

comes forth about the end of April, at the period when the corn is ripe; indeed, her appearance abroad with her young is one of the signs for knowing when harvest ought to commence. She is said sometimes to hatch her eggs at intervals, the second couple of young ones making their appearance just when the first are ready to leave the nest; in this case the female comes out with the first couple, the orifice is again plastered up, and both male and female attend to the wants of the young which are left.

The honey-guides were very assiduous in their friendly offices, and enabled my men to get a large quantity of honey; but though bees abound, the wax of these parts forms no article of trade, as it does in Londa. It is probable that the good market for wax afforded to Angola by the churches of Brazil led to the gradual development of that branch of commerce there. The reports brought by my other party from Loanda of the value of wax induced some of my present companions to bring small quantities of it to Tete, but, not being properly prepared, it was so dark coloured that no one would purchase it; I afterwards saw a little at Kilimane, which had been procured from the natives somewhere in this region. Though we were now approaching the Portuguese settlement, the country was still full of large game. Lions and hyænas abounded; the former are never destroyed, as the people believe that the souls of their chiefs enter into them, and that a chief may even metamorphose himself into a lion, kill any one he chooses, and then return to the human form; whenever therefore they see one they commence the usual salutation of clapping their hands. As an evidence of the numbers of these animals I may mention that we saw little huts made in trees, indicating the places where some of the inhabitants have slept when benighted in the fields. As my men frequently left the line of march in order to catch korwes, or follow the honey-guides, they excited the astonishment of the guides, who were constantly warning them of the danger they thereby incurred from lions. I often kept considerably ahead of the main body of my men on this account.

We crossed the rivulets Kapopo and Ue, now running, but usually dry. The latter flows between banks 12 feet high, consisting of a crumbling alluvial sandstone. Great numbers

of wild vines grow in this quarter, and indeed everywhere along the banks of the Zambesi. One species, a black grape with large rough leaves, yields a fruit of very good flavour; but the common kinds—one with a round leaf and a greenish grape, and another with a leaf closely resembling that of the cultivated varieties, and with dark or purple fruit—have large seeds, which are strongly astringent and render it disagreeable. The natives eat all the varieties; and I tasted vinegar made from these grapes. Probably a country which yields the wild vines so very abundantly might be a fit one for the cultivated species. At this part of the journey so many of the vines had crossed the footpath that we had to be constantly on the watch to avoid being tripped up. Although the rains were not quite over, great numbers of pools were drying up, and the ground was in many parts covered with small, green, cryptogamous plants, which gave it a mouldy appearance and a strong smell. As we sometimes pushed aside the masses of rank vegetation which hung over our path, we felt a sort of hot blast on our faces. In this region, too, we met with potholes, six feet deep and three or four in diameter. In some cases they form convenient wells; in others they are full of earth; and in others still, the people have made them into graves for their chiefs.

On the 20th we came to Monina's village (close to the sand-river Tangwe, lat. $16^{\circ} 13' 38''$ S., long. $32^{\circ} 32'$ E.). This man is very popular among the tribes on account of his liberality. The local chiefs in this part of the country have formed a confederacy, similar to what we observed in Londa and elsewhere, under the supremacy of one called Nyatéwe, whose office it is to decide all disputes concerning land. The government of the Banyai is a sort of feudal republicanism. The chief is not hereditary but elective, and they choose the nephew of the deceased chief in preference to his own son; and sometimes even go to a distant tribe for a successor. As soon as the person selected has accepted the office, all the wives, goods, and children of his predecessor belong to him, and he takes care to keep them in a dependent position. If any one of them, becoming tired of this state of vassalage, sets up his own village, it is not unusual for the elected chief to send a number of his young men to visit the seceder, and, if he does

not receive them with the usual amount of clapping of hands and humility, they at once burn his village. The children of the chief have fewer privileges than common free men; for though they may not be sold, yet they are less eligible to the chieftainship than even the most distant relations of the chief. These free men form a distinct class who can never be sold; and under them there is a class of slaves whose appearance as well as position is very degraded. The sons of free men leave their parents about the age of puberty, and live for a few years with such men as Monina for the sake of instruction. While in this state they are kept under stringent regulations; they must salute a superior carefully, and, when any cooked food is brought, the young men may not approach the dish, but an elder divides a portion to each. They remain unmarried until a fresh set of youths is ready to occupy their place under the same instruction. The parents send servants with their sons to cultivate gardens for them, and also tasks to Monina to purchase their clothing. When the lads return to their native village, a case is submitted to them for adjudication, and, if they speak well on the point, the parents are highly gratified.

When we told Monina that we had nothing to present but some hoes, he replied that he was not in need of those articles, and that, as he had absolute power over the country in front, he could, if he chose, prevent us from proceeding. Monina himself seemed to credit our assertion, but his councillors evidently thought that we had goods concealed about us, and at their suggestion a war-dance was got up in the evening, about a hundred yards from our encampment, as if to frighten us out of presents. Some of Monina's young men had guns, but most were armed with large bows, arrows, and spears. They beat their drums furiously, and occasionally fired off a gun. As this sort of dance is always the prelude to an attack, my men quietly prepared themselves to give them a warm reception. But an hour or two after dark the dance ceased, and, as we then saw no one approaching us, we went to sleep. During the night one of my head-men, Monahin, left the encampment, probably in a fit of temporary insanity, brought on by illness. Next morning not a trace of him could be found, and he may have fallen a prey to a lion. I sent in the

morning to inform Monina of this sad event, and he at once ordered the gardens to be searched, and the wanderer, if found, to be restored. He evidently sympathised with us in our sorrow, and assured us that it was not the custom of his tribe to kidnap. I gave him credit for truthfulness, and he allowed us to move on without further molestation.

As we were leaving his village a witch-doctor arrived, who had been sent for, to subject the chief's wives to the "muavi," or ordeal, which is performed in the following manner. All the wives go forth into the field, and remain fasting till that person has made an infusion of the plant named "goho," which all drink, each one holding up her hand to heaven in attestation of her innocence. Those who vomit it are considered innocent, while those whom it purges are pronounced guilty, and put to death by burning. The innocent return to their homes, and slaughter a cock as a thank-offering to their guardian spirits. This summary procedure excited my surprise, for my intercourse with the natives here had led me to believe, that the women were held in too high estimation for it. But I was assured that the women themselves, on the slightest imputation of their having used witchcraft, eagerly desire the test; conscious of their innocence, and having the fullest faith in the truthfulness of the "muavi," they go willingly, and even eagerly, to drink it.

After leaving his village we marched in the bed of a sand-river a quarter of a mile broad, called Tangwe, through a flat country covered with low trees, and with high hills in the distance. This region is very much infested by lions, and men never go any distance into the woods alone. Having on one occasion turned aside at midday into grass a little taller than myself, an animal sprang away from me which was certainly not an antelope, but I could not distinguish whether it was a lion or a hyæna. We saw footprints of many black rhinoceroses, buffaloes, and zebras. After a few hours we reached the village of Nyakóba. Two men, who accompanied us from Monina to Nyakoba's, would not believe us when we said that we had no beads. It is very trying to have one's veracity doubted, but, on opening the boxes, and showing them that all I had was perfectly useless to them, they consented to

receive some beads off Sekwebu's waist, and I promised to send four yards of calico from Tete.

The person whom Nyakoba appointed to be our guide introduced himself to us and bargained that his services should be rewarded with a hoe. Having no objection to this proposal, I handed him the article, which he carried off in high delight to show to his wife. He soon afterwards returned, and said that, though he was perfectly willing to go, his wife would not let him. I said, "Then bring back the hoe;" but he replied, "I want it." "Well, go with us, and you shall have it." "But my wife won't let me." I remarked to my men, "Did you ever hear such a fool?" They answered, "Oh, that is the custom of these parts; the wives are the masters." Sekwebu informed me that he had gone to this man's house, and heard him saying to his wife, "Do you think that I would ever leave you?" then, turning to Sekwebu, he asked, "Do you think I would leave this pretty woman? Is she not pretty?" We questioned the guide whom we finally got from Nyakoba, an intelligent young man, who had much of the Arab features, and we found the statement confirmed. When a young man takes a liking to a girl of another village, and the parents have no objection to the match, he is obliged to live at their village, and to perform certain services for the mother-in-law, such as keeping her well supplied with firewood. If he wishes to return to his own family he is obliged to leave all his children behind—they belong to the wife. This is only a more stringent enforcement of the law from which emanates the practice so prevalent in Africa, known to Europeans as "buying wives," though it does not appear in that light to the actors. So many head of cattle or goats are given to the parents of the girl, "to give her up," as it is termed, *i. e.* to forego all claim on her offspring, and allow an entire transference of her and her seed into another family. If nothing is given, the family from which she has come can claim the children, and I have no doubt that some prefer to have their daughters married in that way, as it leads to the increase of their own village. My men excited the admiration of the Bambiri, who took them for a superior breed on account of their bravery in elephant-hunting, and tried, though

unsuccessfully, to get them as sons-in-law on the conditions named. I saw several things to confirm the impression of the higher position which women hold here; and, being anxious for a corroboration of my opinion, I afterwards inquired of the Portuguese, and was told that they had noticed the same thing; and that, if they wished a man to perform any service for them, he would reply, "Well, I shall go and ask my wife." If she consented, he would go; but no amount of coaxing or bribery would induce him to do it if she refused. The Portuguese praised the appearance of the Banyai, and they certainly are a fine race. A great many of them are of a light coffee-and-milk colour, which is considered handsome throughout the whole country,—a fair complexion being as much a test of beauty with them as with us. They draw out their hair into small cords a foot in length, around each of which they twine the inner bark of a certain tree, dyed a reddish colour. Generally they allow the mass of dressed hair to fall down to the shoulders, but, when they travel, they draw it up to a bunch, and tie it on the top of the head. They are cleanly in their habits.

