

THE SCOTTISH GEOGRAPHICAL MAGAZINE.

EXPLORATION OF THE RIVERS TANA AND JUBA.

By Commander F. G. DUNDAS, R.N.

(*Read at Meetings of the Society in Edinburgh and Glasgow, February 1893.*)

THE river Tana, on the East Coast of Africa, the mouth of which is situated 100 miles north of Mombasa, was only partially known when, in March 1891, I was placed in command of an expedition formed by the Imperial East Africa Company to ascend this highway to the interior, and throw it open for commerce.

This expedition, consisting of three Europeans—Mr. Bird Thomson, Mr. Hobley, geologist, and myself—a crew of eighteen natives, and caravan of seventy Zanzibaris, safely crossed the bar at the mouth of the Tana, in the stern-wheel steamer *Kenia*, on April 1st, 1891 (the bar, as is always the case on the East Coast of Africa, is difficult to pass), and started up the river, which for some fifty miles was very narrow, with sharp, tortuous bends, where the vessel was navigated only with the greatest difficulty, on account of her size and the very strong current.

The tribe of the Wapokomo, who inhabit this district, and live upon the banks of the river, are of a quiet and timid nature, hard-working and industrious, growing large quantities of rice and other grain; they are very expert canoemen, almost living upon the water. During the rainy season the river overflows and floods the country over a large area, so that great difficulty was experienced in endeavouring to follow the course of the river, the vessel often being found some considerable distance away from the banks, manœuvring about amongst the trees.

The populous districts of Ndera, Subaki, and Masa were passed, the inhabitants of which fled into the forest at the sight of the *Kenia*, but were eventually induced to return, and, their fears allayed, they eagerly bartered food for cloth and beads. Then an unbroken stretch of dense forest extended for several days' journey on either bank; the foliage was thickly

covered with immense masses of creepers, which rendered it almost impossible to make a way through it from the river, and no sign of life, either of man or animal, was seen for this period. Emerging at length from the forest, we arrived in the district of Korokoro, and two days' voyage further on, the water shoaling rapidly and numbers of sandbanks appearing in the river, the vessel grounded continually. Finding ourselves then unable to proceed any further by water, we made the *Kenia* fast to the left bank near the small village of Hameye, the furthest settlement of the Wapokomo tribe, 350 miles from the mouth.

Two days after our arrival, the water had fallen so rapidly that it would have been impossible to have attained even this distance, had there been any delay. For one month the men were employed erecting a strong *Boma* and earthworks, for protection in case an attack should be made by the natives upon the vessel during my absence.

On August 17th I started with the caravan for Mount Kenia, following the course of the river, which had assumed a totally different character, falling over a rocky bed and at times assuming the force of a cataract. For several days our course lay through dense thorn-woods, over desert ground and grassy plains, at times crossing ranges of rocky hills. The countries of the Wadarobbo and Wadsagga were passed, and, though food was obtained from the latter, the people were treacherous and unfriendly; but no serious difficulty was experienced.

After marching several days in a dense forest, where our food-supply began to fail and no means of replenishing it could be found, we crossed the river by means of a raft from the right to the left bank, and arrived in the Mbe country. Here we left the river and steered direct for the mountain, some eighty miles distant and at times very conspicuous with its two snow-clad peaks. On entering the rich and fertile lands of Kikuyu, I met the inhabitants rushing about in a most excited state, exclaiming that the Masai (one of the most dreaded tribes in Central Africa) had arrived in their country on a raid, and were burning the villages and pillaging and carrying off everything. The route of the raiders was soon clearly discernible by the vast volumes of smoke that rose from the burning villages to the north-west. Continuing my course, which now lay along the crest of a range of hills, I suddenly perceived, about a mile off, in the valley below, a large force of Masai, comprising upwards of 700 warriors, armed with broad spears that glistened in the sun, and wearing the fantastic head-dress of skin which they don when on the war-path. They were marching in a serpentine formation in the direction from which I had just come. As my caravan numbered but two Europeans and sixty men, fifty of whom were porters and useless for fighting, as they would have bolted at once, I did not assume the offensive, knowing that in all probability, if attacked by the Masai, the caravan would have been annihilated. Accordingly, when the Masai by halting plainly showed that they had seen us, I spread out my men in skirmishing order, hoping to deceive them as to our numbers. These tactics apparently answered, as, after a short delay, they continued their march.

