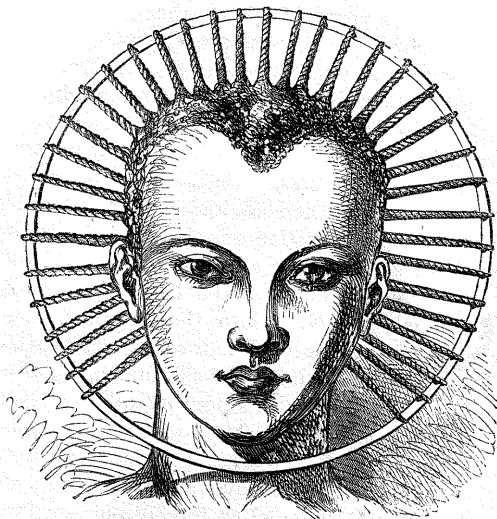


plants, which admit of being knitted like ropes, supplied the materials necessary for completing the structure. The Loajima was here about twenty-five yards wide, but very much deeper than where I had crossed it before on the shoulders of Mashauana. The last rain of this season had fallen on the 28th, and had suddenly been followed by a great decrease of the temperature. The people in these parts seemed more slender in form, and their colour a lighter olive, than any we had hitherto met. Their mode of dressing the great masses of woolly hair which lay upon their shoulders, together with their general features, again reminded me of the ancient Egyptians. A few of the ladies adopt a curious custom of attaching the hair to a hoop which encircles the head, giving it somewhat the appearance of the glory round the head of the Virgin (woodcut No. 1). Some have a smaller hoop behind



No. 1. A Londa lady's mode of wearing the hair.

the one represented in the woodcut. Others wear an ornament of woven hair and hide adorned with beads, the hair of

the tails of buffaloes being sometimes added, as represented in No. 2. While others, as in No. 3, weave their own hair on



No. 2



No. 3.

pieces of hide into the form of buffalo-horns, or, as in No. 4, make a single horn in front. The features depicted in the cuts, though by no means universal, are frequently met with. Many tattoo their bodies with the forms of stars and other figures by inserting some black substance beneath the skin, which leaves an elevated cicatrix about half an inch long.



No. 4. A young man's fashion.

CHAPTER XXIII.

DETOUR SOUTHWARD.—CABANGO.—THE KASAI AND QUANGO.—THE SEASONS.—VALLEY OF THE LOEMBWE.—CROSSING THE KASAI.

WE made a little détour to the southward, in order to get provisions in a cheaper market. This led us among a people who had not been visited so frequently by the slave-traders as the rest, and who were therefore rather timid and very civil. The same olive complexion prevailed, as also does the custom of filing their teeth to a point, which makes the smile of the women frightful, as it reminds one of the grin of an alligator. The inhabitants throughout this country exhibit just as great a variety of taste as any civilized community. Many of the men are dandies, with their shoulders dripping with the oil from their lubricated hair, and everything about them ornamented in one way or another. Some spend the whole day and even portions of the night in thrumming a musical instrument for their own sole gratification. Others try to appear warlike by never going out of their huts, except with a load of bows and arrows, or a gun ornamented with a strip of hide for every animal they have shot; and others never go anywhere without a canary in a cage. Ladies may be seen carefully tending little lapdogs, which are intended to be eaten. Their villages are generally in forests, and are composed of irregular groups of brown huts, with banana and cotton trees, and tobacco growing around. Every hut is provided with a high stage for drying manioc roots and meal, and with cages to hold domestic fowls. Round baskets are laid on the thatch of the huts for the hens to lay in, and, on the arrival of strangers, men, women, and children ply their calling as hucksters, with a great deal of noisy haggling, but still with civility and good temper. Animal food is very scarce among these people, and even birds are rare, from the extent to which they have been consumed. Moles and mice constitute important articles of diet among them; and traps may be seen fringing the paths for miles together at intervals of ten or fifteen yards.