The birds here sing very sweetly, and I thought I heard the canary, as in Londa. We had a heavy shower of rain, and I observed that the thermometer sank 14° in one hour afterwards. From the beginning of February we experienced a sensible diminution of temperature. In January the lowest was 75° , and that at sunrise; the average at the same hour (sunrise) being 79° ; at 3 P.M., 90° ; and at sunset, 82° . In February it fell as low as 70° in the course of the night, and the average height was 88° . Only once did it rise to 94° , just before a thunder-storm; yet the sensation of heat was greater now than it had been at much higher temperatures on more elevated lands.

We continued a very winding course, in order to avoid the chief Katolósa, who is said to levy large sums upon those who fall into his hands, and we passed several villages by going roundabout ways through the forest. The drums beating all night in one village near which we slept showed that some person in it had finished his course. On the occasion of the death of a chief, a trader is liable to be robbed, for the people consider themselves not amenable to law until a new

one is elected. Our guides were carrying dried buffalo's meat to the market at Tete as a private speculation.

As we avoided human habitations, I had an opportunity of observing the expedients my party resorted to in order to supply their wants. They consumed various vegetable productions, such as large mushrooms which grew on the anthills, a tuber named "mokúri," and another about the size of a turnip named "bonga," which has a sensible amount of salt in it. They also gathered a fruit called "ndongo" by the Makololo, and "dongolo" by the Bambiri, resembling a small plum, which becomes black when ripe, and is good food, as the seeds are small. The gravel and the sand, of which this district is composed, drain away the water so effectually that the trees, being exposed to violent heat without moisture, often become scrubby. The rivers are all of the sandy kind, and we pass over large beds between this and Tete, which in the dry season contain no water. Close on our south the hills of Lokóle rise to a considerable height, beyond which flows the Mazóe with its golden sands. The great numbers of pot-holes on the sides of sandstone ridges, when viewed in connection with the large banks of rolled shingle and washed sand which are met with on this side of the eastern ridge, may indicate that the sea in former times rolled its waves along its flanks. Many of the hills between the Kafue and Loangwa have their sides of the form seen in mud-banks left by the tide. The pot-holes appear most abundant on low grey sandstone ridges here; and as the shingle is composed of the same rocks as the hills west of Zumbo, it looks as if a current had dashed along from the south-east in the line in which the pot-holes now appear, and was thence deflected towards the Maravi country, north of Tete, where it may have hollowed out the rounded water-worn caverns in which these people store their corn and hide themselves from their enemies. In this case the form of this part of the continent must once have resembled the curves or indentations seen on the southern extremity of the American continent.

We were tolerably successful in avoiding the villages, and slept one night on the flanks of the hill Zimika, where a great number of deep pot-holes afforded an abundant supply of good rain-water. Here, for the first time, we saw hills with bare,

smooth, rocky tops, and we crossed over broad dykes of gneiss and syenitic porphyry running N. and S. As we were now approaching Tete, we were beginning to congratulate ourselves on our successful progress, when we found ourselves pursued by a party who threatened to send information to Katolósa, the chief of that district, that we were passing through his country without leave. We were obliged to give them two small tusks, for, had they told Katolosa, we should in all probability have lost the whole. We then went through a very rough stony country without any path. On the evening of the 2nd of March I halted about eight miles from Tete, feeling too fatigued to proceed, and sent forward to the Commandant the letters of recommendation with which I had been favoured in Angola by the bishop and others. About two o'clock in the morning of the 3rd we were aroused by two officers and a company of soldiers, who had been sent with the materials for a civilized breakfast and a "masheela" to bring me to Tete. My companions called me in alarm, thinking that we were captured by the armed men. When I understood the errand on which they had come, and had partaken of a good breakfast, all my fatigue vanished, though I had just before been too tired to sleep. It was the most refreshing breakfast I ever partook of, and I walked the last eight miles without the least feeling of weariness, although the path was so rough that one of the officers remarked to me, "This is enough to tear a man's life out of him."

CHAPTER XXXI.

NOTICES OF TETE AND ITS VICINITY.—PRODUCTIONS.

I WAS most kindly received by the Commandant, who did everything in his power to restore me from my emaciated condition, and invited me to remain with him until the following month, as this was the unhealthy period at Kilimane. He also generously presented my men with abundant provisions of millet; and gave them lodgings in a house of his own,

until they could erect their own huts, whereby they escaped the bite of the tampan, or, as they were here named, Carapatos. We had heard frightful accounts of this insect while among the Banyai, and Major Sicard assured me that its bite is more especially dangerous to strangers, as it sometimes causes fatal fever. The village of Tete is built on a long slope down to the river, with the fort on the water's edge. The rock beneath is grey sandstone, and has the appearance of having been crushed away from the river, the strata thus assuming a crumpled form. The hollow between each crease is a street, the houses being built upon the projecting fold. The rocks at the top of the slope are much higher than the fort, and of course completely command it. The whole of the adjacent country is rocky and broken, but every available spot is under cultivation. The houses of the Europeans in Tete are built of stone, cemented with mud instead of lime, and thatched with reeds and grass; they have a rough untidy appearance in consequence of the cement having been washed out by the rains. There are about thirty of them; the native houses are built of wattle and daub. A wall about ten feet high encloses the village, but most of the native inhabitants prefer to live outside it. There are about 1200 huts in all, which with European households would give a population of about 4500 souls. Generally there are not more than 2000 people resident, for the majority are engaged in agricultural operations in the adjacent country. The number of Portuguese, exclusive of the military, was under twenty. There were 80 soldiers, who had been removed hither from Senna, a station lower down the river, in consequence of the mortality that prevailed among them there. Here they enjoy much better health, though they indulge largely in spirits extracted from various plants, wild fruits, and grain, by the natives, who understand a method of distillation by means of gun-barrels, and a succession of earthen pots filled with water to keep them cool. The general report of the fever here is that, while at Kilimane the fever is continuous, at Tete a man recovers in about three days. The mildest remedies only are used at first, and, if that period be passed, then the more severe.

The fort of Tete has been the salvation of the Portuguese power in this quarter. It is a small square building, with

a thatched apartment for the residence of the troops; and though there are but few guns, they are in a much better state than those of any fort in the interior of Angola. The decay of the Portuguese power in this region is entirely due to the slave-trade. In former times considerable quantities of grain—as wheat, millet, and maize—were exported, besides coffee, sugar, oil, indigo, gold-dust, and ivory. The cultivation of grain and the washing for gold-dust were carried on by means of slaves, of whom the Portuguese possessed a large number, and the natives of the interior, both chiefs and people, were friendly to the system, because they supplied the food for the sustenance of the slaves while engaged in gold-washings, and thus procured in return a quantity of European goods.

But when the slave-trade began, many of the merchants commenced selling their slaves as a more speedy mode of becoming rich, and they continued this until they had no hands left either to labour or to fight for them. It was just the story of the goose and the golden egg. The coffee and sugar plantations and gold-washings were abandoned, because the labour had been exported to the Brazils. Many of the Portuguese then followed their slaves, and the Government was obliged to pass a law to prevent further emigration, which, had it gone on, would have depopulated the Portuguese possessions altogether.

Rebellion followed closely on the decrease of the Portuguese establishments. A man of Asiatic and Portuguese extraction, called Nyaude, built a stockade at the confluence of the Luenya and Zambesi; the Commandant of Tete armed the whole body of slaves and marched against this stockade, but, when they approached, Nyaude despatched a strong party under his son up the left bank of the Zambesi, which attacked Tete, and plundered and burned the whole town except the house of the Commandant and a few others, with the church and fort. Having rendered Tete a ruin, Bonga carried off all the cattle and plunder to his father. News of this having been brought to the army before the stockade, a sudden panic dispersed the whole; and as the fugitives took roundabout ways in their flight, Katolosa, who had hitherto pretended to be friendly with the Portuguese, sent out his men to capture as many of them as they could. Another half-caste, called Kisaka, on the

opposite bank of the river, likewise rebelled. He imagined that his father had been bewitched by the Portuguese, and he therefore plundered all the plantations of the rich merchants of Tete on the north bank, which is the most fertile, and on which the Portuguese had their villas. When these were destroyed, the Tete people were completely impoverished. An attempt to punish this rebel proved unsuccessful, and he has lately been pardoned by the home Government. The Portuguese were thus placed between two enemies, Nyaude on the right bank and Kisaka on the left, the former of whom, having placed his stockade on the point of land on the right banks of both the Luenya and Zambesi, could prevent intercourse with the sea. The Luenya rushes with great force into the Zambesi when it is low, and in ascending the Zambesi boats must even go a little way up the former river, so as not to be carried away by its current, and dashed on the rock which stands on the opposite shore of the Zambesi. In coming up to the Luenya for this purpose all boats and canoes that came close to the stockade were robbed. Nyaude kept the Portuguese shut up in their fort at Tete during two years, and they could only get goods sufficient to buy food by sending to Kilimane by an overland route along the north bank of the Zambesi. Commerce, which the slave-trade had rendered stagnant, was now completely obstructed. The present Commandant of Tete, Major Sicard, having great influence among the natives, put a stop to the war more than once by his mere presence on the spot. Had I attempted to reach this coast instead of going to Loanda in 1853, I should probably have been cut off, as the war was still raging. My present approach was just at the conclusion of the peace; and when the Portuguese authorities here were informed that I was expected to come this way, they all declared that no European could possibly pass through the tribes. Some natives at last came down the river to Tete, and, in allusion to the sextant and artificial horizon, said that "the Son of God had come," and that he was "able to take the sun down from the heavens and place it under his arm!" Major Sicard then felt sure that this was the man whom he expected.

