

Hadendoas, and Abyssinians. It consists of 200 men, all of whom are mounted on either camels or mules. This battalion rendered good service during the late campaign, and, in peace time at any rate, are by far the most suitable troops for this part of the country. They are natural scouts and exceedingly mobile. A considerable number of irregulars could be raised here at any time.

Sheikh El Morghani.

Said Ali El Morghani, the youthful head of the Morghani sect whose home is the Khatmia under the north-west end of J. Kassala, has now taken up his abode at Omdurman, where, however, he is by no means so generally revered as in the Eastern Sudan. Said Ahmed, an elder brother, who was a prisoner during the Mahdia, now acts as his representative at Kassala. Said Ali's ancestors were Ashraf at Mecca, and settled at Kassala at the beginning of the last century.

Population.

The population of Kassala town in 1900 was 12,000; and the whole of the Nomad Arabs in the district were then estimated to number 6,000. In 1904, the total population of the town and the Nomads was computed to be 46,000. The townspeople are chiefly Halenga Arabs, who are excellent cultivators, also a mixture of Beni Amer, Shukria, Takruris, etc.

Water supply.

The water supply, which is from wells varying from 15 to 30 feet deep, is good and plentiful.

Cultivation.

The principal cultivation is the dura crop, raised on the land flooded* by the Gash. This dura is a large white species called "Taulib," and is harvested about January; it ranks in quality with the best "Mugad" dura of the Nile. At present the system of irrigation on the Gash is very primitive and wasteful. An improved scheme in accordance with modern ideas is under consideration.† A subsidiary rain crop (Naggad), harvested at the end of October, is also raised, but is not of much account. Crops are very liable to the attacks of extraordinary flights of very voracious small birds and also locusts. A very destructive species of "blight" occasionally devastates the crops. It is known as "El Asal" (*Aphis Sorghi*, vide "Report of Wellcome Research Laboratories—Gordon College—1904"). The rains are often barely sufficient to raise those crops dependent on them. Gardens irrigated by sagias and wells are numerous.

Rains.

The rainfall of an average year is very meagre.‡ During the Kharif, the period from June to October, rain of any kind rarely falls on more than 20 to 30 days. On perhaps half a dozen of these there may be very heavy thunderstorms. Rain, which almost invariably comes from the east, generally falls between 6 and 8 p.m., and is preceded by a wind of hurricane force, which usually brings with it a phenomenal wall of dust several thousand feet high and many miles in extent, which often takes an hour or more to blow past, during which time the obscurity and colour of the atmosphere reminds one strangely of the thickest of London fogs.

Climate.

The climate for eight months of the year, though hot in March, April, and May, when the thermometer not infrequently registers over 112° Fahr., is healthy. From July to October there is a good deal of malaria, especially during a favourable rainy season. This has been reduced a good deal recently by draining, and precautions against mosquitoes.

Trade.

The trade at present is not to be compared with that before the Mahdia, but is increasing; what export trade there is, comes from Gedaref. The imports *via* Suakin and Massawa are not of much importance at present; they are sugar and Manchester goods principally. By far the largest proportion of imports now comes *via* Suakin.

Transport animals.

The camel is the best animal for this district, both for riding and transport purposes. A good camel costs from £E.7 to £E.10. They are nearly always available for sale or hire, though in the rains they are not to be found in the immediate vicinity of Kassala.

Horses or mules, which are imported in small numbers from Eritrea or Abyssinia, cannot usually be hired or purchased. Horses are liable to be attacked by a species of horse sickness, which often ends fatally. The Abyssinian and Dongolawi breeds do best. A good riding mule costs from £E.6 to £E.8.

Posts and telegraphs.

There is a weekly camel post for both letters and parcels to and from Berber, also a weekly mail to and from Keren and Massawa, also a fortnightly mail to and from Suakin, and a weekly mail to Gedaref and Gallabat. Telegraph lines connect with Suakin, Gedaref, Gallabat, Massawa, and Addis Ababa. Communication is liable to occasional interruptions during the rains.

Serut fly.

During the "Kharif" the whole country south of the line Kassala—Asubri swarms with a wasp-like "Serut" fly, which bursts into life as soon as the young grass has sprouted and dies as the vegetation dries up at the end of the rains. This fly is most vehement in its attacks on all animals, including game, but camels suffer the most, and if exposed for any length of time to their bites, they rapidly lose condition, and will probably die from the effects.

Game.

In various parts of the districts, described in Section 4, the following varieties are found:—Elephant, rhinoceros, buffalo, giraffe, roan-antelope, kudu, waterbuck, tora hartebeeste, ibex, wild sheep (?), bushbuck (two (?) varieties), reedbuck (scarce); Abyssinian duiker, oribi, dig-dig, and the following gazelles:—Sommering's, Dorcas, Heuglin's,

* In 1903, under 2,000 feddans of cultivation were irrigated by the Gash flood.

† Vide Sir W. Garstin's "Report on the Basin of the Upper Nile." Foreign Office Blue Book, Egypt No. 2, 1904.

‡ 12·4 inches (1904).

Isabella, and possibly *Rufifrons*; also hippopotamus, crocodile, turtle, warthog, pig, wild ass, lion, leopard, hyena (two varieties), cheetah, serval; also various civet and wild cats, hares, wild dogs, baboons, and monkeys; ostrich, bustard, guinea fowl, francolin, sand grouse, geese, snipe, wild fowl, and quail.

Both rhinoceros and buffalo are rare.

(c) THE KHOR GASH.*

For at least 70 miles above Kassala the Gash has a sandy bed, which averages 100 to 300 yards in width, with strips of higher ground, covered with grass, and liable to be flooded in a good year, bordering it at intervals, especially at the bends. Outside these again, on what may be called the real banks, is an almost continuous fringe of dom palms and high grass, varying from 100 to 500 yards, and occasionally nearly a mile, in width. There is no definite track parallel to the khor on either bank, but the going on both banks outside the belt of dom palms is good. If desired, the bed of the Gash may be followed, though rather heavy-going, and corners may be cut off occasionally.

Year after year, in the dry season, water is found in certain well-known localities, usually 2 or 3 miles apart. The depth of the wells, which are revetted with brushwood, varies, according to the season and the flood, from 5 to 20 feet. The cattle and sheep are watered usually every alternate day from large mud basins (*duruk*), two or three of which are constructed near each well. There are nowadays no places between Kassala and Todluk where water stands in pools for any considerable time after the flood has subsided, as it is said to have done formerly at Saneit,† where, however, water is still found very close to the surface.

The Gash flood usually reaches Kassala during the first week in July, and brings down with it numerous fish, which are eagerly caught by the natives. It ceases to flow about the end of September or beginning of October. During the period when it is in flood it is occasionally unfordable for several days together. The Gash, like the Atbara, brings down a large amount of fertilising matter from Abyssinia. The discharge of the Gash in flood is estimated at about 100 metres cube per sec.

There are no permanent inhabitants living on the Gash, but in the dry season, thousands of Beni Amer cattle and sheep, and nearer Todluk, those of the Baria, are brought to it south of Kassala for pasture and water.

Many of the Beni Amer, Baria, and Baza in Italian territory, all of whom are bitter enemies of the Abyssinians, may be met openly carrying Remington rifles.

North of Kassala the people, watering from the Gash, are principally Hadendoas. For description of Gash, north of Kassala, *vide* p. 97.

(d) COUNTRY SOUTH OF KASSALA TO THE SETIT.

South of Kassala a flat and, except for the Gash, waterless plain, bounded on the east and south-east by the Eritrean hills from Sabderat to Sogada, extends to the river Setit. The whole of this plain is more or less covered with kittr and other thorn bush, which becomes particularly dense towards its southern and western extremities. With the exception of the Nomads living during the dry season on the banks of the Gash and Atbara and the few Hamrans on the Setit, the entire country is uninhabited.

Though a good deal of the country south of Abu Gamal is drained by several khors, chief of which are Gersat and Gullui which, having their origin in the Sogada hills, or even further east, join the Atbara at Khashm El Girba, nevertheless, the ground, being cotton soil, becomes at intervals in the rainy season boggy, and practically impassable, and water stands in ponds at several places, notably Umsiteiba and Mellawiya, on the roads from Kassala to Asubri and Fasher. At this season, too, most of the country is covered with tall rank grass, and travelling even along the roads is a thing to be avoided.

There is a perennial spring on Jebel Abu Gamal, 18 miles south of Kassala, from where there used to be a road, now overgrown with bush, *via* this Jebel to Um Hagar on the Setit.‡ A scanty water supply is sometimes obtainable from holes in the rock of Koraitib, 47 miles south of Abu Gamal.

(e) COUNTRY SOUTH OF R. SETIT.

Sudan territory, south of the Setit, bounded on the west by the Atbara, and on the east and south by the Abyssinian Inhabitants' frontier, running from the mouth of the Khor Royan (a tributary of the Setit) to a point opposite the Khor Abnakheir (a tributary of the Atbara), near Gallabat, is uninhabited, save for the one village of Gadabi, about 25 miles north of

* *Vide* Sir W. Garstin's "Report on the Basin of the Upper Nile." Foreign Office Blue Book, Egypt No. 2, 1904.

† *Vide* "Wild Tribes of the Sudan"—James.

‡ A road is now (1904) being cut from Kassala *via* Abu Gamal to Umbrega on the R. Setit.

Gallabat. The people living at this village are Takruris. The village of Nogara, which lies 10 miles S.S.E. from J. Lukdi, belongs to Abyssinia, and is under Dejaz Gasessa (1904). Many of its inhabitants were formerly under Mek Nimr, and are a mixture Jaalin, Takruris, and Sudanese, the majority of whom are said to be robbers and runaway slaves.

The country bordering the Setit to as far south as J. Lukdi belongs to the Hamrans, south of them the country, including the Bahr El Salam, belongs to the Debania, and further south again the country, including Gadabi, belongs to the Takruris, of Gallabat.

Description
of country.

Between the Setit and the Bahr El Salam rivers the country is flat and waterless, and its surface is badly cracked, cotton soil, overgrown with high grass, and generally wooded, but with here and there wide open spaces. South of the Bahr El Salam, though the trees, grass, and soil continue much the same, the Abyssinian foot hills approach nearer to the Atbara and the ground becomes more undulating and intersected by khors, in some of which, though chiefly in the extreme south, water stands throughout the year.

Roads.

As the inhabitants are few, roads are proportionately little used, and consequently bad and overgrown. Off the track, the going is execrable, and grass, bush, and cotton soil make the following of game paths a necessity.

All roads lead to Nogara, the asylum for illegitimate hunters and renegade blacks from the Sudan. They are: (1) Gedaref to Nogara (70 miles, approximate), *via* Sofi, Geif El Hamam (on Setit), and J. Lukdi. About 25 miles without water between the two latter places. At Lukdi, a large well, filled with sand, requires cleaning out; now (1904) only contains rain water for a few months.

(2) Um Hagar (on Setit) to Nogara (38 miles). Water comparatively plentiful up to December, after that only obtainable by digging in bed of Khor Royan and Khor Bowal (17 miles interval). The Italians hope this road will be a trade route from Abyssinia into Eritrea. With this object in view a road has been cut by them from the Khor Gash to Um Hagar.

(3) Abu Gulud to Nogara, *via* Abu Siteib (50 miles). Water at Tabarakalla (17 miles), also Atbara, Abu Siteib, Bahr El Salam.

(4) Nogara to Gallabat (83 miles), *via* Abu Siteib, Khor El Dom, Gadabi, and Um Sai. Water plentiful in December, probably scarce between Abu Siteib and Gadabi (37 miles) later. Very little used and much overgrown.

Natural
products.

Honey and gum are practically the only products of this country. A good deal of game still exists, but it has suffered both from the depredations of cattle plague, as well as from professional game dealers with their parties of armed natives who have hunted this district for years: these are now rigidly excluded by the Sudan Government. The inhabitants of Nogara are also mostly armed with modern breechloading rifles.

Abyssinian
outlaws.

Two Abyssinian outlaws have haunted this region both during and since the Mahdia. One, whose name is Hakos,* reputed to have some 150 rifles, has lately (1902) been actively raiding villages along our frontier. Kidana Miriam, the other brigand chief, has remained comparatively inactive, and is now (March, 1903), reported to be on the Upper Bahr El Salam or Angareb with 50 to 200 rifles.

(f) THE ATBARA† AND TRIBUTARIES.

THE ATBARA.—The Atbara rises near Chelga in Abyssinia, where it is known as the R. Goang. Coal is found in the valley of the Goang near its source. Both the Atbara and Setit in their course through the Sudan flow for the most part through a flat alluvial plain, and have cut for themselves a deep channel, which is, in the upper reaches of the Atbara at any rate, over 150 feet below the level of the plain. The banks, too, have been washed away by the drainage from either side and are cut up into numerous ravines and khors for several miles on either side of the actual bed.

Thus it is that the banks of the Atbara from Gallabat, to a point 15 miles north of Goz Regeb, are so intersected with ravines and watercourses, that it is seldom possible to march within 2 or 3 miles of the river, which is only approached at intervals. At Gallabat the width of the bed, which is generally shingle, and in which during the dry season the water stands in pools as it does throughout its course from here to the Nile, varies from a minimum of twenty yards at a spot where the river passes through perpendicular cliffs of rock to an average width of 100 to 150 yards.

At Asubri the width between the banks, which are some 15 to 30 feet high, is about 350 yards.

At Gallabat (1899) the spate commenced to come down on 17th May, and the river was still just fordable at Fasher in the same year on the 15th June; after about that date it does not again become fordable until the beginning or middle of November. The flood water reaches the Nile about the end of June.

There are usually ferries at Sofi, Fasher, Suweihil (near Asubri), and Goz Regeb during the flood season.

South of Sofi a road leads up the left bank to Gallabat.

* Hakos is reported to have been killed on the Abyssinian side of the frontier, December, 1903, whilst Kidana Miriam appears to have settled down in Abyssinian territory.

† *Vide* Sir W. Garstin's "Report on the Basin of the Upper Nile." Foreign Office Blue Book, Egypt No. 2, 1904.

North of Sofi, which is on the left bank near the junction of the Setit, roads run parallel with the river on both banks, that most generally used being from Sofi to Asubri by the left bank, thence to the Nile by the right bank. The country from the Setit to Fasher (right bank) belonged formerly to the Hamrans; it is now practically uninhabited except by Nomads during the dry season. Fasher to Mitateb (right bank) belongs to the Hadendoas, who go there in large numbers for grazing during the dry season. Their country practically extends from the Atbara to Suakin. From Mitateb (right bank) and Goz Regeb (left bank) to the Nile the country belongs to the Bisharin. From a point about 50 miles south of Adarama northwards to the Nile the banks are fringed with dom palms. Few people live along the river during the rains, and though the alluvial soil brought down by this river is one of the chief fertilizing agents of Egypt, there is at no season any system of irrigation in use along it. Here and there where nature causes the river to overflow its banks a certain amount of cultivation may be met.

TRIBUTARIES OF THE ATBARA.—These nearly all emanate from the hilly country of Abyssinia or Eritrea. There are none of importance on the left bank in the Sudan.

(1) THE BAHR EL SALAM AND ANGAREB.—The Bahr El Salam is a flowing stream during most of the year. Its bed is very rocky, and in places the bends are extremely sharp as it cuts its way through high cliffs of rock. It has many deep pools with hippopotamus and crocodiles, and appears to often overflow its banks in flood time in places where it passes through these narrow gorges. It has generally a north-westerly direction. The River Angareb appears to be only another name for the upper Bahr El Salam. The Bahr El Salam joins the Atbara on the R.B. about 28 miles south of Sofi.

(2) THE SETIT* AND ROYAN.—The lower Setit, *i.e.*, that portion of it which flows through Sudan territory, much resembles the upper Atbara in general character. Its banks are similarly intersected by ravines and small khors which carry the drainage from the plateau along which on either bank there is a track at some distance from the river, and which only descends to it occasionally. The river is generally about 300 yards wide, and during the dry season it is fordable at frequent intervals, and here and there almost ceases to flow.†

The only inhabitants of the Setit, west of the junction of K. Royan are the survivors of the once famous Hamran sword-hunters, who live in a small village on the right bank about 15 miles from its junction with the Atbara. Although now very poor and with their hunting to a certain extent restricted by the Game Laws, they have nearly all acquired horses and are as bold and keen Nimrods as ever. Latterly, many of the Beni Amer Arabs from Eritrea have brought their flocks for pasturage to the banks of the Setit during the dry season.

Above Umbrega there was no track on the right bank in March 1900, as the Abyssinian Baza, living east of Maletib, were said to terrorise the country. There is now (1904) a fairly good track made by the Italians who have a small post at Um Hagar.

In Abyssinia the Setit is known as the Takazze.

The junction of the Royan and Setit is about 4 miles east of Khor Umbrega. The Royan appears to be merely a khor which is dry, except for occasional pools, a few months after the cessation of the rains. Its junction marks the boundary on the Setit between the Sudan and Eritrea on the north bank, and Abyssinia on the south bank.

* *Vide* "Nile Tributaries of Abyssinia" (Baker), and "Wild Tribes of the Sudan" (James).

† Mr. P. C. Waite (Scottish Geographical Magazine) gives the length of the Setit as 800 miles, and its flood discharge (at mouth?) as more than 4,500 metres cube per second. Sir W. Garstin estimates the maximum discharge of the Atbara at its mouth to be about 3,000–4,000 metres cube per second. The discharge of the Setit is, therefore, evidently considerably over-estimated.

CHAPTER IV.

CENTRAL EASTERN SUDAN.

(Country between the Nile and Abyssinia, bounded by the Atbara and the Blue Nile.)

SECTION 1.—COUNTRY BETWEEN THE ATBARA AND THE NILES—FROM EL DAMER SOUTHWARDS TO ABU HARAZ—SOFI LINE.

The vast tract of country from the junction of the Atbara with the Nile southwards to about the line Abu Haraz—Sofi, bounded on the east and west by these rivers, and on the south-west by the Blue Nile, has been generally called by cartographers “the Island of Meroe”; this name in reality, however, has long ceased to be applied to it locally, and is quite unknown to the Arabs of the present day. By the latter it is divided into four districts. The northern one, forming the triangle El Damer, Adarama, Shendi, is called *El Daheira* (the high stony ground). The western district, including Shendi, Halfaya, Geili, and Abu Deleig, is known as *El Karaba*; south and south-east of this the country north of the Blue Nile from Khartoum North to Abu Haraz is called *Sharg El Adeik*; whilst the whole of the eastern portion from Adarama southwards, bounded on the west by Um Hatab, El Hawad, Geili, and Galaat Arang, forms the well-known *El Butana* grazing district.

General description.

The northern or El Daheira district is, as its name denotes, a sandstone plateau generally bare, level, and desert-like. On the west, there are considerable ranges of sandstone hills. The soil, which is more sandy than further south, is, as a rule, poor and unfertile, except in the wadis, a few of which are usually cultivated in favourable years, and are generally marked by stunted selem and kittr bush. Further south, in the El Karaba and Sharg El Adeik districts, there is much more land suitable for cultivation, though even here it is generally seen in the wadis only, notwithstanding that the rainfall is markedly heavier. Selem, kittr, samr, sayal, and tundub trees grow plentifully, though they are rarely thick enough to obstruct free passage through them, and homra and maheirib grass are everywhere to be met. In the two last-named districts wells are comparatively numerous, though often excessively deep, occasionally as much as 250 feet, and the water rather salt.

El Daheira.

El Karaba and Sharg El Adeik.

In El Karaba, saltworks are frequently seen. Hafirs or tanks for holding up rain water, many of which are said to have been made by the ancients, are here particularly numerous compared to other parts of the Sudan, and are quite a distinctive characteristic of this part of the country.

The region known as “El Butana” is wonderfully open and flat, indeed, so much so, that, as a rule, not a single tree or bush is visible for miles, except along an occasional wadi. These, as a rule, drain northwards, and, as elsewhere in this part of the country, are usually the localities selected for cultivation, though the soil, generally speaking, is here richer than in the other districts.

El Butana.

The great product of El Butana is, however, Hantut grass and Siha plant, both particularly good for camels, and thus during the rains it was, and is still to a lesser extent, customary for camel-owning Arabs from all parts of the Sudan to visit this district for grazing. Water at this time of year, being comparatively plentiful, the Arabs are not tied down to the very limited number of wells existing in the dry season, and are thus free to wander far and wide wherever it suits them. A month or two after the cessation of the rains the grass becomes dry, weather-beaten, and broken, and the greater part of this region is then bare and desolate.

Though the Shukria are probably the rightful owners of this district, yet the Debania (Gedaref), Abu Rof, Kenana, Kawahla (Blue Nile), and other tribes were always accustomed to graze here gratuitously, though without, it seems, the permission of the owners, who apparently were not strong enough to effectively resist this invasion. An arrangement has now been made by the Government assigning specified areas to the various tribes for grazing purposes.

The principal localities, and, in fact, the only known wells where the Nomad Arabs congregate during the dry season, are given below. At all these places the Arabs live by families in small groups of dom-mat tents.

Wells.

I. UM HATAB.—About 30 miles east of Kabushia, 10 wells, 36 feet deep, less in the rains. Arabs here are Fadnia, Kawahla, and Jaalin, under Sheikh Mohammed Suleiman. Belongs to Shendi District of Berber Province. Last wells on road from Gedaref to El Damer. It is just outside the north-west limits of El Butana.

II. UM SHEDIDA.—Some 30 miles east of Um Hatab. 30 wells, 36 feet deep. Arabs and Sheikh same as Um Hatab, belong to Berber province. Situate in north of El Butana.

III. BIR AMBASA.—Between Abu Deleig and Um Hatab, is said to be 300 feet deep, water plentiful. However, no Arabs live here, presumably on account of the great depth of well and consequent labour in drawing water. It is said to have been dug by the Ancients (infidels), and to have inscriptions on it, though this appears open to doubt.

Bir Geheid about 20 miles east of Ambasa and on the eastern side of El Hawad—a very large well, 30 feet in diameter and 330 feet deep. No water at present and well partially filled in. Said also to have been built by the Ancients.

IV. DEBBAGHAT.—16 wells, 60 feet deep, in Khor Jegjegi. Lies about 6 miles E.N.E. from Abu Deleig. Arabs, Jaalin, Ahamda, Batahin, under Hassan Nimr, a sub-Sheikh under Mohammed Suleiman. It belongs to Berber Province.

V. ISNABIR.—23 miles east of Abu Deleig, on road from Goz Regeb to that place. Arabs, Batahin, under Sheikh Mohammed Talha, belonging to Gezira Province. Wells contained little water in April, 1900.

VI. ABU DELEIG.—84 miles by road E.N.E. from Khartoum. 50 wells, 30 to 70 feet deep, extending for some miles in the Wadi Jegjegi. Headquarters of the Batahin and residence of Sheikh Mohammed Talha. Other tribes here are Mogharba, Hassania, Jaalin, etc.

Abu Deleig belongs to Gezira Province, and there is a Mamur, Police Officer, and Police Post here.

Up to February, 1898, Abu Deleig was always held by a Dervish force, latterly under the command of Abd El Rahim Wad Abu Dugal. This post was surprised by Irregulars from Kassala in February, 1898, who in turn, however, were themselves surprised on their way back to Kassala and suffered severely.

VII. GEILL.—About 25 miles due south of Abu Deleig. About 30 wells, 100 to 150 feet deep, situated around a flat topped granite hill about 250 feet high, on the summit of which is the tomb of Bint El Mek, a daughter of one of the Fung kings and wife of one of the early Shukria sheikhs. Arabs, Batahin and Mogharba, belonging to Gezira Province. There are ancient carvings here on the south side of the hill. (*Vide* also "Route Report Khartoum North to Kassala" Vol. II, Chap. IV).

VIII. UM RUEISHID.—50 miles south-east of Abu Deleig on the road from Kassala to Khartoum, three wells, 100 feet deep in the dry season. They are the westernmost wells in the Kassala Province. Arabs Shukria, Mogharba, and Awaida, under Shiekh Ali Wad El Had.

IX. EL GELEITA.—12 miles north of Um Rueishid, on Goz Regeb—Abu Deleig road. Eight wells, 70 feet deep, water plentiful, Arabs mostly Shukria. Belongs to Kassala Province.

X. SHAG (EL WALIA).—12 miles east of El Geleita, first water after leaving Goz Regeb, on Abu Deleig road. Four wells, 70 to 100 feet deep. Inhabitants chiefly Shukria, few Mogharba, etc. Belongs to Kassala Province.

XI. EL SOFEIYA.—72 miles rather north of west from Asubri. 20 wells, 100 feet deep, water plentiful. Arabs same as at Um Rueishid. Residence of Ahmed Mohammed Abu Sin, wakil of Head Sheikh of Shukria in the Kassala Province.

XII. RERA.—About 10 miles south of El Sofeiya, 10 wells, 100 feet deep. In the eastern and highest ridge, of which there are several close by, there are two or three rock tanks containing water. Arabs, Shukria, Mogharba, Awaida, etc., under Ali Wad El Had, of Kassala Province. 48 miles south of Rera is the well of El Adeid a few miles south of J. Tawal. Water is scarce in the dry season, and only a few Shukria are found here.

XIII. EL SADDA.—22 miles south-east of Rera, 20 wells, 90 feet deep, $\frac{1}{4}$ mile west of south end of J. El Sadda, a low ridge running north and south; Arabs and sheikh same as at Rera. From here a road leads to Gedaref, which lies about 90 miles S.S.E. No water on the road except during rains at Hafir El Igl.

Cultivation.

The Arabs cultivate considerably in favourable years, when dura can be purchased at PT.25, or even less per ardeb. As before stated, the wadis known locally as "Atmurs" are the localities selected for cultivation; the chief of these being El Hawad (12 miles east of Abu Deleig), which extends probably some distance to the south, and northwards it trends towards the Nile at Kabushia. It receives the water of Khor Jegjegi. "Hemeisi" and "Feterita" dura are the crops most generally grown.

Herds, etc.

All these Arabs own large numbers of sheep and goats, but cattle and camels are now comparatively scarce, owing to the depredations of the Dervishes. The Shukria camels are remarkable for their size and carrying capacity, but are not, as a rule, suitable for fast work.

Riverain population.

Along the left bank of the Atbara, from El Damer to Goz Regeb, the Arabs are chiefly Nomad Bisharin and Jaalin. There are few permanent villages south of Adarama.

Atbara.

Amid the ruins of Goz Regeb live the few survivors of the former inhabitants under Sheikh Gaffa Ageil. South of Goz Regeb are Shukria, under Amara Abu Sin, who has a permanent village at Gandaua, a few miles north of Asubri.

In the neighbourhood of Fasher are the Lahawin, a tribe which formerly belonged to the White Nile.

Nile.

Along the Nile (right bank), from El Damer to Khartoum North, there is a considerable and much mixed

riverain population, for the most part living in mud-built villages, and cultivating with both sagias and shadufs. The chief tribes are Jaalin, Ababda, Shaigia, Hassania, Mogharba, Aonia, etc.

EL DAMER.—Population about 700; Jaalin, etc. This town was formerly famous for its University and learning. It suffered much during the Mahdia, but its population and prosperity is now rapidly increasing, and there is quite a good market; principal trade, dom-mats, baskets, etc., and salt. A few caravans come here direct from Gedaref. There is a railway station here. It will be the capital of the Berber Province in 1905.

Villages on
the Nile.
(R.B.)

KABUSHIA.—26 miles down the river from Shendi. Population about 250, Shaigia and Jaalin; Awaida, Aliab, and Fadnia Nomads come here for grazing and cultivation. There is a comparatively large market.

The ruins of the ancient Meroe are situated about 4 miles to the north, and there are traces of an old temple at El Bagarawia. There are 25 pyramids (Tarabil) about 5 miles north-east. Some of these pyramids were examined in 1903, but little of interest was discovered. (*Vide* Appendix D.)

SHENDI.—Population about 500, majority Shaigia and a few Jaalin also Nafiab, Awaida, and Ababda. Headquarters of the Egyptian Cavalry: four squadrons, also one field artillery battery. Railway workshops and good railway station. Headquarters of Shendi District and residence of a British Inspector, Mamur, etc. Post and telegraph offices. Excellent climate. Houses of mud. There is a good market, but not to be compared with that of former days, when Shendi was an important place and had 7,000 inhabitants. The town was once the capital of the ancient kingdom of Meroe, and is said by some to have been the residence of the Queen of Sheba. Bruce says the women of Shendi were noted as being the most beautiful in the Sudan. It was here that Ismail Pasha, son of Mohammed Ali, Khedive of Egypt, was burnt in his hut by Mek Nimr, in 1822, in revenge for his barbarities. To avenge Ismail's death the town and inhabitants were destroyed in 1823 by order of Mohammed Ali. The Nimr family are now in poor circumstances.

There is excellent grazing along the banks of the river at almost all seasons of the year.

Shendi was occupied by Major T. Hickman with the 15th Egyptian Battalion on 26th March, 1898, after a short fight.

Government steam engines have been erected here with a view to cultivation by the Supply Department of the Army. The natives here have learnt to appreciate such agricultural implements as iron sagias and ploughs of English pattern, and are anxious to acquire them.

WAD BAN NAGA.—There is a railway station here about 24 miles from Shendi. Sauarab and Aonia Arabs, and others, such as Deshiab Batahin, Ababda, and Hassania, come here for grazing. It belongs to the Shendi District, of the Berber Province. For the antiquities in the neighbourhood *vide* Appendix D.

GEILI.—Situated on right bank of Nile, 28 miles north of Khartoum North, is the residence of Zubeir Pasha and his following, who belong mostly to the Gemaab tribe, a branch of the Jaalin. There are also Batahin and Hassania here. There is a railway station at Wad Ramla, $1\frac{1}{2}$ miles to the north.

KHARTOUM NORTH.—On the right bank of the Blue Nile immediately opposite Khartoum. The name applies to several small detached villages, such as Gubbat Khojali, Hellet Hamad, etc. The inhabitants consists of Jaalin, Shaigia, Mahas, Mogharba, Khojalab, etc., under Omda Mohammed Osman Ibrahim. (For description *see* Chap. II, p. 49.)

