
Survey of the Sobat Region

Author(s): H. H. Austin

Source: *The Geographical Journal*, Vol. 17, No. 5 (May, 1901), pp. 495-512

Published by: geographicalj

Stable URL: <http://www.jstor.org/stable/1775832>

Accessed: 27-06-2016 03:09 UTC

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at
<http://about.jstor.org/terms>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



The Royal Geographical Society (with the Institute of British Geographers), Wiley are collaborating with JSTOR to digitize, preserve and extend access to *The Geographical Journal*

Cross and the *Belgica* have not added very much to our actual geographical knowledge of these regions. The expeditions which are about to sail from England and Germany have a field for exploration greater than the whole of Australia, and the scientific results which would accrue from the exploration of so extensive and unknown a polar track must be very great; and surely we cannot boast of any brighter chaplet than that which has been gained in the field of scientific and geographical research. Explorations in the antarctic can have little commercial value, for a more barren spot could scarcely be conceived. As for gold—well, in the first place, you have got to find it, a most unenviable task, and you would fully deserve it if you were successful. But I do not think any rational-minded person would for a moment entertain so wild and picturesque an idea as that of discovering a second Eldorado in South Victoria Land.

The PRESIDENT: There were glittering stones, were there not?

Mr. BERNACCHI: Yes, but I don't think it was gold. Nor would the most ardent advocate of imperial expansion look to the territory surrounding Mounts Erebus and Terror as a sphere for his ideas.

The PRESIDENT: I think I may congratulate the meeting on having listened to an extremely interesting paper, and also an important paper from a geographical point of view. In the first place, the lecturer appears to have cleared up the question respecting the difference between Russel islands and Balleny islands. Then he has given us a clearer description of Robertson bay and Cape Adare and Duke of York island than we had previously received. His description of the excellent winter quarters in Wood bay is important. And it must be very gratifying to Mr. Bernacchi to find that his theory respecting the great ice-barrier has received the attention of Sir Joseph Hooker and Dr. Blanford, who have both expressed, at all events, their very great interest in it. I am sure you will all cordially pass a vote of thanks to Mr. Bernacchi for his very interesting paper.

SURVEY OF THE SOBAT REGION.*

By Major H. H. AUSTIN, D.S.O., R.E.

IN the autumn of 1899 two survey parties left England for the Sudan, with the object of surveying (1) a tract of country from Roseires on the Blue Nile, in a southerly direction down to the Sobat or Baro river; and (2) the Sobat river and the country lying between it and the north of Lake Rudolf.

The former survey party was under the command of Major C. W. Gwynn, D.S.O., R.E., who was accompanied by Lieut. L. C. Jackson, R.E., whilst the latter survey was entrusted to me, assisted by Major R. G. T. Bright, of the Rifle Brigade.

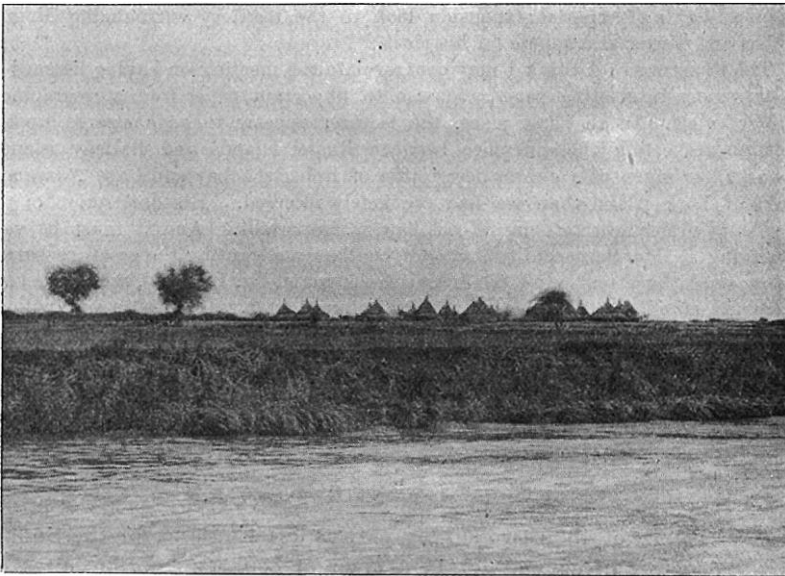
Major Gwynn and Lieut. Jackson accomplished a most successful and interesting journey, and accurately surveyed tracts of country hitherto but little known, as they entered regions never before visited by Europeans.

I do not propose, in this paper, to deal with Major Gwynn's

* Read at the Royal Geographical Society, March 25, 1901. Map, p. 572.

expedition, as I hope, on his return to England, he may be prevailed upon to give some account himself to the Society of the most valuable geographical results obtained by him and Lieut. Jackson. I shall merely confine myself, therefore, to giving a brief outline of the work done by Major Bright and myself, with some notes on the country passed through by us and the natives met with.