Proceeding onwards, I at length arrived at the foot of Kenia, which now, topped by snowy peaks, reared its majestic height in front of us, bearing due

north and presenting the appearance rather of a range of mountains than of a simple elevation. The valleys and open country all around were highly productive, and the richest which I had seen in Africa. Large fields of grain, with plantations of bananas and plantains, alternated with rich grassy fields and slopes divided by water-courses and rivulets that rushed from the mountain with the violence of torrents. Numbers of vegetables were to be obtained here from the natives—principally a large root called *Mbogo*, and very like a yam; and large flocks of sheep and goats were seen. Leaving the bulk of my caravan at the foot, I commenced the ascent of Kenia from the southern side, passing through dense forest, crossing deep ravines, and at length emerging from thick cane-woods at a height of 10,000 feet, near to the snow-line, where further progress was arrested by enormous ravines that descended almost sheer to a depth of about 800 feet. I observed the maiden-hair fern, forget-me-nots, and clover growing in profusion on the slopes, fostered by the moisture of the atmosphere, for the mountain is enveloped for days together in dense masses of cloud, which entirely screen it from view.

The ascent from the northern side is practically easy, the unbroken flank of the mountain rising by easy gradients from a plateau 2000 feet high.

On our return through the Mbe country, a most harrowing sight presented itself: what only a few days before were prosperous villages, standing amid fields of grain, were now smoking ruins; bodies of old men, women, and children, half-burnt, lay in all directions; here and there might be seen a few solitary individuals, sitting with their heads buried in their hands, hardly noticing the passing caravan, and apparently in the lowest depths of misery and despair. On questioning several of these unhappy beings, I was informed that the Masai had unexpectedly arrived one morning at dawn, spearing and burning all before them, and carrying off some 250 women and large herds of cattle. Only a few of the unfortunate people had escaped by flying to the mountains. I think one of the principal advantages to be gained by the construction of the Mombasa and Nyanza railway would be the opening up of these districts, which are now simply inaccessible, and hence are the scenes of these cruel outrages. Were it constructed, not only would these raids be stopped, but the country would be thrown open to trade and the sphere of Christianity largely extended.

Returning with the caravan to the vessel, which I found undisturbed, after an absence of nearly three months, I was enabled through the rising of water to start down-stream on November 1st; and although the passage was extremely difficult, through the narrow bends, the numberless snags, and the swiftness of the current, I recrossed the bar at the mouth of the river on Christmas Day, 1891, and succeeded in reaching Lamu, a port 50 miles to the northward.

The principal point ascertained in connection with the river Tana is that during the rainy season, when the river is in flood, it forms a route for small vessels of light draft, passing for a distance of 350 miles through populous and fertile districts, where ivory also is to be obtained, the trade in which now is almost entirely confined to a Swahili trader living at Kau.

After refitting the *Kenia* at Lamu, I set out for the Juba, having undertaken a similar expedition up this river for the Directors of the Imperial East Africa Company. The Juba discharges its waters into the Indian Ocean on the east coast of Africa, in lat. $0^{\circ} 14'$ S. and long. $42^{\circ} 38'$ E. Its lower course is in a southerly direction; the upper part of the river has not been explored.

It probably rises in the mountainous region of Abyssinia. Being the actual boundary between the British and Italian spheres of influence in East Africa, it is of considerable interest; as also in connection with the ill-fated expedition of Baron von der Decken, who in August 1865 ascended the river in his steamer, the *Guelph* (having lost one steamer on the bar at entrance), to the rapids above Bardera, where the vessel was wrecked, and the Baron with five Europeans was murdered by the Somalis, two only of his colleagues effecting their escape. No further details have ever transpired in connection with the fate of this expedition, for I am the only European who has been to Bardera since the catastrophe. The narrative of Von der Decken's expedition is well known; and I hope that during my recent voyage I have materially added to the present knowledge of the Juba as a highway to the populous districts of the Goosha territory and the rich tracts of the Boran country. Colonel Chaillé Long is reported to have made the ascent of the river for some 100 miles on behalf of the Egyptian Government; but, although Von der Decken's expedition was remembered and spoken of by the natives on the river, nothing was known of the visit of any other European.

Whereas the course of the Tana is almost entirely confined to the countries of the Wapokomo and Wakamba tribes, who are quiet and peaceful, the river Juba flows through the territories of the powerful and hitherto dreaded Somalis. The stern-wheel steamer *Kenia*, belonging to the Imperial East Africa Company, in which I made the ascent of both rivers, is 86 feet in length, with 23 feet beam, draws 2 feet 6 inches when laden, and has six compartments, with an upper deck, and deck-houses fitted with wire-gauze mosquito-frames, and an awning-deck above. The armament consisted of two new-pattern Maxim-Nordenfeldt guns.