Villages on
the Blue
Nile. (R.B.)

EILAFUN.—On right bank Blue Nile, $19\frac{1}{2}$ miles by road from Khartoum. A very neatly-kept village of Mahas and Shaigia, under Omda Mohammed Abd El Kader. It belongs to Kamlin district of Gezira Province. There is a mosque here, as to the Khalifaship of which there are frequent squabbles.

About 7 miles east of Eilafun is the village of Um Dibban, the abode of the three brothers, sons of the famous religious Sheikh El Obeid, the powerful and fanatical Mahdist leader who defeated Mohammed Ali Pasha at Um Dibban in September, 1884, and who was the first Dervish Commander to besiege Khartoum. They have a private mosque here, and though primarily a religious family, they aspire to considerable temporal power.

RUFEE.—Situated on the right bank of Blue Nile, 95 miles by land, by river 104 miles, from Khartoum. The population of the town and surrounding district numbers 30,000, and is mainly composed of Shukria Arabs. Others are Batahin, Sherafa, Jaalin, Mogharba, etc. There is one Greek trader here who carried on business here throughout the Mahdia. The houses are mostly grass tukls. No post or telegraph office. Nearest is at Kamlin

Routes.

Route reports referring to the principal caravan routes are given in Vol. II, Chap. IV. There is also a caravan route from Gedaref, *via* El Sadda, Rera, Abu Deleig, and Um Hatab to El Damer. Caravans, however, usually strike the Nile at Kabushia after leaving Um Hatab. From Kabushia a track leads due east to Adarama.

SECTION 2.—GEDAREF AND DISTRICT.

Practically the whole of the region enclosed between the Rivers Rahad and Atbara from a point some miles north of the town of Gedaref, southwards to Khor Seraf Said on the Gallabat road, an area containing more than 11,000 square miles, is comprised in the Gedaref District. This large tract of country, like other parts of the Sudan, is now greatly under populated. The inhabitants of the district are estimated at about 25,000 (1904).

The whole of the northern portion of this area is generally flat and open and devoid of bush, but here and there, particularly to north-east and south of the town of Gedaref, it is undulating and rather hilly. As these hills extend further south, the whole country becomes gradually enveloped in forest, which, though it yields a good deal of gum, is practically uninhabited, waterless, and for the most part unexplored, and bears few signs of former inhabitants.

In the rains, the surface of the ground, whether open or forest, is covered with grass 3 to 5 feet, and in places 15 feet, in height, which, until burnt, is exceedingly annoying to the traveller, should he be on foot or riding a mule or a donkey.

Generally speaking, the whole country is fertile, and only needs inhabitants and a minimum of labour to render it reproductive; water, though now scarce, would probably not prove to be an insuperable difficulty.

Historical.

In pre-Mahdist days, Gedaref and district, including the old Gedaref or Suk Abu Sin, was a fertile and populous spot. Its cornfields supplied a large portion of the Sudan, both to the north and west, and it was, in short, prosperous. It was devastated by the Dervishes in 1885, and the garrison captured. Abu Anga and later Ahmed Fedil were appointed Emir of the district. In 1898, it was seized by a small column from Kassala under Colonel Parsons, after a hazardous and successful fight, a few miles outside the town, and though subsequently twice attacked by Ahmed Fedil, held its own until relieved by a force from the Nile. (*Vide* p. 267.)

Gedaref Town.

The town of Gedaref is situated partly on an under-feature emanating from some low hills, rather more than 100 feet high, half-a-mile to the east, and partly on the plain which lies below the general level of the surrounding country on three sides, and on the fourth, slopes away very gradually westwards.

This plain, which extends for some miles in all directions, especially to the west and north-west, is devoid of trees of any description, and being practically all rich black cotton soil, there is really an almost unlimited extent of land available for cultivation during the rains.

The quasi-European quarter of the town consists of one street of shops, built of brick, about 200 yards long, and, with the exception of a few other brick houses and the Government buildings, the whole of the remainder of the town consists of grass tukls.

Trade.

The principal traders are Greeks, but these are few, and so far trade has not reached the expectations formed of it, owing chiefly to want of railway communication with this part of the Sudan.

There is a fair gum trade, but the quality of Hashab is hardly equal to that of Kordofan. Otherwise, besides the usual imports, consisting of cotton goods, sugar, etc., and the export of a certain amount of dura, dukhn, and simsim, and coffee from Gallabat, into other districts of the Sudan, trade at present has not reached large proportions, but is improving.

It is a notable fact that in the Eastern Sudan a well-to-do native never travels without his coffee, after imbibing which he professes to be ready for anything; in the Gezira and Kordofan, coffee does not seem to be nearly so generally drunk.

There is a little trade with Walkait, *via* the Setit, but this at present is insignificant.

Population.

The inhabitants of Gedaref, estimated in 1904 at 5,500 souls, are a heterogeneous collection of Shukria, Debania, Takruris, and every kind of black. The Baggaras sent here to colonise after their defeat at Omdurman have now mostly been disseminated in the district, and what Abyssinians were originally found here have for the most part returned to their homes.

The old name of the town, "Suk Abu Sin," is now inapplicable, as the Shukria have so decreased in numbers and wealth during the Mahdia as to be comparatively insignificant. Abu Sin is the family name of the leading Shukria family.

Water supply.

The water supply is from wells partly cut through rock; it is good but not plentiful. Efforts are being made to improve the supply.

Garrison.

The garrison usually consists of one company of the Sudanese battalion at Kassala, which also furnishes a

detachment at Gallabat. There is always an Egyptian Mamur present, and usually a British Inspector for at least six months in the year. In addition, there is generally a small detachment of the Arab battalion here.

There are many excellent gardens, growing the usual Sudan vegetables, and in addition, figs, limes, custard apples, and dates; the latter are remarkable in that the trees bear two separate crops during the year. Cultivation.

As above-mentioned, a rain-crop of dura, dukhn, simsim, etc., is very extensively cultivated on the surrounding fertile plain; a certain amount of cotton is also grown for local use; this, and the cereals, are capable of considerable development; but this must await the advent of a railway. It should, however, be borne in mind that rain-watered cotton does not produce so fine a staple as that grown on irrigated land. All cotton grown here finds a ready sale at Gallabat to the Abyssinians.

The characteristic dura of Gedaref is a red species called "Kurgi," which produces a very white flour. There is very little "Naggad" or early dura sown; its place is taken by dukhn, which, with simsim, is harvested at the end of October, whereas the "Kurgi" is not ripe until February. Simsim, or Sesame, as a rule does particularly well in this district. As all crops are dependent on the rainfall, they naturally vary considerably and in direct accordance with it. In 1899 they were almost a complete failure. The crops were attacked in 1902-03 by a disease called "Asal," a species of blight, so called as it produces a formation strongly resembling honey (Arabic "Asal").*

The rains begin in June and last on till October.† As the surrounding country is cotton soil, dust does not precede the storms as at Kassala, but judging from the dilapidated appearance of the town, when revisited on their cessation, the rainfall must be considerable in a favourable year. Rains.

Unless actually seen, it is difficult to picture the difference between Gedaref before and Gedaref immediately after the rains. By May, the surface of the ground surrounding the houses and environs of the town has become clean and bare, and many of the grass tukls have been rebuilt and appear almost toy-like, so spick and span are they. However, in October the whole place has the appearance of a wreck, houses are tumbling down, the neat new tukls are discoloured and distorted, and every square foot of ground, right up to the houses, not already planted with dura, at this time fully 12 feet high, is overgrown with the rankest of tall Aada grass, which is even higher, and through which the by-streets of the town are mere tunnels little more than 2 feet wide, and along which it is difficult to find one's way about without a guide.‡

At this season (September and early October) there is a good deal of malarial fever in a year of good rainfall. The natives of the place seem to some extent inoculated with it, though those from the more northern districts are readily affected. Climate.

From December to May the climate is perfectly healthy.

There is no building wood, and little fire wood within 15 to 20 miles.

There is a post and telegraph office, and a weekly camel post to Kassala, Gallabat, and Wad Medani. Telegraph also connects with these places. Wood.
Posts and telegraphs.

As the serut fly is present at Gedaref during the rains, all camels are removed about the end of May, and other animals are kept in tukls as far as possible. Serut fly.

In the dry weather camels are the best transport, both for travelling along the roads or going across country over the cotton soil, should it be necessary, but, in the latter case, they will sooner or later suffer from sore feet. Transport animals.

Limited numbers of camels are obtainable for hire or purchase during the winter months. Mules are only occasionally brought here. As many as 50 donkeys can usually be bought without much difficulty, price £E.2 to £E.3. The little Abyssinian donkey, price about £E.2, which is the best for that country, is also generally procurable.

Ariel, gazelle, bustard, quail, and a few snipe and teal are to be found in the neighbourhood at certain seasons. For game in other parts of this district, *vide* under Gallabat. Game.

Beyond Gedaref itself and the villages in its neighbourhood there are few others worth mentioning. Sofi, on the Atbara, is a largish Jaalin village under Sheikh Taib El Nimr. It was here that Sir Samuel and Lady Baker spent the rains of 1869 (*vide* "Nile Tributaries of Abyssinia"). Villages.

At Abu Gulud, between Sofi and Doka, and other villages in this neighbourhood a large quantity of grain is usually grown. Asar is the headquarters of the Debania tribe, now much reduced in numbers, and the residence of their Nazir Sheikh Wad Zaid.

On the Rahad the principal villages are Mafasa and Hawata. The former is the headquarters of the Mamur of this (Radah) district. Upstream of Hawata there are few inhabitants at present.

SECTION 3.—GALLABAT AND DISTRICT.

The comparatively small area (about 1,200 square miles) bounded on the west by the River Rahad, on the north by Khor Seraf Said, the southern boundary of Gedaref Province, and on the east and south by the Abyssinian

* *Vide* p. 98.

† Total rainfall, January—October, 1904, 23.1 inches.

‡ This description refers to the state of Gedaref up to the end of 1899. Conditions have now improved.

frontier, comprises the district of Gallabat. Practically the whole of this region is thickly wooded with talh, soffar, ebony, silag, ardeib, hashab, baobab, bamboo, and other trees, of which some attain considerable size; the central and south eastern portions are hilly, as is Gadabi and some of the country to the east of the Atbara.* In the vicinity of the town of Gallabat there are perennial streams of running water, but the greater part of the province is dependent on wells for its water supply.

Town. Gallabat town, called by the Abyssinians Matemma, is situated at the foot of a steep slope on the left bank of the Khor Abnaheir, which here constitutes the boundary with Abyssinia, and is about 5 miles from the Atbara which flows to the north and north-east.

Historical. The town has for a very long time been considered as forming an important trade centre on the Sudan-Abyssinian frontier, and the latter people used to lay claim to it. It was in consequence an almost constant source of feuds and fighting during the greater part of the last century between the Abyssinians and the Turks, and later with the Dervishes. It was formerly celebrated for its slave mart, and drove a prosperous trade. (*Vide* "Cradle of the Blue Nile," vol. 2, p. 168.)

It was attacked by the Dervishes under Zeki Tumul in 1886, and sacked. Three years later King John of Abyssinia, burning with fury at the sack of Gondar by the Mahdists, collected his warriors and fought a tremendous battle here, with, it is asserted, 80,000 to 100,000 on either side, on 9th March, 1889. The Abyssinians, who outnumbered the Dervishes, at first were successful, but just as the Dervishes, on the following day, were giving way on all sides a stray shot wounded and subsequently killed King John. This completely reversed the situation, and the Abyssinians turned and fled (*vide* p. 258.)

Its occupation by the Dervishes naturally resulted in the ruin of its trade, and this is only now beginning to revive.

Robbers are, however, rife inside the Abyssinian frontier, and owing to that and other reasons, the revival is slow.

The Anglo-Egyptian flags were hoisted at Gallabat on 7th December, 1898, by Colonel Collinson, C.B. The Abyssinian flag was then already flying on the fort.

Gallabat is said, before the Mahdia, to have been a comparatively large and busy trade centre. Looking at it now, it is difficult to believe that it can ever regain its pristine wealth and importance. The town, such as it is, with the exception of the Zabtia, etc., is built entirely of grass tukls. On the top of the slope overlooking the town there still remains the old Dervish fort built by Zeki Tumul. From here a very fine view is obtained away to the hills beyond the Atbara, and on a clear day one can see the mountains surrounding Lake Tsana. The hill pointed out as that on which King John was wounded lies 3 miles south-east, and that near which his body was captured is visible 10 miles further off.

Inhabitants. The inhabitants are almost entirely Takruris,† originally from Darfur. The ancestors of these people, on arrival at Gallabat on their way back to Darfur after visiting Mecca in the 18th century, realised they had found a better land and settled here, where they have remained ever since. They possess curious jagged throwing-knives, which their ancestors are said to have brought from the Upper Congo.

In 1899 the population of the province, which was carefully assessed, numbered 2,200 souls, of which about 700 were living in the town itself. In 1901, it was estimated to be 2,670, and it has since increased to 3,800 in 1904.

These Takruris are as a rule poor, but industrious and fairly good cultivators. They also collect a good deal of honey. This they find with great dexterity by means of a bird, whose note they are exceedingly quick at detecting. Honey and water is always proffered to the thirsty traveller, though a liquor called "Asalia," a kind of "Um Bilbil" or "Merissa," is the drink they prefer themselves.

Trade. Neither the import nor export trade with Abyssinia has as yet attained much importance. Coffee is one of the chief imports; this is about PT.70 per 100 lbs., and is of very good quality. The remainder are mostly unimportant native requirements, such as bees-wax, shatta (red pepper), tobacco, etc., which are brought in in small quantities; also a good many cattle, horses, mules and donkeys. This import of live-stock constitutes the bulk of the trade.

There is a growing export trade both in raw locally-grown cotton as well as in Manchester goods.

Half the customs receipts go to Abyssinia. In 1902 the total amounted to £E.720 and in 1903 to £E.805.

Cultivation. Most of this district is fertile, but there is little land cultivated around the town of Gallabat, as the natives have discovered other spots in the forest where, owing to the particular kind of grass that grows, less labour is necessary to prepare the land for sowing.

Most of the cultivation lies about 15 miles north-west of Gallabat, where there are a good many villages, chief of which are Wallak and Basunda. Though, as a rule, the grass is almost everywhere burnt as soon as dry (November and December), yet the grass on a piece of land which it is intended to cultivate is most carefully preserved until the arrival of the ensuing rains. Then, and not till then, when the young grass has sprouted, the dry grass is

* For description of country east of Atbara, *vide* pp. 99-101.

† The Takruris speak of the Abyssinians as "Makada"—this is a name generally used for them throughout the Sudan and means "slaves." The Abyssinians naturally resent the appellation and have complained officially about it. They retaliate by calling the Takruris, who originally came from Darfur, "Far," *i.e.* Rats, the real name of people of Darfur being, of course, For.

fired, and the old and new are destroyed together; the ground is now clear and ready for sowing without further trouble, and thus cultivation is carried on with a minimum of labour. As the country is mostly forest, of course clearings have occasionally to be made. Two crops of dura are raised—"Naggad" and "Kurgi"—also a good deal of dukhn, which is ready for harvesting by the middle of October. Cotton is said to grow well, and in 1901 there were 800 acres of it under cultivation; this was four times as much as in the preceding year. It is expected that several thousand acres will be under cotton cultivation in 1905-6.

A few lime trees are now all that remain of the beautiful gardens which existed formerly on the banks of the Khor Abnaheir. The Dervishes are said to have ruthlessly cut down the fruit trees for building wood.

The garrison is usually a detachment furnished by the company of the Sudanese or Arab Battalion at Kassala. Garrison. There are also the usual civil police.

The rains begin here earlier and are much heavier* than at either Gedaref or Kassala. After the end of April heavy rain storms become pretty frequent and last till September or October. During this season the roads are very bad for travelling. The serut fly appears when the new vegetation has sprung up. Rains.

The same as Gedaref. Healthy, December to June; unhealthy, during the remainder of the year.

The main water supply is from the Khor Abnaheir, which averages 5 yards wide and 2 feet deep, but varies considerably according to the time of year, and becomes stagnant and foul towards the end of the dry season. There are also some small springs near the fort, the water from which, at this season, is more wholesome. Climate. Water supply.

Roads lead from here to Chelga and Gondar, Kwara, Dunkur, Roseires, Rahad, and Gadabi. (Vide Vol. 2).

There is a telegraph and post office at Gallabat.

Camels are the most suitable transport animals, unless the Abyssinian frontier is crossed, when mules or donkeys become desirable; for the journey to either Gondar or Kwara they are indeed indispensable. Trade routes, Telegraph offices, Transport animals.

When the Dervishes sacked Gondar, their transport consisted chiefly of camels, but very few are said to have survived or even to have reached there.

Camels are hardly ever procurable at Gallabat. No number of mules, donkeys and horses can be relied on unless plenty of notice is given, when the Abyssinians would probably readily supply a limited number.

British, Egyptian, or Turkish money is not as a rule accepted by the Abyssinians, who require to be paid in Maria Theresa dollars, which they value at PT.10½, but the Sudan Government at not more than PT.9½. Currency.

From El Damer to the line Roseires-Gallabat all the game mentioned under "Kassala" is found, with the exception of ibex, oryx, wild sheep, and klipspringer, and in addition rhinoceros and tiang (*Damaliscus Senegalensis*); bohor, or reedbuck, and *Gazella rufifrons* are common in places. Game.

SECTION 4.—COUNTRY BETWEEN BLUE NILE, DINDER, AND RAHAD, WITH DESCRIPTION OF THESE RIVERS.

The country between the Blue Nile and the Rahad and Dinder Rivers is at present (1904) practically uninhabited south of the village of Durraba on the Dinder, which is about the same latitude as Karkoj on the Blue Nile. General description.

Before the Mahdia, villages extended along both the Rahad and Dinder to nearly as far south as the Abyssinian frontier. Now, however, though inhabitants are slowly returning, there are but few villages even north of the Karkoj-Durraba line.

The country lying south of the latitude of Sennar being infested with the serut fly during the rainy season, the inhabitants, who are principally Kenana, Kawahla, Rufaa El Sharg, and Agaliin, are semi-nomadic; that is to say shortly before the commencement of the rains many of them trek with their camels, cattle, horses, etc., northwards across the Rahad to the well-known El Butana grazing district (see p. 103), in order to escape the fly, whilst only a few remain behind to cultivate their dura, simsim, and cotton. Tribes.

The whole of this country as far south as the Abyssinian frontier, in the vicinity of which the hills commence, is perfectly flat and covered with bush or forest of varying density, with here and there open spaces, often many miles in extent. The bush is thickest in the vicinity of the river banks and thickest of all along the Rahad.

The trees and bush most usually seen are talh, hashab, kittr, sayal, kurmut, heglig, laot, sunt, sidr, etc.

El Agab Abu Gin, Nazir of the Rufaa El Sharg Arabs, is in charge of all the country bordering the Dinder and Rahad (left bank) from the latitude of Sennar southwards. His residence is at Abu Hashim on the Dinder (left bank). El Agab Abu Gin. Of the other villages occupied by his people the principal are Durraba, Bandana, Gileidat, and Lueisa.

From the villages of Wad El Abbas and Sheikh Talha, both on the Blue Nile, roads lead to Gileidat and thence southwards along the Dinder to Durraba, beyond which point there is no regular road. From Senga and Karkoj, roads lead, *via* Abu Hashim and Deberki on the Dinder, to Hawata on the Rahad. South of this, as far as the Roseires-Abu Ramla track, the country may be said to be roadless and, owing to the cotton soil and bush, travelling across country is a trying operation for man or beast. There is a good road up the right bank of the Blue Nile from Wad Medani to Famaka. Communica-tions.

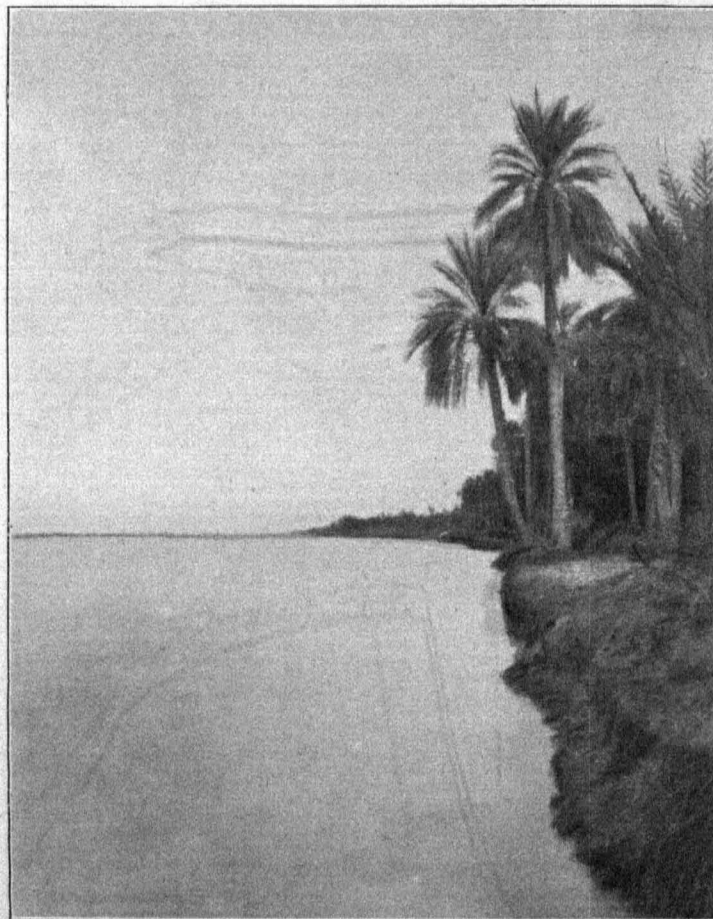
* Total rainfall, January to October, 1904, 34.6 inches.

Khor Um Degul, or Agaliin, or Mehara, which lies between the Blue Nile and Dinder, and joins the latter near Deberki, was formerly thickly populated and cultivated by the Agaliin; it was, however, until 1902, quite deserted. A few villages are now said to be springing up along it, and wells are being opened. There are many talh and hashab gum trees in its vicinity.

North of Sennar-Gilgidat villages are more numerous along the Rahad, Dinder and Blue Nile, though there is no great extent of cultivation.

Game.

In this district, or rather in the southern portion of it, the following species are found :—Elephant (Abyssinian variety, with small tusks), buffalo, rhinoceros, giraffe, roan, kudu, waterbuck, tora hartebeeste, tiang, reedbuck, ariel, gazelle, oribi, bushbuck, warthog, bush pig, lion, leopard, hippopotamus, crocodile, etc.



ON THE BLUE NILE.

THE BLUE NILE.*

General description.

The Blue Nile rises in the Abyssinian mountains about 60 miles south of Lake Tsana (altitude of Lake Tsana, 4,800 feet). Its source was discovered by Bruce in the year 1760. After flowing northwards into the lake at its south-west corner, it finds an exit† again to the south-east, and, after making a big bend to the east, it curls round

* *Vide* also p. 19, and "Itinerary of the Blue Nile," Vol. II.; also Sir W. Garstin's "Report on the Basin of the Upper Nile," Foreign Office Blue Book, Egypt No. 2, 1904.

† Its course through the lake is said to be plainly discernible.

to the south and flows in a north-westerly direction towards the Sudan, which it enters near Famaka, after a course of some 500 miles. Altitude at Famaka, 1,700 feet (approx.).

Throughout the whole of this upper portion of its course, which has never been explored, it is believed to flow in a series of rapids over a rocky bed and often between high cliffs, and for the most part through the most precipitous and rugged country. Here it is known as the Abai, whereas, as soon as it reaches the plains of the Sudan, its name at once becomes "Bahr Azrak" or Blue Nile.

Until comparatively recently the Blue Nile was considered by the Abyssinians to be the main stream of the Nile, and they, several centuries ago, fully realised the value of attempting, or threatening, to deprive Egypt of her water supply by the construction of a dam at the outlet of lake Tsana or possibly elsewhere. A mission to study the possibilities of this lake was recently sent from Egypt, and the investigation showed that it is by far the most suitable site on the Blue Nile for the construction of a storage reservoir which, though its benefit to Egypt would be slight, would be of the greatest value to the Sudan.*

The length of the Blue Nile, from the point near Famaka, where it enters the Sudan, to its junction with the White Nile at Khartoum, is estimated at approximately 460 miles, which makes its total length about 1,000 miles. Length, width, &c.

The average width of channel throughout its course in the Sudan is 550 yards.

Although in the northern reaches the width increases, it is rarely more than 800 yards wide at any point.

The average height of the banks over low-water level is from 26 to 30 feet for the first 150 miles up-stream from Khartoum. Further south they are higher, and average over 33 to 39 feet above low-water level. The difference in level between flood and low-water is 20 to 23 feet. In the first quarter of the year, the river is reduced to a succession of deep pools, connected by very shallow reaches. Even native boats can with difficulty navigate the distance between Sennar and Khartoum during this season. The Blue Nile is at its lowest in April, but during the latter half of May the first or false rise begins. The real rise begins in June, and the maximum height is attained in August. In the latter half of September it begins to fall rapidly. Banks.

Navigation is simple enough at high Nile. As far up-stream as Roseires, 405 miles above Khartoum, the river is navigable by the ordinary Nile steamers from the middle of June till the end of November. Just above Roseires, however, there is a cataract about 6 miles long. This cataract has never been navigated by steamer, but it is said that previous to 1881, sailing boats passed regularly up and down it. Rafts occasionally navigate it successfully on their way down stream. During the last two years a small launch and a few sailing boats have been passed up and down, but there is a dangerous reach for sailing boats above the cataract. Navigability. Cataract.

During November and December the water falls rapidly, and sandbanks appear in quantities, the rush of water through the narrow channels being very great. The worst part of the river is near Abdin and Sennar, but there is little rock anywhere. The water for 5 miles below Roseires is bad, and in places dangerous from rock. Steamers with barges lashed alongside, at the end of December in most years, can get through, except at one point some 20 miles south of Sennar, near Abdin, where a reef of rocks extends almost entirely across the river. Steamers have to be steadied over this place by ropes in December, and the barges passed up and down by ropes.

Sir W. Garstin calculates the average discharge of the river at Khartoum to be :—

Discharges.†

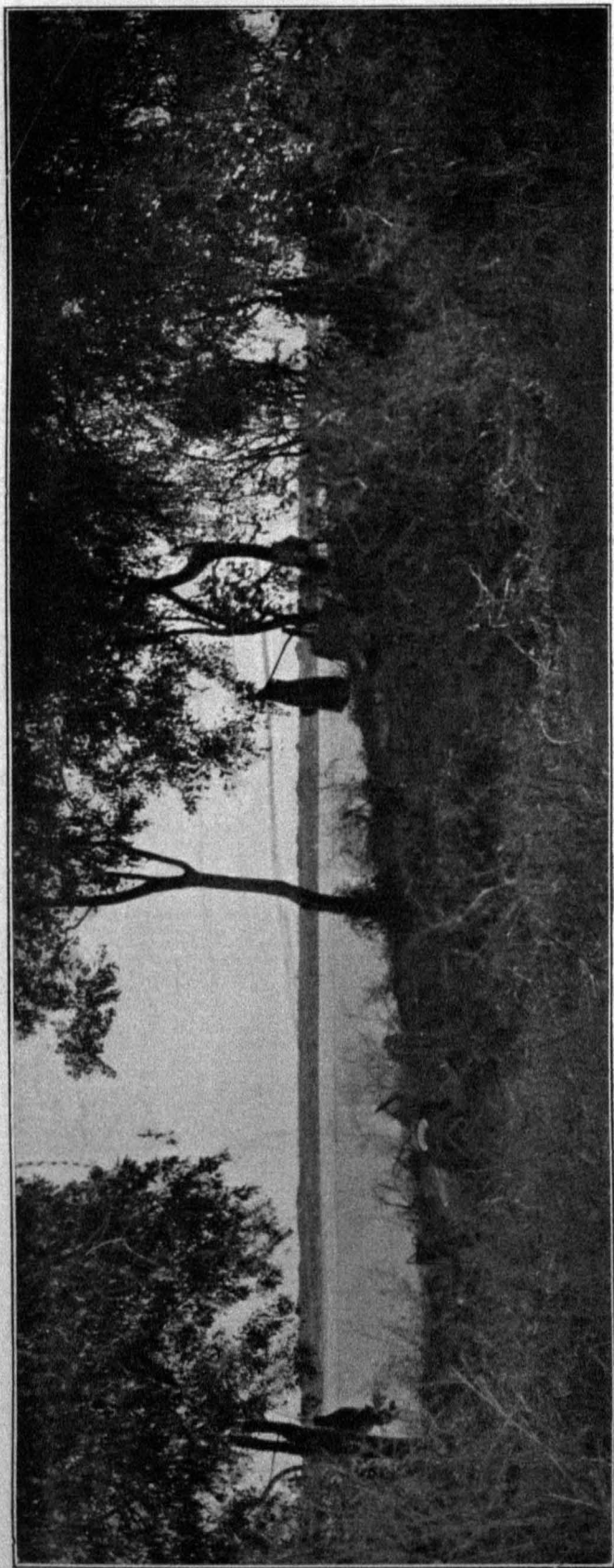
At low-water (May)	..	..	..	200 metres cube per second.
In flood (August)	..	..	..	11,000 " " "

The velocity of the stream is very great: even in February it is not less than 3 miles an hour, while in full flood it must be considerably over 6 miles an hour. In winter the water is very clear, and of a beautiful limpid blue. Velocity.

* *Vide* Foreign Office Blue Book, Egypt No. 2, 1904.