We passed on through forests abounding in climbing-plants, many of which are so extremely tough as to require the use of a hatchet; the carriers are frequently obliged to cut them with their teeth, for no amount of tugging will make them break. The paths in all these forests are so zigzag that thirty miles along them does not exceed half that amount in direct distance. On the 7th of May we reached the river Moamba (lat. $9^{\circ} 38' S.$, long. $20^{\circ} 13' 34'' E.$), a stream thirty yards wide, and, like the Quila, Loange, Chikapa, and Loajima, containing both alligators and hippopotami. Here, as on the slopes down to the Quilo and Chikapa, we had an opportunity of viewing the geological structure of the country,—a capping of ferruginous conglomerate lying upon a pale-red hardened sandstone, and this upon a trap-like whinstone, while lowest of all lies a coarse-grained sandstone containing a few pebbles, and occasionally a white calcareous rock or banks of loose round quartz pebbles. The slopes from the level country above increase in length as we advance eastward, and are dotted with circular bogs, surrounded by clumps of straight, lofty, evergreen trees. Several of these bogs pour forth a solution of iron, which exhibits on its surface the prismatic colours. The level plateaus between the rivers, both east and west of the Moamba, were less woody than the river glens, the trees on them being scraggy and scattered. Occasionally large open spaces occur with scarcely a bush, and on these dreary intervals it was impossible not to be painfully struck with the absence of animal life. Not a bird was to be seen, except now and then a tomtit, some of the *Sylviæ* and *Drymoica*, and a black bird (*Dicrurus Ludwigi*, Smith) common throughout the country. We were gladdened by the voice of birds only near the rivers, and even there they were neither numerous nor varied. The Senegal longclaw, however, maintained its place, and was the largest bird we saw, and we once came on a butcher-bird in a trap. Small animals are rare, as they have been hunted almost to extermination, and of insects ants alone abounded. Few common flies were to be seen, nor were we ever troubled by mosquitoes. The want of life in the scenery made me long for the banks of the Zambesi, with its herds of graceful antelopes, dark buffaloes, and sleek elands.

We crossed two small streams, the Kanesi and Fombeji, before reaching Cabango, on the banks of the Chihombo. The country was becoming more densely peopled as we proceeded, but the population was scanty compared to what it might sustain. Provisions were in great abundance; a fowl and basket of meal weighing 20 lbs. were sold for a yard and a half of very inferior cotton-cloth, worth not more than three pence. At this rate four persons can be well fed with animal and vegetable food at the rate of a penny a day. The chief vegetable food is the manioc and lotsa meal. These contain a very large proportion of starch, and when eaten alone for any length of time produce a most distressing heartburn and a weakness of vision; but when mixed with a proportion of ground-nuts, which contain a considerable quantity of oil, they produce no injurious effects.

Cabango (lat. $9^{\circ} 31'$ S., long. $20^{\circ} 31'$ or $32'$ E.) is the dwelling-place of Muanzanza, one of Matiamvo's subordinate chiefs. The village consists of about two hundred native huts, and ten or twelve square houses, constructed of poles with grass interwoven, which are occupied by half-caste Portuguese from Ambaca, agents for the Cassange traders. The cold in the mornings was now severe to the feelings, the thermometer in the open air ranging from 58° to 60° at 6 A.M., and rising to 80° in the shade about midday. A person having died in the village, we could transact no business with the chief until the funeral obsequies, which occupied four days, were finished. These days I spent in writing up my journal in order to send it back to Loanda by a party of traders.

I picked up some information from native traders relative to the country of Luba, which lies far to the north of this, and the town of Mai, which is situated far down the Kasai. In going to Mai the traders crossed only two large rivers, the Loajima and Chihombo. The Kasai flows a little to the east of Mai, and near it there is a large waterfall, which puts a stop to the navigation from the coast. They described the Kasai as being there of very great size, and as bending round to the west from that point. They also described the Kasai as receiving the Quango about thirty-five or forty miles to the westward of Mai, after which it assumes the name of Zairé or Zerézéré. The Kasai, even previous to the

junction, is much larger than the Quango; for, in addition to the branches we have already crossed, it receives the Chihombo at Cabango; the Kaunguesi fourteen miles east of the Kasai; then, forty-two miles further, the Lolua; besides numbers of little streams. It is evident, from all the information I could collect both here and elsewhere, that the drainage of Londa falls to the north and then runs westward. The countries of Luba and Mai are evidently lower than this, and yet this is probably not much more than 3500 feet above the level of the sea.