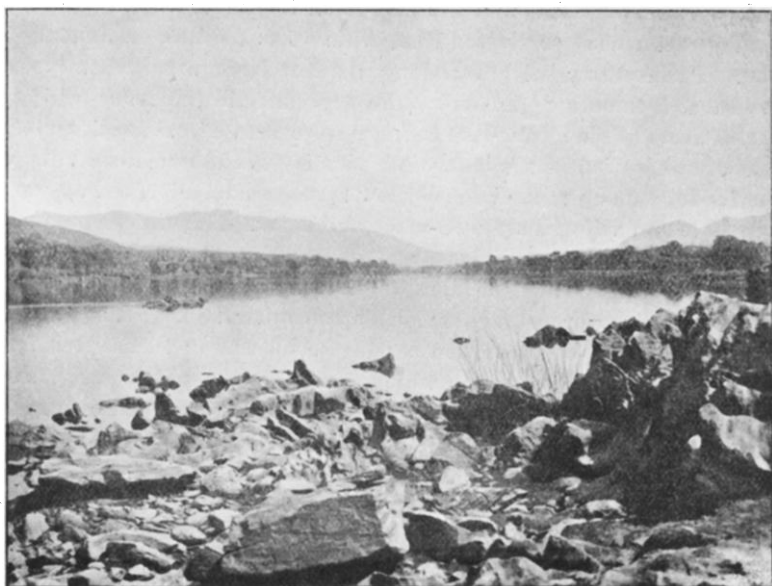
We left Omdurman at the beginning of December, 1899, in one of the Sudan gunboats, which towed a double-decked barge and two sailing-boats, in which were accommodated our escort of 22 Sudanese and 25 animal attendants, as well as the whole of our transport, consisting of 7 camels, 10 mules, and 130 donkeys. We proceeded up the White



NUER VILLAGE ON RIVER SOBAT.

(Photo by Major R. G. T. Bright.)

Nile past Fashoda, until we reached Sobat Fort, at the junction of the Sobat with the White Nile. We then steamed up the former river until we reached a point beyond which we were unable to proceed owing to the lowness of the river at that time of the year, and there disembarked—about midway between the Sobat and Nasser posts. As the transport animals had been confined on board for close on three weeks, and had lost condition considerably, we halted for a week at the point of disembarkation (near the village of Ashel), in order to admit of their picking up strength, and during this time the loads, etc., were packed into their saddles and all arrangements completed for the land journey. The course of the Sobat from Sobat Fort to the



BLUE NILE EMERGING FROM ABYSSINIAN HILLS, 20 MILES EAST OF FAMAKA.

(Photo by Major C. W. Gwynn.)

point of disembarkation was surveyed from the steamer, and the traverse thus obtained fitted in between points fixed astronomically when the steamer was tied up for the night. In this portion of the river only one tributary joins the Sobat. This is known as Khor Filus, and enters the south or left bank of the river some 10 or 11 miles above Sobat Fort. It is some 30 to 40 yards in width, and is said to be merely a loop of the river, the exit from the Sobat being near the village of Nyangdeng, which we crossed subsequently during the land journey.

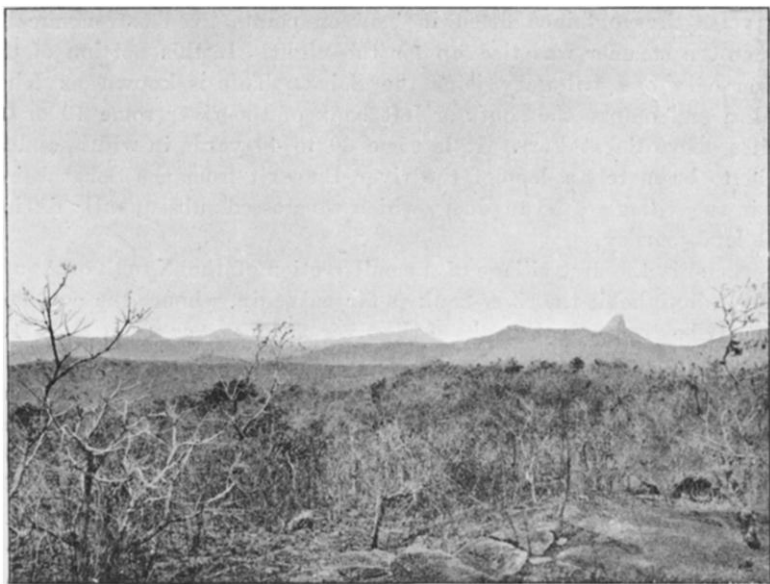
Ashel is the first village of a small section of the Nyuak or Anuak tribe, who inhabit the river-bank as far as Wegin, whence the powerful Nuer tribe occupy both banks of the river as far east as about E. $34^{\circ} 10'$, thus separating the two sections of the Nyuaks.

From Sobat Fort as far as Amajok village, both banks of the river are inhabited by Shilluks. The Dinkas then intervene between the Shilluks and Nyuaks, numerous villages existing along the river throughout Shilluk and Dinka territory as far as the village of Lajak, after which come some 15 to 20 miles of uninhabited country along the river until Ashel is reached. The Dinka territory for the most part consists of open treeless grass plain; but the natives appear rich in herds of cattle, and possess numerous flocks of goats and sheep.

The disembarkation camp near a single Dom palm tree on the left

bank of the river Sobat was abandoned on December 28, and the land journey commenced to Nasser Post, which was reached on January 4, 1900. The country traversed along the left bank was generally well wooded and thickly populated, more especially in the Nuer territory, where tracts of fine park-like country were crossed, as well as large areas of cultivation in the immediate vicinity of the numerous villages. The inhabitants are, however, very low types of humanity, and although their huts and villages are well-made and substantial, the people themselves are indolent, suspicious, and depraved, and yet by no means unfriendly. Physically the men are tall and well-made, and have a high reputation for courage amongst the other tribes. They are all stark naked, and, as protection against cold, smear themselves from head to foot with wood-ash, which gives them a particularly filthy appearance. They are all well armed with spears, of which every man carries two or three in addition to a knobkerry, whilst their weapon of defence consists of an oval-shaped buffalo-hide shield. The elder married women are as filthy in appearance as the men; but all wear a leather apron or skin fastened round their waists. The girls and unmarried women do not, as a rule, smear themselves with wood ash, but, like the men, are quite naked.