† The following table of discharges (Sir W. Garstin's) shows to a certain degree the relative importance of other rivers in the Sudan :—

					Discharge per second.	
					Maximum.	Minimum.
Bahr El Jebel (Mouth)	...	...	...	...	300 m.c.	300 m.c.
Bahr El Zeraf (Mouth)	...	...	...	...	140 m.c.	50 m.c.
Bahr El Ghazal (Mouth)	...	...	...	...	30 m.c.	15 m.c.
Sobat (Mouth)	...	...	...	...	900 m.c.	50 m.c.
White Nile (Khartoum)	...	...	...	...	1,600 m.c.	300 m.c.
Atbara (Mouth)	...	...	...	...	3,000 m.c.	nil.
Gash (Kassala)	...	...	...	...	100 m.c. (?)	nil.
Nile (Berber)	...	...	...	...	14,000 m.c.	(?)



ON THE BLUE NILE.



FOREST SCENERY, WEST BANK, UPPER BLUE NILE.

flood, being charged with the scourings of the Abyssinian mountains and forests, it is heavily charged with deposit, and the water is of a deep chocolate colour. The Blue Nile is considered the chief fertilizing agent of Egypt.

From Khartoum to Sennar the country is uninteresting; banks flat, vegetation and population considerable, here and there cultivation by sagias, crops mostly dura.

Country
along the
banks.

South of Sennar the thorn jungle along the banks becomes very dense, and at high Nile dips into the water; often the only way to get through it is by hippopotamus paths, though the roads on both banks have been cleared and there are meshras at frequent intervals.

Speaking generally, the further south one goes the steeper and higher the banks become, the channel of the river being worn away by the rush of water. The country on the right bank is mostly jungle, with little cultivation and few villages.

Between Wad Medani and Sennar the jungle on the left bank runs in a strip of one or two miles in breadth; west of this strip are the cultivation and villages, which extend right across to the White Nile. Near Wad Medani the cultivation is continuous, and one marches for miles through dura fields.

As one proceeds south, the cultivation becomes less general, until south of Senga, where it is mostly confined to strips along the river bank, and a certain amount round villages a few miles inland. South of Senga the jungle is replaced by forest, large tamarind trees, etc., with thick undergrowth, and open marshes extend along the banks, which, in the dry season, afford excellent grazing. The grass, which grows to a height of 8 to 10 feet in the rains, dies rapidly as the rain ceases, and throughout November and December the natives burn enormous tracts of the dry grass. These grass fires, intended to improve the grazing as well as to enable people to get about the country, are, as may be imagined, exceedingly detrimental to the forest trees, which become distorted and stunted. The forest on both banks of the Blue Nile south of Senga is chiefly composed of acacias of several varieties, laot, tamarisk, kittr, hashab, talh, soffar, and sidr. A few kakamut, tebeli, dom palms, and sycamores are also to be seen in these forests.

The months of December, January, and February are cool and healthy. March, April and May are hot. The rainy season begins in May and lasts till the end of October.* August, September, and October are very hot and damp. The drenching rains cool the air temporarily, but the subsequent heat is moist and enervating. On the upper reaches at Sennar, Karkoj, and further south, as the vegetation and foliage increase in density, so does malarial fever abound in proportion for at least a month after the rains have ceased. September and October are probably the worst months.

Climate.

In October, frequent heavy thunderstorms occur with torrential rain; they are, however, very local. Heavy dew at night. The storms get less frequent as the month goes on, and are over before November, after which the climate gradually improves. The north wind blows fitfully during November and December, and the nights are cold, but the temperature by day is very high until late in December, particularly south of Karkoj. The "serut fly" practically appears and disappears with the rains, and is scarce in October, except in certain places. Its northern limit is Sennar. Mosquitoes are bad at all stations at night during August, September, and October.

Serut fly.

Cotton is cultivated by the natives on the Blue Nile either on the foreshore of the river or inland on ground found by experience to be suitable in a good rainy season.

Cotton.

On the Dinder the only crop raised is the rain crop. This is sown in July after the heavy rains have commenced at the same time as drua, etc. The foreshore sowing takes place simultaneously with that of other foreshore crops, *i.e.*, about December, after the river has fallen, according to the state of the Nile and the height of the submerged banks thus cultivated.

Both rain and foreshore crops begin to be ready for picking 4 months after sowing. There are usually three pickings, the last being the worst, as by that time the plants, which during winter are neglected, are invariably suffering from drought.

In a good year one feddan (acre) of rain-watered land will produce 400 to 1,000 lbs. of unginned cotton. The species of cotton generally sown on the Blue Nile and Dinder are "Abu Hareira," "Belwa," and "Mumtaz." The two former, usually sown on the foreshore, are the old native kinds, whilst the latter, sown as raincrop, was introduced by Mumtaz Pasha from Egypt in the days of the Old Government. The "Abu Hareira" and "Belwa" kinds last 3 years, but the "Mumtaz" only one.

On the Blue Nile, the most favourable land for cotton cultivation is said to be from Sennar southwards to Abu Naama; on the Dinder, the land above Deberki and Abu Rakhis is considered best. Good cotton (irrigated), however, was grown at Wad Medani last year (1903-1904) on the Government experimental farm; 6½ kantars† being actually grown on 1,000 square metres, or a ¼ feddan, giving an average yield of 27 kantars (2,700 lbs.) per feddan.

ROSEIRES.—On the right bank; residence of a British Inspector and Egyptian Mamur. Post and telegraph office; communication by ferry with left bank. There is usually a garrison of one company, under a British officer,

Principal
towns.

* Total rainfall at Roseires, April to October, 1904, 27·8 inches.

† 1 Kantar = 100 lbs.

furnished by the battalion at Wad Medani. A gunboat is also stationed here. The population is increasing, chiefly Hameg and Sudanese tribes. The market is kept open all the year round, and most ordinary requirements can be obtained here. For rainfall, *vide* footnote on preceding page.

KARKOJ.—On the right bank is an unimportant village, formerly residence of a British Inspector and Mamur, and the headquarters of the District, which has, however, now been moved to Senga. Population about 1,000, mostly Jaalin. The market, which is a poor one, is held on Wednesdays and Saturdays. There is no post or telegraph office here. Senga is the telegraph office.

SENGA.—Left bank. (*Vide* Chap. V, p. 119.)

SENNAR.—Left bank. (*Vide* Chap. V, p. 119.)

WAD EL ABBAS.—On the right bank; was founded about 50 years ago. The population numbers about 1,200, and consists chiefly of Jaalin, with a mixed lot of Gezira Arabs, as well as about 300 Sudanese.

There is a weekly market on Wednesdays.

WAD MEDANI.—Left bank. (*Vide* Chap. V, p. 119.)

For principal towns between Wad Medani and Khartoum (*vide* Chaps. IV and V).

See under "Country between Blue Nile and Rahad," p. 109.

Game. With the exception of the Dinder and the Rahad, there are in the Sudan no other important affluents of the Blue Nile, Tributaries of Blue Nile. with the exception of perhaps the Khor Tomat, which joins the main stream near Famaka. This is dry, except during and shortly after the rainy season. Water, however, is easily obtained by digging in its bed.

Dinder. The River DINDER rises in the Abyssinian mountains to the south-west of Dunkur, and after flowing for about 50 miles through very mountainous country it enters the plains of the Sudan and flows for about 200 miles in a north-westerly direction until it joins the Blue Nile (right bank) about 40 miles above the town of Wad Medani.

General. Its bed near Dunkur, where it leaves the mountains, is rocky and stony, and about 100 yards wide. It was here found (June, 1901) to be 3 feet deep, with a rapid current, and for several months in the rainy season it must be difficult to ford.

Bed. Throughout its course in the Sudan its bed, which is sandy and free from rocks a few miles below where it crosses the frontier, is much less winding than that of the Rahad and rarely exceeds 200 yards in width. Its tendency is to become narrower in its lower reaches, and at its mouth it is not more than 120 yards wide.

Upstream of the old site of El Haj the river is wider and shallower and banks lower than in the inhabited area. Even in the old days there were few or no permanent villages above El Haj, but only temporary grazing encampments.

Banks. Its banks are steep and generally about 15 feet high. They are, as a rule, rather higher than the adjacent country, which, when the river is full, becomes flooded and marshy. These marshes were formerly extensively planted with cotton, which is said to have been of good quality; its cultivation is now being encouraged as far as the limited population admits.

Forests. The forests along the banks of the Dinder are of better quality and less dense than those of the Rahad; sunt, kakamut, haraz, sidr, hashab, talh, babanus etc., are plentiful.

Navigability. The Dinder has been navigated by steamer as far up-stream as Deberki, about 120 miles from its mouth. Large sailing boats ascend it as far as El Safra. Of course, this is only possible whilst the river is in flood during, perhaps, three months in the year, and owing to the wooded banks and southerly wind it is very difficult for sailing boats. In the dry season water stands in pools. There is little doubt, however, that like the Rahad it is navigable in flood to the Abyssinian border.

Flood. The flood arrives at the junction with the Blue Nile about the last week in June. This is rather earlier than the Rahad flood, owing to the later commencement of the rains in Northern Abyssinia, and possibly partly due to the Dinder not being so excessively tortuous as the Rahad. Both Dinder and Rahad bring down large quantities of fertilising matter.

Tributaries. None of much importance.

Rahad. The RAHAD rises in Abyssinia in the mountainous region between Lake Tsana on the East and Kwara to the west. It takes, at first, a northerly direction, but after entering the Sudan it flows generally north-west in an extraordinarily winding bed to its junction with the Blue Nile, almost opposite the town of Wad Medani.

General. Its width probably nowhere exceeds 100 yards, and is frequently not more than 60; in places it is only 30 yards wide. It loses much of its water by "spills" known as "Maya," and is a much more imposing-looking river above than below Hawata.

Banks. The banks, especially the right, are steep and high, sometimes as much as 40 feet above the bed at low water. They differ from those of the Dinder in that only the left bank is liable to be flooded, and that only at a few places, and consequently do not lend themselves to cultivation to the same extent.

Forest. Belts of dense kittr bush and other jungle grow along its banks. In the lower reaches there are many fine sunt

trees, and further inland talh, heglig, etc. Bordering its upper reaches are heglig, silag, khashkhash, ardeib, tebeldis, gemmeiz, etc.

There are few villages at present above Hawata (right bank), and consequently there is no regular path, though the bush has been to a certain extent cleared. Travelling along the river above Shammam, though practicable, is a difficult operation, more especially before the grass is burnt. Villages.

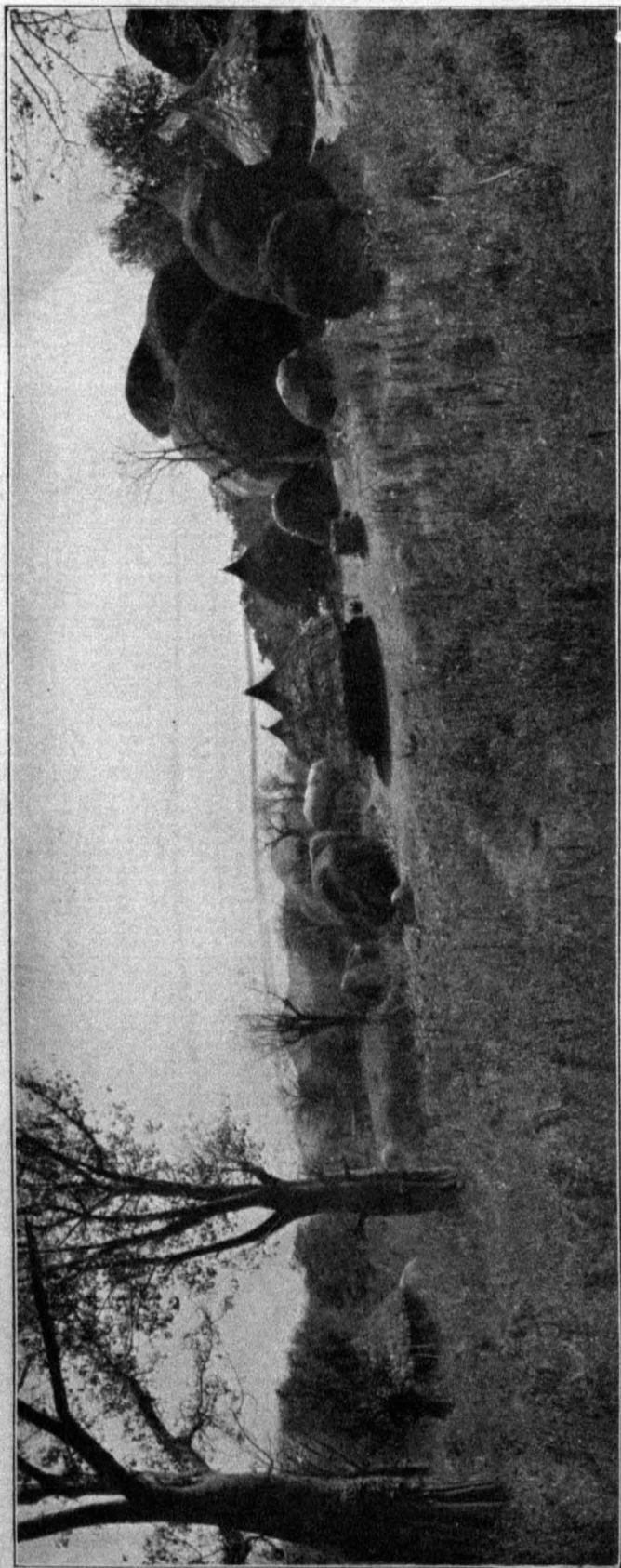
The flood reaches the Blue Nile about the first week in July, and water ceases to flow at the mouth by the end of November. High water is said to last 90 days from about mid-July. Flood.

The river, when in flood, is navigable for small steamers throughout, but its comparatively narrow bed, combined with very sharp and frequent bends, militate against successful navigation by sailing boats. Navigability.

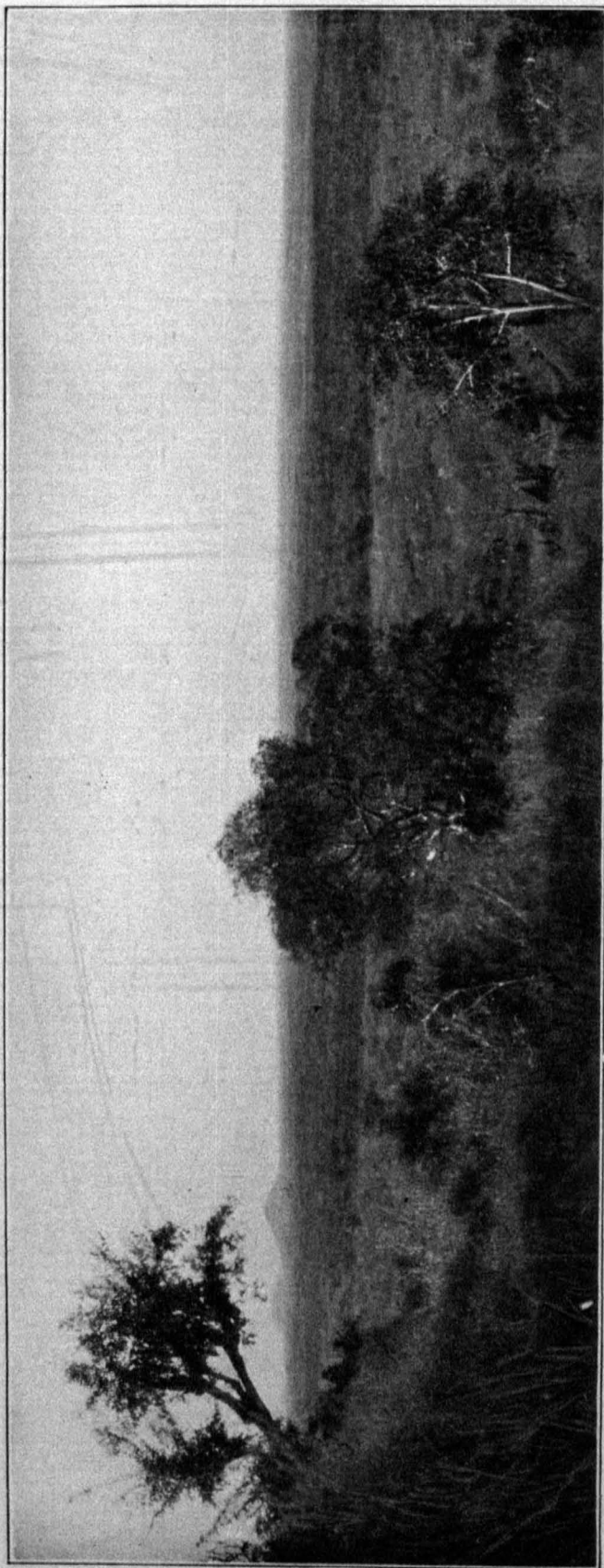
Mr. Armbruster navigated the river in the stern-wheeler Amara from its mouth to Meshra Abid (420 miles) in August, 1904. On the way down stream navigation was only effected with considerable difficulty and serious damage to the steamer, owing to the rate of the current—6 miles per hour at Abid and 3 miles per hour at Sherif Yagub—as well as to the extreme sharpness of the bends, at which there were often rocks and large overhanging trees.

TABLE OF DISTANCES ON THE BLUE NILE.

Place	Intermediate.		Total from Khartoum.	
	Miles.	Kilometres.	Miles.	Kilometres.
Khartoum (Palace)	0	0	0	0
Soba	14	22½	14	22½
Eilafun	4	6½	18	29
El Masid	20	32	38	61
Kamlin	23	37	61	98
Rufaa	33½	53	94½	151
Abu Haraz...	23	37	117½	188½
Mouth of Rahad	5	8	122½	197
Wad Medani	½	1	123	198
Mouth of Dinder	40	64	163	262
Wad El Abbas	30	48	193	310½
Sennar	20	32	213	342½
Senga	53	85	266	428
Karkoj	21	34	287	462
Abu Naama	22	35½	309	497½
Roseires	73	117½	382	615
Famaka	52	83½	434	698½



VILLAGE IN THE SOUTHERN GEZIRA.



LANDSCAPE, SOUTHERN GEZIRA.

CHAPTER V.

CENTRAL SUDAN.

(Country between the White Nile and Abyssinia, bounded by the Blue Nile and Sobat.)

SECTION 1.—GEZIRA; KHARTOUM TO SENNAR—GOZ ABU GUMA LINE.

The area of about 7,500 square miles enclosed by the Blue and White Niles, from their junction at Khartoum to as far south as the line Sennar—Goz Abu Guma, forms the northern portion of that generally known as the “Gezira” or “El Hoi,” and contains some of the most fertile and most thickly populated districts in the Sudan. Though rather sandy in the neighbourhood of Khartoum, the soil of this flat alluvial plain gradually becomes richer and richer as one proceeds southwards, until between Mesellemia and Managil or Abud the acme of fertility is attained. The eastern half of this district is much more fertile and cultivated than the western half, a fact perhaps attributable to the fertilizing properties of the Blue compared to the White Nile. The whole of this region is so flat and free from khors, or other indications as to the direction of the drainage, that, except perhaps just south of Managil, it is impossible, without careful levelling, to define the watershed between the two rivers.

General
description
(topo-
graphical).

Bush of any extent and the granite hills, so common in most parts of the Sudan, are only found along its more southern, eastern, and western limits, whilst where not cultivated, the surface of the ground is usually covered with maheirib, homra, hantut, or naal grass. The entire area is definitely owned by tribes, families, or individuals, and strangers desiring to cultivate any portion can only do so on payment of rent, which is usually taken in kind.

Many of the tribes, and their name is legion*, inhabiting the interior of this district are of a semi-nomadic nature, that is to say, they cultivate and graze in the interior during the rains, and in the dry weather repair to the rivers, where not only is the watering of their flocks an easier matter and the grazing better than inland, but much ground is left by the receding Niles available for cultivation.

Inhabitants.

On both the Blue and White Niles, however, there is, in addition, a large and heterogeneous sedentary population. The principal cereal cultivated is, of course, dura, and a species known as “feterita” is sown as soon as sufficient rain has fallen, after which it merely requires to be kept weeded, and in two months’ time is ready for harvesting. The only drawback is that this crop is entirely dependent on the rainfall, which is often insufficient, and small banks, 1 to 2 feet high, called “taras,” are generally necessary to hold up the water in order to thoroughly flood any particular piece of land which it is desired to cultivate.

Cultivation
(dura).

Three ardebs† per feddan (acre approximately) is an exceptionally good crop, but one ardeb per feddan is the ordinary yield of rain-watered land. The natives reckon a yield of 15 ardebs per ruba† of seed sown a very good crop for very good land in a favourable year, but 4 ardebs per ruba is about the average.

Shaduf or sagia-watered land on the Blue Nile yields 5 ardebs of dura shami (Indian corn) per feddan, whilst on the White Nile 3½ to 4 is an average crop. Irrigation on the former is usually by sagia, and on the latter by shaduf.

Dura shami.

Wheat is cultivated to a limited extent on shaduf or sagia lands, but it is too expensive to be popular with the natives. An average crop is 5 ardebs per feddan. It is sown late in November, and harvested three months later.

Wheat.

Much has yet to be learnt as to the suitability of the Gezira for growing cotton. Cotton sown on the foreshore of the White Nile near Khartoum in July is irrigated by the flood, and three pickings can be made before the river becomes too low in February. Experiments so far show “Mit Afifi” to be the species best adapted to the country, but the paucity of the rainfall has so far precluded the possibility of obtaining reliable results from the experiments made. Sufficient cotton, of a quality suitable for local requirements, has, however, been grown for many years.

Cotton.

The water supply during the dry season of other than the riverain population is from wells. In the rains these are supplemented by hafirs or tanks. The depth of the wells varies from 60 feet on the east of the watershed near the Blue Nile to 100 feet in the centre, where they gradually become deeper the further south one travels, until a few miles south of Managil they are as much as 200 feet deep, whilst in the pans or hollows of the west of the watershed

Water
supply.

* *Vide* list, Appendix F.

† 1 ardeb = 300 lbs. = 24 ruba.

they are often not more than 15 feet. These latter wells are peculiar, in that if used for long they become salt and thus new wells have to be constantly dug.

Many of the wells also in the north of the Gezira are salt. Nearly all villages have their own well, though occasionally water is carried for a distance of several miles.

Grazing.

There is often very little grazing a few months after the rains have terminated; during the dry season, therefore, the flocks are pastured along the banks of the Niles, and in bad seasons they even cross the river into Kordofan.

During the Kharif, as the serut fly is not present north of Sennar-Shawal, many camels and flocks are brought from the south to graze north of this line.

Chief towns.

EL GETEINA.—54½ miles by road south of Khartoum on right bank White Nile. Headquarters of Geteina District and residence of Mamur, police officer, etc. The inhabitants are chiefly Danagla and Jaalin. The Omda's name is Sheikh Mohammed Osman Abd El Rahman, a Dongolau. Most of the houses are built of mud. Post and Telegraph office. (*Vide* p. 53.)

KAWA.—132 miles by road south of Khartoum on White Nile (right bank). It is the same as El Eis of the old travellers. It has rather a large population of Danagla, Jaalin, Shaigia, and various blacks. The Omda's name is Ismail Musa. The houses are both mud and flat-roofed, and grass "tukls." It is the headquarters of Kawa District and residence of Mamur. Post and Telegraph office. (*Vide* p. 57.)

GOZ ABU GUMA (OR ZEINOBA).—Quite a newly built town of grass tukls on the White Nile, about 180 miles by road south of Khartoum. A steamer from Khartoum runs up as far as this with mails weekly. There is a post office and telegraph office. Residence of a Mamur and police officer. Inhabitants, Danagla, Jaalin, Gowama, and blacks. Omda Ahmed Mohammed El Zein, a Jaali. Practically no transport animals obtainable here. A good deal of gum is collected here from the interior of Kordofan. (*Vide* p. 59.)

MAATUK.—A collection of tukl villages, 22 miles north-east of Dueim and 29 miles west of Managil. The population, a large one, consists chiefly of Arakin, also Hassania and Tawal. The Omda's name is Ibrahim Wad El Netef, an Araki.

The water supply is plentiful and good from many wells 15 to 30 feet deep. In the rains the inhabitants, to a great extent, leave the wells and live on their cultivation, drinking from hafirs or rain-water tanks. There is much rain cultivation about here in good years. Where not cultivated, the land is usually covered with scattered laot and kittr bush. Maatuk belongs to Kawa District of the Gezira Province.

MANAGIL.—A collection of some half-dozen or more tukl villages in the centre of the most fertile part of the Gezira. It is 38 miles from Wad Medani, 50 from Dueim and 107 from Khartoum. Residence of Mamur and police officer of Managil District belonging to Gezira Province. Fair "Suk": market days, Sundays and Wednesdays. The wells, three in number, are about 150 feet deep. There is a large mixed population here and throughout the District, which contains 43,000 inhabitants. The land just south of Managil is the most suitable in the Gezira for the cultivation of cotton. This district was handed over to his fellow Taaisha by the Khalifa Abdalla, and some of the Tagale blacks imported by them to cultivate have settled in the neighbourhood.

SEGADI.—A large tukl village situated at the foot of the southern slopes of two low granite hills 50 miles south of Managil. It belongs to the Sennar Province. The Omda's name is Torin Ahmed, of the Rufaa tribe. The population, numbering about 1,500 (?), is composed of many different tribes. Water supply is fairly good. It is about 40 miles from Goz Abu Guma and 36 from Shawal, on the White Nile.

MOYA.—Another large village belonging to and 21 miles west from Sennar and about 14 miles south-east of Segadi. There are several hills in the neighbourhood, chief of which is J. Moya, about 500 feet high, from the summit of which Jebel Dali, on the road to Gule, is visible bearing 177° mag. There is a road from here to Gule and another to Wad Medani. Water supply is very bad, and, in fact, almost nil towards the end of the dry season, when the inhabitants disperse in different directions. The Omda's name is El Imam Hadibai, and the population, which, however, varies, numbers about 1,200, chiefly Amarna, also Hameg and Gowama.

KAMLIN.—58½ miles by road and 64½ miles by river from Khartoum, on left bank of Blue Nile. Present (1904) Headquarters* of Gezira Province and residence of Mudir. There is a large population, consisting of Danagla (several sections, but chiefly El Jeberked), Mawalads (Mogharba and Egyptian), Jaalin, and Shaigia. Houses mostly built of mud. Post and Telegraph office. The Omda's name is Abbas Musa.

HELLET AMARA (OR ARBAGI).—On left bank, Blue Nile, 84½ miles by road and 95 by river from Khartoum. Opposite Rufaa. There are several villages in the angle of the river which, however, are so close to one another that they may be considered as one. Houses mostly built of mud. Population chiefly Jaalin, Danagla and Batahin, under Omda El Sheikh Ali El Haj Taha, a Jaali. Amara is the headquarters of the Mesellemia District of Gezira Province and residence of a British inspector, Mamur, police officer, etc. Population of District 32,300, chiefly Halawin, who are the best cultivators in the Sudan.

* Wad Medani is to become the headquarters of Gezira (Blue Nile) Province in 1905.

ARBAGI.—Arbagi, which is close to Amara, is one of the oldest sites in the Sudan, and is mentioned by the learned Ludolphus in his history of Abyssinia. It was destroyed by the Shukria early in the 19th or at the end of 18th century.

MESELLEMIA.—Mesellemia, from which an administrative district takes its name, is about 11 miles nearly due south of Arbagi, and about 6 miles inland from the Blue Nile (L.B.). Prior to the Mahdia it was a very large town and a great centre of trade. People are now returning and are rebuilding it. Surrounding it is some of the most fertile land in the Sudan. Residence of a Mamur and headquarters of the district.

WAD MEDANI.—Population about 14,000; on left bank Blue Nile, just above its junction with Rahad; about 1 mile long by $\frac{1}{2}$ mile broad; large market daily, also bi-weekly, Monday and Thursday, the largest in the Sudan next to Omdurman. Founded by El Fiki Medani about 1800 A.D. Post and telegraph office. Inhabitants: Gezira sedentary tribes, principally Khawalda, Arakin, Kawahla, Jaalin, Bussalia, and Medaniim. Headquarters of Gezira Province (1905). Garrison, one battalion. Rainfall here for 12 months—March 1903 to February 1904—was 313.5 m.m. or about 12 $\frac{1}{2}$ inches.

SENGA.—Headquarters of Senga District: will probably be headquarters of Sennar Province in 1905. A large and increasing village, and next in importance to Wad Medani; left bank Blue Nile about half mile long and some distance inland; all built of straw huts except the Government buildings, which are of brick. Soil fertile, and district much wooded. Population about 1,600. Yearly increasing trade and daily market. Founded by Abdalla Wad El Hassan about 19 years ago. Inhabitants mostly Jaalin and Kenana. Post and telegraph offices.

SENNAR.—Almost in ruins owing to Dervish occupation. Has lost all its former importance. Extends about $\frac{3}{4}$ mile along the river, surrounded by an old trench and embankments. There is a large mosque of red burnt bricks, in a very bad state of repair. At the time of its re-occupation in 1898, Sennar town was in ruins and uninhabited; it was made headquarters of the province till, in April, 1900, it was superseded by Wad Medani, Sennar remaining headquarters of a District. In March, 1903, the headquarters of the District were removed about 3 miles south of Sennar to Kabush on the river bank, where new buildings have been erected; people are now moving and settling between old Sennar and Kabush. Bi-weekly market Monday and Thursday. In surrounding district soil very fertile, all land cultivated by rains, except in Sennar town, which is irrigated by five sagias. Near Kabush there is thick forest along the river, known as the forest of Kabush, extending nearly up to Ereidiba. Population 350. Inhabitants: Kenana, Gawazma, Rufaa, Jaalin, Kawahla, etc.

WAD EL ABBAS.—Population about 1,200; right bank Blue Nile; founded about 50 years ago. Inhabitants, Jaalin and Gezira tribes, with some 300 blacks. Weekly market on Wednesdays.

SECTION 2.—COUNTRY SOUTH OF SENNAR—GOZ ABU GUMA LINE TO THE SOBAT.

(a) General Description.

The country between the Niles south of north lat. 13° 30' (approximately) forms the southern portion of that known as "the Gezira" or "El Hoi," and is, save for the riverain population of the Blue Nile and the few villages on the White Nile between Goz Abu Guma and Jebelein, practically uninhabited as far south as north parallel 12°, which is the northern limit of Dar Fung. Topography.