We arrived off the bar from Lamu in tow of ss. *Juba* on 25th April 1892. This was the second attempt to reach the mouth, as the weather, through the unusual strength of the north-east monsoon, was very bad, and the vessel nearly foundered on the first occasion. We now succeeded in crossing the bar, which, owing to the necessity of exposing a vessel broadside on to the heavy rollers, is most difficult and dangerous. There is a depth of only one fathom at high-water, which varies but slightly with spring and neap tides. The numerous sharks and crocodiles about showed the fate we might expect should the vessel strike. Turning into the river from a north-east to south-west course in calm weather, we found a broad, majestic stream about 250 yards wide, with a current running $2\frac{1}{2}$ knots, though at the narrow entrance it was much accelerated. The right bank was all low, with sandhills and a few bushes, while the left was wooded, and in the rear rose high red-sandstone hills, studded

with thorn bushes. On the bank were piled up trees and snags brought down by the current, and lying in masses extending some little distance from the river. Passing up in the *Kenia*, I arrived at Gobwen, a small village $2\frac{1}{2}$ miles from the mouth, having two very ancient Arab forts almost in ruins, one on either side of the river. On the left bank parts of the old wall which encircled the village and fort still remain. The only inhabitants now are the Kirobotos, natives of Muscat, some of the Sultan of Zanzibar's soldiers, who occupy the forts. Kismayu, the port for the river Juba, with a good protected anchorage, is ten miles south from the village of Gobwen, and is accessible at all times for vessels. A tramway could easily be constructed to connect these two places, the route for the most part traversing flat sandy soil, with a slight gradient at the river end, and thus products coming down the river might be transported to Kismayu for shipment.

The *personnel* of this, my second expedition, consisted of twelve Zanzibaris (the crew), one native Goanese engineer, one Hindu, one Chinaman (carpenter), twelve *Askari* (native undrilled soldiers), and fifteen native porters for cutting and carrying fuel.

I arranged to make a start up the river on May 2nd, but before that date received intelligence, from the Arab *akida* of the fort, that the Somalis were massing all round, and that evidently something was about to happen. I had noticed for several days that the hills in the distance were covered with black moving masses of natives. On the morning of the 2nd, having ordered steam at eight o'clock, I saw that both banks and the neighbouring hills were one black mass of Somalis, somewhat relieved by their white cloths; they were all armed with spears and the short stabbing knife which every Somali carries. Large bodies were to be seen moving through the bush and thorn-trees, chanting a kind of dirge, which, I understood afterwards, was their war-song. Presently my Arab *serang* rushed up to me on to the awning-deck, saying that all the crew had deserted. Then I noticed that two canoes filled with my men were arriving at the bank. When they had landed, the men knelt or grovelled on the ground before the Somalis, kissing their feet in abject terror. Of my caravan followers, encamped on the bank, all had bolted except the headman. Seeing several chiefs seated together under a thorn-tree, I landed in a canoe, and, going up to them, wished to know what was the cause of all this trouble, and why all these tribes had assembled. They informed me that I must take the ship out of the river, as no leave had been given for a vessel to come in. If I advanced with the vessel, they said, there would be war, and they would kill me. I learnt afterwards that 400 Somalis, concealed in thick bush, were stationed at the bend of the river, where the water was shallow, expecting the vessel to ground, when they would have attacked her.

Eventually, after a long palaver, I agreed to remain fourteen days, and they, on their part, promised to forward a letter from me to Murgan Usuf, the Sultan of the Ogaden Somalis, who was the head chief, and lived at Uffmadu, six days' journey from the coast. On the fourteenth day I received a reply from Murgan, saying that he was coming down to see me with a large following of 6000 men, and that I must feed them. I

replied that I should be glad to see him, but that, as I had no food, he had better leave his retinue behind him. I then went down to Mombasa to see Mr. Ernest Berkeley, the Administrator of the Imperial East Africa Company, who returned with me; and aided by his admirable administrative capabilities and untiring zeal and tact, I succeeded in concluding a peace with Murgan Usuf, who granted permission for the vessel to proceed. That gentleman, looking round the *Kenia*, espied my sword hanging in the cabin, and said he would have that as my present to him; he then quietly appropriated it, along with an arm-chair which he had taken a fancy to. He is a tall, powerful, handsome man, exceedingly sharp, and with a remarkable memory.

