eastern branch of the Kibish proved to be a beautiful perennial stream, and from this point onwards water was plentiful. The ascent of 6,000 feet, however, we were able to enlist the services of a number of black porters.

The Abyssinians have collected a number of blacks to cultivate in the neighbourhood of the station, where there is good soil and plenty of perennial water. A few hundred yards from the station, where there is good soil and plenty of perennial water, we now found ourselves on the true Abyssinian plateau, although to my surprise I found the indigenous inhabitants are all low grade black races who go about quite naked, in spite of the cold. Most of the villages are at altitudes of from 7,000 to 8,000 feet, and temperatures of between 40° and 50° Fahr. were experienced morning and evening. The black population extends as far as Kaffa, although settlements of Abyssinians have been established in the neighbourhood of the posts.

At Maji we found that Fitaurari Dampti was at Adis Ababa, and Kenyazmachi Rata was in charge. This is the station where Mr. G. Clark organised the Abyssinian expedition into the country west of Lake Rudolf. The garrison of the place must consist of several thousand men, but many detached and mobile parties were away in the country south and west, as well as the following Fitaurari Dampti had taken to Adis Ababa.

Kenyazmachi Rata received us well, and assisted us in hiring sufficient mules to take us to Jirem in Jimma, although there was some difficulty in obtaining the animals, as the negadi (merchant) caravans had already been owing to the Tigrinya attacks.

Before starting I went with the Kenyazmachi to a tall on the edge of the escarp. whence a wide view of all the country was obtainable. He pointed out all the districts to which he laid claim, and this included Rapta all of Tima, and some three days' march beyond that plateau, and practically the whole of the western shores of Lake Rudolf. He based the claim on Leichtenfels' and more recent rods. He said that permanent posts had been established in the country though he admitted some had been withdrawn when they had given up the idea of a boundary. Before starting I went with the Kenyazmachi to a tall on the edge of the escarp. whence a wide view of all the country was obtainable. He pointed out all the districts to which he laid claim, and this included Rapta all of Tima, and some three days' march beyond that plateau, and practically the whole of the western shores of Lake Rudolf. He based the claim on Leichtenfels' and more recent rods. He said that permanent posts had been established in the country though he admitted some had been withdrawn when they had given up the idea of a boundary. Before starting I went with the Kenyazmachi to a tall on the edge of the escarp. whence a wide view of all the country was obtainable. He pointed out all the districts to which he laid claim, and this included Rapta all of Tima, and some three days' march beyond that plateau, and practically the whole of the western shores of Lake Rudolf. He based the claim on Leichtenfels' and more recent rods. He said that permanent posts had been established in the country though he admitted some had been withdrawn when they had given up the idea of a boundary. Before starting I went with the Kenyazmachi to a tall on the edge of the escarp. whence a wide view of all the country was obtainable. He pointed out all the districts to which he laid claim, and this included Rapta all of Tima, and some three days' march beyond that plateau, and practically the whole of the western shores of Lake Rudolf. He based the claim on Leichtenfels' and more recent rods. He said that permanent posts had been established in the country though he admitted some had been withdrawn when they had given up the idea of a boundary.

Starting on the 27th March we followed generally the line of the watershed between the Omo and Nile Valleys through a very hilly country. Rain fell heavily almost every day, and interfered considerably with survey operations. The country had been in many parts completely devastated by the Abyssinians, but in the neighbourhood of Abyssinian posts were considerable settlements of black slave cultivators. The condition of these people depending largely on the disposition of the Abyssinian officers in charge. The triangulation was carried by Captain Waller into Kaffa. Beyond that point clouds made triangulation impossible, and only a plane-table sketch could be executed, checked by occasional latitudes and observations.

The route led through Sigrada, the chief station of Ras Waldo Giorgis. This place is connected by telephone with Adis Ababa, and the line runs further east into Kaffa, but the bad condition of the line made it impossible to get messages through in wet weather.

In Kaffa the dividing line between the black population of the southern districts and the brown people of Kaffa is very sharply marked.

The latter are entirely distinct from the Galla tribes which stretch in a broad band across Abyssinia from Hadar in the east through Shoa to the western escarpment overlooking the Tigre plateau. (See Map.) Whether black, brown, or pagan, pastoral

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Americo Clark. This left us without means of communicating or writing to the Abyssinians, except in places where Arabic was understood.

Mr. Zephiro had also acted as medical officer since Dr. Drake-Brockman's departure with excellent results.

We resumed our march shortly after midnight on the 9th, and rejoined the frontier in the neighbourhood of Gorni. The country was now exceedingly hot and dry, and there was little nourishment left in the grass. Our animals in consequence rapidly lost condition. It was surprising that our few riding horses and ponies got along at all, as on several occasions they had to go over forty hours without water at least of which time they were on the march. Nothing better than a footpace could be got out of them, so that under the circumstances little deviation from the shortest route from water or water was possible.

Captain Maud's work at this point was still incomplete and required little revision, as we were now rapidly and not as previously moving along the edge of it. Captain Maud traversed the country after the rains had commenced, and could consequently move with deliberation. The Dillo and Gau craters are curious features, some hundreds of feet in depth, and about ½ mile in diameter, though their edges hardly rise above the surrounding plain. In the rains lakes are formed in the craters, but these dry; and water, very salt but potable is obtained from wells in the dry bed. The whole formation of the district is highly volcanic.

There were large numbers of Hooli Boran and Gabra in the neighbourhood of these wells, with great quantities of sheep and camels. Through the energy of Mahomed Hassan we were able to buy some of the latter, which we badly needed, though the people were by no means willing to sell. They stated that these Abyssinians had requisitioned nearly all their draught animals, leaving them barely sufficient to carry water from the wells to the villages. Female and fat camels (i.e. animals cut by the sides of fattening for food) were in plenty, but the latter are difficult for pack purposes till they have been on some time on the march.

From Gorni westwards no people were met with till Lake Rudolf was reached. As far as the L. Bullull grazing is fairly good, and there were signs that the country is used in the rains. Two excellent groups of wells were found in the west back of the Bullull, but they had evidently not been used for some time. The grazing in the neighbourhood is poor, and this may account for the absence of people. It is probable, however, that fear of Abyssinian parties is the reason, as the place is frequented by elephants.

As pointed out before, this portion of the frontier leaves no line of communication in British territory between Umar and Sarda, and in the establishment of such a line it would be necessary to defect the frontier to include the Mogaadishu and Sarda wells. This would give a good natural frontier, and leave the Gafra tribes of Somali origin, who frequent the wells, in British territory.

As matters stand Abyssinian parties can penetrate into British territory from Mogaadishu, Sarda, Lake Stephanie or along Lake Rudolf without fear of any force stationed at Churru Moyale or neighbourhood. They could only be checked by a separate force based on Marsabit and Lake Rudolf. I can suggest no concession which might be made to compensate such a deflection.

From Sarda to Lake Stephanie as there is no track and no water was found, the march was a trying one.

Lake Stephanie was found to be even drier than when Captain Maud visited it.

A well-defined point on each side of the lake was selected and beaconed. The beacon on the east side is close to a group of hot-springs in British territory at the edge of lake bed. The water of the springs is potable, but salt and unsavouring. Great quantities of zebra, hartebeest, and other game were found here, but no elephants.

Some fresh but muddy water was found close to the edge of the lake, some 4 miles south of the eastern beacon, but there was no sign of the strait of water shown by Captain Maud along the south-east shore of the lake.