With the exception of the water in natural tanks at Jebels Mazmum* and Gerebin (which are however apt to run dry) this level plain is waterless in the driest season, though the soil is of the richest description, and beyond here and there a few isolated granite hills, the highest of which is Abu Gurud, its surface is devoid of all inequalities and undulations. Not a single khor or wadi is discernible, and except for fairly wide belts of kittr bush, especially near the two rivers and round the bases of the hills, the country is on the whole fairly open until nearing Dar Fung, when dense forest commences and stretches, apparently continuously, east and west from Nile to Nile. Dar Fung.

Owing to the scanty water supply during the dry season and the spongy nature of the soil, it is almost impossible for caravans to travel otherwise than on the few existing tracks.

South of Gule this forest of talh, hashab, soffar, etc., extends uninterruptedly to the hills of Tabi on the south-east, and to Surkum and Keili to the south. About 30 miles south of Gule khors draining the Tabi hills become frequent, and the surface of the ground becomes stony, making the going along the already narrow and much overgrown paths exceedingly bad.

The districts of Fazogli, Keili, and the greater part of Dul and Kirin are undulating and much cut up by watercourses, and boast far more hills than the country further west towards the White Nile. The hills in these districts Fazoglian
Keili.

* There is now a well at J. Soga, a few hundred yards west of the village at the northern end of J. Mazmum; there is also a well at J. Dali, which cannot, however, be relied on.

are scattered promiscuously, and rise steeply from the surrounding country. They are generally covered with detached boulders and stunted trees. The plain itself is for the most part gravelly or stony, and is intersected with dry rocky khors. It is covered near the foot of the hills with a thick low growing forest, but away from the hills the bush is generally thinner. Before it has dried up, the grass among the bush would make it very difficult to leave the paths, but in the dry season there is generally no difficulty in getting through the bush, excepting at the khors. The whole of this country suffers greatly from want of water, and even where there is water in the streams near their sources, it soon disappears into the ground. Water can, however, often be found in many of the stream beds by digging.

South and
south-west
of Gule.

South and south-west of Gule stretches an almost uninterrupted plain to the Baro and Sobat, bounded on the west by the White Nile and on the east by the hills on the Abyssinian frontier. In the central and eastern portions of this district there are a few scattered hills, such as Abuldugu, Melkan, Ulu, etc., belonging to the Burun, at each of which there is water, but in the Dinka country from Jelebein southwards along the Nile, these are conspicuous by their absence. Between north parallels $12^{\circ} 30'$ and $10^{\circ} 30'$ forest is almost continuous, however, south of $10^{\circ} 30'$ the country becomes gradually more open and grassy and continues so, as far as is known, up to the fringe of forest bordering the Baro and Sobat. Water, south of $10^{\circ} 30'$, seems comparatively plentiful, both in hafirs made by the Burun or standing in pools in khors.

The width of marsh bordering the Baro and Sobat is often much exaggerated; it seems generally not to exceed 4 to 5 miles in width along the former, and is more often much less along the latter. Fringing the marsh is a narrow belt of forest, and behind that steppe-like country, which becomes practically treeless in the region of the lower Sobat (*vide* Chap. VI).

Drainage.

Khor Tomat, draining Beni Shangul and Fazogli is the principal khor emptying into the Blue Nile.

The more important ones emptying into the White Nile are :—

Khor Deleib, source in Jebel Tabi and mouth at Renk; Khors Rau and Balantega, mouths at Jebel Ahmed Agha, but source conjectural, and Khor Adar or Yal, which empties into the White Nile about 30 miles north of Fashoda, and possibly forms the mouth of both the Yabus and Sonka. Another theory is that the Sonka and Yabus drain into a marsh, from which a certain amount of water is believed to find its way into the Sobat near Nasser. Khor Garre drains into the Baro.

Rainfall.

The rainfall over the whole of this area is heavy, especially in the more southern districts, where the rainy season may be said to extend from the end of April till the beginning of November.

Transport
animals.

Camels, mules, or donkeys do well throughout the whole of this district, except during the rains, when mules are probably the best. At this season the serut fly is present everywhere, and in the dry season along the Nile there is a small black fly, similar in general appearance to the common house-fly, which is excessively annoying and somewhat injurious to camels. Abyssinian horses are useful, and the ordinary Arab does well, though more delicate.

Roads.

The only roads* known to exist, with the exception of those from Senga to Moya, and Senga to Jelebein, *via* Teigo and Jebel Dali, are described in the route reports in Vol. 2, Chap. V.

Currency.

In the more northern parts of this region the ordinary Sudan currency is *de rigueur*, but in dealings with natives along the Abyssinian frontier Maria Theresa dollars or gold rings, obtainable at Abu Shaneina (36 Maria Theresa dollars = 1 oz. gold, approximately), are generally required, though in Fazogli, Keili, or in fact in any Arabic-speaking district, Egyptian money is as a rule readily accepted.† Menelek's dollar is only very rarely seen, and his smaller coins never. The Maria Theresa dollar is not, as a rule, accepted unless the brooch on the shoulder is pretty clearly distinguishable. Amongst the Gallas salt bars form the small change ($3\frac{1}{2}$ bars = 1 Maria Theresa dollar).

In the Dinka country on the White Nile, giraffe or buffalo hides are the best trade goods; "gianotta"‡ and other large beads, as well as Egyptian money are also acceptable. Along the Sobat, beads (large amber, opaque white, small white, "gianotta,"‡ etc.), spear heads, axes, and fasses are all much in request. Money is becoming daily more readily taken.

Mosquitos.

Mosquitos, or "Ba-uda" as they are called by the Dinkas and by many Sudanese Arabs, are very numerous in places even in the dry season along the White Nile, though here and there there are none even quite close to the water. The natives themselves, though not professing belief in the Anopheles theory, say that if one is bitten much by them they cause fever. The fact of there being a village at any spot may be accepted as sufficient guarantee that there are no, or at any rate, very few, mosquitos there. Most of the villages even in the dry season are a mile or more from the river.

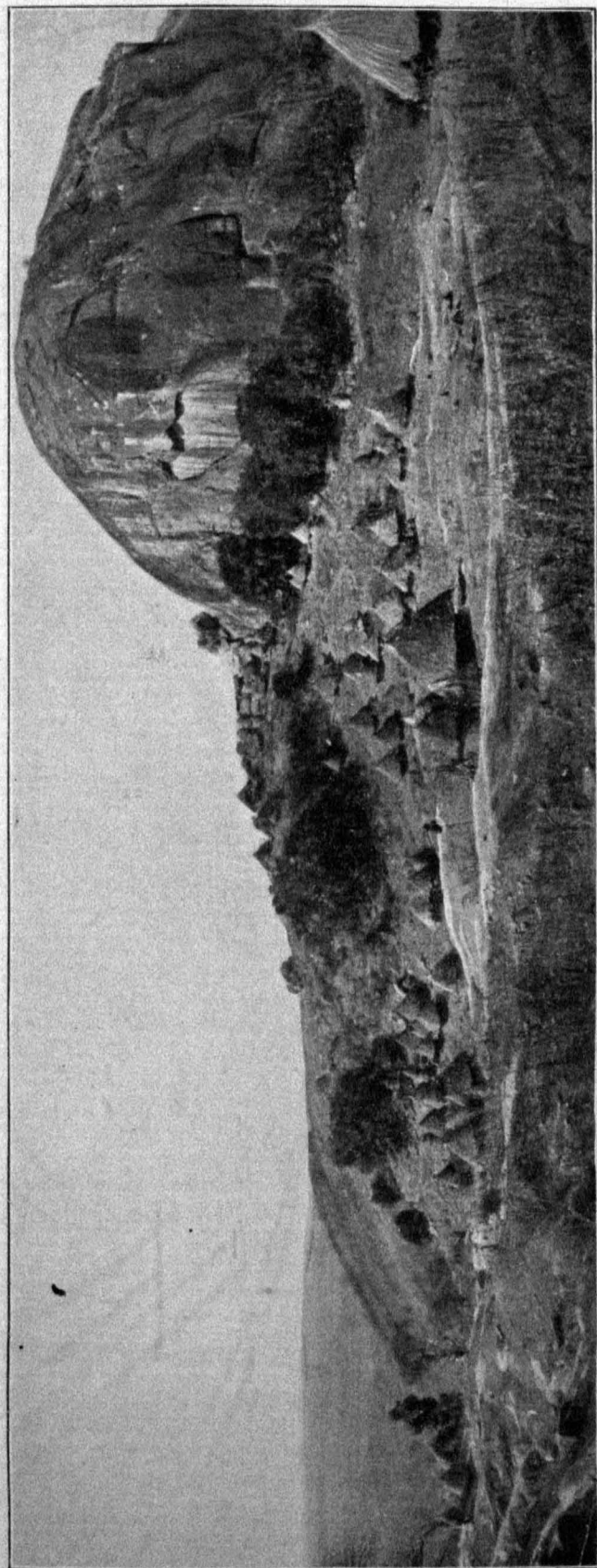
Game.

The following species are represented:—Elephant, buffalo, giraffe, hippopotamus, hartebeeste (*Jacksonii* and *tora*), tiang, roan-antelope, kudu, waterbuck, reedbuck, bushbuck, cobus leucotis, gazelle, oribi, lion, leopard, cheetah, etc. Specimens of Neumann's hartebeeste are also believed to have been shot near Ahmed Agha.

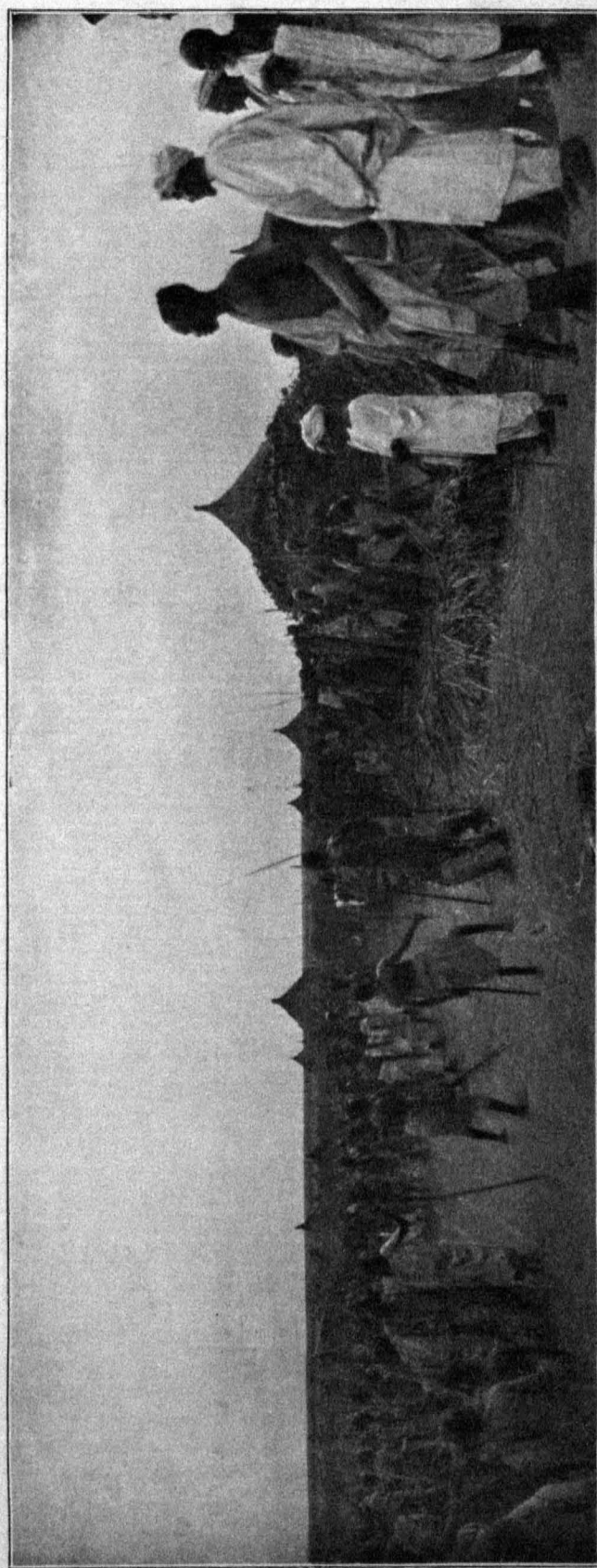
* A new road is being cut (1904) from Senga to Goz Abu Guma, and from Roseires direct to Gule and Renk.

† Egyptian money is accepted in Beni Shangul except by the Abyssinians.

‡ Black bead with white spots.



IN THE DAR EL FUNG.



VILLAGE SCENE—BURUN COUNTRY.

(b) *Dar Fung (South of North Lat. 12°).*

Boundaries. Dar Fung is now, compared to its palmy days, an unimportant district. Its boundaries are: on the north, Jebels Gereiwa and Rera; on the east, Jebel Agadi and the Fazogli district. Southwards, it extends to the Abyssinian frontier, and, including the district of Keili and the northern Burun country, extends westwards towards the Dinkas of the White Nile.

J. Tabi and Ingassana. In the days when the Fung were at their best, it included Dul and Assosa etc., which now belong to Abyssinia. Jebel Tabi and district is included in Dar Fung. The Ingassana, now under Mek Agoda, who inhabit it, remained independent and refused to pay tribute to Idris Wad Regab or the Government until February, 1903, when the Mudir visited this district and established the headquarters of the Dar Fung District at Soda instead of Gule, without opposition. The Ingassana are seldom met without their peculiar sickle-shaped swords. They also possess curious boomerang-like throwing-sticks. They keep apparently a good deal to themselves, as complaints against them are rare. They expressed delight at coming under the ægis of the Government, and at the assurance of their future immunity from slave raids. The district of Tabi is hilly and well watered, and appears to be much more healthy than the surrounding plains. It is said to much resemble Erkowit in the Suakin district. Pigs are not uncommon in this district, and the menu of the chiefs is a varied one, dogs, horses, camels, leopards etc., are all eaten, especially the former, with great relish. The skulls of all animals consumed are arranged in order round the enclosures of the houses.

Idris Wad Regab. Idris Wad Regab, a direct descendant of the old Fung dynasty, is now Mek or head Sheikh of Dar Fung. He is a loyal man, and is now very badly off, having suffered greatly at the hands of the Dervishes, by whom he was not recognised. Sheikh Abd El Kader is his Wakil. Adlan Wad Surur was Mek during the Mahdia; he now lives near Karkoj.

Gule used to be the chief town of Dar Fung, it is now only second in importance to Keili. It consists of three small villages situated at the foot of Jebel Idris or Gale, a granite mass about 1,000 feet high, and contains but a few hundred inhabitants, mostly Hameg, or a mixture of Hameg and the aboriginal Fung. There are generally some encampments of Dar Ageil or Selim Arabs in the vicinity.

Trade. There is a little trade with Abyssinia, but practically nothing in the shape of supplies, animals etc., are procurable here. Most of the merchants trading with Abyssinia pass through Keili.

Cultivation. There is the usual dura and simsim cultivation, but little more is grown than is required for the wants of the inhabitants.

Raids. As, prior to the demarcation of the Abyssinian frontier, the Burun were so decimated by raiding parties from Abyssinian territory, Idris Wad Regab was, in March, 1902, given rifles by the Government to protect his people. In addition to these he had a good many of his own, with which he inflicted some loss on Ahmed Fedil's force when it marched from Dakhila to the White Nile after the battle of Roseires, December, 1898. These raids have ceased for the present owing to the capture of the principal raider, Ibrahim Wad Mahmud, in February, 1904. *Vide* Chap. VII, Part II, page 278.

Water supply. Water, which is obtained from several holes at the foot of the Jebel, is fairly plentiful but bad. It is said to be impregnated with lime.

Burun.

Boundaries, etc. The Burun inhabit the country between the Dinkas of the White Nile and the Abyssinian frontier from about 11° 30' north latitude southwards to the Dinkas and Nuers of the Sobat and Baro. Those among the hills north of K. Yabus are under Mek Idris Wad Regab, of Gule, and appear to have acknowledged the suzerainty of his predecessors for probably a century before the advent of the Turks. On the K. Yabus and south of it nothing can be definitely stated as to their organisation, but they appear to be divided into a number of independent communities.

The Burun are said to be related to the Berta, but they are lighter in colour than the Berta generally are and speak a different language.

Burun near K. Yabus. Major Gwynn gives the following description of the Burun near Khor Yabus: The men, who are physically very finely built, are stark naked, and smear their heads with wet and clammy red mud.* They all carry long bows, wooden pointed featherless arrows, and in addition, generally a spear. Arrows are poisoned by being stuck into a certain species of tree,† and are pointed with notched charred wood or ebony. They have a range of 150 yards.

* Their appearance is said to be rendered still more grotesque by the wearing of a cow-hide belt about 3 inches wide to which is affixed, at the back, the tail of some animal; this gives the wearer the strange appearance of possessing a tail.

† *Euphorbia candelabrum*.

The women are also naked, save for a small loin cloth of skin. They are good looking and attractive. The Burun dialect spoken by Idris Wad Regab's men, but no Arabic, is understood by the Burun of the Yabus. Their word of greeting is "Moka."

The Burun north of K. Yabus live as a rule on the scattered hills during the rains, and drink from the rainwater which collects in natural rock tanks. During the dry season, when this water is exhausted, they either descend to the plain and live on the khors, in many of which water stands in pools, or else have to carry their water for a considerable distance. Some of the hills inhabited by them are Abuldugu, Surkum, Melkan, Gum Gum, and Wadaga. K. Gemmeiza, flowing from near J. Abuldugu towards Melut, furnishes their principal water supply. They also obtain water from "Hafirs," or ponds, which are roofed with thatch to lessen evaporation. Wells seem to be very rarely sunk. These northern Burun are now very poor, and women and children are very scarce.

The Burun, in the Garre Valley, seem more prosperous, having plenty of water and grain in their country, but both sections, especially the northern, have been most deplorably reduced by slave raids from the east. The principal raider, however, Ibrahim Wad Mahmud, as before stated, was captured by Lieutenant-Colonel Gorrington in February, 1904. The southern Burun country is still almost entirely unexplored.

The Burun seem to have little intercourse with the tribes living on the White Nile, and no regular roads to it, except perhaps from J. Gerawid to J. Ahmed Agha, seem to exist. It is intended, however, to open up roads between the western frontier of Abyssinia and the Nile, and to improve the present primitive system of water supply in this district. For report on routes, *vide* Chapter V. and Appendix, Vol. II. Communications.

Keili.

Keili, which is part of Dar Fung, is bounded on the east and south-east by the Abyssinian frontier, which divides it from Beni Shangul, Gomasha, and Dul, and on the north-east by Fazogli. Keili claims to share with Fazogli the mountains of Agaru, Kashangaru, and Ragreig, though practically the whole of Agaru belongs to the latter, and the whole of Ragreig to the former, as also does Jebel Gainshur. Jebels Kurmuk and Maiak are within the southern limits of this district, and Jebels Surkum and Abuldugu to the west also belong to it. On the north the boundary is Jebel Tabi. Boundaries.

The Jebelawin inhabit the eastern portions of the district, and the Burun the western. For administrative purposes, this district is in the Dar Fung District. Inhabitants.

The acting Mek of Keili is a youth of about 15 years of age. His father, Beshir Hamdan, who was much addicted to slave dealing, was arrested and deposed by Government, February, 1903.

The valley between Ragreig and Jebel Keili forms as it were an oasis, and must have a population of several thousand. It is a very pleasant spot in the dry season, but in the rains becomes more or less swampy.

Sheikh Bilburka, of the Fung inhabitants of Dul, now lives at Keili in order to avoid the exactions of the Watawit, under Abyssinian rule, similarly Sheikh Jela Abdalla, a Jaali refugee, fled from Beshir and Shanji villages in 1897, and now lives in the Arab settlement at Keili.

The Jebelawin language is used at Jebel Keili. The Burun use a dialect of the Burun language similar to that of Jebel Maiak. Language.

In the valley between Jebels Kurmuk and Keili a great deal of dura is grown, both for local consumption and for the supply of the mountaineers in the hills near Dul. There are plenty of cattle, sheep and pigs. Cultivation, etc.

Some alluvial gold is found in the khor east of Jebel Ragreig. Gold.

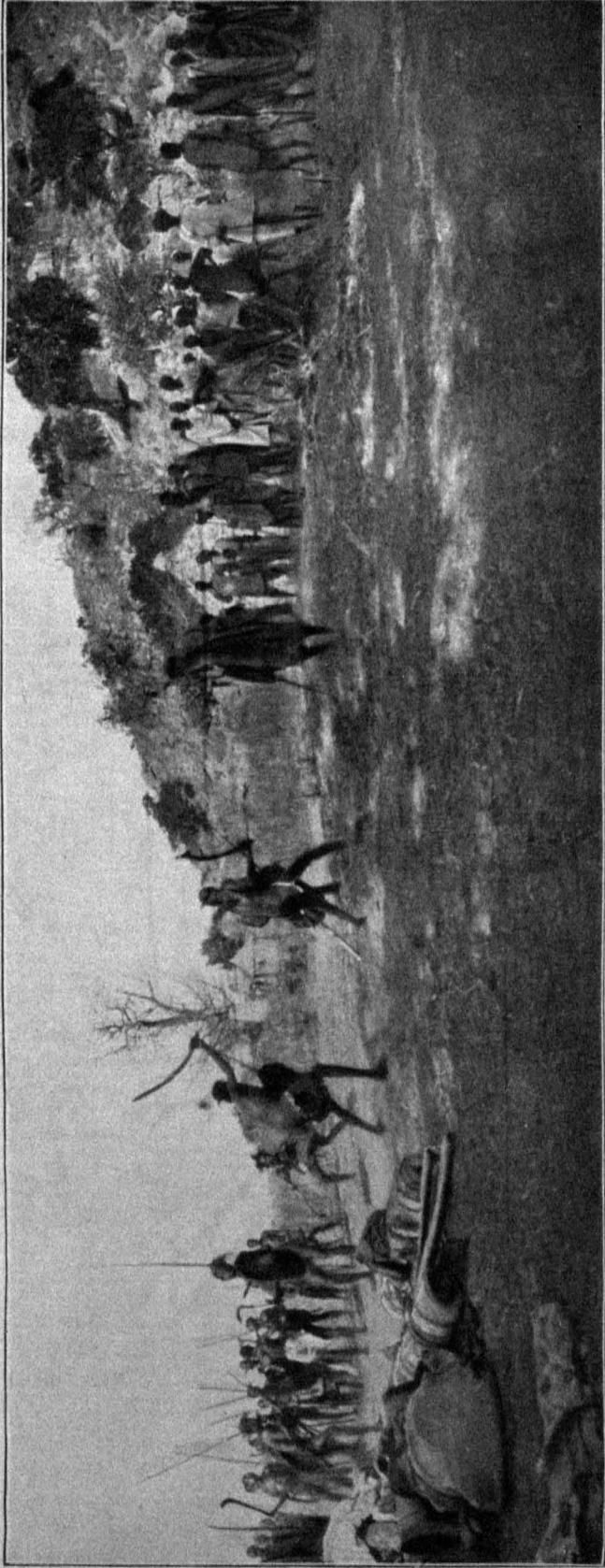
Water is obtained from wells and from pools in khors, whilst on the face of Jebel Keili itself there are several springs. At Jebel Surkum there is a perennial supply of muddy water from four holes on the south side of the Jebel. Water supply.

At Jebel Abuldugu there is water in the pass through which the road from Gule leads. This, however, does not last all the year round. Natives then water in the Khor Ganna, about 2 miles to the east.

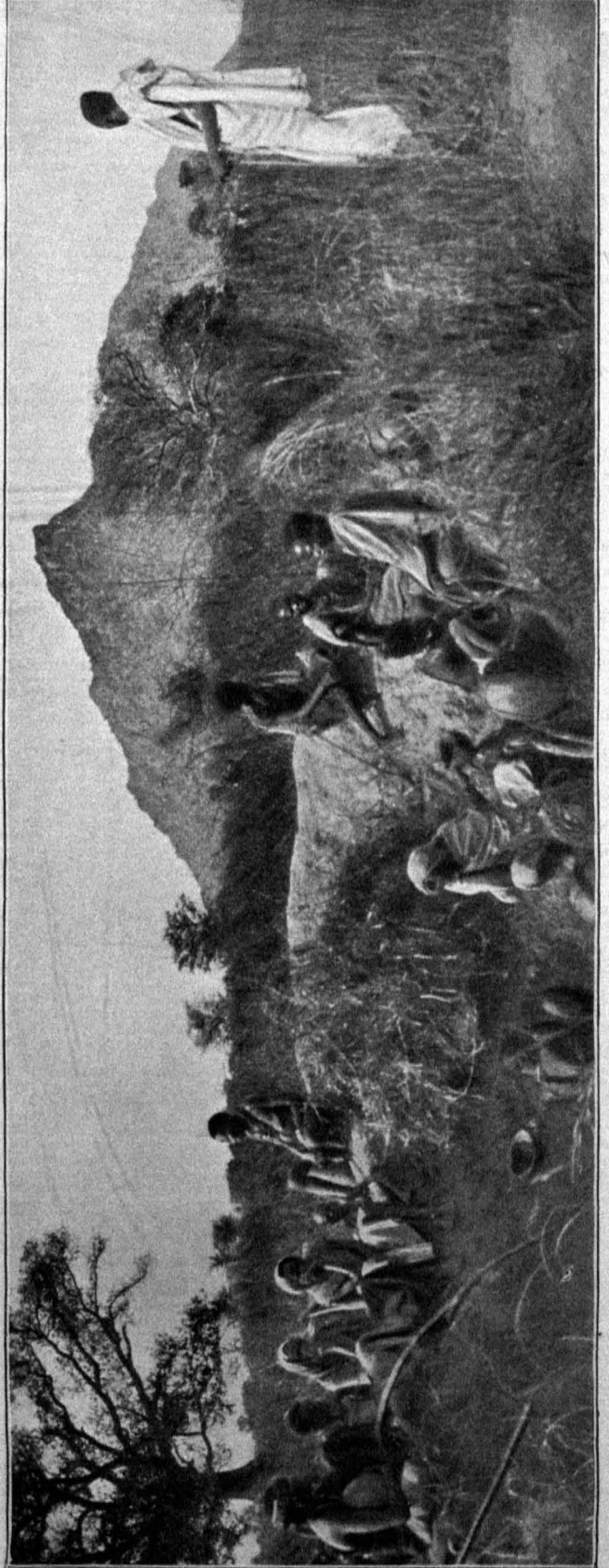
Keili is the chief town of Dar Fung and is rapidly growing. It is situated at the foot and to the south of J. Keili, and is the residence of the Mek. There is also a small garrison of Sudanese regulars here from Wad Medani, as well as some mounted irregulars.

(c) Fazogli.

Fazogli is not included in Dar Fung, but belongs to the Roseires District; it is bounded for administrative purposes as follows:—On the north-west and west by the Hameg (Abu Gemai to Jebel El Geri), on the north by the Jebel Geri—Abu Ramla line, and from Abu Ramla its boundary runs southwards along the Abyssinian frontier to Jebel Kashangaru, thence northwards towards Jebel Agadi, Dar Fung being to the west of this line. Boundaries.



INGASSANA VILLAGE.



HILL SCENERY IN DAR EL FUNG.

The Mek's name is Regab Hassan, who is surnamed Abadaro, and is a middle-aged man who appears to have a good deal of influence, but is said to be addicted to drink. He claims descent from Jaber, the first Fung conqueror of Fazogli. Mek.

The principal inhabitants are Jebelawin, an aboriginal race merged into the ruling Fung living at Fazogli, Kuturu, Kiri, Abu Shaneina on both banks, and Adarsi. Their villages on the Tumat and at Abu Shaneina are under Mek Khamis, a Jebelawi, but the Arabs at the latter place are under an Arab named Ali Wad Rowaa. Inhabitants.
Jebelawin.

Elias Khamis, the former Fung ruler of the Jebelawin of Beni Shangul lives on the Tomat with a following of Sudanese refugees from Beni Shangul. Sheikh Fakir is similarly in charge of Arab refugees from the south.

Arabic is understood by the Sheikhs of the district, but the rotana in use on the left bank of the Nile is that used by the Hameg of the Blue Nile, and by the Jebelawin and Berta. On the right bank, in the Fazogli district, the Gumz language is totally different. Language.

The Sheikhs alone profess Mohammedanism; the majority of the Jebelawin are heathen. Religion.

In the hills the inhabitants are nearly all Berta; very few can talk Arabic. They are as a rule finely developed and healthy looking, but are dull and lazy to a degree. Their villages are built in the most inaccessible places; the tukls being wedged amongst great boulders. They only grow small patches of dura, and depend entirely on the rains to irrigate it. During the dry season, even for drinking, water has to be carried immense distances. A great many fowls are kept in the villages. The men in some places wash for gold in the khors. Berta.

The Berta of Jebel Falabut are under Mek Abadalla, those of Jebel Faronge are under Mek Amaka. On the latter mountain are separate villages for the Faronge sub-tribe, part of the Fadoko sub-tribe, and the Goamili, who were driven from Jebel Abdanab of late years by the rulers of Beni Shangul. The head-quarters of the Fadoko sub-tribe remain at Sarankchau, near Abdanab on the Yabus river, subject to the Sultan of Beni Shangul. Falabut and Faronge are in charge of Mek Abu Ras of Kiri.

The Berta extend westwards from the Blue Nile through Gezan to Mudeli village (Sheikh El Nur) to Jebel Sude sub-district (Sheikh Hambalha), and Khor Gasa (Mek Jibara), south and west of which the Berta have lost their independence.

The Berta, though heathen, are not averse to Mohammedanism. Religion.

Bakurig Bugul, the successor of Gormaz, the last aboriginal Mek of Gezan sub-district, lives at Fazogli. Hassan Wad El Gharbi is the Sheikh of the Watawit at Gezan and Amora, Mek Abulang being resident chief of the Berta. Gezan.