On July 23rd, having laid in a large supply of wood for fuel from the trees piled up at the mouth of the river, we started at 8 A.M. on the voyage up the river. For the first eight miles stretched large undulating plains, interspersed with woods and numbers of *Mkono* (Fan palms) growing on the bank close to the water. The depth of the water varied from $2\frac{1}{2}$ to $3\frac{1}{2}$ fathoms. At noon I arrived at the first large Somali villages of Hadjowen and Hadjualla, situated nearly opposite each other, with populations of about 900 each. As we came alongside the right bank at Hadjowen, the natives crowded down to look at the vessel. The Somalis, as is well known, are a very fine, handsome race, of good physique, with well-formed features; the hair is very thick, and sticks out like a bush, but is parted in front.

The younger girls and women are mostly pretty, with splendid black eyes; they are jealously guarded by the males, and a *Mzungu*, or European, is hardly permitted to look at them. The Somalis are very strict Mohammedans. I noticed numbers of Galla slave-girls about, the different features and lighter colour marking them out from the Somalis, who are very black.

Leaving these, the only large Somali villages on the river from the mouth to Munsoor, 360 miles, and Bardera, 387 miles, I went on up the river. The country still showed large grassy plains, with occasional wood. Later in the afternoon, seeing large herds of game feeding, I made fast to the bank, and, going ashore, was fortunate enough to secure two *Topé*—a very large species of reddish antelope with sloping horns. The flesh was excellent, and provided us all with fresh meat for two days.

The next day, Sunday, we pushed on up the river, generally running through wooded reaches and jungle. Several times it occurred to me that there must be another river in the neighbourhood, the bends were so sharp and numerous. Seeing, as I thought, another river about a quarter of a mile off, running nearly parallel to the Juba, I landed and went over to it, when I discovered that it was the reach I had passed through just three hours before. This will illustrate how the river winds in this part of its course. At night, when the lamp was lit on the upper deck for dinner, the table and the deck overhead near the light were simply masses of insects of every description—large moths, beautifully marked, numberless extraordinary animals with gigantic feelers, earwigs, and gnats. As a rule, there was, I am glad to say, an absence of mosquitos.

Thick wood continued on both sides, with occasional openings, at which we saw numbers of natives of the Waboni tribe, who live chiefly by hunting. They are dressed with a piece of skin round the loins, and are armed with bows and arrows. The trees were full of monkeys of every description, from the smallest to the largest-sized baboons; they seemed to observe the vessel with some curiosity, but not to be in the least scared. Several white-headed eagles and numberless crocodiles were the only game to be seen, for the grass plains at the back were not visible. Numerous large snags in the river showing above the water, combined with a sweeping current, made the navigation somewhat difficult, more especially as I had to take all the angles at the different bends for the survey of the river, and occasionally anchor to ascertain the strength of the current with the patent log. Not one of the natives shipped as crew ever having been afloat before, I was obliged to be on the alert every moment when under weigh, and was never able to leave the steering-wheel.

As we ascended, the bends in the river took a wider sweep; and I observed clumps of the castor-oil plant, almost choked with an abnormal growth of creepers and undergrowth.

At 10 A.M. on the 25th we entered the Goosha district, the *Shambas*, or cultivated lands, commencing on the left bank. The population of Goosha some thirty or forty years back was solely composed of runaway slaves; but the inhabitants have increased to an enormous extent. Where formerly there were only a few villages, now there are numerous towns, extending almost continuously over an area of 100 square miles, with populations varying from 600 to 1000.

The people live entirely on the proceeds of cultivation. The clearings in the forest are first made by firing all the bush and lighting a fire at the foot of the trunk of each tree, which is left to smoulder. After a few days it comes down with a crash and a shower of sparks, and lies where it falls; but the land around is tilled and sown, mostly with *Mahindi* (Indian corn), which is the staple food. *Mtama*, *Sem Sem* (a small brown grain which is crushed for oil), cotton, and tobacco are also grown. These dead trees, which are to be found through the whole cultivated district for a distance of 100 miles, constitute a very handy supply of fuel for steaming. They are quite dry and burn admirably, in many instances not even requiring to be cut into lengths. I may add that from the mouth of the river to Bardera I never had to cut a single tree down for firewood.

On arriving at a large island, 28 miles in circumference, formed by the river forking, I was very perplexed as to which course to follow, and which was the river proper. At length I chose the north-east fork, which afterwards proved to be the right one, and arrived shortly after at the village of Mataku. I was here told that the other arm or fork joined the main stream again some distance further on, but that it was narrow and full of snags, with tortuous bends. However, on my passage down I navigated the other fork safely, thus accomplishing the circumnavigation of the island and obtaining information as to both channels. The arm of the river which I had taken was also most difficult to navigate.