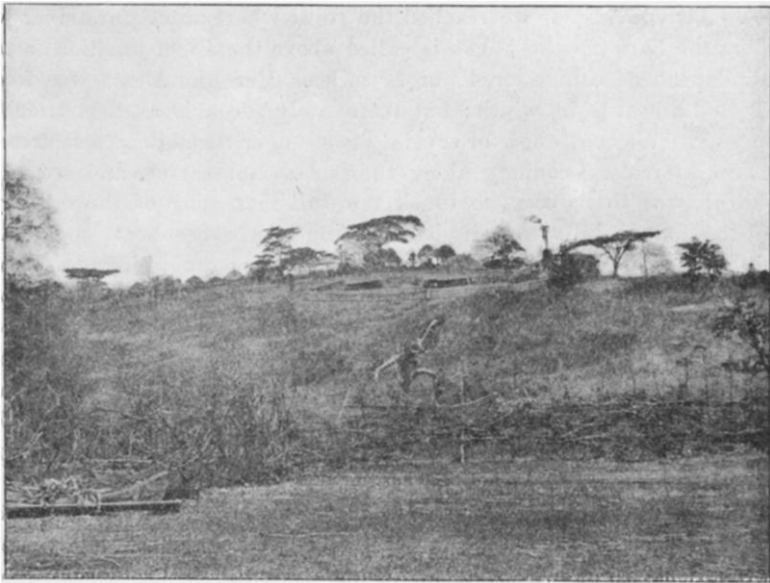
Shortly before reaching Nasser another large khor is crossed on the south bank near the village of Tolor. This is reported to be the Khor Geni, which flows out of the Pibor river, some $6\frac{1}{2}$ miles below the



GOMASHA PLATEAU, LOOKING NORTH TO THE LARGER OF THE TWO GULE PEAKS.

(Photo by Major C. W. Gwynn.)

junction of the Akobo river with the Pibor, thus forming another loop. These loops are, I think, one of the most curious features of the whole of the Sobat region, and a glance at the map will show what strange and unlooked-for courses the streams take in this swampy country when the rivers have overtopped their banks. Time after time during our wanderings we came across places where a branch would take off from the main stream for no very apparent reason, and, after careering about across country by a course of its own for many miles, would gradually find its way back to its original parent, or into another river. The country is so flat, and as generally there is nothing to indicate the course of a river, it is often quite impossible to even make the



VIEW ON ABYSSINIAN PLATEAU.

(Photo by Major R. G. T. Bright.)

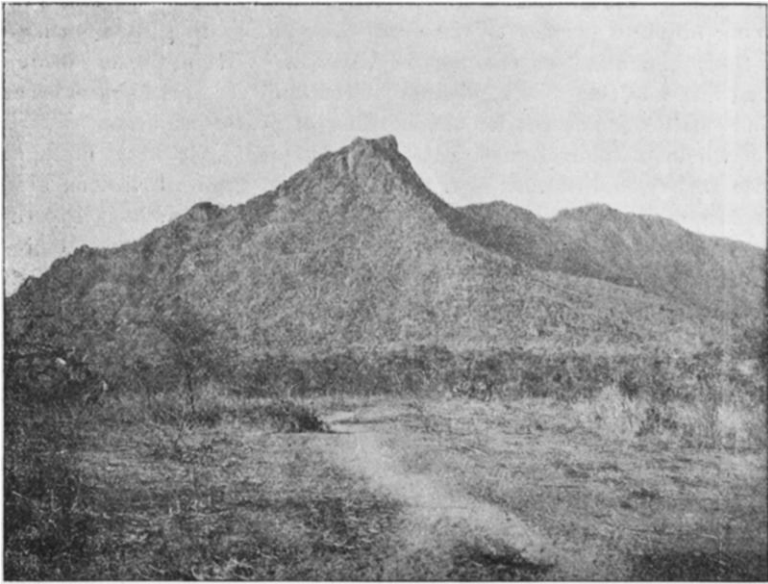
wildest guess as to where a stream is likely to go to, and, in consequence, native information (generally of a most unreliable nature) had occasionally to be accepted. The presence of streams, even when only some 50 or 100 yards distant from the line of march, was not unfrequently quite unknown to the survey party until we suddenly found ourselves right on the bank. The Adura river is the most important loop in this region, as this is really a very large one; though found to be quite unnavigable, it is often over 100 yards in breadth; but its bed is full of islands and sandbanks.

The position of Nasser Post, as now shown on the map, may be taken as the correct one, for Major Gwynn's position for it, working from

Omdurman along the Blue Nile and then south, agreed within a few hundred yards of that obtained by me by the White Nile and Sobat route from Omdurman. In the neighbourhood of Nasser the right bank of the Sobat is densely populated as far as the junction of the Sobat and Pibor rivers. The left bank is uninhabited, as nearly all that portion of the country is inundated when the rivers are full.