On mentioning to the Commandant that I had discovered a small seam of coal, he stated that the Portuguese were already

aware of nine such seams, and that five of them were on the opposite bank of the river. As soon as I had recovered from my fatigue I went to examine them. We proceeded in a boat to the mouth of the Lofúbu, about two miles below Tete, and on the opposite bank. Ascending this about four miles against a strong current of beautifully clear water, we landed near a small cataract, and walked about two miles through very fertile gardens to the seam, which we found to be in the perpendicular bank of one of the feeders of the Lofubu, called Muatize. On the right bank of the Lofubu there is another feeder entering that river, called the Morongózi, in which there is a still larger bed of coal exposed. Further up the Lofubu there are other seams in the rivulets Inyavu and Makare, while in the Maravi country the coal crops out in several places, having evidently been brought to the surface by volcanic action at a later period than the coal formation. I was also informed that there are seams in the independent native territory, and indeed I have no doubt but that the whole country between Zumbo and Lupata is a coal-field of at least $2\frac{1}{2}^{\circ}$ of latitude in breadth, having many faults, made during the time of the igneous action. There would not be much difficulty in working the coal or in bringing it to market. The wages of free labourers, when employed in such work, is 1 braça, that is two yards of unbleached calico, per day, or 8 braças per month. English or American unbleached calico is the only currency used. The carriage of goods up the river to Tete adds about 10 per cent. to their cost, the usual conveyance being by means of very large canoes and launches built at Senna.

The gold-field, whence Tete draws its supply of the precious metal, lies outside the coal-field, extending in a segment of a circle from the N.E. to the S.E. In the former direction there are six well-known washing-places: proceeding to the N.W. we meet with the Mushinga range: then crossing to the S. of the Zambesi near Zumbo, we hear of a station, formerly worked by the Portuguese, on the river Panyáme, called Dambarári. Then follows the now unknown kingdom of Abútua, once famous for its gold. To the S.E. of this lie the gold-washings of the Mashóna, and still further E. those of Maníca, where gold is found much more abundantly than in

any other part, and which has been supposed by some to be the Ophir of King Solomon. I saw the gold from this quarter as large as grains of wheat; while that found in the rivers which run into the coal-field was in very minute scales. The inhabitants are not unfavourable to washings, but at present they only wash when they are in want of a little calico. They know the value of gold perfectly well, for they bring it for sale in goose-quills, and demand twenty-four yards of calico for one penful. When the rivers in the district of Manica and other gold-washing places have been flooded, they leave a coating of mud on the banks. The natives observe the spots which dry soonest, and commence digging there, in firm belief that gold lies beneath. They are said not to dig deeper than their chins, fearing lest if they did so the ground should fall in and bury them. When they find a *piece* or flake of gold they bury it again, from the superstitious idea that this is the seed of the gold, and, though they know the value of it well, they prefer losing it rather than the whole future crop.

Besides gold, there is iron in this district in abundance and of excellent quality. In some places it is obtained from what is called the specular iron-ore, in others from black oxide. The latter has been well roasted in the operations of nature, and contains a large proportion of metal. It occurs generally in rounded lumps, and is but slightly magnetic. The natives become aware of its existence in the beds of rivers by the quantity of oxide on the surface, and they find no difficulty in digging it with pointed sticks. They consider English iron as "rotten;" and I have seen a javelin of their own iron curled up by a severe blow like the proboscis of a butterfly, and afterwards straightened while *cold* with two stones. So far as I could learn there is neither copper nor silver. Malachite is worked by the people of Cazembe, but, as I did not see it, nor any other metal, I can say nothing about it. A few precious stones are met with, and some parts are quite covered with agates. The mineralogy of the district, however, has not been explored by any one competent to the task.

The scenery of the country surrounding Tete is picturesque, being hilly and well wooded. The soil of the valleys is very fruitful and well cultivated. The plantations of coffee, however, are now deserted, and it is difficult to find a single tree.

The indigo (*Indigofera argentea*, the common wild indigo of Africa) is found growing everywhere, and large quantities of the senna-plant (*Cassia acutifolia*, the true senna of commerce) grow in the village of Tete and other parts; but neither indigo nor senna is collected. Calumba-root, which is found in abundance in parts further down the river, is bought by the Americans, it is said, to use as a dye-stuff. A kind of sarsaparilla, or a plant which is believed by the Portuguese to be such, is found from Londa to Senna, but has never been exported. All the cultivation is carried on with hoes in the native manner, and considerable quantities of *Holcus sorghum*, or maize, *Pennisetum typhoideum*, or lotsa, millet, rice, and wheat, are raised, as also several kinds of beans, cucumbers, pumpkins, and melons. The wheat is sown in low-lying places, which are annually flooded by the Zambesi. When the waters retire, the women drop a few grains in a hole made with a hoe, and push back the soil with the foot. One weeding alone is required before the grain comes to maturity. This simple process has all the effect of our subsoil-ploughing, liming, manuring, and harrowing, for in four months a good crop is ready for the sickle, and has been known to yield a hundred-fold. No irrigation is required, because gentle rains, almost like mist, known by the name of "wheat-showers," fall in winter. The rains at Tete come from the east, though the prevailing winds are from the S.S.E. The "seconds" make the whitest bread, and the boyaloa, or native beer, is used instead of yeast, just as the toddy called "sura" is used at Kilimane, where the cocoa-nut palm abounds.

The independent natives cultivate a little cotton, but it is not at all equal, either in quantity or quality, to what we found in Angola. The pile is short, and clings to the seed so much that they use an iron roller to detach it. The natives have never been encouraged to cultivate it for sale, nor has any new variety been introduced. We saw no palm-oil trees, the oil which is occasionally exported being from the ground-nut. One of the merchants of Tete had a mill of the rudest construction, worked by donkeys, for grinding this nut. It was the only specimen of a machine I could exhibit to my men. A very superior kind of salad-oil is obtained from the seeds of cucumbers, and is much used in native cookery.



The Buaze.

I saw here for the first time a specimen of plants named Congé and Buaze, the fibres of which will probably prove to be a suitable substitute for flax. The former is a species of alee; the latter is stated by the Portuguese to grow in large quantities in the Maravi country north of the Zambesi, but is not cultivated, and has only been used for making threads on which the natives string their beads. A firm thread of it feels like catgut in the hand, and would cut the fingers before it would break.

The price of provisions is low, but very much higher than previous to the commencement of the war. Two yards of calico are now demanded for six fowls, while before the war the same quantity was worth twenty-four fowls. The panja of wheat, weighing between 30 and 40 lbs., is worth a dollar, or 5s.; but the native grain may be obtained among the islands below Lupata, at the rate of three panjas for two yards of calico. The highest articles of consumption are tea and coffee—the former being often 15s. a pound. Food is cheaper down the river below Lupata, and, previous to the war, the islands which stud the Zambesi were inhabited, and grain and fowls could be got to any amount. The inhabitants disappeared before their enemies the Landeens, but are beginning to return since the peace. They have no cattle, the only place where we found no tsetse being the district of Tete itself; and the cattle in the possession of the Portuguese are a mere remnant of what they formerly owned.

On the 1st of April I visited the site of a former establishment of the Jesuits, called Micombo, about ten miles S.E. of

Tete, which, like all their settlements, exhibited both judgment and taste in the selection of the site. A little stream of mineral water had been collected in a tank and conducted to the house, before which was a garden for raising vegetables at times of the year when no rain falls. I was accompanied by Captain Nunes, whose great-grandfather, also a captain in the time of the Marquis of Pombal, received orders to seize on a certain day all the Jesuits of this establishment, and march them as prisoners to the coast. The riches of the fraternity, which were immense, were taken possession of by the state. They were keen traders in ivory and gold-dust, and large quantities of gold had often been sent to their superiors at Goa, enclosed in images. The Jesuits here do not seem to have possessed the sympathies of the people as their brethren in Angola did. All praise their industry, and probably their successful labours in securing the chief part of the trade to themselves had excited the envy of the laity. None of the natives here can read; and though the Jesuits are said to have translated some of the prayers into the language of the country, I was unable to obtain a copy. The only religious teachers now in this part of the country are two gentlemen of colour, natives of Goa. There is but a single school in Tete, and it is attended only by the native Portuguese children, who are taught to read and write, the black population being totally uncared for. The European Portuguese value education highly, and send their children to Goa and elsewhere for instruction in the higher branches. The soldiers are marched every Sunday to hear mass, and but few others attend church. During the period of my stay a kind of theatrical representation of our Saviour's passion and resurrection was performed. The images and other paraphernalia used were of great value, and the Commandant is obliged to lock up all the gold and silver in the fort for safety, but the present riches of the church are nothing to what it once possessed.