The word "Gumz" signifies "people" in the aboriginal language, of which the various sub-tribes use distinct dialects. The Gumz, of which the Bazaroda and Kadalo are sub-tribes, are heathen, God and sun being synonymous. Gumz.

The Bazaroda sub-tribe is under Mek Ya Karda, grandson of Ab Zaroda. The boundaries are the Blue Nile on the south and Khor Bombode on the east. Headquarters, Hoburra. Other villages are Kambal, Yagor, Agabar, and Yarada. Though subject to Abadaro, the Mek of Gubba demanded as tribute, in 1900 and 1901, 50 ardebs of dura and 30% worth of gold dust. Products include cotton, dura, simsim, "zaf" or dom fibre, and Adansonia bark rope, honey, gungeleis or Adansonia fruit, and gold dust from the Nile, near the mouth of the Khor Zuar. Bazaroda.

El Kadalo sub-tribe, formerly peopled Jebel Dimr and Jebel Mulki, but Mek Adam, owing to a blood feud with the Fung ruler of Gubba, is now living on the Nile with his following from those hills. The rest of the Kadalo are under him, and subject to Abadaro of Fazogli. In the Samina Hills there are Kadalo at Beletamaru and Masambaga, under Mek Ahmed Wad Mohammed, surnamed El Wishari, also at Jabranza under his son Beshir Ahmed. Kadalo.

At Jebel Metongwe the local Mek is Mansur, and at Jebel Menze, Mek Idris.

FAZOGLI the residence of the Mek, is a straggling village of tukls, extending about 2 miles along a ridge of high ground running parallel to the river. This ridge is about 800 yards from the river, and the low intervening ground is given over entirely to cultivation. The ground behind Fazogli rises to the height of 1,750 feet at a distance of 2 miles, and is covered with trees. Principal
villages.
Fazogli.

The water supply is from the river.

The old mudiria of FAMAKA is an enclosure about 120 yards square, surrounded by a stone wall, which is still in good condition. It is situated on the river bank on a solid rock, which stands in a bend of the river facing E.S.E., and about 60 feet above it, and holds a commanding view of the country to the south for miles. Famaka.

It is itself, however, commanded at a distance of 800 yards by the very high ground rising behind Fazogli.

ABU SHANEINA is the most important village or town in Fazogli. It is here that the trade route from Beni Shangul strikes the Blue Nile, and it is chiefly from that quarter that any considerable increase of trade with Abyssinia can be expected. It is the headquarters of a small frontier force furnishing outlying detachments north and south of the Blue Nile. Mek Khamis is Sheikh of the Jebelawin here and Ali Wad Rowaa of the Arabs. Abu
Shaneina.

KIRI is the most prosperous (1900) looking village in Fazogli, and is built on what should be a very healthy site near the river. The Sheikh's name is Abu Ras Wad Sogheir. Kiri.

- Masurkum. MASURKUM is on the Beni Shangul Abu Shaneina road. The Sheikh, named Bikori, is an old and infirm man, but has evidently been a strong man in his time. He suffered considerably from Dervish raids, and has lost all his cattle.
- Cultivation. Dura, simsim, lubia, and tobacco are the principal crops cultivated, the former is of good quality, both Naggad and Kurgi being sown. In Gezan there is a considerable area under cultivation, but with this exception there is practically none south of a line drawn from Kiri through Jebel Kukura to Masurkum and thence up Khor Masurkum. In the Tomat villages, west of Jebel Fazogli, the dura crop is very fine, but simsim is chiefly grown between Kiri and Fazogli. Ground close to Tomat would undoubtedly repay cultivation, but at present the more easily cleared areas near the Nile are amply sufficient for the population.
- Cattle, etc. There are comparatively few cattle and sheep in the district, the people having suffered so much from raids.
- Trade. A good deal of trade is carried on with Beni Shangul and this is bound to develop. Fazogli produces a little gold, which is found in all the khors coming from Jebel Faronge: Khor El Dahab, near Gezan, being the richest. A good deal of coffee is imported from Abyssinia, as well as horses, mules, cattle, donkeys, and sheep. The idea of ever tapping the trade of the Abyssinian province of Gojjam is said to be out of the question owing to the apparent impossibility of finding a trade route free from physical difficulties of an insuperable kind.
- Transport. Donkeys or mules are the best transport animals all round, though camels do very well as long as their feet do not get sore. All the transport animals available for purchase, or otherwise, are those that come in from Abyssinia, and the supply is a very fluctuating one.

(d) *Dinkas on the White Nile.*

The Dinka country on the White Nile, extends from Jebelein southwards to about 10 miles south of Kodok, along the right bank; it is uninhabited, however, except by Nomad Selim, north of Karshawal.

The Dinkas, or Jange, as they are called by the Arabs, have no Mek like the Shilluks, but each section is separate and independent under its own sheikh, consequently, they were never able to unite to defend themselves against the depredations of slave traders and the Dervishes, who found them an easy prey. Many of their sheikhs at the present time are men who have been slaves in Cairo, and who have been repatriated either by Gordon or the present Sudan Government. Thus it is that, whilst the majority of the men are stark naked, one here and there meets a respectably dressed old man carrying a sunshade.

The women ordinarily wear a goatskin apron in front and another behind, but the unmarried girls are usually content with a string of beads.

The men mould their hair, mixed with red mud, into fantastic shapes, and sleep on a bed of cow-dung ash, with which their bodies are covered. The women do not usually thus disfigure themselves, and sleep on hide mats.

The Dinkas are remarkable for their height and slender limbs and figures. They are not, however, of such fine physique as their neighbours the Shilluks.

They are unenterprising and ignorant to a degree, and so unprogressive and rigidly conservative that any such up-to-date innovation as the introduction of donkeys* for transport purposes, an innovation admitted by themselves to be most desirable, is not adopted simply on the pretext that it was not the custom of their fathers and forefathers.

They consequently always walk, the men carrying long narrow bladed spears and a knob-kerry, and the women a large basket on their heads containing their food, etc.

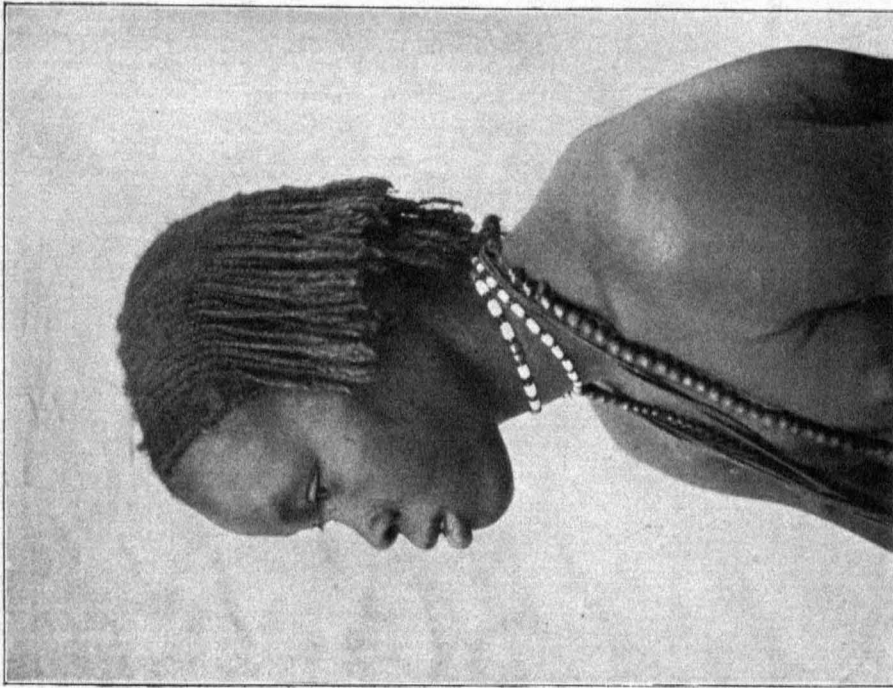
During the dry season the Dinkas desert the hinterland of the river, and descend with their flocks and herds to live near its banks, where the now dry marshes afford excellent grazing.

The localities which they frequent mostly are Renk, El Wat, Jebel Ahmed Agha, Meshra Zeraf, Kaka (right bank), Khor Adar. There are police posts at Renk and Melut; Renk being the headquarters of the District and residence of a British Inspector.

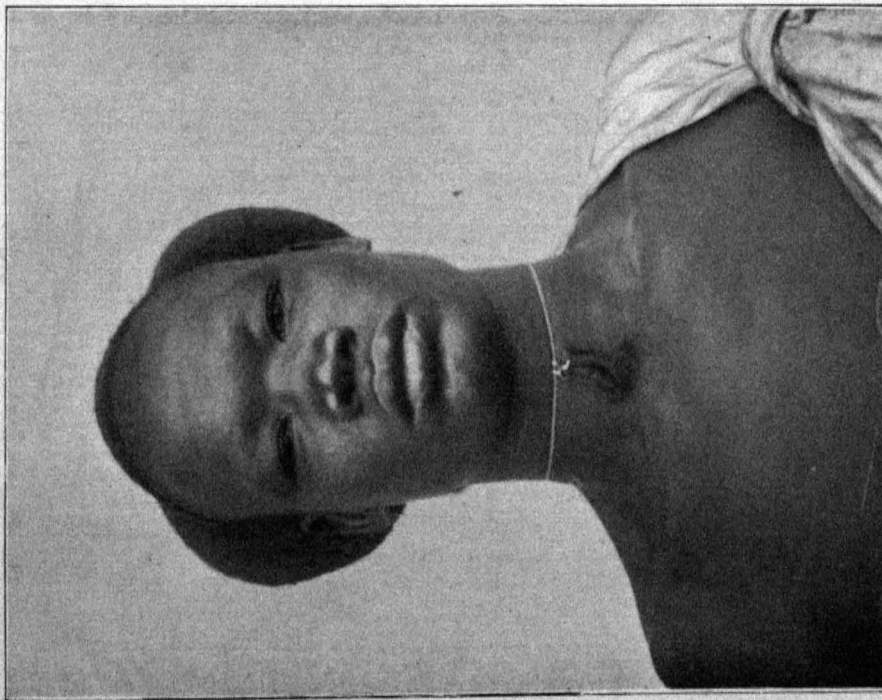
Cultivation. On the arrival of the rains they, for the most part, retire inland, sometimes 20 or 30 miles, to their cultivation, which however, is little more than sufficient for their own requirements. The grain is stored in these cultivation villages, and is only brought to the river in the dry season in small quantities from time to time on the women's heads.

Donkeys, and indeed any means of transport but their women's heads are unknown. If, therefore, it is desired

* Since writing this, Bakhit Niok, a more progressive sheikh than his fellows, has provided himself with both a horse and donkey, other sheikhs are following his lead, and donkeys are becoming comparatively common in Northern Dinkaland.



DINKA GIRL.



DINKA.

to purchase any dura from the Dinkas in the dry season, the would-be purchaser must be prepared to provide transport and to send it a day or so inland.

Herds, etc. The Dinkas of the White Nile, who number about 8,000, own a good many cattle and sheep, and pay tribute on them to the Government partly in kind and partly in money (1904). According to a census made in 1903, the following were the estimated numbers of their herds and flocks: cattle, 8,000; sheep, 16,000; goats, 13,000.

Though living in a grand game country they have no sporting instincts whatever, and rely on the Baggara Arabs to provide them with skins in exchange for dura. They fish to a certain extent, but are not nearly so expert as their neighbours the Shilluks, unlike whom they have no aquatic proclivities.

Religion. A certain number, owing to their having travelled to Khartoum and even Cairo as slaves, profess the Moham-medan faith, but their number is few. The remainder believe in the existence of a being who rules their destiny, and whom they call Deng. He has many forms and shapes, from the spirit of a great departed Sheikh to the more familiar personality of a favourite cow. They also believe in the possibility of transferring their spirits to a particular animal for a particular purpose and for a stated time; for instance, if an unwelcome individual is present, they annoy him in the guise of hyænas at night until he departs. (*Vide* also Chap. VI, Section 2 (*d*), and Chap. VII.)

Marriage customs. (*a*) *Arranging Marriage.*—The intending bridegroom must obtain the consent of the girl's father or guardian, as the case may be, and settle the "maal" (purchase price). He does not necessarily pay the whole at the time, but later, if he finds the girl suits him, and does not have any dealings with other men, he pays the difference; also sometimes after paying the full "maal" he may be ordered by a village council to pay an additional "maal" if he is a rich man.

As a rule the "maal" is paid to the girl's father or guardians a year or so before the man marries her; she remaining meanwhile in her father's house. If during this period of "engagement" the man comes to the conclusion that the girl is not suited to him, he can terminate the engagement, and receives back his cattle. No inter-marriage of blood relations is allowed under any circumstances, on the other hand, a man may marry all or any of his late father's widows (except of course his own mother). In this connection it is interesting to note that, if a girl is tampered with and subsequently becomes ill, it is held to be conclusive proof that she was tampered with by a blood relation, and the blood relations who could possibly have been responsible for the offence are ordered to pay a heavy fine to the girl's father.

(*b*) *Misconduct of a Fiancée.*—If a fiancée misconducts herself, the bridegroom elect receives back all the cattle that he may have paid to the girl's relations, but, if, on the other hand, he still chooses to marry her, he will not receive his cattle back, but will exact a "fine maal" from the man with whom the girl misconducted herself. If he does not choose to marry the girl he receives back his cattle, and the father of the girl receives the "fine maal" from the delinquent. If the man still marries the girl under these circumstances, he slaughters one of the cattle paid as "fine maal" and invites the whole village to dinner; but if he does not marry her, the girl's father does not follow this custom of slaying the bull.

The father or guardian who receives the marriage portion of the girl does not retain the whole to himself, but it is divided according to certain rules among the relations. A man having received a marriage portion on behalf of his daughter or ward, and the girl being still only "engaged," may not dispose of any of it, until the girl is actually married, and has entered her husband's house.

(*c*) *Misconduct after Marriage.*—If a man has dealings with a married woman, her husband shall take a "fine maal" from the adulterer, two or three head of cattle according to the adulterer's wealth. If the wife go wrong, the husband may cast her off, and send her back to her people, and receive back from them the "maal" he originally paid, plus the issue of the said cattle since they left his hands. If the husband go wrong, the father or guardian of the girl he has wronged will take a fine "maal" from him; his wife cannot divorce him.

(*d*) *Divorce.*—If a man maltreats his wife she may complain to her father, who may free her by paying the husband back the original "maal," plus its issue. If the father has no cattle, he will receive his daughter into his house, and when she marries, recompense the late husband.

If a man wishes to divorce his wife, and has good grounds for wishing to do so, he will return her to her father or guardian and receive back his original "maal," plus the issue or not, according to the circumstances of the case.

If a man divorce his wife for misconduct, and there are children of the marriage, they will remain with him.

Misconduct. (*a*) If a man misconduct himself with a girl he will pay to her father or relations a "maal" such as he would have paid had he wished to marry the girl in the usual way, and he must marry her. If, however, the father of the girl is not willing to marry his daughter to the man, he will not exact a full "maal" from him, but only a "fine maal" according to the man's wealth. If a girl misconduct herself, and dies from the effects, the man responsible will pay her father eight head of cattle.

If a man misconduct himself with an engaged girl, and marries her in the place of the original fiancée he shall pay to her father the same "maal" as was paid in the first instance by the other man, and if the girl die in his house,

he shall have no claim to receive back all or any of his "maal" from her father or whoever received his "maal," but in most cases the father will pay him a proportion as a favour.

(b) *Misconduct with a Blood Relation.*—The man who is convicted of misconducting himself with a blood relation will pay to the girl's father one bull and one cow-calf. The bull will be cut into two halves, and afterwards devoured at a village feast; the couple will not, of course, be allowed to marry.

If a man has an adopted daughter, who has been paid to him as "blood maal," she is not allowed to marry out of her adopted father's family, except in rare cases in which she happens to be a blood relation of her adopted family. A man thus possessing an adopted daughter, paid originally as a "blood maal," can terminate the blood feud by paying to her father or relations a small "maal" of cattle. Blood maal.

Violating a "blood maal girl."—If a man has dealings with a girl who has been paid as a "blood maal," he shall be ordered to pay one head of cattle, which, however, can never be returned. If a man has connection with a girl who does not come under this category, he pays, as stated before, a certain "maal," which, however, is returned to him when the girl eventually marries, together with the issue of the "maal."

If a wife die before she has been received into her husband's house, he receives back the "maal" he has paid in advance for her. If she die after being received into her husband's house, he does not, as a matter of course, receive his "maal" back, but the father will almost invariably pay him back half as a favour. If there are children of the marriage, the widower will not receive any cattle back. Death of a wife.

If a husband die his widow will remain with her late husband's relations unless her own relations choose to pay back the "maal" originally received for her, in which latter case the custody of the children is generally given to her late husband's people. Death of a husband.

If a man die and leave property, it goes to his sons, failing a son, if he leave a married daughter who has a son it goes to him. Failing any issue, his property goes to his male relations. The widow of a man will never receive his property. Disposal of property.

HISTORY OF THE DINKAS OF THE WHITE NILE.

This section of the Dinkas migrated from the Bahr-el-Ghazal about 130 or 150 years ago, as nearly as can be judged from various sources of information, and most of their customs, their character, and habits of daily life, are identical with the corresponding traits of the Bahr-el-Ghazal Dinkas as recorded by Schweinfarth. Some of the older Dinkas of the "Ibrahim" section, especially those whose wits have been sharpened by a visit to Cairo or Khartoum, appear to take a considerable interest in tracing back their history.

At the time of the migration, the head of the Bahr-el-Ghazal Dinkas was one Akwai Chakab. He descended into the country on the right bank of the White Nile north of the Sobat, and drove out the Arab inhabitants; these were chiefly Fung, Abu Rof, and Jaalin, the latter being also partly on the left (west) bank. No mention is made of the presence of any Baggara Arabs on the west bank. Akwai Chakab was accompanied by one Kur Deng Achuk wad Agweir, and by his own son, Deng Karuma wad Akwai. Having seized the country and installed his own people, Akwai Chakab returned to his own country in the Bahr-el-Ghazal, and left the Government of his new country in the hands of his son, Deng Karuma and Kur Deng Achuk wad Agweir. Another son of Akwai Chakab accompanied his father in the seizure of the new territories; this was Kolong wad Akwai, and to him was entrusted the command of the advance guard of the army. His orders were to push on ahead, spy out the country, and eventually attack Sennar and the El Ahamda, etc., and reinforcements would be supplied from the rear if necessary.

On the conquest of the Sudan by Mohammed Ali Pasha, the invading "Turks" did not penetrate the east bank beyond Jebel Ahmed Agha; how far south they went on the west bank is not stated. On the east bank, however, they had to fight the powerful Dinka forces from Muli (now called Renk) and did not always come off victors (Muli was at that time called by the Arabs "Haso'a"). The Dinkas, however, being forced to fall back, retreated up Khor Rau, east of Ahmed Agha, followed by the "Turks," who came up with them, and fell on them at the Debba Mabi. The "Turks" completely routed them, and seized and carried off their cattle, but none of their women or children. Mention is made of the "Turks" fighting with the Shilluks near Kaka. The invading army then appears to have retired from the country, leaving the Dinkas to their own devices; and they do not seem to have been troubled again for a considerable time. They were, however making mischief, and they admit that the evil days that befel them at a later date was the inevitable consequence of their own misdeeds. Strong enough to hold their own against other neighbouring tribes, they appear to have turned their attention to annoying the Government, and amongst other exploits, penetrated to Karkoj, killed Sheikh Abdallahi and some of his people, and robbed the remainder. The Governor-General of the Sudan at, or about the time of these occurrences, 1863, was Musa Pasha Hamdi, and he detailed an army under the command of Mohammed Kheir, to go into the Dinka country and wipe out the Dinkas. This was the commencement of their troubles which did not end till 1898. The first descent upon the Dinkas was in the Abialang district, otherwise known as the Dinka

Ibrahim. The inhabitants fled to Jebel Gule and threw themselves under the protection of Sheikh Regab wad Idris, and paid him heavy tribute on the understanding that he would arrange matters between themselves and the Government. Regab wad Idris appears to have accepted the tribute, and then to have sent word to Sennar that the fugitive Dinkas were in his power. Thereupon a force of Egyptian soldiery was despatched from Sennar, and captured the fugitive Dinkas, whom they led off as slaves. The men were enrolled in the Nubian regiments, and the women and children sold. Orders subsequently came to release them, but a considerable number of the men were, nevertheless, kidnapped, and many remained in the regiments; of the latter, there are now several still serving in the army as more or less senior officers. On those occasions when the Dinka forces defeated the Government troops, the locality of the battle has generally been called by the Dinkas by the name of the commander of the Government troops, such as the Island of Wad Ab Kona, of which the original Dinka name, also still used, was Gasa-el-Abiad. Other instances are Wad Ab Sheiba and (Jebel) Ahmed Agha.

The result of these depredations was that the Dinkas were practically driven to exist as outlaws, living in the woods or in the inaccessible Nuer country. They never, however, lost their hold over their own country, and whenever the Government forces withdrew, they would return to the vicinity of their villages, ready to fly at a moment's notice.

In later days, in the time of the Dervish regime, those Dinka districts which, on demand, paid up the whole of their cattle, were not further molested; on the other hand, the people south of Jebel Ahmed Agha declined to fall in with this proposal, and were consequently perpetually harried and raided, and had many of their women and children carried off, the Dinka's first care being always to drive his cattle off to a place of safety. Since the establishment of a settled Government, the Dinkas have been returning in increasing numbers to their country, but the general complaint now is, that at the present time, hundreds, and even thousands of Dinkas are still in the service of those who seized them, or bought them in the old days, and who would, if they had an opportunity, return to their country.

(e) *Selim Baggara.*

The Selim Baggara, though really belonging to the left bank from opposite to Jebelein southwards nearly to Kaka, cross over to the right bank in considerable numbers during the dry season. They prefer to live amongst the Dinkas, as they rely on them principally for their grain supply, not being cultivators to any extent themselves. A good many of them are mounted on Abyssinian ponies (price 30 to 40 sheep, *i.e.*, 3*l.* to 4*l.*) on which they hunt elephant, buffalo, and giraffe in the most fearless manner, armed only with their long broad-headed Baggara spears. The skins of these animals are readily accepted by the Dinkas in exchange for dura. The Selim are divided into two sections, Um Tarif and Walad Mahbub; the Sheikh of the former is Amin Musa,* and of the latter El Hag Suleiman, both live on the left bank opposite Jebelein. The tribe owns a considerable number of sheep, but little or no cattle. They cultivate to a small extent on the borders of the Gimma country, about 20 miles north-west from Jebelein.

The Arab names for places are, as a rule, quite unknown to the Dinkas, and *vice versa*.

(f) *Shilluks.*

From Kodok south, on the right bank, to the Sobat the inhabitants are mostly Shilluks (for description of whom *vide* Chap. VIII.)

* El Hag Suleiman is now (1904) Head-Sheikh of all Selim.

CHAPTER VI.

SOUTH-EASTERN SUDAN.

(The Sobat and tributaries, and country south of the Sobat and north of N. Lat. 5° between the Bahr El Jebel and Abyssinian frontier.)

SECTION 1.—DESCRIPTION OF THE SOBAT AND ITS TRIBUTARIES.

The Sobat rises on the Abyssinian plateau somewhere about east long. 36° and north lat. $7^{\circ} 15'$, though its source River Sobat. has probably never been accurately determined, and flows generally from east to west.

For the first 260 miles (approximately), as far west as the junction of the Pibor*, it is known by the Abyssinians as the Baro, by the Nuers as the Kir, and by the Anuaks as the Upeno; from this point to its junction with the White Nile, at a point some 55 miles by river south of Kodok and 460 miles (approximately) from its source, it is called the Sobat.

In its descent from the plateau to Gambela, for the first 150 miles, it flows in a series of rapids through wooded, mountainous, and hilly country, in a rocky bed often not more than 40 yards wide. From Gambela to Finkio (15 miles) it increases in width to about 200 yards, but in the dry season is full of rocks, especially at the bends. Throughout the remainder of its journey to the Nile it meanders across an immense dead-flat alluvial grassy plain, varied here and there by extensive woods reaching down to the water's edge, but often nothing is visible for miles save swamp and grass with numerous termite hills, and but an occasional tree. During this part of its course its width varies as a rule from 150 to 300 yards, though occasionally it narrows to 30 or 40 yards in the marshy region between Balamkun and the Pibor.

Working up stream,† the banks are, as a rule, firm and dry for the first 150 miles from Sobat mouth, and numerous Banks.+ villages are seen built actually on them. The left bank is usually higher than the right, and both banks are higher than the country in their immediate vicinity, and thus narrow swamps running parallel to the river exist well on into the dry season. These marshes are often drained by the natives through cuts in the banks in order to capture the fish in them. Above the village of Shwai the banks are alternately marshy and firm.

Both the Sobat and Baro, probably as far up-stream as Finkio, are navigable for steamers drawing $4\frac{1}{2}$ feet of Naviga- water, from the middle of May till the end of December. About the middle of the latter month the appearance of bility. sandbanks makes navigation difficult, though it is probable a channel for small boats exists throughout the year.

Both the Sobat and Baro are fordable at fairly frequent intervals in the dry season eastwards of the Dinka Fords. country.

The current is generally estimated at from $2\frac{1}{2}$ to 3 miles per hour in flood; in the dry season (February to May) Current. it is not more than 1 mile per hour.

The current of the Baro in flood combined with the sharp bends and occasional narrowness of the river render navigation difficult in places.

The water of the Sobat in flood is of a reddish-yellow colour, whilst that of the Baro is similar to the colour of Water. the Blue Nile or Atbara, being like them derived from the Abyssinian hills.

The sources of supply of the Sobat are:—

(i) The southern Abyssinian hills and the rains which drain westward from them.

(ii) The vast marshes which lie between the White Nile and the Abyssinian hills, which keep the Pibor bank-full till the middle or end of January.

The Sobat reaches its lowest level about the end of January and commences to rise about the end of April or begin- Rise. ning of May.

Petherick in April (low water), 1862, estimated the discharge of the Sobat at 120 cubic metres per second. The Discharge. same authority on 5th June (after the rise had begun), 1863, reckoned the discharge at 233 cubic metres per second. For later calculations, *vide* footnote p. 111.

* Abyssinian boundary.

† During the driest season of the year there is no difficulty in marching along either bank. Between Itang and Nasser the best road is along the right bank.

‡ For distances along the Sobat, *vide* p. 152.

Adura (loop
of the Baro).

A large loop of the Baro takes off from the main stream near the village of Gadjak* on the south bank, and enters the Baro again some 14 miles to the east of the Sobat-Pibor junction. This river is known by the natives as the Adura. Although seemingly a large and important loop, it was found to be quite unnavigable in July, when the river was nearly full, owing to the existence of a large number of sand-banks and islands. Another loop south of the Adura is said to be formed by a stream known as the Mokwai. This has a very insignificant exit from the Baro, only some 5 or 6 miles to the east of the Adura exit, but is reported in its lower reaches to be an important stream in flood time, possibly after it is joined (as it is said to be) by the Bela river. The combined stream enters the Pibor, by native report, and, in that case, the river, followed by Major Capper for some 20 miles of its course, is probably this one.

Tribes—
Shilluks.
Dinkas.

From the junction of the river Sobat with the White Nile, for the first 30 or 40 miles up-stream, both banks of the Sobat are occupied by the Shilluks. For full description of this tribe, see Chap. VIII.

The Dinka tribe thence occupy both banks of the river Sobat to about $32^{\circ} 16'$ east, villages of first Shilluks and then Dinkas being very numerous from the Sobat mouth up to this point, which is near the village of Lajak. They are shy and suspicious, but amenable to kindness and trade.

The Dinkas of the Sobat have been worsted in the frequent forays of the more powerful Nuers into their district. They complain bitterly of the spoliation of their herds by the Nuers, and state that many of their children, now growing into manhood as Nuers, were torn from them in the constant raids of the Nuer tribe. The Dinkas, in spite of this alleged oppression, own large numbers of sheep, goats, and cattle (*vide* details Appendix F, p. 330). The Dinkas on the Sobat are far more intelligent and energetic than their kinsmen on the White Nile, and cultivate sufficient grain and tobacco for their own needs.

For the most part the Dinka territory along the Sobat consists of open, treeless, grass plains. Fifteen to 20 miles east of Lajak the river banks are uninhabited until the small village of Ashel is reached, which is the commencement of a small tract of Anuak country, sandwiched in between the Dinkas in the west and the large and powerful Nuer tribe to the east.

Anuaks
(west of
Nasser).

The small section of Anuaks referred to here only occupy some 25 to 30 miles of the river bank as far as the village of Wegin, which is the boundary between them and the Nuer tribe. The different tribes hereabouts are considerably intermingled, as they appear to intermarry† to a large extent, and Anuaks may be found living amongst the Nuers even as far east as Nasser. Their position would not, however, appear to be a very enviable one, as the men are more or less slaves of the Nuers, and are called upon to perform many household and menial duties for their more powerful neighbours; at the same time the Anuaks appear to have no fear of entering Nuer territory.

The chief villages of the Anuaks, between Ashel and Wegin on the left bank of the river, are Yakwoik, Fatiwanyang and Shwai. A friendly Sheikh, Aiwei Wad Agwot, lives at Fatiwanyang. He is constantly to be seen at Nasser Post, and also occasionally even at Kodok.

This section of the Anuaks is a small and unimportant one; in general appearance they closely resemble the Nuers. They appear to grow very little food, barely more than sufficient for their own requirements, but at the same time have flocks of sheep and goats and a few herds of cattle.

Their country is well wooded for the most part, and, from native accounts, numerous herds of elephants constitute a very real source of danger to travelling, more especially at night time. Game is plentiful on both banks of the river in December, 1899. Very little trade has been carried on with these natives, but a few goats and sheep can be purchased for brass wire; the price being about a 6-foot length of wire for a sheep. Latterly, however, since more intimate communication with Nasser Post has been established, the demand for cloth has increased.