We left Nasser on January 7, and the following day arrived at the junction of the above-mentioned rivers. A crossing was effected on January 9, a short distance up the Pibor, which at that point was about 100 yards wide, and divided into two channels by a small island. We now entered a treeless region, and as all the tall rank grass had recently been burnt by the natives, we experienced some difficulty regarding fuel. Two days later we reached the point where the Adura river re-enters the Baro (as the Sobat is called above the Pibor junction) after an independent course for 40 or 50 miles. Here the Adura was from 100 to 120 yards in width; but fortunately fordable at that time of the year. We continued for several days longer through a most dreary and uninteresting country along the Baro. Not a tree, and scarcely a shrub, was to be seen, to break the dull monotony of the country, and the distant hills were invisible owing to a dense heat haze. All this country is one vast swamp when the rivers are full, and is then quite impassable for transport animals. At length, on January 16, we struck across country to the Adura river, and followed that river up to its exit from the Baro, which we reached the following day; thereby conclusively proving the Adura to be merely a loop of the main stream. South again of the Adura there is reported to be another river, the Mokwai, which is said to be a fine river in its lower reaches, although its exit from the Baro, some 5 or 6 miles above that of the Adura, is a most insignificant one, and barely discernible, as it is so overgrown by tall shrubs. This river is said to be joined by another stream known as the Bela, which we crossed subsequently on our journey south, and the combined streams then enter the Pibor some 10 to 12 miles above its junction with the Sobat. It was found navigable for some 20 miles up stream, by Major Capper, in 1898, but the steamer was then stopped by "sudd."

Above the exit of the Adura the banks of the Baro are well wooded, there existing in places a regular forest-growth of sycamore and other trees. Near the village of Methok, which is the limit of Nuer occupation on the left bank of the Baro, a big stream, known to the Nnyuaks as the Aluro, and to the Nuers as the Nigol, spreads out into a large swamp, and finds its way by insignificant channels through a thick forest-growth into the Baro. It has its origin in the Abyssinian highlands, and constitutes a most formidable obstacle, for large expanses of both banks are converted into swamp when the river is full and overtops its banks. We later on spent three days floundering through this



TYPE OF HILLS OUTLYING THE EDGE OF ABYSSINIAN PLATEAU.

(Photo by Major C. W. Gwynn.)

swamp, when we struck south from Nyuak country on our way to the river Gelo, after the rains had broken.

Shortly after crossing the Nigol river, we entered the territory of the Anuaks, or Nyuaks, who inhabit both banks of the Baro, or, as they call it, the Upeno river, as far east as the foot of the Abyssinian escarpment, whence it issues out through a deep gorge on to the open plains. This portion of the river is the most fertile and attractive anywhere along its course through the plains. The country is well wooded, to a large extent free of those large expanses of swamps so general in Nuer territory, and moreover the natives are of a higher order of civilization than their more westerly neighbours. They are a peaceful, industrious, and most friendly race, who cultivate large areas of country along the river-banks, until the stony region is reached, close to the point on the river where Colonel Marchand was compelled to abandon the *Faidherbe* after leaving Fashoda. The little cultivation found beyond that point is almost entirely confined to the islands in the river, as the banks are very stony and thickly wooded. In the cultivated districts the population is very dense, and the river-banks are dotted with numerous huts and hamlets built close to the edge of the bank and overlooking the river. These huts are usually erected on small mounds slightly raised above the normal level of the bank, are neatly built of mud and wattle, with grass roofs, and are scrupulously clean and well-kept. As

a rule, they are surrounded by a fencework of tall reeds and grass, giving absolute privacy to the occupants, similar in general principle to the "kisikatis" so common in Uganda. Within the enclosure so formed, in addition to several huts for the family, are the granaries and other smaller enclosures for the herding of goats and sheep at night. The whole interior is most carefully plastered over with mud, and quite free from dust and dirt. In addition to grain of various kinds, the natives also grow tobacco and cotton. The latter commodity they do not attempt to make use of in any way, and the whole of it is usually taken over by the Gallas inhabiting the summit of the Abyssinian plateau; but tobacco they smoke themselves. As a rule, the men are more decently clad than the Nuers, as many of them wear beautifully cured skins round the loins, and they are in every way far cleaner, better groomed and smarter looking than their westerly neighbours. Beads, obtained from the Gallas, are very generally worn round the neck and waist, and in addition splendid ivory bracelets are frequently to be seen on the arms of the men. These natives, however, do not appear to be either warlike or courageous like the Nuers, and, being great agriculturists, their main desire seems to be to cultivate their fields and remain at peace with their neighbours. Their spears are generally small-headed with long handles, and many of the men and boys are armed with merely sharp-pointed sticks hardened at the ends by fire. We saw a very curious species of spear amongst these



IN THE ABYSSINIAN HILLS.

(*Photo by Major C. W. Gwynn.*)

natives, the heads of which are manufactured from the leg-bone of a giraffe, polished down to about an inch or three-quarters of an inch in diameter, some 18 inches in length, and sharpened to a fine point. This is secured in the ordinary way to a long wooden handle, and the join covered by lizard-skin.

The elder married women all wear skins, cured or otherwise, round the loins, and these are often daintily picked out with a border of



NUER SHEIKH AND SON.
(*Photo by Major C. W. Gwynne.*)

varicoloured beads. The dress, if it may be so called, of the unmarried women and girls consists of an accumulation of beads round the neck, and a large number of strings of beads round the waist, from which a small fringe, as it were, of generally white opaque, or white and light-blue, beads depends some two or three inches in length over the hips, and in front and behind. As the girls are often very beautifully made, and possess pleasant, laughing, and sometimes really pretty faces, a group of them together forms a most charming picture.