On the 2nd the Zambesi suddenly rose several feet in height. Three such floods are expected annually, but this year there were four. This last was accompanied by discoloration, and must have been caused by another great fall of rain east of the ridge. We had observed a flood of discoloured water when we reached the river at the Kafue; it then fell

two feet, and from subsequent rains again rose so high, that we were obliged to leave it when opposite the hill Pinkwe. About the 10th of March the river rose several feet with comparatively clear water, and it continued to rise until the 21st, with but a very slight discoloration. This gradual rise was the greatest, and was probably caused by the water of inundation in the interior.

Having waited a month for the commencement of the healthy season at Kilimane, I should have started at the beginning of April, but that I wished the moon first to make her appearance, in order that I might take observations on my way down the river. A sudden change of temperature happening on the 4th, simultaneously with the appearance of the new moon, the Commandant and myself, with nearly every person in the house, were laid up with a severe attack of fever. I soon recovered by the use of my wonted remedies, but Major Sicard and his little boy were confined much longer. There was a general fall of 4° of temperature since the middle of March, the thermometer standing at 84° at 9 A.M. and 87° at 9 P.M.; the greatest heat being 90° at mid-day, and the lowest 81° at sunrise. It afforded me pleasure to attend the invalids in their sickness, though I was unable to show a tithe of the gratitude I felt for the Commandant's increasing kindness. My quinine and other remedies were nearly all expended, and no fresh supply was to be found here, there being no doctors at Tete, and only one apothecary with the troops, whose stock of medicine was also small. The Portuguese, however, informed me that they had the cinchona bark in their country, in small quantities at Tete, in forests at Senna and near the delta of Kilimane. It seems quite a providential arrangement that the remedy for fever should be found in the greatest abundance where it is most needed. On seeing the leaves I discovered that it was not the *Cinchona longifolia*, from which the quinine of commerce is extracted, but an apocynous plant, nearly allied to the *Malouetia Heudelotii* of Senegambia, and possessing strong febrifuge qualities. The flowers of this plant, which is called in the native tongue Kumbanzo, are reported to be white. The pods are in pairs, a foot or fifteen inches in length, and contain a groove on their inner sides. The thick soft bark of



The Kumbanzo leaves, pods, and seeds.

the root is the part used by the natives, while the Portuguese use that of the tree itself. I immediately began to use a decoction of the bark of the root, and my men found it so efficacious that they collected small quantities of it for themselves, and kept it in little bags for future use. Some of them said that they had it in their own country, but I never happened to observe it. The decoction is given after the first paroxysm of the complaint is over. The Portuguese believe it to have the same effects as the quinine, and it may prove a substitute for that invaluable medicine.

When my friend the Commandant was fairly recovered, and I myself felt strong again, I prepared to descend the Zambesi, As it was necessary to leave most of my men behind me, he

gave them a portion of land on which to cultivate their own food, generously supplying them with corn in the mean time. He also said that my young men might hunt elephants in company with his servants, and purchase goods with the ivory and dried meat, in order that they might have something to take with them on their return to Sekeletu. The men were delighted with his liberality, and soon sixty or seventy of them set off to engage in this enterprise; the rest had established a brisk trade in firewood, as their countrymen did at Loanda. I chose sixteen of those who could manage canoes to convey me down the river. Many more would have come, but we were informed that there had been a failure of the crops at Kilimane from the rains not coming at the proper time, and that thousands had died of hunger. I did not hear of a single effort having been made to relieve the famishing by sending them food down the river. The mortality raged most violently among the natives inhabiting the delta, who, though in a state of slavery, are kept on farms and mildly treated.

Major Sicard lent me a boat which had been built on the river, and sent Lieutenant Miranda to conduct me to the coast. He also provided most abundantly for the journey, and sent messages to his friends to treat me as they would himself, from every one of whom I am happy to acknowledge that I received most disinterested kindness. We were accompanied by three large canoes which had lately come up with goods from Senna. They are made so strong that they might strike with great force against a rock without being broken. The men sit at the stern when paddling, and there is usually a little shed made over a part of the canoe to shade the passengers from the sun.

CHAPTER XXXII.

DESCENT OF THE ZAMBESI.—SENNA.—THE QUILIMANE AND ZAMBESI.—THE MUTU.—KILIMANE.—VOYAGE TO MAURITIUS, AND THENCE TO ENGLAND.

WE left Tete at noon on the 22nd, and in the afternoon arrived at the garden of Senhor A. Manoel de Gomes, son-in-law and nephew of Bonga, whom the Commandant had deputed to be my host. I found him extremely friendly, and able to converse in a very intelligent manner. He entertained us with great liberality, and next morning presented us with six fowls and three goats as provisions for the journey. When we parted from him we passed the stockade of Bonga, at the confluence of the Luenya, but did not approach it, as he is said to be very suspicious. The stockade itself is composed of living trees, and is thus in no danger of being burnt: there are some good houses within the enclosure. It was strange to see a stockade menacing the whole commerce of the river in a situation where the guns of a vessel would have full play on it; it is a formidable affair however for those who have only muskets. On one occasion, when Nyaude was attacked by Kisaka, they fought for weeks; and though Nyaude was reduced to cutting up his copper anklets for balls, his enemies were not able to enter the stockade.

On the 24th we sailed only about three hours and reached a small island at the western entrance of the gorge of Lupata. Respecting the range, to which the gorge has given a name, Portuguese writers have erroneously stated it to be so high that snow lies on it during the whole year. The western side, which is the most abrupt and gives the idea of the greatest height, rises up perpendicularly from the water six or seven hundred feet. The eastern side is much more sloping and is covered with trees. It extends a considerable way into the Maganja country in the north, and then bends round towards the river again, terminating in the lofty mountain Morumbala, opposite Senna. On the other or southern side it is straighter,

and is said to end in Gorongozo, a mountain west of the same point. We passed through the gorge in two hours, and found it rather tortuous, between 200 and 300 yards wide, and excessively deep; a steamer could apparently pass through it at full speed. At the eastern entrance of Lupata stand two conical hills, composed of porphyry, having large square crystals therein; they are called *Moenda en Goma*, which means a footprint of a wild beast. Another conical hill on the opposite bank is named *Kasisi* (priest), from having a bald top. We descended swiftly with the current, and found the river spreading out to more than two miles in breadth and full of islands, the breadth of water between the islands being quite sufficient for a sailing-vessel to tack and work her sails in. The Portuguese state that there is high water during five months of the year, and that during the season of low water there is always a channel of deep water, which is, however, very tortuous and shifting. The right bank below Lupata is low and flat: on the north the ranges of hills and dark lines below them are seen, but the shore itself is invisible from the boat, and I could only guess the breadth of the river to be two miles. Next day we landed at Shiramba, once the residence of a Portuguese brigadier, who spent large sums of money in embellishing his house and gardens: these we found in entire ruin, having been destroyed by his half-caste son, who had rebelled against the Portuguese. The southern shore has been ravaged by the Caffres, here named *Landeens*, and the inhabitants generally acknowledge the authority of *Bonga*, and not of the Portuguese. While we were breakfasting the people of Shiramba commenced beating the drum of war, upon which Lieutenant *Miranda* immediately got all the soldiers of our party under arms, and demanded of the natives why the drum was beaten. They gave an evasive reply; and as they employ this means of collecting their neighbours when they intend to rob canoes, our watchfulness may have prevented further proceedings.

We spent the night of the 26th on the island called *Nkuesi*, opposite a remarkable saddle-shaped mountain, and just on the 17th parallel of latitude. The sail down the river was very pleasant from the low state of the temperature; but the shores being flat and distant, the scenery was uninteresting-

We breakfasted on the 27th at Pita, and found some half-caste Portuguese there, who had fled from the opposite bank to escape the ravage of Kisaka's people. On the afternoon of the 27th we arrived at Senna, which we found to be twenty-three and a half hours' sail from Tete with the current in our favour. We met various parties towing their canoes laboriously up stream: they usually take about twenty days to ascend the distance we had descended in about four. The wages paid to boatmen are considered high, and some of the men who had accompanied me gladly accepted employment from Lieutenant Miranda to take a load of goods in a canoe from Senna to Tete.

I thought the state of Tete quite lamentable, but that of Senna was ten times worse. At Tete there is some life; but here everything is in a state of stagnation and ruin. The village stands on the right bank of the Zambesi, with many reedy islands in front of it, and much bush in the adjacent country. The soil is fertile; but the village, having several pools of stagnant water, is very unhealthy. The fort, built of sun-dried bricks, has the grass growing over the walls, which have been patched in some places by paling. The Landeens visit the village periodically, and levy fines upon the inhabitants, as they consider the Portuguese a conquered tribe. The half-castes appear to be in league with them, for, when any attempt is made by the Portuguese to coerce the enemy or defend themselves, information is conveyed at once to the Landeen camp, and, though the Commandant prohibits the payment of tribute to the Landeens, on their approach the half-castes eagerly pay it. Senhor Isidore, the Commandant, a man of considerable energy, had proposed to surround the whole village with palisades as a protection against them, and the villagers were to begin this work the day after I left. The most pleasant sight I witnessed at Senna was the boat-building carried on by the negroes of Senhor Isidore, without any one to superintend their operations. They had been instructed by a European master, and now they can lay down the keel, fit in the ribs, and turn out very neat boats and launches, valued at from 20% to 100%. Senhor Isidore had some of them instructed also in carpentry at Rio Janeiro, and they constructed for him the handsomest house in Kilimane,

the woodwork being all of country trees, some of which take a fine polish and are very durable.