Owing to the extreme dryness of the country I sent Mahomed Hassan forward to locate water. The holes that had been dug by Mr. Butter's expedition were dried up, and we found another small supply some way up the route. I sent this man to follow Mr. Butter's route and took a small party across the hills to meet the beacon on the west side on one of the most prominent spurs overlooking the lake. The lake bed was hard and dry, and can never have more than a few inches of water in it.

The country between Lakes Stephanie and Rudolf is very stony and rough. The

ground rises to some 3,000 feet, i.e., 1,000 feet above Lake Stephanie and 1,500 feet above Lake Rudolf. The watershed runs close to the former lake, and the escarp forming its western boundary is rough and precipitous.

Water-wells found in two places in the large watercourse which was followed by the caravan. The country was very dry, with no grazing, and no inhabitants were met with, though there were signs that it is at times frequented by nomadic tribes, probably Arbore.

Between Stephanie and Rudolf there are no well-marked features for the definition of the boundary. My first idea was to allow it to follow the course of the stream-bed we marched along, assuming that it flowed east and west, as shown by Captain Maud. It proved, however, to turn considerably more to the south, and its junction with the lake is not well marked.

I therefore prefer a line running to the northern summit of the Loye Hill, whilst both Captain Maud and Captain Waller occupied a survey station, and thence in a line directed to the prominent and unmistakable cone of Mount Bulur to the margin of the lake. The shore of Lake Rudolf is low and sandy, and it was impossible to find material for a permanent beacon. Adopting the proposed line it is a simple matter without instruments to locate its position. If it would concurate the Abyssinian government at all there would be no objection to adopting the line of the streams as a boundary. I had no means, however, of ascertaining the name of the stream, and, as above stated, the exact position of the boundary at the edge of the lake would not be well defined.

We reached Lake Rudolf on the 22nd February, the weather still being very hot and dry. There was no sign of the detachment which had been sent to buy camels at Konadi, and all our animals, especially the mules, horses, and donkeys, were in bad condition from lack of water and proper grazing. With the exception of a few donkeys, camels were the only animals obtainable since our arrival on the frontier, owing to our having got into touch with the Abyssinians. So far camels had proved the best form of transport suitable to the country, but once we reached the high ground west of the Kimsi River they would be useless. It was clear therefore that though we had reached Lake Rudolf in time to explore the western region, it would be impossible to take the whole party through it for want of transport. I therefore decided to send the bulk of the caravan by the easiest route they could find direct to Adis Ababa, knowing that the route by the lakes was feasible for camels.

We moved northward, therefore, along the lakes and found a considerable settlement of natives and an Abyssinian post near the north end of the lake. This people were called Gafra, and are black. They cultivate the marshy ground near the Omo, and own the sheep cattle. They appear to be allied to the nomadic tribes and are of low type.

The Abyssinian post was manned almost entirely by old soldiers of Leopold-Savanne, Arabs, Somalis—all the sweepings of the Red Sea ports. They appeared to have little respect for the Abyssinian in charge, who was in mortal terror of the climate. The relations of the inhabitants with the men of the post were quite friendly, and there seemed to be no ill-treatment.

Captain Waller and I visited Captain Maud's Survey station on Rocky Hill with a view to continuing the triangulation westward, reducing Captain Condon at Marie. The north-western corner of Lake Rudolf was found to be dry and largely under cultivation, though there is some marsh land and several minor lakes. Probably when the Omo rises it floods up to the limits of the lake shown by Captain Maud.

At Marie I found that Captain Condon had been able to buy a few donkeys from the Gelafa, and I was consequently just able to provide enough transport to allow Captain Waller to accompany me westward. The crossing at Marie was an awkward one and the river infested with enormous crocodiles, so I went ashore to carry before crossing. At Marie there were no people on the left bank of the river, but at Karre there were villages on both banks, with a post of Denji Biru's men on the left bank of Ras Wardi Giorgis on the right.

At this point the caravan separated, on the 2nd March, and I gave Captain Condon—with whom went the two non-commissioned officers—a rendezvous at Adis Ababa about seven weeks later. Captain Condon elected to follow a route through Daga (Daga) Birni (headquarters), Walimo, and Kambatta (Dejia) Ababa's province.

This route had not been previously explored, and the passage of the watershed between the Omo and the Sagan Rivers proved very difficult. Beyond that point, however, good going through a rich country was experienced, and the journey was

picked up the small detachment which had been sent from Banissa to graze tired camels near Giddiduma.

Unfortunately the neighbourhood contained a quantity of shrub poisonous to camels, and was also infested by the Garsi fly; consequently the animals had gone off rather than improved in condition.

Churra Moyale, where Mr. Zaphiro's head-quarters were established, and where the Boma Trading Company had also a representative, was reached on the 22nd January.

It was found that at this point the topography on Captain Maud's map was slightly in error, and that the name Churra Moyale did not apply to the large spur as shown on the map, but to the district on the crest of the escarp from which the spur projects. Owing to the resulting confusion, Mr. Zaphiro had selected the site for his head-quarters in what was properly Abyssinian territory.

As the error was small and the area affected of no great importance, it appeared a pity to waste all the labour Mr. Zaphiro had expended constructing Fort Harrington, a strict adherence to the terms of the treaty. I therefore arranged the boundary so as to include Fort Harrington with water supply in British territory.

The highest point of the spur, which Captain Maud called Churra Moyale, is really G. Kahr, and the spur itself is known generally as Topesa. In case the real Abyssinian Government raise objections, it may be pointed out that the greater portion of Churra Moyale proper is left in Abyssinian territory.

It was necessary to half some days at Churra Moyale to go thoroughly into this matter, also to reorganise the transport of the caravan, and to dismiss the Garsi and other chiefs who had accompanied us to this point. They all belonged to the country east of Moyale, and there was therefore no necessity to take them further. Mr. Zaphiro had arranged that fresh camels should meet us at Churra Moyale, but on arrival we found that the natives in his absence had moved to Wojera, and some even as far as the Lobi.

This I think was chiefly due to the prevalence of rinderpest in the neighbourhood of the escarp, but may have also been due to some extent to fear that we should adopt Abyssinian methods of requisitioning transport.

From Mondo to Moyale we had to a large extent employed animals provided by Ali Abdi, the chief of the Garre, and it had been my intention to pay merely for their use and for animals which died. It now, however, became necessary to purchase the animals outright, and even by so doing we had barely enough animals to go on with, and were in fact running very short of food for the men.

So much was this the case that there was not sufficient transport available for so many men that the case that there was not sufficient transport available for so many men, and he was compelled to remain a short time longer at Moyale to get more animals, returning finally by an inland route through Abyssinian territory.

Mr. Zaphiro was very particular about our getting animals on our route westwards, and consequently dispatched a small party of Somalis with cloth to buy animals from the Rendille at Kongiles Maran, with orders to return us in the neighbourhood of Lakes Stephanie or Rudolf.

Another matter which had to be settled here was the disposal of the ivory Mr. Zaphiro had confiscated during the past year from Abyssinian hunters.

I did not consider it advisable to leave it with no better protection than the few Abyssinians Mr. Zaphiro proposed to leave behind. It was at this time my intention that he should accompany the expedition to Adis Ababa, partly to utilise his services as a doctor, and partly to give him an opportunity of seeing the western portion of the boundary, which he did not know.

I consequently made a contract with Mr. Roy, the agent of the Boma Trading

Company, for the transport of the ivory to Nairobi.

On the 29th January, leaving Mr. Zaphiro behind the expedition moved west, through Moyale westwards, as far as Ed-Sucurgrate, Bultut Valley (130 miles), the treaty line does not leave a single permanent well in British territory within many miles of the frontier.

As far as the Urut there is plenty of water just south of the line in the valleys, but these valleys are deeper and the water situated higher up than in a similar stretch between Moyale and Rada.