On January 26 we reached the point in the river beyond which Marchand had found it impossible to navigate his launch, the *Faidherbe*, owing to the existence of rocks and rapids in the bed. He had in consequence drawn the launch up on to one of the wooded islands, and, after securing it by chains to neighbouring trees, and building a grass house over it to protect it from the weather, had abandoned the launch, together with several aluminium barges. The natives pointed out to us the island on which it was beached, and accompanied us across a ford to the site of the boat; but nothing would induce them to approach the grass hut, nor enter the presence of the boat, which they viewed with the greatest superstition, imagining apparently that the house was erected for the accommodation of evil spirits left to guard the steamer. Some two months later, and by the order of the Emperor Menelik, large numbers of Gallas and Abyssinians were sent down from the summit of the plateau, with instructions to take the steamer to pieces and convey it in sections to Adis Abeba. An Abyssinian specialist was sent down from the capital to superintend the transportation and the taking to pieces. The hull, some 50 to 60 feet in length, however, was merely cut in two, and carried with great difficulty to the foot of the steep ascent of over 3000 feet from the Baro gorge to the top of the plateau. Whether it ever reached the top I cannot say, as we left the country before the ascent was commenced; but, as nothing more than a precipitous goat-track to the summit existed at that time, and each of these large sections required about 100 men a-piece to transport it, I fancy a good many Gallas are likely to have met with violent deaths during the undertaking, unless a good road was constructed, or the sections were still further cut up. The Abyssinians, however, led us to understand that, cost what it might, the boat in its entirety was to be taken to the capital.

The nature of the country now underwent an entire change. The swampy soil we had become so familiar with gave place to stone and gravel. Low rocky hills approached the river-banks, which were densely wooded with trees and scrub, necessitating a considerable amount of cutting in places to enable the transport animals to travel with their loads. Several large sandy beds of streams were crossed; but, owing to the close nature of the country, it was impossible to conjecture whence they came. As they were all dry, however, I think it unlikely any of them have their origin in the highlands, with the exception of the Bonga, a small stream, at that time, of running water 15 to 20 yards wide, and 6 to 9 inches deep. A few miles beyond the Bonga we entered the gorge of the Baro, and as we proceeded further up, lofty hills enclosed the valley until eventually, after crossing the Baro a few miles above where it was joined by the Birbir river from the north, we were confronted by the steep ascent of over 3000 feet to the summit of the Bure plateau. This ascent was accomplished with

great difficulty in two stages. Fortunately, the Abyssinians came down with large numbers of Gallas to assist us in the undertaking, or we should never have been able to accomplish it. After a long trying day, during which we found our camels quite unequal to climbing the steep slopes, we reached a rocky nullah with pools of water, some 1400 feet above the river. The Gallas carried in our camel-loads; but, in spite of these ungainly animals being unloaded, they succeeded in leaving the narrow track, and took an ignominious dive down the side of a precipitous hill-slope until they were brought up sharp by the rocky nullah some 50 to 60 feet below. Eight donkeys, with their loads, had previously started the fashion, and what with camels and donkeys



CULTIVATED COUNTRY: LEGA GALLA.

(Photo by Major C. W. Gwynn.)

lying about in a confused mass below, we had a pretty lively time, and spent several distracting hours before we could get them up again and into camp, which was only a few hundred yards beyond. Marvellous though it seemed to us, none of the animals were killed, and all were eventually got into camp by dark, with the exception of one or two camels which were brought in next day. Men and animals were pretty well worn out, although we had only marched some 4 miles, so it was somewhat depressing to find that the final ascent of 1800 feet to the summit was quite impracticable for loaded animals. However, the Abyssinians came to our rescue by supplying us with large numbers of Gallas, who, during the next two or three days, carried up

all our belongings, enabling us to take the animals up empty; but the camels were hopeless, and at the end of three days we had with the greatest difficulty only managed to get six out of the seven to the summit. The seventh never lived to breathe the exhilarating air of the plateau above, as he succumbed to his efforts long before he could be dragged to the top. A mule and several donkeys also found the climb too much for them, and, much to our regret, sought peace and rest from their troubles by lying down and refusing to live any longer.

It was really a most dreadful climb, and one not to be lightly entered upon when encumbered with a large number of transport animals. We were now at an elevation of about 5200 feet, and the fine air, vegetation, and beautiful butterflies reminded Major Bright and me very strongly of Save, on the northern slopes of Mount Elgon, in East Africa. The view from our lofty position across the Baro and Birbir valleys lying so far below us was grand in the extreme, and occasioned some very quaint remarks from our Sudanese, many of whom had never before been in or even seen hilly country. Major Bright's boy remarked to him, in broken English, that he didn't see how we were ever going to get out of the country again, as there were "hills at all four corners." The edge of the plateau hereabouts is uninhabited, and it was not until we had proceeded some 6 or 7 miles in an easterly direction through undulating wooded country that we reached the first Galla settlements. Here, unfortunately, I was taken seriously ill, and it appeared doubtful at one time if I should recover. Thanks, however, to Major Bright's assiduous attention to me, I was sufficiently well at the end of a fortnight to continue the journey from Bure to Gore, where the head-quarters of the Abyssinians of this region are situated.