There are several conical hills in the neighbourhood of Senna, some of which command a fine view of the surrounding country. One standing about half a mile west of the village, called Baramuana, has another behind it; hence the name, which means "carry a child on the back." The prospect from it is very fine; below, on the eastward, lies the Zambesi, with the village of Senna; and some twenty or thirty miles beyond stands the lofty mountain Morumbála, which is probably 3000 or 4000 feet high, and, from its form, is evidently igneous. On the northern end there is a hot sulphurous fountain, which my Portuguese friends refused to allow me to visit, because the mountain is well peopled, and the mountaineers are at present on bad terms with the Portuguese. They have plenty of garden-ground and running waters on its summit. To the north of Morumbala we have a fine view of the mountains of the Maganja, which here come close to the river and terminate in Morumbala. To the south-east, the west, and the north, the country is flat and covered with forest, which gives it a sombre appearance; but just in the haze of the horizon, south-west by south, there rises a mountain range equal in height to Morumbala, and called Nyamónga. In a clear day another range beyond this may be seen, named Gorongózo, once a station of the Jesuits. It is famed for its clear cold waters and healthiness, and there are some inscriptions engraved on large square-slabs on the top of the mountain, which have probably been the work of the fathers. Manica lies three days north-west of Gorongozo, and is the best gold country known in Eastern Africa. The only evidence the Portuguese have of its identity with the ancient Ophir consists of some pieces of wrought gold which have been dug up near the fort, and in the gardens of Sofala, its nearest port. They also report the existence of hewn stones in the neighbourhood, but these cannot have been abundant, for all the stones of the fort of Sofala are said to have been brought from Portugal. Natives from Manica whom I met in the country of Sekeletu state that there are several caves in the country and walls of hewn stone, which they believe to have been made by their ances-

tors; and there is, according to the Portuguese, a small tribe of Arabs there, who have become completely like the other natives. Two rivers, the Motirikwe and Sabia, or Sabe, run through their country into the sea.

On the 11th of May the whole of the inhabitants of Senna, with the Commandant, accompanied us to the boats. A venerable old man, son of a judge, said they were in much sorrow on account of the miserable state of decay into which they had sunk, and of the insolent conduct of the people of Kisaka, now in the village. We were abundantly supplied with provisions by the Commandant, and sailed pleasantly down the broad river. About thirty miles below Senna we passed the mouth of the river Zangwe on our right; and about five miles farther on our left the mouth of the Shire, which seemed to be about 200 yards broad. In passing it we observed great quantities of the plant *Alfacinya*, probably the *Pistia stratiotes*, a gigantic "duck-weed," floating down into the Zambesi. It was mixed with quantities of another aquatic plant, probably a species of *Trapa*, which the Barotse named "Njéfu," containing in the petiole of the leaf a pleasant-tasted nut. This was so esteemed by Sebituane that he made it part of his tribute from the subjected tribes. The existence of these plants in such abundance shows that the Shire flows from large collections of still water, as we found them growing in all the still branches and lagoons of the Leeambye in the far north. While at Tete I was informed that the Shire issues from the southern extremity of the lake Nyanja, and that it flows through a low, flat, marshy region, occupied by a numerous and brave population. The accumulation of the *Alfacinya* is said to be so great as to obstruct navigation. The lake Nyanja was reported to be forty-five days N.W. of Tete, and to be surrounded by level grass-covered plains; its width at a narrow part was estimated at about 70 miles.

A few miles beyond the Shire we left the hills entirely, and sailed between extensive flats covered with trees. We slept on a large inhabited island, and then came to the entrance of the river Mutu. The people who live on the north are called Baróro, and their country Bororo. The whole of the right bank is in subjection to the Landeens, who generally levy a tribute upon passengers. I regret that we did not meet them,

as I should like to have ascertained whether they are of the Zulu family of Caffres or of the Mashona, and also to learn what they really think of white men. I understood from Sekwebu that they consider the whites as a conquered tribe.

The Zambesi at Mazaro is a magnificent river, more than half a mile wide and without islands. The opposite bank is covered with forests of fine timber; but the delta, which begins here, is only an immense flat covered with high coarse grass and reeds, with a few mango and cocoa-nut trees. I had a strong desire to follow the Zambesi further, and ascertain where this enormous body of water found its way into the sea; but on hearing that Captain Parker had ascended to this point, I deemed it unnecessary for me to go over the same ground,* and resolved to continue my route direct to Kilimane by the course of the Mutu. At the point of its departure from the Zambesi this river was only 10 or 12 yards broad, and so filled with aquatic plants, and overhung with trees and reeds, that we were obliged to leave our canoes behind us at Mazaro. During most of the year this part of the Mutu is dry, its bed lying 16 feet above the level of the Zambesi when it is low, and even now we were obliged to carry all our luggage by land for about fifteen miles. As Kilimane is called, in all the Portuguese documents, the capital of the rivers of Senna, it seemed strange to me that the capital should be built at a point where there was no direct water conveyance to the magnificent river whose name it bore; but I was informed that in days of yore the whole of the Mutu was large, and admitted of the free passage of great launches from Kilimane all the year round.

After we had followed the right bank of the Mutu to the N.N.E. and E. for about fifteen miles we found that it became navigable in consequence of receiving a river from the north called the Pangázi. It is still further increased by the tributary waters of the Luáre and the Likuáre from the same quarter, and the river, thus enlarged and converted into a tidal stream, is thenceforth known as the Kilimane. The Mutu at Mazaro is simply a connecting link between the Kilimane and the Zambesi, and neither its flow nor stoppage

* Extracts from Captain Parker's description of this part of the river are given in the Appendix to this volume.

affects the river of Kilimane. At Interra we met Senhor Asevedo, who, perceiving that I was suffering from a very severe attack of fever, immediately placed at my disposal his large sailing launch, which had a house in the stern. This was greatly in my favour, for it anchored in the middle of the stream, and gave me some rest from the mosquitoes, which in the whole of the delta are something frightful. Sailing comfortably in this commodious launch along the river of Kilimane, we reached that village on the 20th of May, 1856, being very nearly four years since I started from Cape Town. Here I was received into the house of Colonel Nunes, one of the best men in the country. I had been three years without hearing from my family, the letters sent having, with one exception, all failed to reach me. I received, however, a letter from Admiral Trotter, conveying information of their welfare, and some newspapers, which were a treat indeed. Her Majesty's brig "Frolic" had called to inquire for me in the November previous, and Captain Nolloth of that ship had most considerately left a case of wine, and his surgeon, Dr. Jas. Walsh, an ounce of quinine—both of them most acceptable presents. But my joy on reaching the east coast was sadly embittered by the news that Commander MacLune, of H. M. brigantine "Dart," on coming in to Kilimane to pick me up, had, with Lieutenant Woodruffe and five men, been lost on the bar. I never felt more poignant sorrow. It seemed as if it would have been easier for me to have died for them, than that they should all be cut off from the joys of life in generously attempting to render me a service.

Eight of my men begged to be allowed to come as far as Kilimane, and, thinking that they would there see the ocean, I consented to their coming, though food was so scarce that they were compelled to suffer some hunger. They would fain have come further; for when Sekeletu parted with them, his orders were that none of them should turn until they had brought Ma Robert back with them. On my explaining the difficulty of crossing the sea, he said, "Wherever you lead, they must follow." As I did not well know how I should get home myself, I advised them to go back to Tete, where food was abundant, and there await my return. I bought a quantity of calico and brass wire with ten of the smaller tusks which

we had in our charge, and sent the former back as clothing to those who remained at Tete. As there were still twenty tusks left, I deposited them with Colonel Nunes, that, in the event of anything happening to prevent my return, the impression might not be produced in the country that I had made away with Sekeletu's ivory, and I instructed him, in the event of my death, to sell the tusks and deliver the proceeds to my men. I explained this to the men, and they replied, "Nay, father, you will not die; you will return to take us back to Sekeletu." They promised to wait till I came back, and, on my part, I assured them that nothing but death would prevent my return.

The village of Kilimane stands on a mud bank, and is surrounded by extensive swamps and rice-grounds. The banks of the river are lined with mangrove-bushes, the roots of which, and the slimy banks on which they grow, are exposed alternately to the tide and sun. The houses are well built of brick and lime; the latter from Mozambique. Water is found anywhere at a depth of two or three feet, and hence the walls gradually subside; pieces are sometimes sawn off the doors below, because the walls in which they are fixed have descended into the ground, so as to leave the floors higher than the bottom of the doors. It is almost needless to say that Kilimane is very unhealthy. A man of plethoric temperament is sure to get fever; and a stout person is regarded as certain to go off before long. I had an opportunity of observing the effects of the fever in the case of some German sailors whose vessel was lost near the bar shortly before we came down. At first they felt only "out of sorts," but gradually became pale, bloodless, and emaciated, then weaker and weaker, till at last they sank like oxen bitten by tsetse. The captain, a strong young man, remained in perfect health for about three months, but was at last knocked down suddenly, and made as helpless as a child, by this terrible disease. He had imbibed a foolish prejudice against quinine, but he was saved by it without his knowledge, and I was thankful that the mode of treatment so efficacious among natives promised so fair among Europeans.

After waiting about six weeks at this unhealthy spot, in which, however, I partially recovered from my fever, H. M.

brig "Frolic" arrived off Kilimane. As the village is twelve miles from the bar, and the weather was rough, she was at anchor ten days before we knew of her presence, about seven miles from the entrance to the port. The Admiral at the Cape kindly sent an offer of a passage to the Mauritius, which I thankfully accepted. Sekwebu and one attendant alone remained with me now. The latter begged so hard to come on board ship, that I greatly regretted my inability to bring him to England. I said to him, "You will die if you go to such a cold country as mine." "That is nothing," he rejoined; "let me die at your feet."