It was therefore impossible to modify the line so as to include wells in British territory without making considerable detours, in exchange for which there was no possibility of granting concessions elsewhere.

In the stretch of country here is a considerable population on the British side,

and the most serious fact to be considered is the destruction of elephants by Abyssinian hunting parties based on the wells.

The effect of the Roman escarp and the distribution of water supply on the movements of the elephants has been described in my previous memorandum, and it is between Moyale and Uran that they especially congregate.

This country was swarming with hunting parties, but practically all were met with in what, under the treaty, was Abyssinian territory.

As it was out of the question to modify the frontier so as to place the wells in British territory, I decided to provide only a patrol road as far west as Uran by means of the detached hill of Elephanta and the pass between it and the escarp in British territory. There are wells at the foot of this mountain which would I consider always provide sufficient water to serve as a base for patrols watching for poachers.

From Uran the frontier leaves the escarp and runs through an arid plain dotted with rock kopjes. The water holes make it impossible for the main caravan to follow the frontier closely, but Captain Waller made a reconnaissance of the Elephanta and Eleuro Hill to test the accuracy of native reports.

He found no regular track or sign of permanent occupation, though the country was evidently used as a grazing ground in the wet season.

The main caravan followed the line of the escarp, and even then experienced considerable difficulty for lack of water.

From Uran to its north-west extremity at Arbaile the escarp runs parallel to the strata, and is therefore much less indented and drier than in its eastern section.

Such water-holes as exist are not easily accessible from the plain. The only exception is found at Mogado, where there is a good well some 3 miles from the escarp, among some small-extinct volcanoes which strike out from the escarp towards G. Farroll.

In this neighbourhood there are deposits of salt used by the natives to mix with tobacco. This attracts a considerable number of native caravans from the north, and accounts for the comparatively good road down the escarp used by Mr. Donaldson Smith and Mr. Butler. There is a large settlement of Gabra at Mogado who own quantities of camels and sheep.

They appeared to consider themselves under Mr. Zaphiro's protection, and were apparently not interfered with by the Abyssinians.

Avoided the subject of the frontier as far as possible, as I had decided on the districts west of Uran neither to erect beacons nor in any way to expose the natives to look for British protection.

From Mogado we still followed the escarp to Arbaile intending to move thence to Dibo. At Arbaile however a letter arrived from Mr. Zaphiro reporting the receipt of a letter from Fituarari Wabbi, in which he announced that acting under orders from Adis Ababa, he was moving with a large force against the elephant hunters on the frontier. He asked Mr. Zaphiro to accompany him, as he had orders to cross the frontier. Mr. Zaphiro wrote that he would try and catch me up at Guri, but that in his opinion he ought to send a party to watch the movements of the Abyssinians. On receipt of this letter I moved to Goljo, a point on Mr. Zaphiro's route and met him there on the 10th February. We ascertained that Fituarari Wabbi was at the time within some six hours march of us, and I immediately sent him a letter requesting him to come to see us, or to inform me if he was unable to. His reply was to the effect that he could not come to us, and had no authority to discuss matters connected with the frontier.

I consequently decided to send Mr. Zaphiro back to his post with orders not to allow the Abyssinian force across the frontier, except such parties as he could himself accompany, and that even these should not allow to cross except for short distances in actual pursuit of hunting parties. I reported the Abyssinian movement to Adis Ababa, and found subsequently that it had been carried out in consequence of representations made there, though Mr. Zaphiro had not been informed that action was being taken by the Abyssinians.

I was very sorry to lose the services of Mr. Zaphiro, as I had hoped during the remainder of the journey to be able to put into intelligible form the mass of local knowledge he possessed. We were also deprived of his services as interpreter and

Mr. Zaphiro has since then sent me the interesting and useful report on the frontier tribes which is attached.

Carter had explored the course of the Dawa to the point where Captain Maud's work stopped at Bissika. He had also carried the route survey through to Banissa.

It was quite clear that Dr. Deakin-Brockman must be sent home at once, and fortunately this was easy to arrange. He was strong enough to travel, and we were now able to dispense with the hired Abyssinian transport, who could therefore be sent with him. He accordingly started for Adis Ababa on the 29th.

As there was no news of the Abyssinian commissioners, and no reply from Fikauari Waldi, I decided to go on with the demarcation of the boundary, relying on Mr. Zaphiro's information, obtained from the chiefs on the British side of the frontier—and Captain Maud's reports in guiding me in arriving at an equilibrium of settlement. It was impossible to secure the attendance of natives from Abyssinian territory. Captain Waller proceeded westward into the Boran country to pick up Captain Maud's triangulation and carry it east to the frontier districts of Jara, which had been sketched before Captain Maud had started his triangulation. The remainder of the party, with the exception of a small detachment of Somalis who had been sent to graze our tired camels in the Gaddaduma district, marched to the Dawa River at Maika Murri.

Here the work of beaconing the frontier started. A full description of the line as beaconed is given separately.

From the information obtained from the chiefs and Mr. Zaphiro it was clear that Gaddaduma was essential to the maintenance of administration of the British side of the frontier, and of vital importance to a large number of the Garre, as explained in my memorandum on the subject already submitted.

It was therefore necessary to make some equivalent concession. The wells of Chilakko and the grazing grounds north of the Maika Murri-Jara, Dawa-Eil Mole-Jara road, coupled with the centre of the Garre claims to territory further north at Guba Galligallo, provided this. The adoption of the above-mentioned road as the administrative boundary provided an easily recognised frontier, which would otherwise have been most difficult to obtain in this featureless bush-covered steppe. It also avoided the insoluble problem of finding a definite fixed boundary between the Starr and Boran, which the terms of the treaty had set the commissioners.

Ali Abdi, chief of the Garre, willingly surrendered his claims, provided his tribe would receive British protection at Gaddaduma.

The country was at this time becoming very dry. Most of the British trading people had moved to the permanent water, and only a few camel-owners families were met with elsewhere. Amongst all the herds or semi-artificial resources which provide water for some months after the end of the rains, were dry. The water obtainable in the few that were not wise most unsavoury. Road movement was consequently essential, and in some cases, where material for the construction of caravans was difficult to obtain, temporary marks only were left. Mr. Zaphiro undertaking to erect permanent marks when the rains came. The "main" rains in this region correspond with the early "light" rains of the main Abyssinian plateau. Unfortunately in 1908 these early rains had been very poor, and the particularly heavy main rains of the northern districts had not extended so far south. The country was therefore abnormally dry all along the frontier. This, combined with the severe plague of rinderpest in the Boran and neighbouring country, had caused abnormal movements of the population, which made it difficult to verify some of the information received.

On arriving at Hara Reisa, in Jara, it was found that several Abyssinian elephant-hunting parties were in the neighbourhood, as usual matriculating and making toll of cattle from the natives. One party fled from Hara Reisa on our approach, but a small party quartered in a neighbouring village were surprised and made prisoners the night of our arrival. They were subsequently taken to Churru Moyale, where their rifles were destroyed before they were liberated.

Reports also came in that Dejaz Tafari's men had come to Hara Dosa and to Eil Mole after we had passed. Thinking these parties might be in some way connected with the Abyssinian commissioners, and being in any case unwilling to wear my men out in the heavy marching which would have been entailed in taking action against them, I contented myself with sending messengers to Eil Mole to ascertain the composition and action of the party there. The messengers reported that the party consisted of about thirty of Dejaz Tafari's soldiers, elephant hunting, although they professed to be in the employ of the Negadras Haile Giorgis. They despatched on receipt of my message.

Meanwhile I had sent a report from Mr. Zaphiro that had been lost.