Our road for the next 11 or 12 miles passed through a most fertile tract of country, intersected by numbers of small valleys and streams. In every direction small huts and hamlets are dotted about, as the Gallas hereabouts are very numerous. These have cleared extensive plots of ground for cultivating purposes, and quantities of grain are grown throughout the Bure district. In addition to cereals of all sorts, such as dura and Indian corn, peas and beans; tomatoes, potatoes, and coffee are also grown by the Gallas. They are rich also in flocks of goats and sheep, and possess cattle, but in lesser numbers; whilst eggs, butter, milk, and honey are generally easily obtainable. Mules and donkeys are bred extensively on the plateau, and horses and ponies are also seen in large numbers. Although we saw no cotton grown on the plateau, it is brought up from the Baro valley by the Gallas, who weave it into a thick coarse cloth, with which the better class of them and most of the Abyssinians are clothed. The coinage generally employed by the Gallas consists of bars of salt some 8 inches in length, 2 to $2\frac{1}{2}$ inches broad, and perhaps an inch thick. These are bound at intervals

with grass to prevent their cracking. In the Bure and Gore districts ten bars of salt without a flaw were regarded as the equivalent in value of a Maria Theresa dollar.

The Bure district, as already mentioned, is cleared to a large extent, but after descending from a ridge some 18 or 19 miles from the edge of the plateau into a seeming hollow and entering the Abiu district, the country becomes very thickly wooded, and the inhabitants less numerous. The physical features of the country still remain much the same, but more confusing, as an amazing labyrinth of ridges and valleys is traversed. The country is so close that whence the numerous



GIDOMI MARKET.

(Photo by Major C. W. Gwynn.)

streams come or whither they go it is quite impossible to see. They all, however, eventually find their way into the Birbir river, and so into the Baro. Some miles before the foot of the Gore ridge is reached, the track passes through an uninhabited region. The whole of this portion of the country lies between 5000 and 6000 feet above sea-level, and, as may be readily imagined, is very hilly and difficult for transport animals accustomed to the plains.

Gore town is situated on the summit of a high grassy ridge, very much in the shape of an irregular horseshoe, at an altitude of about 6580 feet above sea-level. The ridge is crowded with the houses and huts of the Abyssinian officials and soldiery, as well as those of a large Galla population. In addition to a large council-chamber,

workshops, arsenal, store-rooms, etc., the Abyssinians have built a small church here, in the churchyard adjoining which the remains of the late M. Clochette, a French officer who died at Gore a few years ago, are interred. The climate of Gore is most bracing, and a magnificent view is obtained on a clear day of the whole surrounding country. The cold at nights, however, is very great, and we suffered most serious losses amongst our transport animals, who were quite unaccustomed to it, and died off at an alarming rate.

So much has been written and said of the Abyssinians, that I do not propose dealing with them, as I fear this paper is already running to greater length than I had intended. We remained altogether close on two months amongst this warlike race, of whom we saw a great deal during our residence. We were not sorry, however, to leave the country, for the loss of so much of our transport was occasioning us great anxiety, as we were not able to fully replace our losses by purchasing fresh ones from the natives. In spite of purchasing some thirty-eight donkeys and three mules from the Gallas, by the time we reached the edge of the plateau on our return journey we found our transport reduced in numbers by more than half, as we had only some sixty-eight donkeys capable of carrying loads, one camel, and six mules. We experienced considerable difficulty in removing our loads to the gorge of the Baro valley from the summit of the plateau, and for the next three weeks we had to proceed by double stages to Itang, as we were unable to carry all our gear with our diminished numbers. We purchased food from the Anuaks as we went along, and on our arrival at Itang on April 24 we decided to abandon everything not absolutely essential for the journey south, trusting later to be able to recover the stores left by steamer from Nasser, as the river is easily navigable, when full, up to that point. The headman of the village agreed to store our things until called for, and also provided us with two guides to conduct us south to the river Gelo, where we were to pick up fresh guides.

We spent a few days at Itang, to enable our transport to pick up strength for the journey, as the grazing they had enjoyed for several weeks past had been very scanty; and on April 29, after a complete reorganization of the expedition, we started south. The first day's march, however, we encountered a most formidable swamp some 12 miles from the start. This had been formed by numerous spills from the Aluro river, which had overtopped its banks owing to the recent heavy rains. Several of the spills were waist-deep, which necessitated the unloading of all the animals, and the loads being carried across by men. By 6 p.m. we managed to reach a piece of high ground, a mere mound in this area of swamp, on which it was possible to camp.

Floundering through another half-mile of swamp, next day we reached the Aluro, a rapid stream in heavy flood, some 20 yards in width. The whole morning was spent transporting all loads, etc., to

the south bank; but early in the afternoon we were visited by a heavy downpour of rain, which continued until after dark, so we remained camped in some 6 to 9 inches of liquid mud and water. We pushed on again next day; but only made one more mile in a southerly direction through the swamp to another mound occupied by a colony of fishermen. These came to our assistance, and helped us to carry our loads to this point, as many of the donkeys were quite incapable of travelling



A DINKA AT FASHODA, SHOWING CURIOUS METHOD OF DOING HAIR.

(Photo by Major C. W. Gwynn.)

loaded through the mud, and the camel carrying our Berthon boat was hopelessly at sea. The following day another mile took us through the swamp, and we continued our march to a swampy khor—the Bela by name—some 11 miles distant. On May 3 a long and exhausting march of 14 miles, which occupied the whole day from 6 a.m. to past 6.30 p.m., brought us to the Gelo river and the village of Patok. Progress on the march was dismally slow, as our animals frequently became involved in tracts of bog into which they sank almost up to

No. V.—MAY, 1901.]