When we parted from our friends at Kilimane the sea on the bar was frightful even to the seamen. The waves were so high that, when the cutter was in one trough, and the pinnace in another (for Captain Peyton had sent two boats in case of accident), even the mast of the one could not be seen from the other. Three breakers swept over us, giving the impression that the boat was going down. Poor Sekwebu, who had never before seen the sea, looked at me when these terrible seas broke over, and said, "Is this the way you go? Is this the way you go?" I smiled, and said, "Yes; don't you see it is?" and tried to encourage him. He was well acquainted with canoes, but never had seen aught like this. When we reached the ship—a fine large brig of sixteen guns and a crew of one hundred and thirty—she was rolling so that we could see a part of her bottom. It was quite impossible for landsmen to catch the ropes and climb up, so a chair was sent down, and we were hoisted in as ladies usually are. As soon as I reached the deck I received so hearty an English welcome from Captain Peyton and all on board, that I at once felt myself at home.

We left Kilimane on the 12th of July, and reached the Mauritius on the 12th of August, 1856. Sekwebu was picking up English, and becoming a favourite with both men and officers. He seemed a little bewildered by the novelty of everything on board a man-of-war; and he remarked to me several times, "What a strange country this is!—all water together." When we reached the Mauritius a steamer came out to tow us into the harbour. The constant strain on his untutored mind seemed now to reach a climax, for during the

night he became insane. I thought at first that he was intoxicated. He had descended into a boat, and, when I attempted to go down and bring him into the ship, he ran to the stern, and said, "No! no! it is enough that I die alone. You must not perish; if you come I shall throw myself into the water." Perceiving that his mind was affected, I said, "Now, Sekwebu, we are going to Ma Robert." This struck a chord in his bosom, and he said, "O yes; where is she, and where is Robert?" and he became more composed. In the evening, however, a fresh accession of insanity occurred—he tried to spear one of the crew, then leaped overboard, and, though he could swim well, pulled himself down hand under hand, by the chain cable. We never found the body of poor Sekwebu.

At the Mauritius I was most hospitably received by Major-General C. M. Hay, who generously constrained me to remain with him till, by the influence of the good climate and quiet English comfort, I got rid of an enlarged spleen from African fever. In November I came up the Red Sea; escaped the danger of shipwreck through the admirable management of Captain Powell, of the Peninsular and Oriental Steam Company's ship "Candia;" and on the 12th of December was once more in dear old England. The Company most liberally refunded my passage-money. I have not mentioned half the favours bestowed, but I may just add that no one has cause for more abundant gratitude to his fellow-men and to his Maker than I have; and may God grant that the effect on my mind be such that I may be more humbly devoted to the service of the Author of all our mercies!

APPENDIX.

*Extracts from the Journal of the late CAPT. HYDE PARKER, R.N.,
H.M. Brig "Pantaloen."*

"THE Lúabo is the main outlet of the Great Zambesi. In the rainy season—January and February principally—the whole country is overflowed, and the water escapes by the different rivers as far up as Quilimane; but in the dry season neither Quilimane nor Olinda communicates with it. The entrance to the Luabo river is about two miles broad, and is easily distinguishable, when abreast of it, by a bluff (if I may so term it) of high straight trees, very close together, on the western side of the entrance. The bar may be said to be formed by two series of sandbanks,—that running from the eastern point runs diagonally across (opposite?) the entrance and nearly across it. Its western extremity is about two miles outside the west point.

"Within the points the river widens at first and then contracts again. The rise and fall of the tide at the entrance of the river being at springs twenty feet, any vessel can get in at that time, but, with all these conveniences for traffic, there is none here at present. The water in the river is fresh down to the bar with the ebb-tide, and in the rainy season it is fresh at the surface quite outside. In the rainy season, at the full and change of the moon, the Zambesi frequently overflows its banks, making the country for an immense distance one great lake, with only a few small eminences above the water. On the banks of the river the huts are built on piles, and at these times the communication is only in canoes; but the waters do not remain up more than three or four days at a time. The first village is about eight miles up the river, on the western bank, and is opposite to another branch of the river called 'Muselo,' which discharges itself into the sea about five miles to the eastward.

"The village is extensive, and about it there is a very large quantity of land in cultivation; calavances, or beans, of different sorts, rice, and pumpkins, are the principal things. I saw also about here some wild cotton, apparently of very good quality, but none is cultivated. The land is so fertile as to produce almost any (thing?) without much trouble.

"At this village is a very large house, mud-built, with a courtyard. I believe it to have been used as a barracoon for slaves, several large cargoes having been exported from this river. I proceeded up the river

as far as its junction with the Quilimane river, called 'Boca do Rio,' by my computation between 70 and 80 miles from the entrance. The influence of the tides is felt about 25 or 30 miles up the river. Above that, the stream, in the dry season, runs from $1\frac{1}{2}$ to $2\frac{1}{2}$ miles an hour, but in the rains much stronger. The banks of the river, for the first 30 miles, are generally thickly clothed with trees, with occasional open glades. There are many huts and villages on both sides, and a great deal of cultivation. At one village, about 17 miles up on the eastern bank, and distinguished by being surrounded by an immense number of bananas and plantain-trees, a great quantity of excellent peas are cultivated, also cabbages, tomatoes, onions, &c. Above this there are not many inhabitants on the left or west bank, although it is much the finest country, being higher, and abounding in cocoa-nut palms; the eastern bank being sandy and barren. The reason is, that some years back the Landeens, or Caffres, ravaged all this country, killing the men and taking the women as slaves, but they have never crossed the river; hence the natives are afraid to settle on the west bank, and the Portuguese owners of the different 'prazos' have virtually lost them. The banks of the river continue mostly sandy, with few trees, except some cocoa-nut palms, until the southern end of the large plantation of Nyangué, formed by the river about 20 miles from Maruru. Here the country is more populous and better cultivated, the natives a finer race, and the huts larger and better constructed. Maruru belongs to Señor Asevédo, of Quilimane, well known to all English officers on the east coast for his hospitality.

"The climate here is much cooler than nearer the sea, and Asevedo has successfully cultivated most European as well as tropical vegetables. The sugar-cane thrives, as also coffee and cotton, and indigo is a weed. Cattle here are beautiful, and some of them might show with credit in England. The natives are intelligent, and under a good government this fine country might become very valuable. Three miles from Maruru is Mesan, a very pretty village among palm and mango trees. There is here a good house belonging to a Señor Ferrão; close by is the canal (Mútu) of communication between the Quilimane and Zambesi rivers, which in the rainy season is navigable (?). I visited it in the month of October, which is about the driest time of the year; it was then a dry canal, about 30 or 40 yards wide, overgrown with trees and grass, and, at the bottom, at least 16 or 17 feet above the level of the Zambesi, which was running beneath. In the rains, by the marks I saw, the entrance rise of the river must be very nearly 30 feet, and the volume of water discharged by it (the Zambesi) enormous.

"Above Maruru the country begins to become more hilly, and the high mountains of Boruru are in sight; the first view of these is obtained below Nyangué, and they must be of considerable height, as from this they are distant above 40 miles. They are reported to contain great

mineral wealth; gold and copper being found in the range, as also coal (?). The natives (Landeens) are a bold, independent race, who do not acknowledge the Portuguese authority, and even make them pay for leave to pass unmolested. Throughout the whole course of the river, hippopotami were very abundant, and at one village a chase by the natives was witnessed. They harpoon the animal with a barbed lance, to which is attached, by a cord 3 or 4 fathoms long, an inflated bladder. The natives follow in their canoes, and look out to fix more harpoons as the animal rises to blow, and, when exhausted, despatch him with their lances. It is, in fact, nearly similar to a whale-hunt. Elephants and lions are also abundant on the western side; the latter destroy many of the blacks annually, and are much feared by them. Alligators are said to be numerous, but I did not see any.

"The voyage up to Maruru occupied seven days, as I did not work the men at the oar, but it might be done in four; we returned to the bar in two and a half days.

"There is another mouth of the Zambesi, seven miles to the westward of Luabo, which was visited by the 'Castor's' pinnace; and I was assured by Lieutenant Hoskins that the bar was better than the one I visited."

INDEX.

INDEX.