The Garre hills are a group of granite kopjes, part of a line of similar hills situated on the gradual slope leading up to the Boran highlands of Tari. At their bases are a number of shallow wells, similar to those of Takabbi, and other existing hills in the Golbo. These wells apparently tap ledges of water among the granite boulders, and are not fed by true springs; they therefore run dry almost every season. The country contains some Boran villages, but is looked upon as Garre country.

Captain Waller rejoined us at Hara Reisa, having successfully picked up Captain Maud's work and extended it thus far east.

Captain Waller on his march had been shamed by all the Abyssinians, many of whom were about, and he found the Borans apparently afraid to have any dealings with him. Guides and supplies were almost impossible to obtain.

The wheel traverses could now be checked between Dolo and Hara Reisa, and only slight adjustment was found necessary.

On the 11th January the whole party continued the marching along the frontier, the next water supply being found at the large granite hill of Gamadda. Portion of the hill has a flat top with precipitous sides, and forms a natural stronghold, as there is a small well on top. The water at the foot of the hill was almost exhausted, but fortunately at this point we encountered the first of a series of thunderstorms, which greatly facilitated our movements.

The Gamadda Hill was ascended and made a triangulation station.

On the treaty map the boundary between Garre and Boran is shown as running through the hill, but as both tribes use the wells and grazing indiscriminately it was considered advisable to secure unity of control.

Moreover, the place forms an important station on the road leading along the frontier from Jara to Gaddaduma.

This road should remain in the British sphere, as no alternative line which can be traversed in the dry season exists on the British side of the frontier.

A short march south of Gamadda are the Gaggabba peaks.

Here also the wells had been replenished by the recent rains. All the natives had however left the neighbourhood.

The chain of spurs between G. Burdura and Gaddaduma place both Gamadda and Gargala in British territory as well as the above-mentioned track.

At Gaddaduma a careful examination of the ground was made to secure the most suitable frontier.

The natural features are here of an intricate character, and had not been quite accurately represented in Captain Maud's surveys.

Captain Waller visited bor and found the wells there in use by the Boran villagers, although, owing to the unusually dry season, many had moved to Le.

The wells at Gaddaduma itself were exceptionally low and the grazing in the neighbourhood indifferent.

Partly for this reason and partly for fear of the rinderpest there were comparatively few natives about.

A fairly well-defined watershed was traced between the Gaddaduma and Bor valleys, and with the aid of the beacons erected it serves to mark the frontier.

The treaty line which had been departed from at Gamadda was now almost rejoined at G. Roka. This mountain, which is a lofty spur projecting from the main plateau, proved, however, an indifferent feature to mark the frontier, as it separates two valleys much used by the inhabitants of the Golbo for water and grazing. The boundary was consequently deflected so as to include the wells of Addo and Bute in the British sphere.

From G. Roka west to Churru Moyale, and thence to the Ura district at the head in the escarp close to G. Burdu, the treaty line ran practically tangential to the southern extremities of the spurs of the escarp, leaving the intermediate valleys in Abyssinian territory. These valleys, as has been pointed out in my previous memorandum, included the permanent water supply on which the inhabitants of this part of the Golbo depend, and are also the scene of the wholesale destruction of elephants by the Abyssinians.

Moreover, without access to a certain number of the wells, it would be impossible to establish an east and west line of communication along the frontier in British territory.

A further deflection was therefore made in the frontier in order to include the wells of Godoma, midway between Roka and Moyale.

While at G. Roka we were rejoined by Mohamed Ismail and his party. We also

road to Mekelle at Dolo. He had brought with him all the chiefs of the Garre and various other tribes of mixed stock who occupy the country on the British side of the frontier between the pure Somali tribes in the east and the black races near Lake Rudolf. Dabir Umar, chief of the Her Afagab in British territory, had overtaken us the evening before, having come in in obedience to my message.

Mr. Zaphiro returned with me to Maka Murri. The remainder of that day and the next were taken up in going into the question of the intertribal disputes, Mr. Zaphiro being anxious to avail himself of my party to attempt to restore some sort of order in the country. The outstanding quarrels between the Her Afagab and Garre were settled by mutual payment of blood-money and undertaking to return looted stock, the chiefs being sworn to the agreement. It became apparent, however, that an agreement between these two tribes would be of little value unless the Marchaf tribe also agreed to a general settling up. Mr. Zaphiro was strongly in favour of a surprise visit to the country, which would not give the chiefs a chance of evading us and might result in the capture of rifles. As Mr. Zaphiro had received no news of the appointment of Abyssinian commissioners, and was clear they could not possibly be at Maka Murri by the 15th, the date appointed, I sent a letter to Muzali Walid at Gardula (Fittururi Hafto Giorgis's representative on the frontier) informing him of my arrival, and requesting him to send officers to meet me, to see the frontier in the event of regular commissioners not arriving.

While waiting for the delivery of this letter, I decided to make an expedition into the Marcelli country with Mr. Zaphiro, and about seventy rifles, leaving the remainder of the caravan in charge to proceed slowly to Banissa, the head-quarters of Ali Asafi, chief of the Garre. Unfortunately at this time all the other Europeans were suffering from malaria, and Dr. Drake-Brockman was down with threatenings of blindness.

Mr. Zaphiro started at midnight on the 15th, taking with him seven Abyssinians and about fifty picked Somalis with Mahamed Hassan. This left about twenty men under command, but Mr. Zaphiro was able to arrange for some natives from the Garre tribes.

We took with us the tribal heads, and arranged for a strong party of Garre to follow us. As a result of our proceedings has furnished in my despatch on the 23rd December 1908, or only an outline of our movements will be given here for the continuity of the narrative.

Our first objective was a group of villages at Hara Faro. These belonged to a party of Marcelli Gafo, led by the Her Hassan. This we reached on the 16th December 1908, and found the villages deserted, as they had received news of our approach the evening before from a native who had been on our mule caravan on the 15th.

We went into camp and endeavoured to get into touch with the natives. This was soon obtained, and parties of our Somalis were sent out with messages to the chiefs, and also to Sheik Ali and Mori Shukr, whom we heard was on his way through the country on his way to Sheik Hassan's tomb near Gour. This man was known to be very friendly with Government at Kismayu, and was himself trying to establish a new among the tribes. With his assistance all the head men of the Her Hassan and Her Gafo, a reasonable undersafe conductor, and a sworn agreement between them and the Her Afagab, terms were arranged. The chiefs all professed a strong desire, and the Her Afagab and Garre too arranged. The chiefs all professed a strong desire for the establishment of some sort of British administration in the country, and their willingness to surrender their rifles and pay taxes if this were done.

They would not, however, undertake to collect their rifles and hand them over to Mr. Zaphiro unless he gave them assistance. They clearly recognised that Mr. Zaphiro's guarantee to assist them was not sufficient to give them assistance in case of trouble with their own people. They also rejected the idea of being interfered with by Mr. Zaphiro.

On the 19th I left Maka Murri and a party of twenty-five men to assist the chiefs in forcing their tribesmen to observe the terms of their settlement, and to receive rifles if the chiefs agreed to give them up. He was to obtain all the necessary arms to equip them with the situation, and a pretty free hand to act as he thought best. His men were veterans, and easily recognisable at Churru Moyale, a month later, the result of his service was behind them, were not very tangible, as most of the rifles captured by serving him behind were not very tangible, as they had not been able to obtain any rifles. He was able, moreover, to recapture a herd of over 100 camels which were seized by a raiding party on the left bank of the River Omo, which was seized by a raiding party on the left bank of the River Omo.