Nuers (Sobat
and Baro).

The Nuers are by far the most powerful and numerous tribe living along the Sobat river. Originally they appear, from native accounts, to have occupied tracts of country south of the Sobat in the neighbourhood of Bor and the Bahr El Ghazal, but these sections trekked north, and ousted the more weakly tribes living on the Sobat, and occupied their country. The Falangs and Bonjaks no longer exist, their territory being occupied by the Nuers. There appear to be three separate factions of Nuers at the present day occupying the Sobat valley, who, if native accounts are to be believed, are more or less at enmity with each other, owing to family disagreements. It is often difficult in consequence to get guides from one part of the country to enter that occupied by a rival section. For instance, Sheikh Jok's people will not readily enter the territory of the Nuers in the neighbourhood of Nasser Post; whilst these again will refuse to proceed further east along the Baro than the village of Barrakwik.

The Nuer territory along the Sobat and Baro rivers extends from about east $32^{\circ} 33'$ to about $34^{\circ} 10'$. Their territory on the right bank of the Baro as far east as the Khor Garre‡ ($33^{\circ} 48'$ approximately) belongs to the Sudan, whilst east of this khor and the whole of the left bank of the Baro belongs to Abyssinia. From Wegin village to

* Between the Pibor and this point is a dreary, treeless, uninhabited region of marsh. Above Gadjak the banks are finely timbered, and the river scenery is quite beautiful.

† Many Anuaks are to be seen marked with the Nuer tribal mark, *i.e.*, 6 parallel horizontal lines across the forehead.

‡ *Vide* footnote to p. 135.

Nasser Post the country is probably the finest occupied by the Nuers, as it is for the most part well wooded, and in places one passes through really beautiful park-like country. Villages are numerous, and several of the districts, such as Fauwel and Jurwel, are well cultivated. East of the Pibor their country bordering the Baro is a desolate marsh.

Although the huts and villages of the Nuers hereabouts are well and substantially built, the natives themselves are shy, suspicious, indolent and altogether a very low type of humanity. They appear to cultivate only such small plots of ground in the immediate vicinity of their villages as will suffice for their own requirements for perhaps six



TATUG OR DELEIB—AMERICAN PROTESTANT MISSION STATION ON THE SOBAT.

months in the year, whilst during the remainder of the year they live chiefly on fish, which, existing in great quantities, are easily speared during the dry season of the year. They do not appear to hunt at all.

Physically, the men are tall and well-built, but show little signs of muscular development, being generally long-limbed and wiry. They are all stark naked, and cover themselves from head to foot with cow dung ash, which gives them a particularly filthy appearance and renders their skin extremely rough and coarse. They make no attempt to adorn themselves, but are extremely anxious to procure brass wire with which to make for themselves bracelets extending from the wrist to near the elbow. This seems to be about their only vanity. They are all armed

with spears, of which every man carries two or three. Their weapon of defence consists of an oval-shaped buffalo-hide shield. Bows and arrows they do not appear to possess.

The elder married women are as filthy as the men in appearance. They all, however, wear a leather apron or skin fastened round their waists. The younger girls and unmarried women wear no such covering, and, like the men, are quite naked.

The right bank of the Sobat near Nasser Post is densely populated as far as the junction of the Sobat and Pibor rivers, there being several large and important villages such as Kwoinlualtong, Taufot, and Ajungmir in addition to smaller ones. The left bank of the Sobat is not inhabited, as from Nasser to the Pibor a considerable portion of the country is inundated when the rivers are full.

East of the Sobat-Pibor junction, the country through which the Baro flows may be described, until Anuak territory is reached, as worthless. For the most part it consists of open treeless grass plains, which, in the vicinity of the river, are inundated for months at a time. The population is small, and confined to villages some distance apart, and absolutely no signs of cultivation are seen, except on a large island near the border of Anuak territory.

This perhaps may be explained by the fact that the Nuers in the dry season of the year occupy villages near the river banks, which are merely used as large fishing villages during the time the rivers are low; they subsist almost entirely then on the fish speared in the many pools which are formed by the receding waters of the rivers. When the rivers become full again, and the country is inundated, they withdraw to their permanent quarters further inland, where they probably merely cultivate during the rainy season of the year, between the months of May and November.

Several of the large villages to the east of the Pibor-Sobat junction, such as Taiyau, Gunjang, Gadjak and others which were teeming with life in the month of January, were deserted in July when a visit was paid by steamer to Itang.

With the Nuers of the Sobat and Baro rivers very little trade can be done, as they possess little or no grain, living chiefly on fish. They possess, however, numerous flocks of goats and sheep in the vicinity of Nasser Post, and also some magnificent herds of cattle at Ajungmir. Thirty-five goats and sheep were obtained in exchange for a cow. Large opaque white beads, about the size of a pea, are in request as articles of barter, but brass wire "No. 8" is most in demand, and a desire for cloth is beginning to rise.

The eastern Anuaks of the Baro (or Ufeno, as they call it) inhabit that portion of the river bank extending east of 34° 10' to the mouth of the Baro river gorge at the foot of the Abyssinian hills, and the whole of their territory, with the exception of a small enclave round Itang,* which is leased to the Sudan Government, belongs to Abyssinia.

This tract of country is probably the most fertile anywhere along the river after it enters the plains. It is well wooded, and to a great extent free of those large expanses of swamp found lower down the river in Nuer territory. The numerous huts and hamlets, with which the river banks are dotted, are generally built close to the edge of the bank overlooking the river, usually on mounds slightly raised above the normal level of the bank. These huts are neatly built of mud and wattle with grass roofs, and are scrupulously clean and well kept. They are, as a rule, surrounded by a fence of tall reeds and grass, giving absolute privacy to the occupants. Within the enclosure so formed, in addition to several huts for the family, are the granaries, and also other enclosures for the herding of goats and sheep at night time. The interior is most carefully plastered over with mud and free of dust and dirt. The natives of this region are more advanced in ideas of civilisation than any others living along the Sobat and Baro in the plains. This is possibly due to their being in closer touch with the Gallas, with whom they trade considerably, than any of the more western tribes are.

They are a most peaceful, friendly and industrious race, and are great agriculturists. Miles and miles along the river banks are diligently cultivated by them twice a year, and splendid crops spring up from the generous soil.

Physically the Anuaks are not such a tall race as the Nuers, but their muscular development is perhaps finer. This is probably due to their more nourishing grain food all the year round, but they also supplement their grain largely with fish during the dry seasons of the year. Although they rarely seem to kill their goats and sheep for food, like the Nuers, they are extremely fond of meat, and will constantly beg a white man to come and shoot a hippopotamus for them, so that they may indulge in a real gorge.

As a rule the men are more decently clad than the Nuers, as many of them wear beautifully cured skins, as soft as chamois leather, round the loins. They are far cleaner, better groomed, and smarter looking in every way than the Nuers. A large number of the Anuaks, especially in the neighbourhood of Pokum and Finkio, wear splendid ivory bracelets on the arms. Some of these are as much as 4 to 5 inches in depth, and it is by no means uncommon to see a man with one such bracelet on the upper arm, and two somewhat smaller ones on the fore-arm.

One very curious weapon, to be seen nowhere else, is found among the Anuaks. This consists of a spear, the head of which is manufactured from a legbone of a giraffe, polished down to about 1 inch or $\frac{3}{4}$ inch in diameter, and sharpened to a fine point. These curios are obtainable for about five $\frac{1}{2}$ -piastre pieces.

* Now moved to Finkio.

The Anuaks would not appear to be either a courageous or warlike race like the Nuers, and seem content to merely cultivate their fields and remain at peace with their neighbours. Their spears are generally small headed, with long handles, and it is by no means unusual to see some men armed with nothing but sharp-pointed sticks hardened at the ends. Knobkerries are carried by most men. The older married women all wear skins, cured or otherwise, round the loins. Some of these are daintily picked out with a border of vari-coloured small beads. A large quantity of beads are also very commonly worn both round the waist and neck. The attire of the younger women and girls is really most attractive. In addition to a numerous accumulation of beads round the neck, they wear a large number of strings of beads round the waist of many different colours, whilst a small fringe, as it were, of generally white opaque or light blue and white beads depends in front and behind, some 2 to 3 inches in length round the body. As the girls are often very beautifully formed, and possess pleasant, laughing and occasionally really pretty faces, a group of them together forms a most charming picture of modest maidenhood.

The upper reaches of the Baro are not well cultivated, and beyond the point where the *Faidherb* was abandoned, the population is very scanty, and little or no food is obtainable from the natives; the river banks become very stony and thickly wooded, and what little cultivation there is to be seen hereabouts is generally on the islands.

NASSER, situated on the left bank of the Sobat, 160 miles above its junction with the White Nile, is the residence of a police officer and detachment of police. It is also garrisoned by half a company of a Sudanese battalion under a British officer (January, 1904). Little trade is as yet carried on as the Nuers who live in the vicinity have not yet got over their aversion to dealings with a civilized Government. Principal villages. Nasser.

By the treaty of May, 1902, the Emperor Menelek agreed to lease to the Anglo-Egyptian Government an area of about 1,000 acres in the neighbourhood of ITANG, for the purpose of forming a trading station there. Itang is on the right bank of the Baro, roughly 100 miles above Nasser, and is in the Anuak country; a station was established here in January, 1904. As, however, the site is not a very suitable one a more convenient one at Finkio further east has been adopted. The Sheikh of Finkio is named Ojilo. Itang (Finkio).

Although it is not practicable for probably five or six months in the year to maintain direct steamer communication with Nasser, the post should be absolutely self supporting. Shallow draught steamers drawing say 15 inches could, however, probably reach Finkio during 10 months of the year.

In addition to grain of various kinds, cotton is also grown by the natives in small quantities, and tobacco is very commonly to be obtained. Flocks of goats and sheep are numerous; but the natives will not readily part with their live stock. Cattle are only to be seen very rarely, as the natives fear to possess these lest they should attract the cupidity of the Abyssinians.

The Anuaks are very ready to sell flour and grain in exchange for beads, more especially in the Finkio district, which is very largely populated. They also hire themselves readily as carriers.

The most popular bead is a small light blue opaque one, the only opaque species of small bead obtainable in Cairo. A string of this bead, sufficiently large to pass over the head on to the neck, will purchase from 1 to 1½ pounds of flour, and perhaps 2 pounds of grain. A fowl can also be obtained for about the same quantity of beads. Possibly white or small green opaque beads would be equally sought after, but a blue and white bead, known in East Africa as the "punda malia" (zebra), would, everywhere in these regions, be eagerly sought after by the natives. Many of the Anuaks wear these beads, though how this species has got into the country, except, perhaps, gradually from the north of Lake Rudolf, where they may have been bartered in 1898, is difficult to understand.

The best trade goods would be white, green, pale blue (all must be opaque and not glass) and "punda malia." Beads would be the main purchasing medium for grain, and perhaps brass wire and cloth for goats and sheep.

In a short time money may be introduced—as at Kodok amongst the Shilluks—as the Gallas, being neighbours of the Anuaks, and familiar with the Maria Theresa dollar, would readily bring down goats and sheep for sale, and the Anuaks would probably soon follow suit.

Besides tapping the fertile food-producing districts of the Anuaks, trade in ivory, coffee, live stock, donkeys, and mules, and in addition, perhaps gold and iron, in smaller quantities, will spring up with the Gallas when they find a ready market for their goods.

Several more or less important streams and khors join the Baro in its upper stony region on both banks. Chief of these are the Sako on the right bank and the Bonga on left bank. Chief Tributaries of Sobat and Baro.

Lower down on the right bank, Khor Jokau or Garre joins the Baro by, some say, two mouths, one at Jokau about 40 miles west of Itang, the other at Machar* 15 miles further west, where the post to mark the Sudan-Abyssinia frontier has been erected.

* Though the supposed mouth at Machar is deep and 30 yards wide, whilst that at Jokau is only 5 yards wide, there seems good reason to doubt if the former is in any way connected with the Khor Garre. Capt. Wilson was informed by the natives in February, 1904, when the Machar was entirely dried up, whilst the Jokau was a strong flowing stream 3 feet deep, that the former is not a mouth of the Garre. In June, 1904, the discharge of the Jokau was very marked, being of a muddy-white colour similar to the Pibor. At Machar, on the other hand, though the khor did contain water, perhaps an overflow from the Baro, no discharge was noticeable.

The Khor Garre, which forms the boundary between the Sudan and Abyssinia in these regions, brings down a large quantity of water in flood time from the Galla hills. In the dry season water stands in pools in its bed.

For the first 20 miles from its mouth this khor is inhabited by or belongs to the Nuers, then for a few miles by the Anuaks or Yambos, whose district is called Chai, and higher up by Burun.

Khor Makeir. About 8 miles east of the Pibor junction, Khor Makeir comes in on the right bank. This, near its mouth, is deep, with a sandy bed 30 yards wide. It has not been explored, but is believed by some to be the mouth of the Sonka, in which case it has its origin near Jebel Sonka in the Galla hills south of Kirin. Others say it is only a spill from the Baro.

Tributaries on left bank. Nigol or Aluro. The River Nigol (Nuer) or Aluro (Anuak) enters the Baro about 17 miles below Itang. It appears to have its origin on the Abyssinian plateau, and for some 25 miles before its junction with the Baro it flows parallel to that river, at a distance often of little more than a mile. In flood time it is a most formidable obstacle, as it forms large areas of swamp. Its entry into the Baro, near the border between Anuak and Nuer territory, is a very insignificant one, and barely discernible, as it spills out into a large swamp, near the village of Methok, before it reaches the actual river, and apparently the water gradually finds its way into the river through a thick forest-growth of trees by two small channels only a few feet wide. From the point where the Adura takes off from the Baro, the banks of the latter river are thickly wooded with sycamore and other trees as far as the eastern boundary of Nuer territory.

Pibor. The Pibor flows generally from south to north, and enters the Sobat river at a point about 25 miles above Nasser and about 200 miles from its (Sobat) mouth. It is by far the most important tributary of the Sobat. The Pibor was found (June, 1903) to be blocked by sudd immediately above the Akobo junction, and so its upper waters remained unexplored until September, 1904.* The greenish colour of its water would lead one to suppose that it receives its supply from vast marshes in the plain between the Akobo and the Nile, rather than from the Abyssinian plateau.†

The banks of the lower Pibor are, as a rule, swampy, especially at the season when the river is fullest. The adjoining country is flat and covered with grass, with but few trees, though, south of Koratong, the banks are firm and dry, and trees become general, especially on the right bank.

Width. The waterway of the Pibor in its lower reaches is exceedingly narrow, a steamer frequently touches the reeds of either bank simultaneously. About 40 miles from its mouth, however, it widens to from 40 to 100 yards.

Navigability. The Pibor river has not (1903) been navigated by steamer in the months of February, March, and April, during which period it appears probable navigation would be difficult, if not impossible. During the rest of the year the average depth of water is at least 10 feet.

Discharge. The discharge at the mouth of the Pibor, calculated by Captain H. H. Wilson in October, 1901, worked out at roughly 13,500 gallons per second. The width of the river here being about 80 yards, of which about 30 yards was blocked by sudd. The maximum depth was nearly 30 feet, and the current rather more than 1 mile an hour.

Route. There is a route over comparatively dry country from Nasser to Waratong (45 miles approximately)

Inhabitants. The inhabitants of the lower Pibor are Nuers, whose principal villages are a group at Koratong and another at Kur, both situated on the left bank. These appear to be the permanent homes of this section (Sheikh Jok's) of Nuers, but in the dry season they occupy other villages both north and south along the Pibor, the most important of which is Bil (right bank) near the junction of the Gelo River; during this season Nuers from other districts visit the Pibor for fishing.

The Nuers of the Pibor do not differ in any essential degree from those of the Sobat and Baro, and are just as disinclined as their kinsmen to recognise the advantages of civilisation.

Trade goods. Dura was purchased from the late Sheikh Yowe's (now Jok's) people for small white and dark blue beads, not much larger than a pin's head. A string sufficiently large to pass over the head on to the neck purchased from 1 pound to 1½ pounds of unground grain. A spear length of brass wire, about 9 feet in length, purchased a goat of average size. Coloured fancy cloth will soon be in much request.

Anuaks. A few Anuaks are found on the right bank, these are more or less subject to the Nuers. Their Sheikh is Okwai.

Tributaries of Pibor. The Agwei (Gwynn), or Neubari (Austin), or Ruzi II (Wellby), or Adjouaro (Faivre). The "Agwei" River joins the Pibor about 17 miles south of the Akobo junction. It was found by the Faivre Expedition (1898), by whom it was named the Adjouaro, to rise in the Southern Boma hills and to flow northwards to within a few miles of the left bank of the Akobo, and then bending westwards to flow parallel with that river to the Pibor, or, as they called it, the Adjouba (Agibba?). The Agwei was also heard of by Major Austin when marching through Boma; it was described as a big river and was named by him the Neubari. It is also probably the same as Wellby's Ruzi II.

In September, 1904, Major Gwynn explored this branch of the Pibor in a steam-launch for 55 miles from its mouth, when further progress was arrested by heavy sudd. He describes it as a fine stream flowing between well-defined banks, averaging 3 feet above the level of the river in flood and 60 to 80 yards apart. In places, however, it had overflowed its banks and flooded the adjoining country to a considerable depth. The average width of

* For description of Upper Pibor, *vide* p. 151.

† In June, 1904, the discharge at its mouth was observed to be a dirty-white colour.

waterway, which was frequently obstructed by light sudd blocks, was 30 yards, depth 20 feet, and current 2 to 2½ miles per hour. The banks of the Agwei were stated by Anuaks to be inhabited partly by people of their own tribe and partly by Agibbas. Their description of its upper course appears to agree with the theory that it is the Neubari, and that it is connected with the Akobo, as Major Austin surmised, by the Oboth.

The River Akobo or Juba, which rises in the Domme Hills (Abyssinia) forming part of the watershed between the River Omo and the Nile, about north lat. 6° 30' east, long. 35° 45', flows generally in a north-easterly direction, and for the first 100 miles through more or less hilly country; it then enters the plains and eventually joins the Pibor about 70 miles from its mouth.

The Akobo
or Juba.

The ill-fated Böttogo struck this river (January, 1897) about 40 miles from its source, and found it to be about 25 yards wide and about 18 inches deep, its banks being much overgrown with very high grass which impeded travelling considerably. It was found to be uninhabited for about 45 miles further west, when the first Anuak village was reached. This was the most eastern point on this river reached by Major Austin's Expedition (1901).

The Akobo river forms the boundary between the Sudan and Abyssinia in these regions. The following interesting account of the Akobo and its inhabitants is taken from Major Austin's Report:—

"On our journey south from Nasser, we retraced our footsteps of the previous year along the River Pibor through Nuer territory until we reached the junction of that river with the Akobo. Here we found a small colony of Anuaks settled down for the coming dry season with a view to carrying out fishing operations, and without difficulty obtained the services of two guides. For our first two marches we proceeded east along the river, the banks of which are somewhat thickly wooded with thorn bush, amidst which, here and there, we came upon small families of Anuaks enjoying a precarious kind of existence on fish and the frugal products of the woods. These natives were all without exception very timid, and generally had cleared out of their cosy little arbour before the head of the caravan had reached them. They are very poor and wretched in appearance, the men being quite naked and possessing very few adornments.

"The elderly women merely content themselves with a small goatskin worn round the waist, whilst the younger women, like the men, are devoid of covering. They lack the prosperous and smart bearing of the Ufeno (or Baro River Anuaks), and in general characteristics closely resemble those of the Gelo.

"Some 30 miles to the east of its junction with the Pibor the banks of the Akobo become generally very swampy, and the river was unapproachable at the time we were travelling along it (February). No villages were seen until we reached long. 33° 40', where there was a small one, Bor by name, situated at the base of a single tree, surrounded on all sides by swamp. From near here a track runs in a southerly direction to Bonjak, reported to be 30 to 40 miles distant, and no water on the road.

"Settled villages become somewhat more frequent from that point until the Tedo district is reached. This is fairly thickly populated on both banks of the river, and for the first time we came across a considerable amount of cultivation. A large khor enters the Akobo from the east hereabouts, which probably has its origin in the Abyssinian highlands, whilst, from the village of Neum, a broad loop takes off from the Akobo and re-enters that river again some 5 or 6 miles further north. Up to this point the country had been chiefly open grass land, very sparsely wooded with trees, and occasional small groves of lalob, but it now became well wooded, and the swampy areas less frequent. Small villages were established at closer intervals, but the natives remained very timid and suspicious, and it was difficult in consequence to obtain the services of guides, as the larger number of the inhabitants concealed themselves on the approach of the caravan.

"The Anuak territory terminates at the junction of the Akobo and Ajibur streams, after which comes a long stretch of uninhabited country extending to the foot of the Boma hills. The district of Bula, some distance to the east, is reported by the Anuaks to be inhabited by men of a fair complexion—possibly Gallas. The Anuaks of the Akobo possess but few flocks of goats and sheep, and apparently no cattle. In addition to grain, they probably subsist to a large extent in the dry season on fish, as fish weirs and traps are occasionally met with in the river.

"The average width of the Akobo in its lower reaches is 20 yards, and depth 7 feet, current 3 miles an hour (February); higher up above Neum its width increases to 40 to 60 yards, and its depth diminishes to 18 inches. Its banks are generally high and steep. In its upper portions it flows over a lava bed.

Width,
depth,
and current.

"Small dug-out canoes are also used by the natives for travelling along the river. Navigation in a small launch would probably be quite possible as far as Neum for several months in the year. The larger Nile steamers would most likely be unable to navigate this stream owing to the extraordinary sharp curves and bends of the river, the stream when in flood being very swift. It is quite possible, however, that a powerful launch, drawing, say, 18 inches of water, might, at full flood time, be able to proceed, perhaps, as far as Melile, although extreme caution would have to be observed, for in parts the river flows over a lava bed, whilst in others, fallen trees in the river might prove dangerous."

Naviga-
bility.

The discharge of the Akobo near its mouth was calculated by Captain H. Wilson to be 2,185 gallons per second in October, 1901. There was then a clear waterway 15 yards wide and 14 feet deep, on each side of which were belts of sudd from 20 to 30 yards wide.

Discharge.

Ajibur, or
Ruzi I.

The Ajibur (Austin) or Ruzi I (Wellby), a small stream rising on the Boma hills, flows northwards to the Akobo and joins it on the left bank about 80 miles from its (Akobo) source. Water was standing in pools in its bed in February, 1901.

Gelo River.

The Gelo River rises in the Mocha hills (Abyssinian), situate about east long. 36° , north lat. $7^{\circ} 30'$, and flows generally in a westerly direction to the Pibor, which it enters on the right bank 26 miles above its junction with the Baro.

Mr. Oscar Neumann, who explored this river in 1901, considers it a very important source of supply of the Sobat, and far more so than the Akobo river, which he thinks comparatively insignificant. Mr. Neumann is strongly of opinion that after traversing Lake Tata the river divides, one branch flowing into the Pibor, as above stated, the other or others flowing northwards towards the Baro. Though Bottégo seems to have had the same opinion, Major Austin does not lend much credence to this theory.

Neumann gives the following description of the upper regions adjoining this river :—

"In Shekho I found a large river running westwards. I believed this river to be the Gelo, discovered near its junction with the Ajuba by the Italian Bóttego, an opinion which was confirmed afterwards. Travelling became very difficult here. The western slopes of the south Ethiopian plateau are cut by many deep ravines; the roads, therefore, were narrow and bad, and many of my mules became wounded and useless. As it flows westwards, the River Gelo is lined on both sides by the densest forest. I could march only about 2 or 3 miles each day, and to cover that distance the men had mostly to cut the way with axes and bush knives from morning to noon, after which the caravan was able to proceed. The inhabitants of this forest are the Mashango, who are very seldom seen, but we often found large traps made for hippopotami and waterbucks, and loops made of creepers for monkeys and other small animals going to the water. Already in Gimirra I had seen, far away to the west, a long mountain chain running from north to south, called by the Galla 'Gurafarda' that is to say, 'horse's ear,' from a sharp double peak in the middle. It took more than three weeks from Gimirra to reach the point where the Gelo pierces the mountains, forming magnificent cascades. Some days after passing this gap, I saw from a bamboo-covered hill in the west a boundless bush and grass-covered dead flat plain, the plain of the Sobat and the beginning of the Sudan. Only a few granite hills are scattered over it. Ascending one of these I saw, far away, a large lake—Lake Tata—through which the River Gelo runs. Here we found the first villages of the Yambo or Anuak, who were the first true Nilotic people I met. They are a division of the great Shilluk tribe, which is spread over the whole Eastern Sudan, and extends southwards to the east short of Lake Victoria. The few samples I obtained of their language show that it is scarcely distinguishable from that of the Kavirondo people on the east shores of Lake Victoria, whose country I passed on my first African journey in 1894.

"The land now became more and more swampy. The Anuaks, poverty-stricken through many Abyssinian 'razzias,' live hidden away on small islands in these swamps. A large part of the people have migrated westward, and live in a state of semi-slavery under the protection of the more powerful Nuer, near the Egyptian fort of Nasser on the Sobat.

"Approaching Lake Tata the swamps became so numerous and deep that I turned south and marched to the village Neum, where I struck Bottégo's route. The attempt to march along the northern bank of the Akobo failed, because we stuck fast in the swamps, where I lost many of my mules; so, after two days, I marched back to Neum and crossed the Akobo. The country on the left shore of the river, which had here a north-westerly direction, was drier."

Major Austin, gives an interesting description of the river and country west of Lake Tata :—

"The Anuaks of the Gelo river district need very little description, and, as practically little was seen of them except when passing their villages, not much information was obtained regarding them. As compared with their compatriots on the Ufeno river, they appear to be a far less prosperous race, and, physically, might be described as an anæmic-looking tribe, probably due to the fact that the tract of country they inhabit is for months at a time one vast swamp, and unhealthy in consequence. They are more suspicious and shy than the northern section, but not really unfriendly in any way, as we had no difficulty in obtaining guides from them. They do not take the same pride in their personal appearance as those of the Upeno, and few of the men wear skins. The women are less particular also, and unhesitatingly entered the river at Patok devoid of all clothing, and washed themselves on the bank before our men. The unmarried women, like those of the Nuers, deem it unnecessary to provide themselves with any covering. Beads are worn, but not in the same quantities nor with the same taste as further north.

"The right bank of the Gelo, as far west as about east $33^{\circ} 50'$, is generally well-wooded some little distance from the river, but the left bank west of about east $33^{\circ} 50'$ is absolutely devoid of a tree or even almost of a shrub. An open treeless grass plain appears to extend south until the Akobo river is reached.

"Patok, the first village on the Gelo reached by the survey party, is one of very considerable size, skilfully concealed in a thick belt of wood, the interior of which has been cleared to a large extent. The village is enclosed by a stockade of tree trunks and branches for defensive purposes.

"Most of the large villages along the Gelo, such as the Otwol, Chiro, Oran group, Goin, and Ungela are similarly concealed inside belts of tall trees, and surrounded by stockades.

"These villages are situated some distance from the river, as the expanse of swamp bordering the Gelo prevents villages being built nearer to its banks. At the height of the rainy season it appears probable that the whole country north of the Gelo and between that river and the Baro is one vast swamp, quite impracticable for transport animals.

"The width of the Gelo west of Lake Tata varies as a rule from 60 to 100 yards. At its junction with the Pibor its width is not more than 30 to 40 yards, whilst its current is very swift. Width and current.

"As the Gelo is followed along its banks, no other stream appears to flow into it, although several swampy khors issuing from the river are crossed, flowing in a northerly direction. These are reported to join the Bela river and to flow into the Mokwai.

"Along the Gelo, beyond a small patch of cultivation on the river bank near the village of Patok, no other signs of civilization are evident, except in a few diminutive cleared spaces in the woods; no food is obtainable from these natives. That they must subsist on grain to a large extent appears to stand to reason, so it is possible their fields, like their villages, are concealed in the midst of woods, with which the country abounds. Like the Nuers and Anuaks of the Baro these natives possess small dug-out canoes for crossing the Gelo, and employ them also in their fishing operations. Cultivation.

"To the west of Perbong two other villages, Ametha and Otwol, are reported to exist in Anuak territory hereabouts, and these two probably depend on wells for their water supply, as they must be quite 3 to 4 miles distant from the river, and no signs of tracks leading from or to the Gelo are visible. Goats and sheep are only seen in very small numbers.

"In normal years it is doubtful if this tract of country can be traversed much later than the middle of April with transport animals,* as once the rains set in the whole country is rapidly converted into bog, through which laden animals, especially donkeys, are quite unable to travel. During the dry seasons of the year large herds of elephants roam over these grassy plains and find both food and shade in the forest growth on the north bank of the Gelo. It is to these regions the Abyssinians descend in large numbers yearly from the western edge of the plateau, on ivory hunting expeditions, and traces of recent Abyssinian encampments were on several occasions met with. Before the rains break, however, these parties return to their homes, and we were warned at Gore by Fitorari Hili that we would find the country impracticable for animals once the rains set in, and this we certainly found to be the case." Swampy nature of country.

The River Mokwai or Bela appears to flow westwards to the Pibor from the Gurafarda range of hills (Abyssinia) traversing *en route* the marshy region between the Baro and Gelo; from the latter river it probably receives a considerable overflow. Its mouth is supposed to be about 8 miles south of the Pibor-Sobat junction, but owing to swamp it has not been accurately determined. It is said to be an important river in flood time. River Mokwai.

The Khor Filus enters the Sobat on the left bank about 10 miles from its junction with the White Nile, the following description of this khor, the adjoining country and its inhabitants, is taken from a report by Captain H. H. Wilson, Inspector, Upper Nile Province:— Khor Filus.