- AFRICA**, natural divisions of South, 66.
 Alligators, 174; nest of, 181.
 Ambaca, 258; natives of, 259, 295.
 Ambonda tribe, 284.
 Angola, want of roads, 261; native population of, 277; state of agriculture, 285; climate, 293.
 Anklets, 185, 189.
 Anointing akin, 169, 185.
 Ant-eater, 114.
 Ant-hills, their size, 64, 120, 139, 361.
 Ants, black, 18, 90; red, 288; soldier, 351; white, 353; sagacity of, 222.
 Arabs from Zanzibar, 153.
 Avoset, 172.
 Bakalahari race, 36, 139.
 Baking, methods of, 29.
 Bakwain tribe, 12; mode of burial, 86; religious ideas, 107; treatment of, by the Boers, 80, 84.
 Balonda tribe, their appearance and customs, 187, 307; idolatry and superstition, 192, 310; hamlets, 194, 198; punctiliousness, 202, 208.
 Bamangwato hills, 101; tribe, 108.
 Bansaia tribe, 55.
 Banyai tribe, 376, 401, 405.
 Baobab tree, 110, 341.
 Bangala tribe, 247.
 Banian tree, 328.
 Barotse tribe, 170; valley, 148, 151.
 Bashinje tribe, 242.
 Basongo tribe, 256.
 Batoka tribe, 348.
 Batonga tribe, 377.
 Bechuana race, 137, 138.
 Bee-eater, 171.
 Beehives in forests, 194.
 Beer, native, 127, 205.
 Bees'-wax, 232.
 Beetle, the scavenger, 32.
 Bengo, the river, 263, 269.
 Boers of interior Africa, 23, 67.
 Boguera, native custom of, 99.
 Buazé plant, 414.
 Buffalo-hunting, 180, 321, 325.
 Buffalo-bird, 172, 357.
 Burial, modes of, 63, 86.
 Burial-places, ancient, 286.
 Bushmen, 35, 54, 112, 117.
 Cabango, 305.
 Cacus fish, 272.
 Canaries in Londa, 220.
 Carriers, native, in Angola, 257, 261.
 Cassange, 249, 289.
 Caterpillar, effect of touching, 397.
 Cattle in Londa, 218.
 Cazembe, 208, 215; visited by Europeans, 363.
 Cazengo, district of, 271.
 Chiboque tribe, 229.
 Chieftainship, privileges of, 31.
 Chobe, the river, 58, 119, 159.
 Circumcision, practice of, 98.
 Coal near Tete, 411.
 Coanza, the river, 273, 284.
 Coffee, growing wild, 257; plantations in Angola, 262, 271.
 Complexion, cause of dark, 54, 229, 256.
 Congé plant, 414.
 Cotton near lake Ngami, 49; in Angola, 270, 280; at Tete, 413.
 Cow-eland, 145.
 Cumming, Gordon, veracity of, 102.
 Dance, native, 155.
 Desiccation, proofs of, in interior, 38, 39, 46, 75.
 Dilolo, the lake, 222, 317.
 Diseases among natives, 85, 332; among wild beasts, 91.
 Distillation of water by insects, 230.
 Doctors, native, 87.

- Egyptian customs paralleled, 131, 133, 243, 270, 271.
- Eland, 40.
- Electricity in air, 83.
- Elephant, modes of hunting by Europeans, 52, 103; by natives, 11, 368, 377; its food, 361, 371, 398; rule for ascertaining height, 369; ear of African variety, 370; tenacity of life, 379.
- English, native ideas of the, 184; Mambari description of, 260.
- English manufactures prized, 209.
- Fascination, power of, in serpents, 97.
- Fish, migrations of, in flood time, 178; modes of catching, 213; species in the Zouga, 50.
- Fowl, peculiar kind of, 274.
- Frenzy artificially produced, 360.
- Frogs an article of food, 31.
- Funerals, mode of conducting, 214, 278, 311.
- Future life, native notions of, 150.
- Game-laws in Africa, 391.
- Geese, varieties of, 173.
- Geological notices, 67, 243, 269, 304, 315, 345, 355, 356, 366, 372, 384, 393, 406.
- Gold-field near Tete, 411.
- Golungo Alto, 260, 276.
- Gonye falls, 147, 167.
- Griquas, their origin, dress, &c., 72.
- Gun-medicine, 175.
- Hair, peculiar modes of dressing, 214, 247, 300, 364.
- Hippopotamus, notices of the, 159, 166, 329.
- Honey-guide, 232, 359, 400.
- Hopo or pitfall, 21.
- Hornet, sting of, 330.
- Horse-sickness in South Africa, 70.
- Human sacrifices, 215, 383.
- Hut of Makololo, 143.
- Hyæna, 392.
- Hydrophobia unknown, 159.
- Idolatry in Londa, 188, 196.
- Iguano, 166.
- Indigo plant, 413.
- Inundated plains about the Chobe, 118; of Lobale, 210, 217; valleys, 226, 237.
- Iron-ore in Londa, 207; in Senga, 388; near Tete, 412.
- Jesuit missionaries in Angola, 259, 271, 277; on east coast, 415.
- Jinga, queen of the, 283.
- Kafue, the river, 372.
- Kalahari desert, 34; cause of drought, 66; salubrity of the adjacent district, 89.
- Kalomo, the river, 355.
- Kasai, the river, 225, 305.
- Kasendi, ceremony of the, 323.
- Kilimane described, 426.
- Kingfishers, 171.
- Kolobeng destroyed by the Boers, 29.
- Korwe, nest of, 399.
- Kumbara plant, 416.
- Kuruman station, 7; fountain at it, 75.
- Lakes, beds of ancient, 345.
- Leches, 50; mode of hunting, 140.
- Leeambye, the river, 145. *See* Zambezi.
- Leeba, the river, 152; ascent of it, 180.
- Lehututu, bird, 290.
- Lepelole, cave of, 83.
- Libonta, 172.
- Linkololo, bird, 327.
- Linyanti, 121.
- Lion, its food, 92; habits, 93; roar, 95, 153; Bushmen's mode of killing, 115; conflict with, 11.
- Livingstone, Dr., his early life, 3; qualifies as a physician, 6; emigrates to Southern Africa, 7; visits the Bakwains, 8; returns to Kuruman, 9; resides at Mabotsa, 10; moves to Kolobeng, 12; starts on his first expedition, 38; discovers lake Ngami, 46; starts on his second expedition, 51; discovers the Zambezi, 63; returns to Cape Town, 65; starts on his third expedition, 65; crosses the Orange river, 72; leaves Kuruman, 81; reaches the junction of the Loeti and Zambesi, 153; returns to Linyanti, 155; starts for Loanda, 159; reaches the

- confluence of the Leeba, 178; crosses the Quango, 247; arrives at Loanda, 264; leaves Loanda, 269; reaches Linyanti, 330; visits the Victoria falls, 341; arrives at Tete, 407; and at Kilimane, 427; returns to England, 428.
 Loanda, description of, 267.
 Locusts as food, 31.
 Loeti, the river, 152.
 Londa, fertility of, 212.
 Lotembwa, the river, 215, 315, 319.
 Lotus, 113.
 Lucalla, the river, 272.
 Lupata, gorge of, 419.

 Mai, position of, 306.
 Makololo, 126; their origin, 134.
 Mambari, or native traders, notices of, 64, 123, 150, 184, 320.
 Mamosho tree, 163, 177.
 Maneko tree, 350.
 Manenko, a female chief, 132.
 Manico, 207.
 Maroro tree, 181.
 Marriage in Angola, 278.
 Massangano, 273.
 Matebele tribe, 60.
 Matiamvo, 306.
 Mice near Maahne, 95; an article of food in Londa, 225, 303.
 Milo tree, 177.
 Mirage, 44.
 Missionary, routine of life, 30.
 Missions, observations on, 26, 79, 106, 157.
 Mobola tree, 163.
 MogaMETA tree, 177.
 Mohonono tree, 113, 341.
 Mokoko, the river, 44.
 Mokwa reza, bird, 366.
 Molekana, custom of, 215.
 Monato tree, 38.
 Money unknown in interior, 129, 224.
 Mopane tree, 111.
 Mopato, system of, 100, 140.
 Morala tree, 112.
 Mosheba, fish, 166.
 Mosibe tree, 163.
 Moshuka tree, 350.
 Motsikiri tree, 350.
 Motsaintsela tree, 160.
 Motsouri tree, 160.
 Musicians, native, 199.
 Mutu, the river, 424.

 Nakong, species of antelope, 141.
 Nallele, 149.
 Nato caterpillar, 38.
 New moon, festival of, 161.
 Ngami, discovery of lake, 46.
 Ngotuane plant, 77.
 Noga putsane serpent, 97.
 Nyanja, the lake, 423.

 Olive-trees, wild, 76.
 Ophir, 412, 422.
 Ophthalmia, treatment of, 87.
 Orchilla weed, 180.
 Ordeal, practice of, 291, 403.
 Ostrich, notice of the, 104.
 Ottara, 120.

 Peripneumonia, 71.
 Picho, or native assembly, 156, 199.
 Piri hills, 209.
 Pitfalls, how constructed, 48.
 Plasterer insect, 353.
 Poison and its antidote, 116.
 Polygamy in Angola, 278.
 Portuguese native traders, 198.
 Prophets among the natives, 61.
 Portuguese merchants in Angola, 252, 268.
 Pungo Andongo, rocks of, 232.

 Quango, valley of the, 243; its fertility, 252; river, 246.
 Quisamas tribe, 274.

 Rain-doctors, 17.
 Rainy season, 316.
 Rhinoceros-bird, 357.
 Rivers, underground, 390.
 Rivers, network of, 346.
 Roofs of huts moveable, 195, 212.

 Salt, mode of procuring, 183.
 Salt-pans, 44, 53.
 Salutation, modes of, 188, 195, 362, 373.
 Sandmartins, 171.
 Sanahureh, the river, 118.
 Scissor-bill, 172.
 Sebitwane's history, 59.
 Sechele, 14, 81.
 Sechu, 98.
 Senna, 421.
 Senza, the river, 263.
 Serotli, 39, 41.
 Serpents, 96; an article of food, 98.