He reported that the Her Afagab and others were carrying out their agreements and had joined forces together at the Daba (Dabkriye) was and Mr. Zaphiro who have both since reported the Daba (Dabkriye) was heavily supporting his arrangements. Up to the present he had, that Shire Jalla and several of the Marcelli Gafo had moved across; the others declining their hostility towards the Government. Mahomed Hassan, met several emissaries from the Amulin spreading his influence among the tribes along the river. The Gafo Her Isakra inclined to give them. Sheikh Ismail, chief of the old Her Isakra, has little influence left, and lives now near Bardega. The distribution of rifles among the tribes according to Mahomed Hassan, is as follows: Her Afagab, 260; Her Hassan Galti, 210; and Her Isak 70; with about 100 more among the old Her Hassan, Her Isak, and Digdo families. The Garre have few or no rifles. It was Hassan, Her Isak, and Digdo families. The Garre have few or no rifles. It was found on settling the various claims that, in spite of this, the balance of blood-money was against the Garre, though they had had much more of their stock stolen. The fact is that the moral effect of the rifles is so great that no resistance is offered at the time of raiding parties armed with them. This greatly increases the temptation to raid. On the other hand, loss of life is chiefly caused by individuals of the raided community seeking vengeance. They lurk round the villages till they find an opportunity to kill women or children quietly with a spear.

Mr. Zaphiro and I left Hara Faro on the 19th December with the Garre chiefs, and travelled rapidly through El Wak and Takabba, both of which places Mr. Zaphiro wished to take the opportunity of visiting. This gave him the opportunity of settling several outstanding disputes.

Water was now becoming very scarce. Between Hara Faro, where the pool was almost dry, and El Wak a large pond was found at Dinnaso. At El Wak are numerous wells, some 40 to 60 feet deep, following the course of what is evidently an underground stream. The neighbourhood is very alkaline and the water tainted. The wells are spread over a large area, and at the height of the dry season there is sufficient grazing and water for enormous herds. These wells are mainly frequented by the Garre tribes, but Ajurah and other tribes come there. Several of the wells were dry, and are still owned by Beran living in the Banissa highlands.

Between El Wak and Takabba is a long waterless section. At Takabba there are a number of wells on the bases of a group of low granite hills. These wells are very few at the end of the dry season, and few people remain in the neighbourhood. When water runs short it becomes the duty of the camel-breeding communities to leave, as they can perform the journey to El Wak better than cattle owners. The question of which families go to move is a constant source of dispute, and both here and at Banissa Mr. Zaphiro had to issue orders in the matter.

After Mr. Butter's expedition had passed, the Abyssinians raided as far south as Takabba, and levied a tax of cattle to show the people that the Abyssinians were their masters, not the English.

Leaving our mule to rest a day at Takabba after a hard march, Mr. Zaphiro and I left Takabba on the night of the 25th and reached Banissa the following day, 265 miles had been covered in the tortuous and winding part laid for the purpose of settling native questions had been made for four days at Hara Faro, at El Wak, and Takabba for a day, only mid or sixteen hours at Dinnaso. This El Wak, and Takabba for a day, only mid or sixteen hours at Dinnaso. This latter had, in addition to spend most of the periods of hot interviewing natives. The conduct of the men was excellent, and it was greatly studied by Mr. Zaphiro's memory of the native dialects and his extensive knowledge of the names and tribal history of the natives, even in districts he had never visited. His excellent memory enables him to make good use of his oriental faculty for interminable conversation with the natives.

The country we had traversed was singularly featureless, covered with dense thorn bushes and grass. It would be difficult to move for any distance except by the native tracks, and would prove a most difficult and dangerous country for military operations.

At Banissa I found that Dr. Drake-Brockman's illness at Maka Murri had developed into a serious attack of black-water fever. Fortunately he had made a good recovery, though it had been necessary to carry him all the way to Banissa, a distance of 94 miles, the last 50 miles of which was through waterless country - a very difficult task for Captain Condover with his reduced party: Captain Walker and Corporal

road to meet me at Dolo. He had brought with him all the chiefs of the Garre and various other tribes of mixed stock, who occupy the country on the British side of the frontier between the pure Somali tribes in the east and the black races near Lake Rudolf. Dabber Ugase, chief of the Rer Afagub in British territory, had overidden Rudolf. The Rer Afagub chief of the Rer Afagub in British territory, had overidden Rudolf. I had brought with him all the chiefs of the Garre and various other tribes of mixed stock, who occupy the country on the British side of the frontier between the pure Somali tribes in the east and the black races near Lake Rudolf. Dabber Ugase, chief of the Rer Afagub in British territory, had overidden Rudolf.

Mr. Zaphiro returned with me to Maka Sala. The remainder of that day and the next were taken up in going into the question of the intertribal disputes, Mr. Zaphiro being anxious to avail himself of my party to attempt to restore some sort of order in the country. The outstanding quarrels between the Rer Afagub and Garre were settled by mutual payment of blood-money and undertaking to return looted stock, the chiefs being sworn to the agreement. It became apparent, however, that an agreement between these two tribes would be of little value unless the Marchan tribe also agreed to a general settling up. Mr. Zaphiro was strongly in favour of a surprise visit to the country, which would not give the chiefs a chance of evading us, and might result in the capture of rifles. As Mr. Zaphiro had received no news of the appointment of Abyssinian commissioners, and was clear they could not possibly be at Maka Muuni by the 15th, the date appointed, I sent a letter to Pataurah Wadli at Gurdina (Pataurah Hapti Giorgis's representative on the frontier) informing him of my arrival, and requesting him to send officers to meet me to see the frontier in the event of regular commissioners not arriving.

While waiting for the delivery of this letter, I decided to make an expedition into the Mareeban country with Mr. Zaphiro and about seventy rifles leaving the remainder of the caravan and all the transport to proceed slowly to Banissa, the headquarters of Ali Aludi, chief of the Garre. Unfortunately at this time all the other Europeans were suffering from malarial fever, Dr. Drake-Brockman was down with threatening symptoms of black-water fever.

Mr. Zaphiro and I started at midnight on the 12th, taking with us his party of Abyssinians and about fifty picked Somalis with Mahomed Hassan. This left the main body of the caravan, but Mr. Zaphiro was able to arrange for some assistance from the local natives.

We took with us all the tribal chiefs, and arranged for a strong party of Garre to follow us. A report on our proceedings was furnished in my despatch on the 29th December 1908, and only an outline of our movements will be given here for the continuity of the narrative.

Our first objective was a group of villages at Hara Faro. These belonged to a native chieftain who was a group of villages at Hara Faro. These belonged to a native chieftain who was a member of the Rer Hassan. This we reached on the 29th December, at 1 a.m., to find the villages deserted, as they had received news of our approach the evening before from a herder who had seen our military camp on the 18th.

We made inquiries and sent out signs to get into touch with the natives. This was done. Some natives of our Somalis were sent out with messages to the chieftain, and also to Sheik Ali of Harar Shariif, whom we heard was on his way through the country to a pilgrimage to Sheik Hassan's tomb near Gintir. This man was known to the very treasury of Government at Kismayoo, and was himself trying to re-establish peace among the tribes. With his assistance all the head men of the Rer Hassan and Garre laid within our camp in under safe conduct, and a sworn agreement between them and the Rer Afagub and Garre was arranged. The chiefs all professed a strong desire for the establishment of some sort of British administration in the country, and their willingness to surrender their rifles and pay taxes if this were done.

They would not, however, undertake to collect their rifles and hand them over to Mr. Zaphiro unless to the armed assistance. They clearly recognised that Mr. Zaphiro's control over Moxambique was not sufficiently effective to give them assistance in case of trouble with their own people. They also resented the idea of being interfered with by Mr. Zaphiro's Abyssinians.