In many parts it was only 15 to 20 yards wide, with dense overhanging trees and projecting branches; so that for several hours we were constantly colliding with the trees, the swift current sweeping the vessel in amongst them, and consequently the funnel and awning-deck ran great risk of being swept away. I may here add that whenever it was necessary to turn the vessel—which, be it remembered, was 86 feet in length with 23 feet beam—the bow or stern had to be thrust into the jungle, while the other end was left in the river exposed to the action of the current. It was an everyday occurrence for the vessel almost to disappear into dense masses of vegetation and creepers, which grow very thickly, and, hanging from the lower branches, make an almost impervious barrier.

After four hours' steaming we again joined the other fork, and the river then opened out to a breadth of 120 yards. The first large village on the right bank, Tula, was passed. The natives came out *en masse* to see the vessel go by, the women, as they ran along the banks, uttering low peculiar cries, commencing on a very low note and running up to the highest each lady was capable of producing. Several more elderly females, having three and four small infants tied up in the mother's cloth and secured round their bodies, careered along the banks, every now and then appearing at the openings in the high grass. How the young urchins escaped coming to grief, I cannot conceive.

We arrived at Fulye, the village where the Sultan of the Goosha district, Nasibu Mponda, as he is called, resides. He is a tall, fine, powerful man, more resembling in his colour (which is a light brown) a Galla than a Swahili or Somali. On my arrival he at once came on board to visit me, expressing his delight at seeing the steamer. He begged me not to go to Bardera, as, he said, the up-country Somalis were very bad, and would assuredly kill me. He added that he and all his people throughout the whole Goosha district were friends of the European. The Swahili language is spoken as well as Somali.

From this village to Bilo there are numerous very large villages—in fact, small towns—densely populated, and all the banks are more or less cultivated, the cultivation extending in many instances to a distance of several miles on either side. Very little wood is now seen, the country being a flat plain, and excellently adapted for cultivation. Large groves of bananas and plantains were now of frequent occurrence, and as the *Kenia* moved along, hundreds of natives were to be seen at work in the *Shambas*. They nearly all dropped the *Jembe*, a small flat iron hoe with handle, with which they till the ground, and hastened to the banks to see the steamer—a wonderful phenomenon in their eyes. The villages which I passed on the way up (wishing to get on as fast as possible for fear of the water falling) I called at on the way down, and made friends with all.

At the village of Gelib I saw cotton growing, which was picked by girls, and twisted on to improvised reels. A man was spinning with a wooden loom and shuttle, very primitive but ingenious in design, of native make. The man sat in a hole, working a double treadle, and wove cloths of excellent texture, which were worn by the natives. On inquiry I learnt that no one from the village had ever been to the coast or seen a white man.

After leaving Bilo, which is just 100 miles from the mouth, we found dense, impenetrable forest on either side. Presently we arrived at a point where the Juba, in its downward course, forks and sends off a branch on the right bank to the south-west. I believe this may be the origin of the Sheri, which, as is well known, flows southward and empties itself into the ocean at Port Durnford, 80 miles down the coast, midway between Kismayu and Lamu. Mooring the *Kenia* alongside the bank, I explored this branch in a small boat for 20 miles downwards. It was from 3 to $3\frac{1}{2}$ fathoms deep, with a current of $3\frac{1}{2}$ knots, and was enclosed by dense forest on either side. The stream was so narrow that the branches of trees in some places projected almost across; it was, in consequence, quite unnavigable for the *Kenia*.

From the depth of the water and the large volume coming from the main river, I concluded that it flows for some distance, and this opinion was confirmed by the natives, for they said it went to the "big water" (the ocean). I shot two very large crocodiles, 14 and 16 feet in length respectively; one must have been very old, to judge from the depth of scale.

In a small Waboni village I stopped at, the people lived almost entirely by fishing. Fish were plentiful in the river: they were of several kinds. One was as large as a salmon, but with an enormous head and teeth. Numbers of large turtles, from 30 to 40 lbs. in weight, were also caught in the Juba with a strong hook and line. On several occasions I had turtle-soup and wild duck for dinner when in the river.

On leaving the Sheri, the *Kenia* proceeded between wooded banks to the village of Mfudo. This is one of the last stations of runaway slaves. The work of clearing the forest was still in progress, and *Shambas* had not yet been laid out. The forest extends for about one mile further, and is then succeeded by thick thorn-bush for another three-quarters of a mile, after which you emerge on to vast undulating grass plains, so common in African scenery. I had some excellent shooting at Mfudo, the headman, Shongolo, being a capital hunter. I landed several times on the opposite bank, and followed a small game track through the forest until I came out on to the plain.