2 M

their knees, and gracefully collapsed. Each donkey had to be individually unloaded, forcibly hauled out of the bog, and carried to drier ground before it could be reloaded and started off again.

On reaching the Gelo I had hoped to be able to proceed in the direction of Lake Tata, and there cross it; but we found it was quite out of the question to travel with transport animals, as the Gelo, like the Aluro, had overtopped its banks, and converted such a large expanse of country into swamp, that the river was unapproachable. Heavy rains were daily falling also, and the outlook was gloomy in the extreme, as some 25 per cent. of our men were down with fever after our experiences in the Aluro swamp, and a large percentage of the donkeys were also suffering from the same cause, and in a short time ten died, and six or eight became incapable of carrying loads. It soon became patent to us all that, unless we made every endeavour to get out of this country without delay, we should become hopelessly involved in bog and swamp, through which we should never be able to get our transport animals. With much reluctance, therefore, we were compelled to abandon all idea of reaching Lake Rudolf, and decided to make for Nasser Post as speedily as possible.

On May 5 we started off again in a westerly direction down the Gelo, and for the next few days travelled by an inland track some distance from the river, which was fringed with a broad belt of swamp, and passed several large villages of the Anuaks concealed in thick belts of wood and stockaded. On May 8 we were able to camp once more on the river-bank, at a point where it was some 80 to 100 yards in width. For the next three or four days we followed the river-bank until we were blocked by a large expanse of swamp, where a swampy stream reported to flow out of the Mokwai, known as the Nimeri, closely approaches the Gelo, and is then said to flow north-west again into the Mokwai—another loop. Swamp was everywhere before us, north, south, and west, so we retraced our footsteps some 3 miles up the Gelo, and effected a crossing to the south bank, where it was little more than 30 yards wide, though very deep and flowing like a torrent. A branch goes off from the Gelo close to the point of crossing, and, after flowing west for a bit, runs up north (by report), and re-enters the Gelo at the junction of that river with the Pibor close to the village of Bil—again a loop. This river, the Gelo, is undoubtedly the one that the late Captain Wellby, in his splendid exploratory expedition from Adis Abeba to Nasser, describes as having been met with and crossed at lat. N. $7^{\circ} 50'$, where it appeared to flow from the south-east, was “over 30 yards broad, 8 to 10 feet deep, flowing about 3 miles an hour, and infested with alligators.” Being in flood and nearly bank-full when we crossed it, the river was 13 feet deep, and flowing 4 to 5 miles an hour. During our journey along the Gelo, therefore, we must have crossed Captain Wellby’s route. From May 8 to 12, as already

mentioned, we followed the north bank of the Gelo closely, and during that period no river from the south flowed into the Gelo. I was constantly on the look out for it, and inquired from my guides if they were sure one did not do so, as I was anxious to identify Captain Wellby's Ruzi. They told me of the existence of another river, the Akobo, further south, which I am inclined to think must be the same Akobo followed by Böttego as far north as Tedo, and is probably identical with Wellby's Ruzi.

After we had crossed the Gelo, therefore, we struck across an open plain in a south-westerly direction for some 15 miles, until we reached



OLD EGYPTIAN LINES AND NEW FRENCH FORT AT FASHODA.

(Photo by Major C. W. Gwynn.)

the Akobo at lat. N. $7^{\circ} 46' 32''$. This river was fortunately not in flood: it was only some 20 yards broad and 3 to 4 feet deep, and flowing very sluggishly through a canal-like cutting, so we had no difficulty in crossing it. For the next two days we followed the river by a most extraordinary winding course, and yet flowing due west, until we reached its junction with the Pibor at lat. N. $7^{\circ} 47' 41''\cdot 4$. It would appear, therefore, that the Akobo or Ruzi and the Gelo rivers never meet, but flow by independent courses into the Pibor. The Pibor, at the point we struck it, was some 70 or 80 yards wide and 11 feet deep, with practically no current, as it was not yet in flood. We crossed to the west bank by means of the Berthon boat, and the

2 M 2

following day were confronted with the Khor Geni, which I have already referred to as being probably the same as that entering the Sobat river some miles below Nasser Post. As it was 30 yards broad and 10 feet deep where it flowed out of the Pibor, we had to again use the Berthon boat to reach a deserted village on the opposite bank. For the next day or two we continued along the Pibor, passing several deserted villages which are merely used as fishing villages during the dry seasons of the year by the Nuers, until we reached a thickly populated district where Sheikh Yowe and some 7000 Nuers are settled in a group of villages known as Wunadeng, Uentau, and Koratong. Here we obtained food and fresh guides to conduct us to Nasser Post, and on May 22 camped opposite the junction of the Gelo with the Pibor at lat. N. $8^{\circ} 8' 45''$. Three rivers meet at this point, the third probably being the branch from the Gelo which flowed out of that river close to where we crossed it prior to marching south to the Akobo. The natives told me it was deep, and canoes were required at Bil village to cross it. I was, unfortunately, unable to fix accurately the junction of the Mokwai with the Pibor further north, as we were compelled to leave the bank of the Pibor some distance above, owing to a large expanse of swamp extending from just north of Kur village to the Sobat-Pibor junction. About this time we were treated to very heavy rain, which converted the whole country into bog, and travelling with donkeys was a most laboured undertaking. We struck the Sobat again some 3 or 4 miles below its junction with the Pibor on May 26, and the following day pushed straight through to Nasser Post by the track we had previously traversed early in January. During the five months since we had left the Dom palm camp on December 28, our losses in transport animals had been very heavy, as 108 donkeys had died, and all the camels, and nine out of the ten original mules had also succumbed. The stores abandoned at Itang were subsequently recovered by steamer towards the end of June, and Omdurman reached on July 7. A few days spent here were sufficient to enable us to complete all handing over of stores, etc., to Colonel Talbot, R.E., before leaving for Cairo and England.