- Shells highly prized, 192, 206.
 Shire, the river, 423.
 Shittim wood, 77.
 Sichuana language, 78.
 Skins, mode of preparing, 131.
 Slaves, treatment of, 299.
 Slave-trade in the interior, 203.
 Smoking, effects of, 343.
 Songs of birds, 397.
 Spiders, 220.
 Spinning in Angola, 270.
 Sponges, fresh-water, 171.
 Spring-bocks, 71.
 Stupefaction produced by insects, 352.
 Sugar manufactory, 269.
 Swifts, 83.
- Tala Mungongo, range of, 255.
 Tampan, bite of the, 259.
 Tapioca, preparation of, 286.
 Tattooing, 185.
 Tenacity of life in animals, 175.
 Tete and its productions, 408-413.
 Thermometrical observations, 18, 108,
 113, 169, 204, 262, 305, 320, 355,
 367, 377, 384, 405, 416.
 Thorns in South Africa, 233.
 Tianyane antelope, 144.
- Toad, new species of, 322.
 Tortoises, land, 90.
 Trogon, bird, 178.
 Tsetse, 56, 57, 177, 228.
 Tsitila plant, 55.
 Turtles, fresh-water, 324.
- Unicorn caterpillar, 102.
- Victoria falls, 341.
 Vines, 114; wild, 401.
- Water-melons, 35, 81.
 Waterhed of South African continent
 315.
 Watersuckers, female, 37, 104.
 Weaving in Angola, 271.
 Winter, signs of, 309.
 Wives, purchase of, 404.
- Zambesi, discovery of the, 63; its
 width at various points, 64, 343,
 388, 424; rise of its water, 316,
 388, 393.
 Zebras, 184.
 Zonga, the river, 45, 48
 Zumbo, 382.

SCIENTIFIC NAMES OF PLANTS AND ANIMALS NOTICED
 IN THE FOREGOING WORK.

I.—PLANTS.

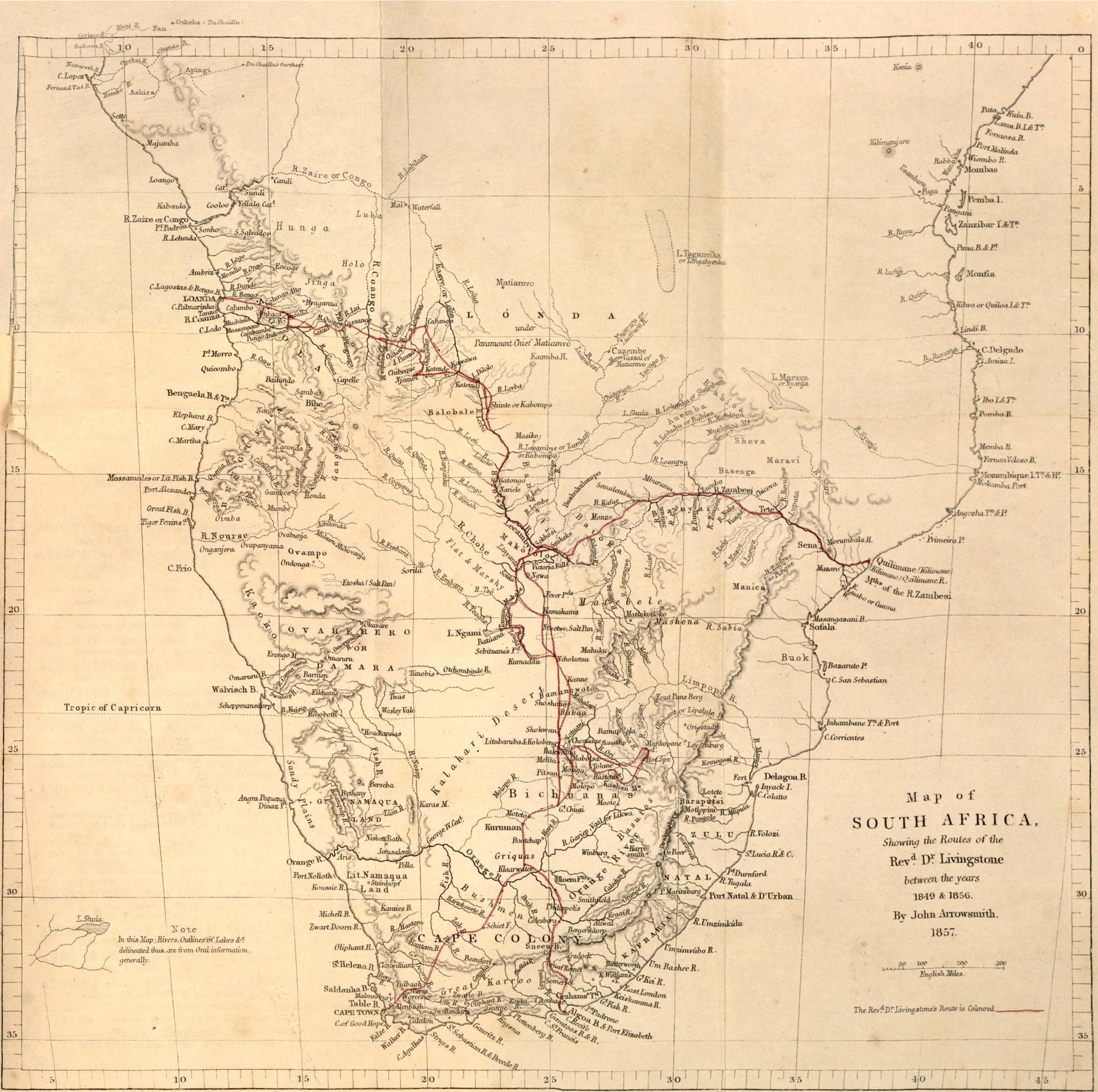
- Acacia atomiphylla*, 76.
 ——— *detinens*, 44, 76.
 ——— *giraffæ*, 76, 139.
 ——— *horrida*, 76, 139.
 ——— *nilotica*, 77.
Adansonia digitata, 49.
Alfacyna, 423.
Amaryllis toxicaria, 76, 285.
 ——— *Brunswigia multiflora*, 76.
Anona, 320.
Araca pomifera, 320.
Arachis hypogæa, 133.
Bauhinia, 111, 350.
Cannabis sativa, 135, 223, 348.
Carica papaya, 320.
- Cassia acutifolia*, 413.
Convolvulus batata, 151.
Drosera, 314.
Elois Guineensis, 272.
Euphorbia arborescens, 116.
Gladiolus, 235.
Holcus sorghum, 135, 151, 413.
Hymanthus, 285.
Indigofera argentea, 413.
Jatropha manihot, 135, 151.
 ——— *curcas*, 213.
 ——— *utilissima*, 151.
Leucodendron argenteum, 194.
Malouetia Heudlotii, 416.
Mesembryanthemum edule, 69.
 ——— *turbiniforme*, 69.
Olea similis, 76.

Pennisetum typhoidum, 212, 220, 413.
Pistia stratiotes, 423.
Salvia Africana, 76.
Sansevieria Angolensis, 51.
Sterculia, 350.
Tarchonanthus, 76.
Trapa, 423.
Uncaria procumbens, 233.

II.—ANIMALS.

Aigoceros equina, 191, 321.
Anas histriónica, 329.
Anastomus lamelligerus, 172, 327.
Anser leucogaster, 173.
 ——— *melanogaster*, 173.
Antilope cerulea, 70.
 ——— *melampus*, 41.
 ——— *nigra*, 321.
 ——— *pygarga*, 70.
 ——— *philantomba*, 191.
Brachymerus bi-fasciatus, 322.
Bubalus caama, 191.
Bucephalus capensis, 97.
Buphaga Africana, 357.
Catoblepas gnu, 40.
Centropus Senegalensis, 290.
Cephalopus mergens, 40.
Charadrius caruncula, 164.
Clarias capensis, 173.
Colobus guereza, 197.
Cuculus indicator, 359.
Cypselus apus, 83.
Dasypeltis inornatus, 97.
Dicrurus Ludwigii, 304.
Drymoica, 304.
Equus montanus, 184.
Euryotis unisulcatus, 96.
Gazella euchore, 40, 71.
Glanis siluria, 50, 178, 212.
Glossina morsitans, 52.
Ibis hagidaah, 164.
 ——— *religiosa*, 172.
Lutra inunguis, 120.
Merops apiaster, 171.
 ——— *bullockoides*, 171.
Micropogon sulphuratus, 366.
Mugil Africanus, 50, 178.
Mus pumilio, 96.
 ——— *lehocla*, 96.
Mygale, 221.
Myrmeleon formicaleo, 115.
Naia haje, 96.
Oryx capensis, 40.
Parra Africana, 173.
Pelopæus Eckloni, 353.
Pluvianus armatus, 164.
Potamochoerus, 376.
Procellaria turtur, 329.
Rana fasciata, 322.
Rhinoceros bicornis, 398.
 ——— *Oswellii*, 50.
 ——— *simus*, 398.
Sciurus cepapi, 393.
Sylviadae, 304.
Tantalus capensis, 164.
Textor erythrorhynchus, 172, 357.
Tockus erythrorhynchus, 399.
Tragopan Leadbeaterii, 290.
Tragulus rupestris, 40.

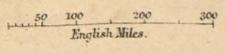
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Map of
SOUTH AFRICA,

Showing the Routes of the
Rev.^d Dr. Livingstone
between the years
1849 & 1856.

By John Arrowsmith.
1857.



The Rev.^d Dr. Livingstone's Route is Coloured

Note
In this Map, Rivers, Outlines of Lakes &c.
delineated thus, are from Oral information,
generally.