I saw several herds of magnificent ostriches, but, as there was no cover, I never could get within 500 yards of them, even after crawling for hours in the hot sun, for their scent or sight was so keen; suddenly they would look round and dart away, and not stop for several miles. Vast herds of buck, *Topè*, *Kuguni*, *Wildebeest*, and smaller kinds of antelope roamed over the plain, and furnished several large bags; one rhinoceros was shot.

On July 29 we came to the last settlement of the Goosha district, called Shionde. The inhabitants were only about 30 in all, and they had lately arrived from one of the larger villages to establish a settlement and clear the forest for cultivation.

Again we entered dense primeval forest. The scenery was beautiful. Between thick green masses of foliage, standing out against the blue sky, ran the brown, muddy river, amidst silence unbroken except by the stroke of the stern-wheel or the occasional splash of a crocodile disappearing off the bank into the water on the approach of the vessel.

The most common kinds of trees are acacias, African oak, tamarinds, and several varieties of green thorn-trees, etc. I was struck by the large masses of purple convolvulus which, intermixed with the thick network of creepers which covers most of the trees, helped to form a serried mass of foliage. Through a small creek running off from the left bank I made my way by canoe into a large lake having no other outlet. Large flocks of pelicans, herons, storks, and other waterfowl thronged the banks, never moving on the approach of the canoe; probably no other human being had even been into this lake before.

In the black alluvium of the river I saw several sparkling grains of metal like gold-dust. I washed some samples, and, the grains of metal still appearing, I put some in a bottle for transmission to Mombasa, but have not yet heard what it is. It is very likely to be talc, which shines like gold, and is found in many places in Africa.

For several days the dense forest continued without intermission. Numbers of hippo were about, and I secured several.

Thick fogs in the mornings hung over the river until eight o'clock, when the heat of the sun dispelled them. The average heat was 90° in the shade during the day, and 83° at night. The monsoon at times blew very strongly, making the nights much colder, but the temperature during the day never varied. The average depth of the river thus far up was from 1½ to 3 fathoms.

On August 2nd, after five days' steaming through forest land without seeing any sign of human life, we suddenly emerged into the open, and arrived at the village of Kabobe. It is inhabited by a very mixed race, consisting of Somalis, Gallas, Swahilis, Kabyles, and Waboni. The chief, Taiu, after a little time became very friendly, and the vessel created the greatest excitement, hundreds of natives of both sexes standing or sitting on the bank alongside day and night, gazing at it with the greatest astonishment.

There were numerous *Shambas*, and the people here lived partly on the produce of the land and partly by hunting. Sweet potatoes, bananas, *Mahogo*, *Koondi*, and *Cherokee* (a small green bean) were obtainable in abundance, empty glass bottles being eagerly accepted in exchange. I had two days' shooting on the left bank, and obtained several water-buck.

In one night the river rose 18 inches. From all the information I collected on this point at several different places, it would appear that during the months of August and September the water rises suddenly, and in a week or ten days falls again with the same rapidity, this change of level occurring several times during these months. Twice this sudden rise and fall came under my own observation. The natives told me it was caused by the rains far up the country bringing freshets down; but comparatively no rain fell over the expanse of country through which I passed. The chief here told me that the river is in flood during part of July, August, September, and October; it falls rapidly in November, when it is possible to walk across its bed. In December and January the water is very low; in February it rises, and is partially in flood during March and April, after which it falls again until July.

On August 4th we left Kabobe, passing Saku, a large village on the

right bank close to Kabobe. The features of the river altered somewhat, the reaches being wide and shallow, with a depth of from $\frac{1}{2}$ to 2 fathoms. Here the vessel grounded on sand-flats, but came off again.

Passing beneath a high bluff of slaty rock that rose precipitously from the water to a height of 30 feet, we soon after emerged from the woods into the open plain, studded with *Mkono* palms and mimosa. High, flat ranges of hills rose on the north-east. From Anoleh, in latitude 2° N., the banks entirely changed in character, becoming hard and stony, with slate intermixed. A plateau 200 feet in height extended on either side for some distance, with a peculiar sugar-loaf peak close to the right bank. The water was now very shallow, and the vessel grounded repeatedly. There were great numbers of hippopotami about, as many as fifteen or eighteen standing close together on a bank in the centre of the river. Just before arriving at the large Somali village, Munsoor, we passed three high, rocky bluffs, rising to 150 feet sheer from the river.

Here I was informed that the Sheik of Bardera had sent down to say that the European was to go back, and not attempt to go up to Bardera, or he would be killed. He added that the only European who, many years ago, had come to Bardera had been killed, and that the same fate would befall me. I replied that I was going to Bardera, and wished to make friends with the Sheik. (The up-country Somalis have nothing to do with the coast tribes and Ogaden.)