On the 19th I left Mahomed Hayom and a party of twenty-five men to assist the chiefs in forcing their tribesmen to observe the terms of their settlement, and to receive rifles if the chiefs agreed to give them up. He was to obtain all the information he could about the situation and a pretty free hand to act as he considered best, and to develop, and finally to reconnoitre at Churrie Moyale a month later. The results of his reconnoitring however were not very satisfactory, as he was unable to obtain any rifles. He was, however, able to recapture a herd of over 100 camels which were seized by a raiding party on the left bank of the Danakil. He reported that the Rer Afagub and Garre were carrying out their agreement and had settled down peacefully together on the Danakil, while Mr. Zaphiro arranged and had settled down peacefully together on the Danakil, while Mr. Zaphiro arranged and had settled down peacefully together on the Danakil.

and Mr. Henvey had since reported that "Abbar, Tigray (Moyale) was heavily fortifying out his engagements." On the other hand, that Sheik Jawa and many of the Hararans had met to discuss the same, declaring their hostility to the Government. Mahomed Hassan met several emissaries from the old Rer Afagub spreading his influence among the tribes along the river. The Gabi Rer Isak were inclined to join them. Sheikh Ismail, chief of the old Rer Isak, has little influence left, and lives now near Bardera. The distribution of rifles among the tribes, according to Mahomed Hassan, is as follows: Rer Afagub, 260; Rer Hassan, 240; and Rer Isak, 160, with about 100 more among the old Rer Hassan, Rer Isak, and Daqodi families. The Garre have few or no rifles. It was found on settling the various claims that in spite of this, the balance of blood-money was against the Garre, though they had had much more of their stock stolen. The fact is that the moral effect of the rifles is sufficient that no resistance is offered at the time to raiding parties armed with them. This greatly increases the temptation to raid. On the other hand, loss of life is chiefly caused by individuals finding an opportunity to kill women or children quickly with a spear.

Mr. Zaphiro and I left Hara Faro on the 19th December with the Garre chiefs, and travelled rapidly through Eil Wak and Takabba, both of which places Mr. Zaphiro wished to visit the opportunity of visiting. This gave him the opportunity of settling several outstanding disputes.

Water was now becoming very scarce. Between Hara Faro, where the pool was almost dry, and Eil Wak a large pond was found at Dumno. At Eil Wak are numerous wells, some 40 to 60 feet deep, following the course of what is evidently an underground stream. The neighbourhood is very alkaline and the water tainted. The wells are spread over a large area, and at the height of the dry season there is sufficient grazing and water for enormous herds. These wells are mainly frequented by the Garre tribes, but Ajuran and other tribes come there. Several of the wells were dug and are still owned by Boran living in the Baran Highlands.

Between Eil Wak and Takabba, is a long waterless stretch. At Takabba there are a number of wells round the bases of a group of low granite hills. These wells run very low at the end of the dry season and few people remain in the neighbourhood. When water runs short it becomes the duty of the camel-breeding communities to leave, as they can perform the journey to Eil Wak better than cattle owners. The question of which families mean to move is a constant source of dispute, and both here and at Banissa Mr. Zaphiro had to issue orders in the matter.

After Mr. Butler's expedition had passed, the Abyssinians raided as far south as Takabba, and took a tax of cattle to show the people that the Abyssinians were their masters, not the English.

Leaving our men to rest a day at Takabba after their hard marches, Mr. Zaphiro and I left Takabba on the night of the 25th and reached Banissa the following day. The 26th miles had been covered in the forenoon and during this period halts for the purpose of settling native missions had been made for four days at Hara Faro, at Eil Wak, and Takabba for a day each and for sixteen hours at Dumno. This last march, and Takabba, entailed very heavy marching off the men and Mr. Zaphiro. The latter had, in addition, to spend most of the periods of rest interviewing natives. The conduct of the men was excellent and I was greatly struck by Mr. Zaphiro's mastery of the native dialects and his intimate knowledge of the names and tribal history of the natives, even in districts he had never visited. His excellent memory enables him to make good use of his oriental faculty for interminable conversation with the natives.

The country we had traversed was singularly featureless, covered with dense thorn bush and grass. It would be difficult to move for any distance except by the native tracks, and would prove a most difficult and dangerous country for military operations.

At Banissa I found that Dr. Drake-Brockman's illness at Maka Sala had developed into a serious attack of black-water fever. Fortunately he had made a good recovery, though it had been necessary to carry him all the way to Banissa, a distance of 74 miles, the last 56 miles of which was through a waterless country—a very difficult task for Captain Condon with his reduced party. Captain Walter and Corporal

Mr. Zaphiro's notes on the frontier tribes, dated 1st August 1908, were reported to have been carried to Abyssinia by him.

6.

sent to Fitaueri Dodi Tare, but this chief, though apparently friendly, would take no steps to provide camels till he had been reassured that we were working with the authority of the Abyssinian Government.

Leaving the main party, therefore, to proceed slowly, Captain Condon and I went off to see what could be done. Our appearance and the production of our sealed pass had had the desired effect, and we were able to purchase on the spot sufficient camels to enable us to carry all our loads without the necessity of making double journeys. Messengers were sent out to collect more, and a party of our own men were left to bring these on. Meanwhile we continued our journey steadily south, though it was constantly necessary to leave detachments behind with the tired animals.

Very few slaves were met, and these were at first of mixed Galla and Somali stock, and later pure Somalis. Dodi Tare is a Mahommadan of Galla family, though his mother was a Somali. According to their usual custom, the Abyssinians have given him an Abyssinian title, and placed him in charge of all the nomadic tribes south of Omo. His sympathies are entirely with his co-religionists, and this was only one of the many cases in which the fact of our party being Somali and Mahommadan secured us assistance.

As we moved south we experienced drier weather, and the health of both the Somalis and the animals improved. Our steady progress did much to improve the morale of the men, who had been much shaken by the slow and apparently objective movements before reaching Gider. The health of the Europeans remained, however, very unsatisfactory.

We travelled along the left bank of the Web River. At first on high ground some distance away from the river, but from Haile Mollo (latitude 5° 40') onwards on low ground fairly close to the river. On the 25th November we reached a large Somali village at Dintu, which had been founded by one El Gaderia, a holy man of a seyyid family from the lower Juba district. Next day we passed a large detachment of the Ogaden Anilum (Ber Afqab and Ber Wafti), moving to escape the raids of the Mallah from the Wabi Shebeli to the country intervening between the Dagaal (Giray) and the latter to escape the raids of the Abyssinians, had taken refuge in the forests between the Daua and Garba River, some seven crossings into the Garre or Massawa country south of the former. The news of Anilum we met was apparently the northern manifestation of a general movement of the true south and west, which will be referred to again.

On the 30th November we reached the junction of the Daua and Gande, two days or intervals of one day, I had given Lord Herbert Horsey.

There was no news of Mr. Zaphiro, whom Lord Herbert had instructed to meet us at this point, but we found a station of the Boma Trading Company established at Dolo, a small village at the junction of the rivers on their right bank. The Manager Gomed Hyrcan (Mr. Horneyold), the manager of the post, was away on a visit to the Italian post at Lingi, when we arrived. Mr. Vincent, his assistant, was in charge. The latter kindly lent us two Berthom boats belonging to the company, and in these all stores and equipment were crossed the following day, the river being still in flood. On the 1st December the animals were, without casualty, swam across the river four miles upstream where the banks were easier.