NOTES OF A JOURNEY ON THE TANA RIVER, JULY TO SEPTEMBER, 1899.

By Captain H. de PRÉE, R.H.A.

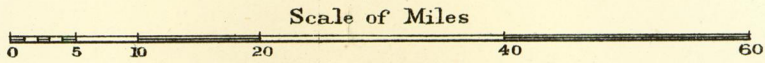
A FEW notes about a shooting expedition made on the Tana river, East African Protectorate, by Lieut. Hankey, Royal Horse Artillery, and myself, may be of some little interest now that attention has been drawn to that part of the world by the rising of the Ogaden Somalis.



THE SOBAT RIVER AND PART OF THE BLUE NILE

FROM THE SURVEYS OF

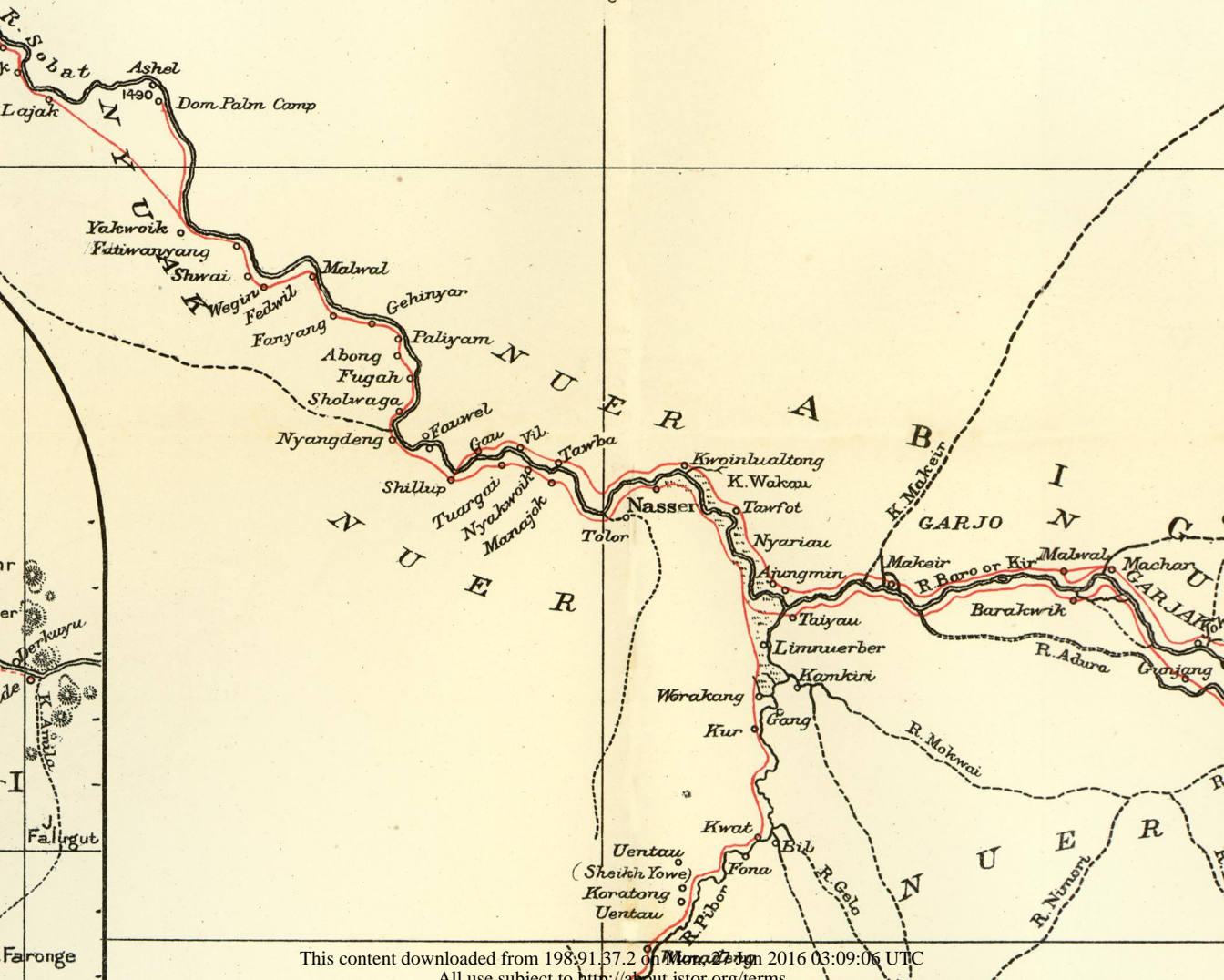
MAJOR H. H. AUSTIN D. S.O., R.E. AND
MAJOR C. W. GWYNN D. S.O., R.E. 1900.



Nat. scale 1:1,000,000 or 15.78 miles = 1 inch.

Major Austins route ——— Major Gwynn's route - - - - -

Heights in feet.



60
inch;