Turning a bend, we came in sight of Bardera on the evening of August 10th. The town is situated on a hill adjoining the river, on the left bank. The whole of the bank was lined with Somalis waving their spears, and evidently, from their excited state, some trouble was brewing. The crew in terror begged me to turn back. I made the vessel fast to the right bank opposite Bardera, the river here being sixty yards wide. I sent an interpreter, a Somali of the coast, to speak with the Sheik, but the men rushed down to the landing-place, brandishing their spears and threatening to kill him if he landed; so I hailed to him to return.

After I had established the porters in a camp alongside the vessel on the right bank, I received news through some of the Barra Somalis that the sheik was sending a large force across some little distance up to attack the vessel that night. I thereupon withdrew the men on board, leaving the tents pitched and the fires burning, and quietly pushed the vessel from the bank into mid-stream.

At 11 P.M. I saw large bodies of natives on the right bank, moving about between the trees. Suddenly they dashed into the river, swimming off on both sides. Unfortunately, or let us say fortunately, my Maxim guns were useless and could not be fired, owing entirely to circumstances beyond my control, and my crew were too frightened to use their rifles. When the Somalis were just clambering on board, I fired a sound signal which I had with me, hoping that it might from its novelty intimidate the savage nature.

These signals are fired from a socket fixed upright in a tube, and, having used them a great deal on the coast in England, the thought occurred to me, in Mombasa, how well they might answer as a last

resource with natives when used for the first time. I therefore carried several with me in my former expedition through the Masai territory, but never had occasion to use one. On the present occasion the signal proved most effective. When it burst in mid-air with a loud explosion, lighting up with a shower of red stars the water, which was black with heads, I had the satisfaction of seeing the natives all turn and make for the banks in terror. No further attack took place.

The next morning, knowing that some move was imperatively necessary, I landed suddenly amongst the Somalis at Bardera unarmed, with my interpreter, and pushed through the threatening crowd of natives to the Sheik, expecting half-a-dozen cold spears through my back every moment, as they pressed round with their spears raised.

I think the sheik was too astonished for words. I said *Aman* (peace), and told my interpreter to tell him that I meant to do him no harm, but wished to be friends. The chief at last asked me how I dared to come unarmed among them; that I was completely in his power, and that he could easily make an end of me. I said he might do so if he liked—that I cared nothing for him; but I knew I had done him no injury, and why should we not be friends after I had shown him the previous night what I could do, but without hurting any of his people? Had the Company wished to take his country I would have come with a large force, instead of quite alone. Was it to be *Aman* or not? After a few moments, apparently taken aback at what seemed my hardihood, he said there should be *Aman*—at least until he had consulted the chiefs. He bade me go on board and await the result.

As you may guess, I waited somewhat anxiously; but at the end of five hours the Sheik sent a present on board as a token that we were friends. He said that he did not like white men in general, but that he rather liked me personally. After some days we became great friends. I told him I wanted to go further up the river, to which he at first objected; but on my offering to take as many of his people on board as we could hold, or to leave some of my own, he eventually consented, and sent the second sheik, with two other chiefs, to accompany the *Kenia* up to the rapids, situated 25 miles above.

Bardera is an old town with remains of a wall running round it; the population is about 1200. The huts are large and clean, the interior being hung with skins and divided into two rooms. There is little or no cultivation around Bardera, and the people live principally on cattle and sheep, vast herds of which feed on the banks. The great caravan route from the Baran country crosses the river at Bardera; by this are brought ivory and hides, which find their way to Brava and the northern ports.

Logh, another large Somali town, is five days' journey from Bardera. The road passes into the Barra, and does not follow the river on account of the very hilly character of the district and its dense thorn-woods. The only other route into the Boran country crosses the river at Logh. The Ganane district is several days' march above Logh.

With the second sheik and two other chiefs on board, I left for the rapids, the water in the river falling rapidly, and passed the village of

Murdah, beyond which the river ran through a range of steep, rocky hills 300 to 400 feet high.