" Starting on April 15, 1902, the expedition marched from the village of Gokjak (some 20 miles from the mouth of the Sobat), and met the Khor Filus at Shol Ajik, some 8 miles inland, thus saving an unnecessary long march along the khor from its mouth, which is 10 miles from the Sobat mouth. The country here is flat and uninteresting, nothing but a vast grass plain, with hardly a tree to be seen. At Shol Ajik trees were met with, the banks of the khor being thinly wooded with a small growth of red 'talh,' with a sprinkling of the unwelcome 'kittr' thorn bush. The khor at this point is some 50 to 80 yards in width, mostly, however, filled up with weeds, the real water channel being clearly marked (though practically dry) by a deep narrow bed, some 15 feet lower than the adjacent banks. On to the village of M'Yolga the same country extends—grass, with a few trees; in one place there were traces of elephants which had been there in the rainy season. Other game seen was the bastard *tiang hartebeeste*, which was really all the game seen in any quantity in the country. M'Yolga is a long scattered village on the right bank of the khor, and marks the limit of the Dinka tribe inland. From here onwards for many miles is uninhabited country, from Bia to Nerol being thickly wooded, in places densely, but only occasionally with any undergrowth that makes travelling difficult. *Tiang hartebeeste* were seen in considerable numbers along the whole route, and also quantities of waterfowl, pelicans, duck, geese, teal, and many and various kinds of crane and heron. In the vicinity of Fanyanglwel, 46 miles south of Sobat, the first signs of Nuer habitation were met with in the shape of their cattle "feriks," which are the summer residences (*i.e.*, dry season, from January to May), built close to water, and constructed lightly of grass only. No regular huts or tukls were met with until reaching Riul, 7 miles further south, where the banks became low and flat, and trees only at some distance on either side. The khor is here in the rains evidently broad and shallow, and, owing to mud, probably an impassable obstacle under such conditions.

"A noticeable feature in the Nuer tukls is the superiority of their construction compared with the tukls of the Dinkas, Anuaks, and other tribes of the Sobat, their cattle tukls being in many cases marvels of constructive art, giver

* This country was traversed from March to June, 1904, by Mr. McMillan and his expedition. Out of 150 mules and the same number of donkeys only 16 animals survived. Anuak carriers were, however, readily obtainable, from 150 to 380 being constantly employed.

only boughs of trees, grass, and native tools for their building. The regular solidly-built villages are placed at varying distances from the khor, probably dependent on high ground and on the nature of the soil, if suitable for the dura crops or otherwise, which are always grown in the vicinity of the rainy season tukls. Another noticeable feature, differing from the Shilluk and Dinka customs, was that the villages are not compactly built. The Shilluks and Dinkas generally build their tukls in close proximity, each village being a thick cluster of huts, the dura being sown anywhere close by. In the Nuer case, the tukls are built in twos and threes, at great intervals, probably each family being separate; the land around each homestead being sown and tilled by the dwellers therein. In the case of many Nuer villages, owing to the village being built in the woods, and the groups of tukls at intervals of 200 to 600 yards, it was impossible to estimate the size of the village without covering many square miles of country. Around the various large pools of water near Meinom, Fading, and Shit, were thick fringes of 'Ambach'; these pools, being the chief source of supply for men and cattle in the dry season, it is only natural to have found the water so churned up and fouled by the cattle as to be nearly undrinkable. In places near these pools, where the adjacent soil was sandy, wells had been dug to obtain a cleaner supply of water. From Shit the khor continues in a southerly direction, being broad and shallow, and it is said, runs on to Bor. The expedition left the khor at Shit, and, relying on native assurances that water would be found in wells, pushed inland to the east, and marched through the main Nuer villages, which were in places very thickly dotted about, and well built. The country from Shit to the limit of the march was well wooded, chiefly with the heglig tree. The ground rose slightly, and as one got inland it became sandy and covered with fine grass, standing 2 to 4 feet high. The country also, here, struck one as being presumably fairly healthy in the rainy season, there being a complete absence of any rank vegetation. The dura crops in April were just appearing, the young shoots being about 6 inches high, and a very considerable extent of ground around each village was under cultivation.

"At Amwot-el-Sogheir, another fairly large khor was crossed; it was, however, quite dry, and the expedition camped on the further side, alongside some wells, which it was learned were the only ones to be found in this part of the district. These wells were worth noticing: dug on the sandy banks of the khor, their depth varied from 20 to 30 feet, with a diameter of about 2 feet 6 inches. Owing to the solidity of the ground, the walls of the well stood without need of revetting, and great labour must have been expended in their construction. Steps were cut in the wells on opposite sides, to enable a man to descend and ascend. In one of the wells a calf was seen, standing in the water at the bottom, having evidently fallen in. It was rescued by one of the Dinka guides, who descended the well without difficulty, and brought up the animal unhurt.

Denkur. "From the camp an expedition was made on the 22nd to the Nuer villages in this vicinity, which were stated to be the headquarters of the chief sheikh of the Nuers of the whole country under notice, by name of Denkur. Marching through a fairly thick forest of 'Abu Homera' trees for an hour, and afterwards over an open grass plain for another hour-and-a-half, brought us up to the village, Keik. Standing in the centre of the village, and seen for about 3 miles off, was a conical mound of earth, well and solidly constructed by Denkur's people as a token that Denkur was a very big man in that part of the world. It was stated that the bones of innumerable oxen were buried in the body of the mound; the cattle being slaughtered for the occasion. This act was to give greater value to the cone in the eyes of the surrounding tribes, as cattle are the most valued possessions of the tribes of the White Nile, and are practically all they live for; in fact, what religion they possess is centred in the cow. The height of this conical mound was about 50 to 60 feet, many large elephant tusks being firmly planted round the base and on the summit. The largest tusk measured 7 feet 10 inches, but of poor quality, as long exposure to rain and sun had ruined the ivory.

Dress, hair, &c. "Having thus traversed as much of this country as was possible on account of water, the party returned to the Sobat by the same route, and arrived on the river bank on May 2. Owing to the extreme shyness of the Nuers, it was difficult to collect much information of their customs. Like all tribes of the Sobat, they are stark naked, and owing to their living in their own country, unmolested and out of all possibility of being in touch with civilization, it is only natural that they are sunk in barbarism and retain to the full all the inherited customs of their savage ancestors. Their hair is left to grow to a length of about 10 inches, and is stained red with the ammonia contained in the dung and water of their cattle. Their bodies (of the men) are covered with the white ash of burnt cow-dung, like the Dinka tribe. This results from the men always sleeping in separate tukls, the floor of which is several inches deep with this white ash, resulting from the perpetually burning or smouldering fire of cow-dung inside the tukl; the men actually make their bed in the ashes. The women do not thus cover themselves, but sleep on mats made of dressed cow-hide, and keep their own skins oiled and clean. The young unmarried girls, like the men, wear no covering, but the married women wear a loin cloth of whatever material is available, a leopard, gazelle, or sheep skin. The arms of the men consist entirely of spears (throwing) and shields, with the universal knob-kerry; bows and arrows are possessed by a very few—rifles they have none. It was reported that one of the big sheikhs possessed himself of a few at one time, but broke them up and made bracelets for his ladies. As I have mentioned above, the main wealth of the Nuers lies in their cattle and flocks of sheep. As the importance or otherwise of a man is gauged entirely by the number of his cattle, it follows that the quickest way to become powerful is for an individual or a village to appropriate the

Weapons.

cattle of another individual or a village, or better still, of another tribe, and thus little raids of this kind are not infrequent.

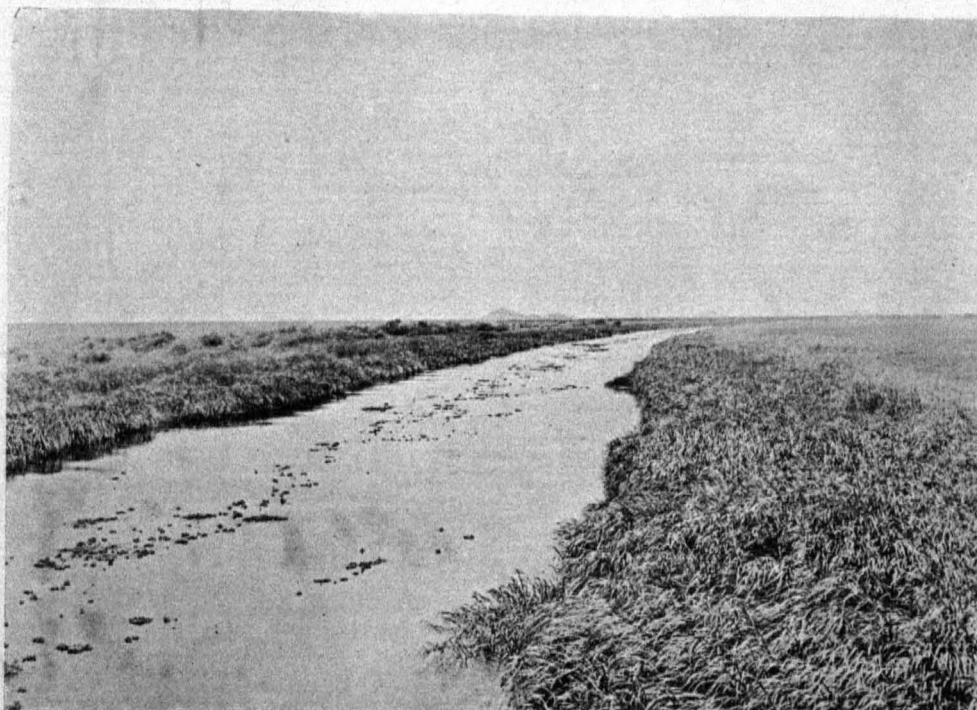
"At Nerol another khor joins Khor Filus, by name Khor Nerol, or Chirol, which is said to connect with the village of Nyandeng, on the Sobat. Owing to lack of water, it was found impracticable to explore any distance up this khor."

SECTION 2.—THE COUNTRY SOUTH OF THE SOBAT AND NORTH OF N. LAT. 5° BETWEEN BAHR EL JEBEL AND ABYSSINIAN FRONTIER.

(a) *General Description.*

The country included in the above limits comprises an area 300 miles by 200, which, except along its eastern, northern, and western margins, still remains practically virgin soil untrodden by a white man.

Our only direct information regarding the interior of this region is furnished by the Faivre Expedition (1898) which followed the course of the Pibor for about 60 miles above the Akobo junction, by the expedition (1902)



THE BAHR EL ZERAF.

led by Major A. Blewitt, which marched nearly due south up the banks of the Khor Filus for about 70 miles, and by Lieutenant Comyn* who explored the so-called Pibor for 170 miles beyond the Akobo junction in September, 1904.

Except perhaps in the extreme south the whole of this area seems to be a flat alluvial grassy plain, during the rains, marshy and liable to be inundated by the various canal-like watercourses traversing it generally from south to north, but during the dry season probably arid and waterless for considerable stretches. In the south the forest is perhaps finer and more generally distributed than further north, where thin belts of the ubiquitous heglig, kittir, and talh occasionally vary the monotony of this vast grass-covered plain.

Though a flat and somewhat unattractive country to the explorer, there is more than one interesting problem awaiting solution, chief of which is the Pibor question.*

The course of the mysterious Oquelokur which drains the northern slopes of the Latuka hills and the Kos, its supposed affluent after entering the Sudan, also awaits investigation. When Captain Borton visited the Beri at J. Lafol at the foot of which, according to existing maps, the Kos should flow, he could see or hear nothing of this stream. At Bor, too, nothing has been seen or heard of any large khor for at least 15 miles inland, though the

* For précis of Lieut. Comyn's report on his exploration of this river south of the Akobo junction, *vide* p. 151.

natives there say the Beir tribe live on a large khor three or four days to the east. It seems therefore probable that the so-called Oquelokur flows further east than is shown on maps, and that it and possibly the Kos drain into the Pibor and thence into the Sobat.

With regard to the source of the Khor Filus, the only information that has been obtained emanates from natives living near its mouth, who vaguely say it "comes from Bor," the reputed starting point of the other large khors Nifar, Diar, and Gaweir (perhaps different names for the same khor), which are said to flow northwards between the Filus and Bahr El Zeraf. Mr. E. Grogan certainly crossed several wide lagoons or spills just north of Bor, so possibly what the natives say regarding the origin of these khors is correct. For description of the Khor Filus, *vide* p. 139.

As regards the inhabitants of the interior, all we know is that the Nuers live on the Khor Filus as far south as 8° north latitude, that the Beri or Beir tribe live some 50 to 80 miles east of the Nile between Bor and Uganda, and that the Agibba tribe live on the so-called Upper Pibor, apparently only some 60 miles east of Bor.

(b) *Bahr El Zeraf*.*

General. Bahr El Zeraf is the name given to the eastern branch of the Bahr El Jebel, which leaves that river somewhere in the neighbourhood of Shambe, and flows into the Bahr El Abiad or White Nile near Tonga, about 100 miles up-stream of Kodok. It has not been navigated in recent years above a point about 180 miles from its junction with the White Nile. Here it opens out into several channels and lagoons, which are for the most part blocked with sudd, and it is difficult to determine which is the main channel. According to native report a through channel to the Bahr El Jebel, navigable for steamers at high Nile, does exist. Whether such is the case has not yet been ascertained.

Width. The general direction of the river is from S.S.W. to N.N.E. The current is much stronger at the head waters of the river than in its lower reaches, except where it flows into the White Nile, which it does through a narrow channel.

Depth. The river averages about 60 yards in width, and nowhere does navigation present any difficulty until nearing the sudd region. Its depth is generally 5 to 10 feet or more, even at low Nile.

Banks. The rise and fall of the Bahr El Zeraf is considerable. In May the banks, which are then hard and steep, are from 5 to 10 feet above the level of the river, which at high Nile, in spite of the opening of the Bahr El Jebel channel, appears still to overflow its banks almost everywhere. This has, no doubt, killed the trees close to the old channel, masses of dead stumps being a feature of the river.

Roads. The country inland in May is dry and level, affording good going, but the only path near the river and parallel to it passable at all seasons of the year is said to be on the left bank. This runs from opposite Tonga on the White Nile up the left bank and crosses to the right bank near Ajiung thence up the right bank to the neighbourhood of Bor. During the dry season water along this route is said to be scarce. The right bank is said to be impassable owing to swamps and elephants. Mr. Grogan, however, followed the right bank from Ajiung to the White Nile, and in April, 1904, Captain J. S. Liddell marched without difficulty with camels from Khor Attar to Twi, leaving the Zeraf about 20 to 30 miles to the west. Much of the country traversed, but at this season dry, had been flooded to a depth of 18 inches by the overflow of a large khor to the east named Gaweir. The road followed is chiefly used by the Dinkas in the rains, as in the dry season water, which is stored in fulas, is scarce.

The banks of the Zeraf are almost invariably fringed with Um Suf, a few yards wide.

Sudd. Most of the sudd in the lakes at the head of the river appears to be growing, though on the edges it is floating and liable to become detached at any time; this is specially noticeable on the western lake or head of the river. The water is strongly discoloured after the 100th mile, and gets more so as the end of the navigable water is reached. Hippopotami, though scarce on the lower reaches, are very numerous on the higher ones, and in the many lagoons through which the channel flows.

The sudd is of three kinds:—

(1) Sudd growing up from bottom and immovable.

(2) Small low floating sudd in large patches, but loosely hanging together, and easily broken up or pushed away.

(3) Patches of high sudd floating and connected by very fibrous roots, and very difficult to separate or clear; very liable to entangle in the stern wheel of steamer.

The first and second can be steamed through with difficulty. The latter has to be cut to pieces by hand and disintegrated.

Between 30th and 148th miles there is no place where wood can be cut, except by cutting it in water (October, 1898). Beyond that, there is no wood at all.

Wood. The inhabitants of the island formed by the Zeraf, Jebel, and White Nile are Nuers, who also occupy the right bank of the Zeraf from its mouth to about opposite Shambe. The right bank appears to have been originally

* *Vide* also p. 18, and the itinerary of this river in Vol. II.

inhabited by Dinkas, of whom a few are still to be found living among the Nuers, whilst the hinterland of the right bank of the Zeraf is still occupied by them. They, however, live in dread of the Nuers, and many of them have left their villages and have sought safety on the river Sobat. Inhabitants.

The Nuers are very shy, but having got over their first timidity on meeting strangers they are cheery and open-hearted, evincing none of that suspicion and churlishness which is such an ever-present characteristic of the Dinkas, even in the more northern districts, nor that inexpressible laziness, a trait of both Dinkas and Shilluks.

The men, boys, and unmarried women are, of course, naked. The married women wear loin cloths of skin, and a few of the men leopard skins. They all affect the long red-dyed hair, the universal custom of the Nuer tribes.

The following is a detailed description of the various Nuer districts on both banks of the Bahr El Zeraf as far as is at present known (taken from a report by Captain H. H. Wilson, 1903):—

The first district on entering the Zeraf is Lak, of which the head Sheikh is Fador Wad Koing (1903). His country is of great extent, and split up into various sub-districts. This district extends between the Zeraf, Bahr El Jebel, and White Nile, near Tonga, the majority of the villages and people being nearer the Bahr El Jebel than the Zeraf. Only a very small proportion of them winter on the latter river, the majority do so on the White Nile, up-stream of the mouth of the Zeraf. The chief village of Lak, and in which Fador himself resides, is called Fulwal, and is close to the Bahr El Jebel. Lak.

The only sub-district of Lak which is on or near the Zeraf, is Warao, of which the Sheikh is one Warao Wad Koing. This sub-district is entirely on the right bank of the Zeraf, at about 50 miles from its mouth, the winter hunting village being situated about 1 mile inland, on the right bank of a big khor known as Bahn, which runs into the Zeraf at this point. The inland village where the people reside during the rains and grow their crops, is about two hours' march inland, and is called Fulfam; the sheikh himself resides in this village.

The district of Thiang is also a large one, being situated on both the right and left banks of the Zeraf, at or about 80 miles from the mouth. The head Sheikh is Toi Wad Thief*, who has two big villages, both on the left bank, called respectively, Fakoi and Fai-at. The people living on the right bank spread themselves between the Zeraf and Jebel rivers, and in the winter descend to the banks of either or both of these rivers to graze their cattle. The people on the right bank have their "rain" village at a place called Khandak, about three hours inland on the right bank at 80 miles. The Sheikh of this section is called Deng. These people are great hunters of the elephant. Thiang.

The villages of this district are seen from the river at about 120 miles, standing about 1 to 2 miles back, with a thick belt of trees behind them; just north of these trees are seen several clumps of deleib palms, and a few solitary dom palms. This district is on the left bank entirely, as far as could be ascertained. The Sheikh of the district is one Nyal Wad Jek*, a young man well disposed to the Government, and who has only recently succeeded his father as sheikh. He is very well supported by his uncle, Niar Wad Koing, an elderly man. These people remain in the same place all the year round; the ground being sufficiently high to admit of their building their rain villages in proximity to the river. This was the furthest point visited by Captain Wilson (1903). The information regarding the remaining district is from hearsay. Gaweir.

This is the district ruled over by Sheikh Diu, who, being an influential man in these parts, is known by this name only. He rules his own district only, and has nothing to do with the other Nuer districts above mentioned, each of which is independent, under its own sheikh. This district lies in the upper region of the Zeraf on the east bank, and the name Fasheikh applies to the inland district, where Diu and his people reside in the rains, as opposed to the village of Ajiung, which is the winter village. Fasheikh.

* The history of Diu's occupation of this district is interesting, and was supplied by several men, who may be quoted as local authorities. In the days of the old Government it was a large Dinka district, the chief sheikhs of which were two men well known to the present Government, i.e., Aiung Yor and Agweir Owae, who are, at the present time, settled on the left bank of the Sobat, at M'Yolga, *vide* p. 139. At that time, Diu was somewhere on the Bahr El Jebel, and the Nuer sheikh on the Zeraf was one Bil Wad Teng, who lived at the spot that is pointed out as the zeriba of Kuchuk Ali, the Khartoum trader. The two lived together, the trader probably working the country under the guidance of the sheikh. On the retirement of the Government from these parts and the disappearance of Kuchuk Ali, Diu came down and seized the Dinka country to the south of this spot, turning out the Dinkas under the above-mentioned sheikhs, and establishing himself as the paramount power in the district. He is stated to consider himself a "fakir" in the same way as Denkur; but that he is not hostile to the Government is clear from the fact that he sent his representatives to Kodok last year.

Fasheikh is stated to be about three hours' march inland from Ajiung, but inaccessible owing to the intervening swampy ground.

* Visited Khartoum, 1904.

(c) *R. Awai or Atem.*

River Atem. An important branch of the Bahr El Jebel appears to leave the main stream through the swamp and sudd to the north of Bor, and to flow north-west parallel to it and at a distance of perhaps 5 or 6 miles to the east. For about 30 miles below Bor, this branch, known by the Dinkas of Pabek as the river Atem, and by those at Tau as the Awai—the “Gertrude Nile” of Grogan—is said to be blocked by sudd. The Dinkas, however, say that Arabi Dafaalla sent a steamer down it from Bor to the junction of the Mading. In May, 1904, Sir William Garstin, G.C.M.G., and Captain J. S. Liddell explored this river by steamer as far up-stream as the village of Tau within 40 miles of Bor. At Tau the natives said it was blocked by sudd 10 miles further south. Up to this point the river was never less than 4 feet deep, though its breadth varied considerably, and to enable a steamer with barges to pass through it would require a certain amount of clearing.

River Mading. About 55 miles below Bor the Atem or Awai bifurcates. One branch known as the R. Mading, flowing north, is at first a fine river 80 yards wide and 5 or 6 feet deep but quickly narrows and loses its water in the marshes, and after 7 miles becomes an insignificant stream. It is said to be completely blocked by sudd a little lower down.

River Awai. The main branch known only as the Awai bends westwards and flows as an easily navigable stream, though difficult for a steamer with two barges, through the usual reedy swamp to the lakes a little north of Shambe. Between the Mading and Shambe the Awai has two main outlets into the Bahr El Jebel. One from Fajak, navigable only for dugouts, spills into the main river near Abu Kuka, but the principal channel, only a few hundred yards long connecting with the Jebel, is about 8 miles up-stream of Shambe. This is easily navigable by steamers.

Banks. The banks of the Awai and Mading are generally swamp, papyrus or grass, but from the former, about 7 miles from the Mading junction, ant hills on more or less dry ground are visible. On the eastern bank of the Atem forest approaches the river and for 10 miles north of Tau the right bank is high and firm, though liable to be flooded. The western bank is everywhere swampy.

Inhabitants. The Nuers do not appear to extend south of the latitude of Shambe. Here the banks of the rivers are thinly populated by Dinkas. From a few miles north of the Mading junction to Tau is the Dinka district of Twi—it was with the people of this district that Mr. Grogan had some trouble in 1900. Sheikh Gurung of Pabek in the north of Twi seems, however, very friendly. South of Tau, Bor district commences, the Dinkas of which are said to be not on friendly terms with Twi.

(d) *Bor and South.**

Bor. There are three sites on the right bank of the Bahr El Jebel known as Bor—the most northern is the site of the Old Government Mudiria, 4 miles further south is Arabi Dafaalla's deim, and about the same distance still further south is the site of the present Military Post and the proposed site of the Headquarters of the new administrative district of Bor, *vide* pp. 76, 77.

The bank at all three places is high and firm, but the most roomy landing place is at the most southern site. Wood is everywhere plentiful, as the forest comes down to the water's edge.

Inhabitants. The inhabitants in the neighbourhood of Bor are Dinkas who live mostly 10 to 15 miles inland. The principal sheikh (Being-Dit) is named Bor, whose village is about 10 miles east of the Dervish deim. Sheikh Kur living about 7 miles north-north-east of Bor is also an important man.

Being Dit. The office of head sheikh (Being Dit) is said to have been from time immemorial in the family of sheikh Bor. It is customary for the Being Dit to nominate his successor from among his near relatives, his selection depending on their individual ability. In the present case, though the eldest son of the Being Dit usually succeeds, sheikh Bor has disregarded the claim of his own two sons, and has nominated Majam, son of his deceased brother, Matj.

If the Being Dit dies suddenly without nominating his successor, an assembly is held to appoint one, a curious fact being that the women, especially the wives of the late Being Dit, have a good deal to say in the selection.

Justice. Owing perhaps to the weakness of the central authority, sheikh Bor, there seem to be practically no penalties for offences. The fine of one cow appears to be considered sufficient for any crime from murder downwards. Capital punishment is never awarded. In the case of theft, the misdemeanant, if traced, is merely ordered to restore the stolen property. This he sometimes does and sometimes does not.

Villages. The houses of the villages are much scattered, which renders the occupants very defenceless in case of raids by the dreaded Beir or Beri tribe under sheikh Lom, who lives several days further inland in a south-easterly or easterly direction.

The tukls are well and neatly built, the walls being made of mud or dura stalks covered with daub. The doorway usually leads into a sort of hall or porch about 3 to 4 feet high; this again has an inner door. This is said to be for protection against hyenas.

* Most of this information was supplied by Mr. R. Türistig.

The usual buildings of a family consist of one tukl (Ud) per wife, one extra large tukl (Luak as cow stable, and the "Gu" or granary, a kind of miniature tukl raised off the ground on wooden legs.

In the rains water is stored in fulas, as the water in these gets low, a series of circular holes, 2 or 3 feet deeper than the fula, are dug round its circumference, and the remainder of the water is drained into them. These holes are then thatched with dura stalks, and water is economised by thus diminishing the loss by evaporation, as well as by draining the wet mud at the bottom of the fula. Water supply.

When these holes run dry water has to be carried by the women often 10 miles or more from the river.

From Bor a dry road, though not yet explored, undoubtedly leads north to Twi or Twich. A good path with rest-houses at frequent intervals leads south up the right bank to Mongalla and Gondokoro. Communications.

Communication with the Aliab, a tribe rich in cattle and grain, living on the west bank opposite to and south of Bor, is maintained by dugouts to Uternau, thence by road to Sheikh Anok, Mek of the Aliab, who lives about 25 miles west of Bor Military Post.

A good deal of dura is grown by sheikhs Bor and Kur. It is of the white variety and of excellent quality. The Dinkas are great smokers, and cultivate sufficient tobacco for their requirements. Cultivation.

Large numbers of cattle (Wong) and a good many sheep (Amal) and goats (Biu) are owned by these Dinkas. The grazing stables or cattle zeribas are called "Mura." The price (Tiek) of a wife used to be five cows or forty goats. Cattle being now scarce, owing to Arabi Dafaalla's prolonged residence at Bor, the price of a wife has been reduced to one cow. Cattle and sheep.

Bows (Danga) and arrows (Juet) are in general use, and are looked upon as the principal weapon for fighting, as their lances are indifferently manufactured. Arms.

Some of the wood from which the bows are made is said to come from Dar Fertit; the arrows are made of cane with iron or hard-wood points, and are poisoned by soaking them in the milky juice (Byol) of the *Euphorbia candelabrum*, which grows hereabouts.

The Dinkas are very inexpert smiths, and so generally have their lances made by the Jurs and Aliab of the west bank in exchange for sheep or goats.

In addition to their bows and spears they usually carry an ebony club.

Iron bracelets (Lung Kok) are made locally. These are about the only things a Dinka smith can make. A Dinka receives his bracelets on coming of age and is then not allowed to part with them. Ornaments.

Ivory bracelets (Gong) are only occasionally seen, as these people are not great hunters, though elephants are very numerous in their country.

The Jenotor* (Guainakwach) are the favourite beads, but they are very particular as to the kind. The most popular are black with red and white spots. Forty of these beads make a necklace and will purchase a sheep or goat; five is the price of a hen and three will buy five eggs.

Brass wire is not nearly so much appreciated as iron or the right sort of beads. It is hammered into bracelets by the smiths, but they prefer to buy these ready made.

Goat skin bracelets are also worn by the men as well as by the women who wear, in addition, brass bracelets round the wrists and ankles, and strings of small blue or white beads round the waist. The men as a rule are naked, whilst the women wear the usual skin apron in front and occasionally behind. At present cotton cloth is considered a prohibitive luxury and is not of much use as barter, though acceptable as a present.

The word of greeting is "Akingedo" and the reply to this is the same word repeated.

The dialect of these southern Dinkas varies considerably from that spoken in the northern districts.

The Dinka is so abnormally lazy that he has no desire whatever to hire himself for work of any description. Carriers are most difficult to obtain from them even when applied for through the medium of their most influential sheikhs. Word of greeting and language.
Habits.

At certain seasons they are busily occupied with their cultivation, but for the remainder of the year, with the exception of the few engaged in superintending the grazing of the cattle, they live in absolute idleness, varied only by an occasional and generally futile hunting or fishing expedition.

The women on the other hand are very industrious. On them falls the heavy work of pounding the dura into flour and preparing food and other household duties, as well as carrying water which has often to be brought from a great distance. Salt is not eaten by the Dinkas, nor is it sought after like sugar, and they do not appear to have any substitute for it. The women usually drink milk flavoured with cow's urine, but the men as a rule drink it unadulterated.

As is stated on p. 128, the Dinka believes in a Creator of the world and mankind known as Deng-Dit. It was only after man had learnt to sacrifice cattle and sheep to Deng-Dit that woman became fruitful and man was able to propagate his species. Religion.

The Dinkas have regular priests (Tieit) who are not, however, professional men, but live and work like the

* Or "Gianotta;" vide p. 120, footnote.

ordinary individual. These priests are believed to have supernatural powers of conversing with those who are dead and have become the children of Deng-Dit.

This communion with the dead is held on the occasion of a ceremony to commemorate the deceased or sometimes in cases of serious illness.

Mr. R. Türistig gives the following interesting description of these ceremonies:—

"It was the memorial day for a deceased wife of sheikh Bor. At about 7 a.m. he and some of his people went to the tukl, which had belonged to her, and sat down in front of the doorway; on the other side near the 'Gu' or granary sat the deceased wife's 'locum tenens' as well as other wives. In the open space between them the Tieit or priest sat on his cow-hide mat. Close by was a tree from which the branches had been shorn, and to which a large number of cow-horns had been affixed—said by sheikh Bor to be a very old erection—and to the bottom of the tree a live goat was fastened.