Captain Water had been able to carry a satisfactory value for longitude to Dolo from his Omo-Daua triangle, by latitude and azimuth observations. We had therefore a value for the eastern terminal of the frontier in harmony with Captain Maud's value further west. A fresh base was measured near Dolo and an attempt made to carry the triangulation along the Daua River. This, however, failed, owing to the absence of natural features and thick bush, which would have made triangulation prohibitively slow. A wheel and compass traverse, checked by frequent latitudes, was therefore used between Dolo and the point at which it became possible to carry out plane-table survey on triangulated points. Satisfactory results were obtained, and it has been possible to adjust the work of Bottego's expedition, and the resulting values obtained.

At Dolo we found considerable difficulty in obtaining supplies and transport, many of which we were also rather short. I had hoped to be able to send back all our hired Abyssinian mules from Dolo, but found they could not be spared. In any case the Abyssinians were afraid to leave us and to traverse alone the Somali country through which we had passed.

On the 2nd December, Mr. Horneyold returned to the station, and from him I

and very inaccurate reports of the state of the country in British territory to the immediate south. It appeared that during the past year detachments of the Ber Afqab had crossed the Tigray saying from the Wabi Shebeli districts to avoid the raids of the Mallah and Abyssinians. The larger raid made by the Abyssinians at the time they came in contact with the Italian detachment from Laga, and the origin of the main movement, but it had been stimulated by the mess sent out of the Massawa. The Ber Afqab had come into collision with the Harrama tribes settled near Massawa. The Harrama tribes (Ber Hassan and Ber Isak) who occupy the right bank of the Juba for some distance inland. There had been much intertribal fighting, in which the aggressor was, in the best language, either the Ber Afqab or the Harrama, as the Harrama called, or New Marchaas, individuals parties of the Harrama, known as the Marchaas or New Marchaas, who, coming from the left bank of the Awash, had attached themselves to the Massawa. One of the most aggressive leaders of the Massawa chief, however, was Shimra Anna, who was for some time one of the Sultan's chief headmen. This man openly professed his hostility to the British Government, and was apparently trying to obtain a position somewhat similar to that of the Sultan distinguishing the authority of the old tribal chiefs. The Ber Afqab, Ber Hassan, and Ber Isak had all obtained a number of rifles. For the time being the Ber Afqab and Ber Hassan patched up a peace, but Mr. Horneyold anticipated fresh trouble when the Juba fell sufficiently a peace, but Mr. Horneyold anticipated fresh trouble when the Juba fell sufficiently to allow it to be easily fords. The Ber Isak, to whom the more turbulent Abyssinian territory was attached, had been raiding the Garre tribes along the Daua, with the consequence that the latter had retired west, giving up all the country east of Minigoo. The road along the Daua was deserted and reported unsafe. Some of the sedentary Garre sub-tribes, which had formerly cultivated the banks of the Juba and Daua, had crossed to the northern (Abyssinian) bank of the latter river, with the exception of a few families who were living under the protection of the company's exception of a few families who were living under the protection of the company's post. Mr. Horneyold was anxious that I should despatch a post to re-establish order as the position of the post was distinctly precarious, and the disturbed state of the country affected trade prospects. The responsible tribal chiefs had all been in communication with Mr. Horneyold, whom they not unreasonably supposed to be in some way a representative of Government. The latter had done what he could to patch up a peace between the tribes by getting them to agree to payment of blood money, and to prevent too hot strife, but he had not, I confess, to point that neither had authority to enforce order. Mr. Zaphiro was opposed to taking any such course, as it would give the Abyssinians a foothold in the country.

On the other hand, Mr. Zaphiro with his small party of untrained Abyssinians could exercise no authority over the Somalis, whom it is more than doubtful if he could have visited in safety.

I sent messengers to the tribal chiefs to come and say my instructions that no further steps could be taken until I had met Mr. Zaphiro.

On the 4th December Mohamed Hassan was despatched to the north bank of the Dolo to buy animals, to call and transport from Somali tribes there and Ouman Walker with Dr. Druce-Brockman started up the Daua to the south bank carrying on the survey. On the 10th Mohamed Hassan returned with sufficient animals for our immediate needs. He remarked that the Somali settlements were being attacked by small parties of Abyssinians and that it was reported that a large Abyssinian party was on its way to force the Daua tribals to their original location, within convenient distance of the Abyssinian post. He had also been able to get hold of some Somalis originally employed by Sir John Harrington to assist the Garre in protecting them from Abyssinian raids prior to Mr. Zaphiro's appointment. These men proved very useful as guides and messengers.

Yeri Ali, chief of the old Marchan Hassan, also came in this day, and professed his desire to live in peace and willingness to accept any settlement of outstanding quarrels. He complained that several British expeditions had passed through the country and claimed the allegiance of the tribes, but that each had passed by without leaving any permanent government to assist the chief in maintaining order. He admitted that the Somalis were rapidly arming themselves with rifles to protect themselves, and that this was the source of most of the intertribal raiding.

Leaving a letter in Amharic with the Boma Trading Company, to be shown to any Abyssinian party which approached us, the Doro, Adami, Gonden, and Bentat in the night of the 11th, and on the following night, reached Captain Water's party.

On the 13th, between Mekele Dabba and Mulka Sabi, we met Mr. Zaphiro, on

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~~ABYSSINIA~~~~CONFIDENTIAL~~

SECTION I.

[41656]

No. 1

Colonial Office to Foreign Office.—(Received November 13.)

Sir,

I AM directed by the Earl of Crewe to transmit to you, to be laid before Secretary Sir E. Grey, a copy of a letter from Major C. W. Gwynn, C.M.G., D.S.O., R.E., enclosing a general report on the work carried out by the Anglo-Abyssinian Boundary Commission, 1908-9, a description of the frontier as demarcated, a map in three sheets of the frontier region, and a report by Mr. Zaphiro on the tribes inhabiting this district.

I am, &c.
H. W. JUST.

Inclosure 1 in No. 1.

Major Gwynn, R.E., to Colonial Office.

Guernsey, November 3, 1909.

Sir,
I HAVE the honour to forward herewith a general report on the work carried out by the Anglo-Abyssinian Boundary Commission, 1908-9, together with a detailed description of the frontier as demarcated, and a map on a scale of 1:500,000, in three sheets, of the frontier region. The map is a provisional issue, the Director of Operations, War Office, having undertaken to produce it finally in three colours.

2. I also forward herewith a report recently received from Mr. Zaphiro on the tribes inhabiting the frontier districts, to which I have added a note. In transmitting the report to my Lord Herbert Hervé requested that a copy might be supplied to the legation at Addis Ababa.

3. Other survey work carried out by the commission in Abyssinia, not directly connected with the frontier, together with technical and other reports, will be submitted direct to the Director of Operations, War Office.

4. I wish to take this opportunity of bringing to notice the excellent work done by the following members of the commission:

Captain R. C. Waller, R.E., had charge of the survey operations, and was an indefatigable worker. He took and computed a great number of astronomical and trigonometrical observations. The experience he has gained fully qualifies him to take charge of a boundary commission.

Captain G. Condon was in charge of transport and of the Somali escort. He was also responsible for all cash transactions on the road.

I found him a most loyal, hardworking, and conscientious officer. His varied experience of natives and transport animals proved extremely useful.

I consider that the transport arrangements were efficient and economical under exceptionally adverse conditions.

Corporal C. Carter, R.E., although at first inexperienced in the class of survey required, quickly picked up the work, and subsequently produced excellent sketches. He worked cheerfully and with great energy, and was always thoroughly reliable. He should prove an exceptionally useful non-commissioned officer in a survey field section on active service.