Arrived at the rapids, where the bed of the river was a mass of rocks, I made the *Kenia* fast on the right bank near a small sand-beach. Baron von der Decken's ill-fated vessel, the *Guelph*, which was wrecked here twenty-seven years before, almost to the day, was lying close-to on her starboard side, the funnel still standing upright, and two trees growing up alongside. I visited the *Guelph* several times, and found one side all gone and two rocks protruding through the bottom, which was silted up with sand and mud. The shell of the port side, with the beams and davits, remained, and the cylinders and boiler were still in position. A larger and smaller island in the centre of the river divide it into three channels. The one off the right bank takes a very sharp turn, and is a mass of rocks; the centre channel is dry; and the third, off the left bank, is the only possible one. But I consider it utterly impracticable for navigation, as the depth varies from six inches to three feet. The current sweeps among the numerous rocks at the rate of six knots. I attempted to haul a small boat through, but had to give it up, for she was nearly dashed in pieces. One of the Somali chiefs, a very intelligent man, told me that four hours' march above the rapids the river falls over a ledge of rock; therefore, if a vessel could be got beyond the rapids, through a great rise in the river, she would be stopped by these falls. I wished to have gone by land to see the falls; but the chief informed me that there was no road, and that it would take some time to cut through the thick thorn-bush on the banks. The latitude of the rapids is $2^{\circ} 34' 45''$ N. The distance from the sea by the river is 407 miles to the rapids, and 387 miles to Bardera. In the whole of this distance the Juba receives no affluent.

Leaving the rapids on August 16th to return to Bardera, we several times grounded heavily on the shallow sand-flats, the river having fallen several inches, and parts in the centre where the vessel had passed on the way up being now dry. We took three days to get to Bardera, having several times to clear everything out of the vessel to get her off. Remaining only one day at the town for fear of being stopped by want of water, and leaving the Sheik and his people on the most friendly terms, I started to make the descent of the river. Day after day the *Kenia* ran ashore on sandbanks, and the work of clearing all the stores out of her and transporting them to the bank through the strong current in one small boat was very heavy and hazardous. However, I succeeded in getting her off, and, after running numerous risks from the strong current and very sharp bends at different points in the river, at length arrived, on September 20th, at Gobwen, near the mouth of the river, after two months' absence. Here I was told that news had been received on the coast a month previously that the *Kenia* was broken up and the European in command killed, the crew being made slaves by the Somalis. The fact that part of the light casing of the *Kenia* had been broken off in a collision with some trees, and had actually floated down the river 250 miles, when it was picked up and forwarded to the Company's superintendent at Kismayu, naturally caused some credence to be attached to the story prevalent on the coast.

The Somalis are a fine race, extremely proud, and would not on any account show the slightest astonishment at anything; no expression of wonder ever passed across their faces even when I showed them the engines, the Maxim guns, and a revolver. Their dress is a white cloth, 7 yards in length and $2\frac{1}{2}$ in width, of broad *Amerikani*, or drill, which is wound round the body, the end being thrown over the shoulder. The women of Bardera, in addition to the white cloth, have a *kanaki* cloth of dark blue or black over the head, and wear white leggings from the knee to the foot over sandals, which does not add to their personal appearance. The men are all armed with the long spear, small round rhino shield, and short stabbing-knife. Nearly the whole of the Somalis I met with are strict Mohammedans, and are most particular, especially in Bardera, in praying at sunrise and sunset. My position, on account of their strict Mohammedanism, was a somewhat perilous one, as I was looked upon as an infidel; and the Sheik said that for this reason it would be unsafe for me to go about, as it would take some time before his people could become habituated to seeing a European among them.

The grasping nature of the Somalis is very observable; no matter what was given in the shape of a present, they invariably wanted more. The second sheik and the two other chiefs whom I had on board for several days were most observant, and very anxious to know about everything, asking numberless questions. They eat a great deal of meat, but the favourite dish throughout Somali-land is coffee-beans stewed in *ghee*, a kind of rancid fat.

The climate is excellent; not a single case of fever occurred during my stay in the river. This I attribute to the dry heat, and to the fact that the river does not overflow its banks, and, like the Tana, create vast malarial swamps. In that river the clouds of mosquitos at night made life unbearable, but in the Juba it was an exception to find many of these insects, and most of the time a curtain could be dispensed with. One peculiar feature in both the rivers is that, almost at the same point, viz., 350 miles from the mouth in the former and 400 miles in the latter, a chain of hills, with rocks and rapids, commences, which would imply that in East Africa a rocky stratum, running north-east and south-west, crosses both rivers.

The country on the Juba is admirably adapted for cultivation and European enterprise, especially in the Goosha district, the ground being very fertile, and the people glad and willing to receive Europeans and trade with them.

I hope that, as the river has now been ascended without bloodshed, the way will be open for further communication, and that peaceful trade—the great object of a chartered company—may soon follow, and eventually in some measure recompense the world at large for the philanthropic efforts of the Directors of the Imperial East Africa Company.