"Sheikh Bor and his people then commenced to question the priest on many points with regard to which they desired the opinion of the deceased wife; the priest meanwhile sat with legs crossed supporting his head with one hand, whilst with the other he continued to rattle a bottle-shaped-gourd half-full of lubia beans. After much shaking and rattling he proceeded, having first directly addressed the deceased and having made a suitable pause to enable her to reply, to give a detailed answer on each question in a deep guttural tone, his eyes meanwhile being rigidly fixed on the ground, his voice (similar to a ventriloquist) sounding as though it were not his own.

"Though I was unable to understand much that was being said, one, at least, of the questions and answers referred to the approaching visit of the Mudir.

"Having obtained all the information required, sheikh Bor rose, the priest remaining seated, seized the sheep, threw it down, and then slowly and solemnly cut the throat of the animal with a lance, remaining himself the while in an upright position. The blood having spurted out, the ceremony was over, and the old sheikh said 'Now let us go to your house.'

"On another occasion a somewhat similar ceremony took place in connection with a sick man. The same priest officiated, but there were more people, and it lasted from 5 p.m. to 10 p.m. A good deal of dancing was performed by women who were decked in fantastic fashion with ostrich feathers, etc. One woman carried a gourd full of liquid butter, with which she anointed in most liberal fashion the necks of those present as well as the entire body of the bull which was subsequently sacrificed. The priest invariably receives the ribs of the animal as his portion, but in this case no one partook of any of the flesh until 5 a.m. the following morning. On the whole, the Dinkas did not strike me as a particularly superstitious race."

Vide also Chap. VII, p. 162, and compare with Shilluk religion, Chap. VIII.

Baris.

On the right bank, 20 miles south of Bor, the Baris begin and extend to Gondokoro and south. The Sudan Baris appear to be a poor race both materially and mentally. At present they are neither willing to work to increase their cultivation, nor to act as porters. In the days of Baker they were a warlike race, rich in cattle—this spirit and property seem to have vanished under Dervish rule. They appear physically stronger and better built than the Dinkas. Like them they do not appear to inhabit the country more than 20 miles inland. Their inland villages have no wells, but each house has usually five pits dug round it for collecting rainwater. The Baris cultivate dura, simsim, telabun and tobacco. During the last few years their crops have suffered much from drought and floods alternately.

Beads are of little use as trade goods. Brass wire, hoes, iron, and tarbushes, as well as native cotton-cloth (damur) are all acceptable.

The men as a rule carry a long narrow-bladed spear, and go about stark naked. The women wear a leather fringe round the loins, with a tanned skin hanging down behind. The unmarried girls are content with the fringe only.

The women carry their babies on their backs, in skin bags, which can be detached and hung on a cross stick to form a cradle.

The principal Sheikhs of the Bari living on the right bank and working south are Kula, Wungo, Lefo Abu Kuka, Legi Lefo, Lado, and Lowala, and on the left bank Mudi, Wani, and Lado Kanga. They have apparently no tribal organization, and the Sheikhs have very little authority.

Mongalla.

Mongalla is the southernmost post of the Sudan Government on the White Nile. It was moved here from Kiro, on the left bank, in April, 1901. It is the residence of a British Inspector and Police Officer; there is also a detachment of two companies under a British officer furnished from the Sudanese battalion at Taufikia. There are here Government offices, barracks, hospital, and residences of officials built of brick. A gunboat is always stationed here. Mongalla is on the right bank, 23 miles north of Gondokoro, and 13 and 12 miles from the Belgian stations, Lado and Kiro respectively.

Rains.

The rainy season in this district is spread over the period from the end of February to November, but during

this season rain is by no means constant. At first there are intervals of a week or even a fortnight between the rainstorms, but after the middle of June, when the heavy rains commence, there is, as a rule, one storm during every 24 hours.

The temperature in these regions is comparatively cool, and the thermometer very seldom rises to 100° Fahr.

Tempera-
ture.

The natives appear healthy, and there seems no reason why, with ordinary precautions, white races should not enjoy equally good health, though the more southern portions, at any rate, of this district are certainly within the "Blackwater" fever zone.

Health.

(e) *The Beri Tribe.*

The following information is taken from a report by Captain N. T. Borton, who visited these people in April, 1904.

Description.

The Beri tribe appear to be a mixture of the Bari and Latuka. They live on a hill about 2,000 feet high called Jebel Lafol which is composed of granite with several fair sized trees growing on it. It lies about 50 miles south-east by east from Mongalla.

The hill is artificially terraced with granite slabs throughout and on these terraces, practically right up to the top of the hill, are built the tukls of the people, exactly similar to Bari Tukls except that the sides are made of strips of wood instead of reeds. The fighting men live round the foot of the hill and the older people higher up.

Houses.

There is no water on the hill itself—all has to be carried from rain pools of which there are at this time of year about a dozen round and fairly close to the hill.

Water.

All cattle were driven off during our visit and were only beginning to return when I left—there did not appear to be many really large cattle zeribas, though these too may have been removed at our approach which had been watched for by day and night for the last three days.

Cattle.

Alikori* is the chief of the tribe and holds absolute sway. He is an oldish man of about 65 years of age, about 5 feet 8 inches in height, and like nearly all his tribe, wears a feather quill piercing his lower lip to allow the saliva to run off, when smoking, with a minimum of trouble to the smoker.

Chief.

The rule of succession is that brothers succeed each other according to seniority; after the youngest brother's death, the succession passes to the eldest son of the eldest brother and so on through the family.

Succession.

Alikori succeeded his father Aseri who had no brothers, the present heir apparent is named Waller Mari.

All Beris stated they have no connection whatever with the Beir tribe opposite Bor† and say they have no other district but Jebel Lafol. From the top of it one can see 50 miles or more in the Bor direction; there did not seem to be any roads and no hills were visible. All tribes in these parts live on hills.

Beris.

The cultivation on the vast plain lying round the hill consists of dura, tobacco, and a few ground nuts only. The dura was about a foot high and appeared to be well looked after and the ground cleaned.

Cultivation.

The only trade is the purchase of dura for sheep, carried on principally with the Lokova on Mount Illyria and a little with our Bari Sheikhs Lado, Lowala, etc., on the Nile.

Trade.

The present fashionable enemy is the Latuka tribe belonging to Queen Topein—relations with other powers are reported as satisfactory.

Enemies.

The population probably amounts to about 3,000 men all told.

Population.

People seem very healthy, quite the opposite of the Baris; no disgusting sights like one sees in their villages; malformed children are destroyed at birth. Sleeping sickness is unknown.

Health.

All disciplinary powers are vested in the chief. For premeditated murder punishment is death. For killing in quarrel, etc., the offender must pay a boy to the family of the deceased. Thefts of cattle must be repaid or the offender is exiled. Thefts of food are not looked upon as offences but as occasional necessities. For adultery the co-respondent must pay 1 cow, 5 sheep and 5 iron malotes (hoes); the wife is dealt with by her husband in the seclusion of the home, but must not be killed.

Legal.

The birth of a child does not give an excuse for a festival of any sort.

Customs.

Marriages are arranged when the girls are very young. The bridegroom interviews his proposed father-in-law, as in other countries, and arranges to pay so many sheep a year until the lady reaches a marriageable age. The ceremony is then celebrated amid much merissa drinking. Divorce is allowed to husbands only; if granted they receive back their marriage settlement. A widow marries her deceased husband's brother; if she has no brother-in-law she may marry someone else, but she usually becomes the property of the head chief.

Death is believed to be the end of all things. No after state is believed in. A sheep is always killed over a dead man's grave.

The language is peculiar to the tribe.

Language.

* There is another branch of this tribe living further north under a chief named Lom (*vide* p. 144).

† This statement appears to be untrue.

Clothing.	The men go naked or wear a short mantle of skin over the shoulders. Women wear a broad skin covering from the waist in front and behind.
Arms.	The same practically as the Baris.
Visitors.	Alikori states no white man has ever been to him before (April, 1904). Emin Pasha once passed with a concourse of people going towards Bor but did not stop.
Siege.	Arabi Dafaalla besieged the hill for 13 days in 1897; he then drew off having suffered considerable loss. The natives used to rush the water holes every night at a different point and thus bring in enough to last for the next day.
Supplies.	Flour and sheep could only be obtained on payment by repeatedly demanding them and were then only forthcoming in very small quantities. It is probable that when the Beri are again visited supplies of grain and meat will be more readily produced.
Transport.	Mules, donkeys, and in the dry season camels could all be advantageously employed for transport.
Game.	Giraffe, hartebeest, topé and oribi practically comprised all the game seen, but there were many fresh tracks of elephant and rhino. One herd of giraffe numbered over eighty animals.
Road.	The best route from Mongalla to J. Lafol is up the right bank of the branch of the Bahr El Jebel, south of Mongalla to Sheikh Lado's or Lowala's (9 miles, thence south-east up the Felluru river <i>via</i> Nierchuk to junction (18 miles) of track from Ali Bey and Gondokoro, water in dry season all along this river. Thence general direction east, passing two pools, liable to be nearly dry in dry season, to Khor Wandida (15 miles), dry in April. Thence still east to Wallada lake, 12 miles, thence 11 miles north-east to J. Lafol, passing a marsh half-way where water should be always obtainable. Total distance about 65 miles. Between the Felluru River and J. Lafol there is no track.

(f) *Country South of the Akobo.**

Boma. South of the junction of the Ajibur and Akobo rivers, an undulating tract of country is traversed before the foot of the Boma hills is reached. The soil is generally of a gravelly nature, but the district is often most charmingly wooded, whilst striking cocked-hat shaped peaks to the west enclose the valley of the Ajibur and add variety to the scene. Until the Boma hills are entered the country appears to be quite uninhabited, for it was not until we reached the lower slopes that we observed natives for the first time gathering the fruit of the many palms that grow, as well as bamboo, hereabouts. The hilly district of Boma† is then entered, and many streams, valleys, and ridges have to be crossed. The soil is seemingly very fertile and capable of producing all kinds of cereals. Proceeding as we did in a south-westerly direction through these hills, we, of course, only traversed quite a small corner, so to speak, of the country, but were much impressed by the possibilities of the place as the site of a future post along the frontier. The natives appeared quite friendly; the scenery at times was really grand; and plenty of food and water could doubtless be always procurable once the natives saw that they would be protected from outside raiding parties. The average altitude of this region is generally from 3,000 to 4,000 feet above the sea level, but other ridges and heights attain an altitude of close on 6,000 feet. The natives were exceedingly shy, but eventually we persuaded them to approach us, though unfortunately we were unable to converse with them except by that most unsatisfactory of means—signs. Physically, the men—we saw no women at all at close quarters—are finely built and appear a higher type than the Nuers or Anuaks. Many of them wore ostrich feathers in their head-dress, and several had large circular knives—like those of the Turkana, but much broader—round their wrists. Beads were very generally worn, and many of the young bloods had broad bands of red beads, picked out with patches of blue and white ones, fastened across the forehead. Small skin aprons, not unlike those of the Turkana, were also worn by some of the men. Most of the men's spears were sheathed and not carried like those of the Nuers and Anuaks uncovered. The huts we saw were wretched little grass erections with no appearance of stability, and gave one the impression of being little more than mere rough shelters. We gathered from these natives that they had recently been raided by the Magois, whom they hate and fear, and had in consequence no goats or sheep left. We certainly did not see any, but at the same time the men looked so sturdy and well-filled that they probably had plenty of grain food. Moreover, the wild fig grows fairly abundantly along the banks of some of the streams. The loftier heights of the country are well wooded, and though, perhaps, they were somewhat distant to judge accurately, I think probably these trees would provide excellent timber for building purposes. The climate appeared most bracing, and, judging by the few days experience we had, the rainfall must be very heavy.

Grand solid rock peaks in places spring out from the ridges in a curious manner, and by their precipitous appearance would probably tax the resource of the most skilled Alpine climbers to reach their summits. We were able to learn nothing regarding the customs or habits of these natives, and, in fact, from the time we left Anuak country until we

* Extract from a report by Major Austin, R.E., 1901.

† Boma was visited by Messrs. Bulpett and Jessen in June, 1904. The inhabitants were found to be very friendly, and a certain amount of grain was obtainable from them. Iron wire—not brass—was what they asked for in payment. Crops in Boma are harvested in June. The maximum temperature registered on the Boma-Musha plateau was 85° F.

reached the Uganda Protectorate had to carry out all conversation by signs. Judging by the great display of beads made, for trading purposes I have little doubt but that red, blue and white beads would be readily taken in exchange for food. The small bead known as "pound" beads would, I think, be far less popular than a slightly larger variety about the size of a pea. The beads should be opaque, and the ordinary glass beads procurable in Cairo, I fancy, would be little sought after.

To the south of Boma and some short distance away from the foot of the hills, a pleasantly wooded tract of country is traversed, consisting of alternate plains of open bush and grass land, whilst water is obtained from khors running in a westerly direction across this plain, before turning north. Further south, again, however, a most uninviting dried up plain, which, after rains, would probably be converted into heavy bog, is met with, and water now becomes a most-serious consideration as far as about lat. $5^{\circ} 30'$ north, where a broad sandy-bedded khor winds its way across the plain in a westerly direction. Along this river bed we found the Karuno tribe settled in considerable numbers. They appeared to be a somewhat powerful tribe, and were certainly the most elaborately bedecked and prosperous looking set of men we saw during our journey. They possessed large numbers of cattle, goats and sheep, and donkeys, and also grow grain along the banks of the Karuno. Like all the natives of these regions, they are extremely suspicious of strangers, and though not unfriendly, are by no means anxious, it seemed to us, to have anything to do with Europeans. I do not remember these people having ever before been mentioned by any traveller; but on comparing my map with Mr. Donaldson Smith's we seemed most obviously to be at the place shown by him as inhabited by the Magois tribe. On enquiring of these natives where the Magois were, they pointed away across the plain to the west, and gave us to understand they had been driven away in that direction by the Turkana, who had come up in force from the south. Although we tried to induce the Karuno people to bring grain or goats and sheep into camp for sale, they would not do so, nor would they even provide us with guides. This is probably more due to the fear these natives entertain of travelling into their neighbour's country than from any unfriendly motives. Here, where raids and counter-raids are frequently being indulged in, considerable hostility naturally exists between the several tribes living next each other. The Karuno in some respects are not unlike the Turkana, except that their head-dress is not a long pendant bag-shaped one, but more like a squat chignon, which is stuck full of fine vari-coloured ostrich feathers. Beads are worn by them in great quantities, chiefly red, white, and a variegated one known in East Africa as "Punda malia" (zebra). Many of the young warriors in addition to numerous strings round the neck, had solid bands of beads—similar to those we saw in Boma—fastened across the forehead. The elders have most handsome head-dresses made of cowrie shells, whilst others again wore skull caps made of small white and red beads worked into a neat design of many circles. Physically, the men are well set up and sturdy, though they do not run to height much and are probably little above the average stature.

The women are not unlike the Turkana, and weave their hair into straight ringlets which fall round the head. They also wear beads in great numbers round the neck, whilst the lower part of the body is covered with a skin apron, cut away at the side with a flap in front and a long trailing tail arrangement behind.

In addition to long handled spears, the men carry short stabbing spears, and oblong-shaped hide shields.

Exactly what extent of country the Karuno occupy I can hardly say, but I should imagine they do not exist further east than the foot of the escarpment, where the country becomes thickly wooded with thorn bush. In a westerly direction they probably do not extend more than 2 or 3 miles beyond where we first struck the Karuno river bed, leaving an uninhabited area of country between themselves and the Magois. After leaving the Karuno, and striking at first in a south-easterly, and later in an easterly direction, we reached and travelled along the foot of a rocky escarpment through an irregular bay, as it were, in the hills. The valley, between our line of march and broken hills to the south, was thickly wooded with thorn bush, and water was difficult to find. We saw a few old grass huts of natives, which had been deserted for some months previously, but saw no signs of human life. It is probable that this tract of country can only be occupied during the rainy season of the year, owing to the extreme scarcity of water.

After we had worked our way through these hills, finally crossing the eastern ridge by an easy pass, we found ourselves in a broad plain, thickly covered with thorn bush. Some 30 miles east more hills seemed to bar progress in that direction, whilst to the south the thorny plain appeared to extend for some 40 miles to the foot of the high mountain masses to the west of Lake Rudolf. We were now in the tract of country called by Dr. Donaldson Smith, Musha. The thorn-bush plain terminated to the north at the foot of two lofty mountains, the more westerly one of which attains a height of close on 6,000 feet, whilst the loftier mass to the south-east of it (previously known to me as Mount Naita, and called by Dr. Donaldson Smith, Etua; whilst in Bottégo's map it is named Aguzzo) reaches a height of about 7,300 feet. We passed numerous kraals whilst journeying in an easterly direction across this plain, which had all been temporarily abandoned by the natives, with whom we could get no intercourse, as they refused to approach us. On several occasions, when we saw two or three natives watching us from a distance, men were sent out to try and induce them to come into camp, but they fled before our men could get within even shouting distance of them. We were most anxious to obtain the service of guides, as the country before us was unknown, and the anxieties regarding water had become very great. It would appear, judging by the tracks we saw, that the Musha

possess much livestock, consisting of camels, cattle, donkeys, goats, and sheep. In the thick bush, however, these people had little difficulty in driving them away and concealing their animals until we had passed, when presumably they returned again to their kraals. On one occasion, however, our advent was unexpected, as near our camping ground some of our party surprised two or three Musha, who were tending a flock of over 200 goats and sheep, and perhaps a dozen donkeys. The natives fled, leaving everything behind in their little enclosures. Strict orders were issued that these animals were not to be touched, as we hoped by so doing we might induce the natives to understand that



ANUAK WOMEN.

we were not a marauding expedition, and were desirous of opening friendly intercourse with them. The animals were left alone all that day and night, but the Musha evidently feared to return, and when we marched off next morning the donkeys gave us a parting bray, which was the nearest approach to friendly intercourse we experienced in this neighbourhood, as we never saw another Musha man during the rest of our journey. In due course we crossed another low range of hills to the south of that grand mountain, Naita, and entered another wooded valley, which ultimately joined that of the River Sacchi, where we arrived on the 1st April, and our difficulties regarding water for the present

were at an end. I would here remark that perhaps for nine months in the year, for a large party to cross this bit of country from Boma to the Sacchi, by the route followed by us, would be a most risky undertaking owing to the extreme scarcity of water. The many watercourses shown on the map were found to be almost without exception merely dry stony beds in which no water was procurable by digging. Fortunately, about the 20th March, rain had fallen to the east of where we then were, and by extraordinary good luck we subsequently found pools at intervals, after long continued search. One point worthy of note is that, in spite of previous rain, we seldom found water in the actual nullah beds, as, owing to their stony nature, the water runs off at once. What water was found was nearly always in depressions some distance away from the banks of these nullahs, where the clayey soil prevented percolation, and retained water in pools until it became evaporated in due course by the hot sun.

On our previous visit to Lake Rudolf from the south, our old Suk guide, Nyanga by name, had on several occasions pointed out to me the striking Naita peak away to the north-west, and told me that the country thereabouts was the most dreadful one he knew for scarcity of water. I believed him, as he was about the most knowledgeable and intelligent native of his class regarding the geography of the country that I have ever met. His information had now been verified by us, and it was with a sigh of relief we found the Sacchi a running stream. To the Swahilis the tract of country Sacchi river. we had traversed was always known as Donyiro, which name appears on the map prepared by the Macdonald expedition.

From very imperfect data I am inclined to think that between our southerly route from Boma and the valley of the Sacchi the escarpment we skirted is the edge of a fine hilly plateau,* varying in height probably from 3,000 to 5,000 feet above sea level. I imagine all that tract of country to be a fertile and probably well-watered region, very much like Boma itself. Whether it is thickly populated it is difficult to say, as the country is absolutely unknown to Europeans, but to traverse it from north to south and east to west with mule transport would probably be most interesting. It would probably be almost too difficult for any pack animals except mules and perhaps donkeys. The much talked of gold, which is discussed by our Swahilis as existing in those parts, might also be found, although I must admit we never saw any gold ornaments worn by natives in the plains bordering that country.

In Sudan territory south of the Sobat the following species are known to exist: Elephant, buffalo, giraffe, Game. rhinoceros, zebra, roan-antelope, waterbuck, Mrs. Grey's waterbuck (*cobus maria*), white-eared cob (*cobus leucotis*), Uganda cob, bushbuck, reedbuck, Jackson's hartebeeste, tiang, lion, leopard, etc.

(g) The Upper Pibor.

In August, 1904, the head waters of the so-called Pibor were explored by Lieutenant D. C. Comyn, Black General. Watch. It was found that 17 miles above the Akobo junction the river bifurcated, one branch known as the Agweif apparently coming from the E. and S.E., the other, known by the Anuaks as Nyanabek, by the Nuers as Kang, and by the Agibbas as Natila, from the S. and S.W.

Following the latter branch, without encountering any serious sudd obstructions, Lieutenant Comyn succeeded, with the aid of a steam launch, in reaching a point which appeared to him to be very near the source of this important feeder of the Pibor.

The flooded plain in which the river seemingly has its origin, is according to Lieutenant Comyn's sketch, about Source. 60 miles due E. of Bor, and 170 miles by river above the Akobo junction.

The banks of the Natila are as a rule ill-defined, swampy and sudd-fringed; in places they appear to be as much Banks. as 200 to 250 yards apart.

Almost throughout its course the banks were more or less inundated, the left bank being usually the higher, and in its upper reaches the plain was flooded to a depth of a foot or more for many miles round.

The water-way varied from 20 to 70 yards in width, and about 20 miles above the Akobo junction, what Water-way. appeared to be a sudd-covered lake, some 800 yards broad and 6 miles in length, was traversed by a deep and tortuous channel 20 to 30 yards wide.

The average depth for the first 130 miles was found to be about 20 feet, but in the next 40 miles the river Depth. gradually shoaled to about 15 inches, and the direction of its course was then only faintly distinguishable by the band of light-green grass which blocked its bed and precluded further progress.

The current varied from $\frac{1}{2}$ to 2 miles per hour, the rise and fall of the river apparently depending largely on the Current. local rainfall. In the dry season the plain, and, according to the Agibbas, the river itself dries up.

Fuel is plentiful everywhere, the river being fringed with a belt of tall and heglig trees for the greater part of Fuel. its course.

* Messrs. Bulpett and Jessen reached a point about 30 miles N.N.E. of Mount Naita in June, 1904, and report that this plateau appeared very rocky and cut up by water courses, which contained water in pools in June. The land seemed uninhabitable and unsuited to cultivation.

† For description, *vide* p. 136.

J. Atin. J. Atin, standing on the left bank, about $1\frac{1}{2}$ miles from the river and about 100 miles from the Akobo junction, forms a conspicuous landmark. It is a solid rocky mass about 2 miles in circumference, and has twin peaks some 400 feet above the plain.

Gordon is said to have marched up the right bank in 1878 (?) and to have crossed to J. Atin, and to have marched thence westwards to the Nile through the Beir or Beri country.

Inhabitants. As is stated on p. 136 the inhabitants of the Lower Pibor are Nuers and a few of the less powerful Anuaks. On the Upper Pibor or Natila a tribe known as the Agibba were found, their first village being Nyanabek, about 70 miles S. of the Akobo. For the next 60 miles villages were frequently seen.

Agibba tribe. Lieutenant Comyn gives the following account of the Agibba tribe, who appear to strongly resemble the Nuers, and also in some respects the Turkana:—

"The Agibbas are a warlike tribe, feared by and fearing the Nuers. Their other neighbours, the Anuaks and Dinkas, they look on with contempt, and buy their suksuk from them. The Abyssinians do not harry this part of the tribe. A few men know the Nuer, Dinka and Anuak dialect. Their physique is good, but their stature is not uniform. Many seem to suffer from hydrocele, and I saw one man with elephantiasis in the leg. They are armed with roughly-made spears of various shapes, wrist knives, and an oblong shield of giraffe hide, and invariably carry their head-rest to sit upon. Their huts are rudely built, of a bee-hive shape, and about the same size as an ordinary tukl."

"They appear to have no canoes, and I saw no fishing-spears, though plenty of fish baskets. Their ivory ornaments are old and small. The principal men wear over the right elbow a bunch of giraffe tails, the band ornamented with cowrie shells. Their clothing consists of a belt round the waist, and, in front and behind (if a man is well off), a skin often embroidered and edged with beads—most wear a $3\frac{1}{2}$ -inch band of red beads with a 1-inch line down the centre across their foreheads. Some of the older men had a bead-covered bowl on their heads instead. The hair of the younger men was dressed very neatly, like an inverted soup plate with the part over the forehead cut off. They have all sorts of suksuk. What they asked for were (in order of preference) cowrie shells, beads (janitor), brass wire, red, white and other beads. The head sheikh, whose name I think is Nadgweir (they were very averse to telling it) seems a man of character. All seem afraid of him, and said if they took up spears without his permission he would cut their throats. I saw but half-a-dozen of women and no children."

TABLE OF DISTANCES ALONG THE SOBAT.

Place.	Intermediate.		From Sobat Mouth.		From Khartoum.	
	Miles.	Kilometres.	Miles.	Kilometres.	Miles.	Kilometres.
American Mission (Tatug or Deleib)	5 $\frac{1}{2}$	9	5 $\frac{1}{2}$	9	524	843
Khor Filas	4	6 $\frac{1}{2}$	9 $\frac{1}{2}$	15 $\frac{1}{2}$	528	849 $\frac{1}{2}$
Gokiak	10	16	19 $\frac{1}{2}$	32	538	865 $\frac{1}{2}$
Abwong	63	101	82 $\frac{1}{2}$	133	601	966
Nasser	107	172	189 $\frac{1}{2}$	306	708	1138
Pibor Mouth	27 $\frac{1}{2}$	44	217	349	735 $\frac{1}{2}$	1182
Machar	36 $\frac{1}{2}$	58 $\frac{1}{2}$	253 $\frac{1}{2}$	406 $\frac{1}{2}$	772	1240 $\frac{1}{2}$
Jokau	16	26	269 $\frac{1}{2}$	434	788	1267
Balankun	9	14 $\frac{1}{2}$	278 $\frac{1}{2}$	448 $\frac{1}{2}$	797	1282
Itang	36	58	314 $\frac{1}{2}$	507	833	1340
Fenkio	23	37	337 $\frac{1}{2}$	544	856	1377
Gambela	18	29	355 $\frac{1}{2}$	572 $\frac{1}{2}$	874	1406
Baro Ford	26	42	381 $\frac{1}{2}$	614	900	1448

CHAPTER VII.

SOUTH-WESTERN SUDAN.

THE BAHR EL GHAZAL.

1. *Introductory.*

The Bahr El Ghazal was re-occupied by the troops of the Sudan Government during the winter of 1900-1901. Before their advent the most recent detailed descriptions of the country (not counting the necessarily superficial writings of the Marchand Expedition in 1898) date from pre-Dervish days (*e.g.*, Junker, Schweinfurth, etc.). Although there has not been time or opportunity for the whole of the country to be subjected to a searching examination since 1901, still, sufficient is known to prove that great changes have taken place in the province since 1881. Roads and places have disappeared, the face of the country has in many parts completely changed, and tribes have disappeared, have been thinned out, or have emigrated to other territories. Introductory.

Thus it will be found that in many particulars the detail given in the following pages will not at all bear out the descriptions by Schweinfurth and Junker of 20 years or more ago.

(For an abstract of the descriptions by these celebrated travellers, *vide* H.B.S. pp. 110-138.)

2. *General Description.*

The Bahr El Ghazal province is bounded on the south and west by the Congo-Nile watershed, on the north by the Bahr El Arab and Bahr El Ghazal, and on the east by the Bahr El Jebel. Its previous history and that of the occupation of this province in 1900-01 by the Sudan Government is narrated elsewhere (*vide* Part II, Chaps. V and VII). Boundaries.

The northern boundary of the ferruginous tableland through which the western tributaries of the Nile pass from the watershed through the Bahr El Ghazal country may roughly be said to coincide with a line drawn through Rumbek and Chamamui (Chak Chak). North of this and until the sudd is reached, the country is flat, and the soil is clay, with great plains of long grass and many swamps intervening—"The Steppes" of Schweinfurth. North-west of this the country is dry and covered with bush, cut up by small khors, which are full in the rainy season. The sudd extends from Lake No to Meshra El Rek (where a base post has been established), and stretches westwards towards Chamamui, to receive the contents of the Wau, Bongo, and Bahr El Arab rivers. The various areas.

The tableland rises gradually towards the south and west to the watershed, the undulations of the surface becoming more pronounced in this direction, and the khors more defined and frequent. Granitic outcrops, rising to 400 feet in some cases, are numerous along the higher slopes of the watershed. Everywhere ironstone and crystalline rock appear above the thin layer of soil that covers them. Nevertheless, on the lower slopes and in the basins of the various khors the soil is profitable and fertile, generally of a rich copper colour with a certain amount of sandstone soil. In Telgona district and the country round, especially to the north and west, are several granitic outcrops, the seven-peaked Telgona and the conical hill of Lutu being the most remarkable. Great forests cover the country almost throughout from east to west. In the steppes of the lower level there are many grass plains, which become vast swamps in the rains. In the table-land the open plains are of no great area. The table-land.

The soil, both in the swamps and in the land liable to annual inundation, is a rich black clayey loam. In the portions further away from the rivers there is often a large mixture of sand washed down from the higher lands. Most of it is, however, very suitable for cultivation. Alluvial plains border one or both banks of all the more important rivers for a considerable distance up their courses. It is only in the upper reaches that the alluvial deposits almost disappear and that the rocky tree-clad slopes descend abruptly to the river. The soil on the higher lands is usually sandy, and clayey in depressions or near streams. It overlies a pitted, ferruginous stone or laterite, which, in its turn, rests on granite, which in places degenerates into gneiss, schists, or quartzite. These granitic rocks are, as a rule, not visible in the lower portion of the highlands, which only show abundance of ironstone, but further inland outcrops of granite become more frequent, and the country becomes more undulating, forming long, low hill ranges, or throwing up solitary granitic hills, usually rounded in outline, but occasionally more rugged in appearance. Soil and geological formation.