I regret the report that the other assistant surveyor, sapper C. Favier, R.E., proved a complete failure, and had it been possible I should have sent him home at an early stage.

His work was so unsatisfactory I could make little use of him, and his manner both towards officers and native was very bad. I strongly recommend that he should not again be employed on similar expeditions.

I would also call attention to the remarkably services rendered by the Somalis, Muhammad Hassan who was also spoken of in the highest terms by Captain Waller in his report.

ABYSSINIA

November 13, 1909.

~~CONFIDENTIAL~~

SECTION I.

[41656]

No. 1.

*Colonial Office to Foreign Office. — (Received November 13.)**Bouling Street, November 12, 1909.*

Sir. I AM directed by the Earl of Crewe to transmit to you, to be laid before Secretary Sir E. Grey, a copy of a letter from Major C. W. Gwynn, C.M.G., D.S.O., R.E., enclosing a general report on the work carried out by the Anglo-Abyssinian Boundary Commission, 1908-9, a description of the frontier as demarcated, a map in three sheets of the frontier region, and a report by Mr. Zaphiro on the tribes inhabiting this district.

I am, &c.

H. W. JUST.

Inclosure 1 in No. 1.

*Major Gwynn, R.E., to Colonial Office.**Guernsey, November 3, 1909.*

Sir. I HAVE the honour to forward herewith a general report on the work carried out by the Anglo-Abyssinian Boundary Commission, 1908-9, together with a detailed description of the frontier as demarcated, and a map on a scale of 1:500,000, in three sheets, of the frontier region. The map is a provisional issue, the Director of Operations, War Office, having undertaken to produce it finally in three colours.

I also forward herewith a report recently received from Mr. Zaphiro on the tribes inhabiting the frontier districts; to which I have added a note. In transmitting the report to me, Lord Herbert Hervey requested that a copy might be supplied to the legation at Adis Ababa.

B. Other survey work carried out by the commission in Abyssinia, not directly connected with the frontier, together with technical and other reports, will be submitted direct to the Director of Operations, War Office.

I wish to take this opportunity of bringing to notice the excellent work done by the following members of the commission:

Captain R. C. Waller, R.E., had charge of the survey operations, and was an indefatigable worker. He took and computed a great number of astronomical and trigonometrical observations. The experience he has gained fully qualifies him to take charge of a boundary commission.

Captain G. Condon was in charge of transport and of the Somali escort. He was also responsible for all cash transactions on the road.

I found him a most loyal, hard-working, and conscientious officer. His varied experience of natives and transport animals proved extremely useful.

I consider that the transport arrangements were efficient and economical under exceptionally adverse conditions.

Corporal C. Carter, R.I., although at first inexperienced in the class of survey required, quickly picked up the work, and subsequently produced excellent sketches. He worked cheerfully and with great energy, and was always thoroughly reliable. He should prove an exceptionally useful non-commissioned officer in a survey held section on active service.

I regret to report that the other assistant surveyor, sapper C. Favier, R.E., proved a complete failure, and had it been possible I should have sent him home at an early stage.

His work was execrable. I could make little use of him, and his manner both towards officers and natives was very bad. I strongly recommend that he should not again be employed on similar expeditions.

I would also call attention to the remarkable services rendered by the Somalis, Mahomed Hassan, who was also spoken of in the highest terms by Captain Maud in his report.

instal on the line as described by that
officer, with the exception of the section
from G.Warda to G.Afur, which should run as de-
tailed in the alternative proposal
closed in his letter of November 3rd. last.

Finally, it must be remembered that
the responsibility for introducing modifi-
cations in the frontier line without
reference to the Abyssinian Government was
forced on the British Commission by the
action of that Government in refusing
to permit representatives to accompany Major
General Sir H. A. Campbell, although His Majesty's Government
have every desire to act in the spirit of
friendship, which animates them towards
Abyssinia, and that adheres to Major
General Campbell, which appears to them
to be the best, and indeed the only suit-
able, line for the administrative require-
ments of both governments.

Taking the frontier from its start
at the junction of the Rivers Jubu
~~and~~
(General) and Dara as far as Chari Moyale,
we will observe that from Lake Yucil to
Djoudi Gudu territory is conceded to the
Amazinians, and from G. Fururud to Gudu,
to the Amazinians and to Charri Moyale,

The third, entitled in favour of Great
Furan.

In the four corners the first
will be against one another, and the Amazinians
advancing, as it is likely to be expected
from the line, which would be

The fourth, or northern, will be shown
as follows, and will be called

The line described in the 1897 Agree-
ment between Egypt and Lake Stevensia
is itself, which by Major Gray's report

to be unworkable, and it will therefore
be necessary to press for the alternative
line suggested by him, i.e., a line running
from G. Werga through G. Sodo, or not

have still a valid claim, on behalf of the

Gum'a tribe, to the large and valuable

district of Guba Gallgalle, south of the

River Dara, and that they consider that

the proposed rectification from G. Warda

to G. Mer is a very moderate price for

the Abyssinian Government to pay in order

to secure the Guba Gallgalle territory.

The remainder of the frontier, from

G. Mer to the junction of the Akobo and

Bibor Rivers, practically follows the

1907 line, and should raise no difficulty

such slight modifications as there are

being nearly all favourable to Abyssinia

Generally speaking, you should base

your discussions with the Abyssinian Gov-

ernment on the terms of Major Gwynn's re-

port, with which His Excellency Govern-

or and Sir H. concurred, and as should in-

Taking the frontier from its start
at the junction of the Rivers Juba
(Senegal) and Dore 55° 16' le Chiffre Royale,
you will observe that from Lake Yirri to
Gondor Gudu territory is conceded to the
Amazighians, and from G. Tumetad to Guba,
to the Amazighians, and off Chiffre Royale,

the frontier, divided in favour of Great
Omdurman, follows the line:

In the Government map figure 100
it is indicated one another, and the Amazighians
is diverted to Gudu, as expected
in the original plan, and the line, which was
the frontier of the Amazighians shown

in the map, is the same as the line described in the letter addressed
to you from Mr. G. W. Lynn, Lake Stephanie
in which, also, Major G. Lynn's report
is to be unworkable, and it will therefore
be necessary to press for the alternative
line suggested by him, i.e., a line running
from G. Verga through G. Gando, Shandj

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Rec'd

1934 FEB 10

SECRETARY TO THE GOVERNOR

Mr. Thesiger

With reference to my Despatch No. 1

No.

of this date, 1933, relative to the Southern

Frontier of Abyssinia, I transmit to

you herewith six copies of the map pre-

pared by the recent Boundary Commission

under Major Dunn, showing the line which

the Abyssinian Government consider should

mark the frontier.

In view of the present situation,

and the responsibility of the Government

of upholding the Abyssinian Government, no

formal or definite agreement until in-

formal勾s have settled themselves

as far as possible, you are authorized

to conduct your own trials for opening the

frontier negotiations. Though of course

you will take advantage of any opportunity

offering reasonably hope of settling

In any future communication on this subject, please quote

No. 3275/10.

and address

The Under-Secretary of State,
Foreign Office,
London.

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Recd 14 Feb 10

Foreign Office

February 12 1910.

SIXTY

In reply to your letter 36633/08 of the 28th ultimo relative to the Southern Frontier of Abyssinia, I am directed by Secretary Sir E. Gray to transmit to you herewith, for the information of the Secretary of State, for the Colonies, a draft of the instructions which Sir E. Gray proposes to send to His Majesty's Minister at Addis Ababa respecting the discussion of this question with the Abyssinian Government.

Sir E. Gray will be glad to learn whether the Earl of Rosebery concurs in the terms of this communication.

I am,

Your most obedient

John Curzon