About thirty-four miles east of the Lolua, or a hundred and thirty-two miles E.N.E. of Cabango, stands the town of Matiamvo, the paramount chief of all the Balonda. The town of Mai is pointed out as to the N.N.W. of Cabango, and thirty-two days or two hundred and twenty-four miles distant, or about lat. S. $5^{\circ} 45'$. The town of Luba, another independent chief, is eight days farther in the same direction, or lat. S. $4^{\circ} 50'$. Judging from the appearance of the people who had come for the purposes of trade from Mai, those in the north are quite as uncivilised as the Balonda. They were clad in a kind of cloth made of the inner bark of a tree, and they informed us that the chief of Luba discourages all improvements, and refuses to admit even guns into his country. The weapons employed by his people in killing elephants are spears, poisoned arrows, and traps. The tusks are remarkably heavy, and are exchanged for shells and beads.

I should have been glad to pay a visit to Matiamvo, and then descend the branch of the Zambesi, which traverses the district to the eastward of his capital. But from all I could hear of Matiamvo, there was no chance of my being allowed to proceed through his country to the southward, and, if I had gone merely to visit him, all my goods would have been expended by the time I returned to Cabango; I therefore reluctantly gave up the plan.

The country of Matiamvo is said to be well peopled, but they have little or no trade. They receive calico, salt, gunpowder, coarse earthenware, and beads, in exchange for ivory and slaves. They possess no cattle, Matiamvo alone having a single herd, which he keeps entirely for the sake of meat.

The present chief is said to be mild in his government, and will depose an under-chief for unjust conduct. But though he possesses absolute power, his name had less influence over his subjects with whom I came in contact than that of Sekeletu has over people living at a much greater distance from the capital.

As we determined to strike away to the S.E. from Cabango to our old friend Katema, I asked a guide from Muanzanza as soon as the funeral proceedings were over. He agreed to furnish one, and also accepted a smaller present from me than usual, on learning that I was not a trader. He seemed to regard these presents as his proper dues; and as a cargo of goods had come by Senhor Pascoal, he entered the house for the purpose of receiving his share, when he was gravely presented with the commonest earthenware vessel, which he received with expressions of abundant gratitude.

The Balonda in this quarter are much more agreeable-looking than any of the inhabitants nearer the coast. The women allow their teeth to remain in their white state, and would be comely, but for the custom of inserting pieces of reed into the cartilage of the nose, by which the nostrils become expanded. They seem generally to be in good spirits, and spend their time in gossip, funeral ceremonies, and marriages. This flow of animal spirits must be one reason why they are such an indestructible race.

We were forced to prepay our guide and his father too, and yet he went but one day with us, although he promised to go to Katema. He was not in the least ashamed at breaking his engagements, and probably no disgrace will be attached to the deed by Muanzanza. My men would gladly have stripped him of the wages, which he wore on his person, but, as we had always acted on the mildest principles, they let him move off with his unearned gains. The reason why we needed a guide at all was to secure the convenience of a path, which, though generally no better than a sheep-walk, is much easier than going straight in one direction, through tangled forests and tropical vegetation. We knew the general direction we ought to follow, and also if any deviation occurred from our proper route; but we could not without a guide avoid impassable forests and bogs, or get to the proper fords of the rivers.

After leaving Cabango on the 21st we crossed several little streams running into the Chihombo on our left, in one of which I saw tree ferns (*Cyathea dregei*) for the first time in Africa. We saw also grass-trees of two varieties, which in damp localities attained a height of forty feet. On crossing the Chihombo, about twelve miles above Cabango, we found it waist-deep and rapid, and we were delighted to see the evidences of buffaloes and hippopotami on its banks. As soon as we got away from the track of the slave-traders the more kindly spirit of the southern Balonda appeared, for an old man brought a large present of food from one of the villages, and volunteered himself to go as our guide. The people, however, of the numerous villages through which we passed, always made efforts to detain us, that they might have a little trade in the way of furnishing our suppers. Sometimes large pots of beer were offered to us as a temptation. Occasionally the head-man would peremptorily order us to halt under a tree which he pointed out. At other times young men volunteered to guide us to the impassable part of the next bog. At one village, indeed, they would not show us the path at all, unless we remained at least a day with them. Having started by ourselves, we took a path in the right direction, but it led us into an inextricable thicket. Returning to the village, we tried another footpath in a similar direction, and with a similar result. We were thus forced to come back and remain until the following morning, when they put us in the proper path. Beyond this forest we found the village of Nyakalonga, a sister of the late Matiamvo, who treated us handsomely. She wished her people to guide us to the next village, but this they declined doing unless we traded with them. She then requested us to wait an hour or two till she could get ready a present of meal, manioc-roots, ground-nuts, and a fowl, and she sent her son to the next village without requiring payment. It was truly pleasant to meet with people possessing some civility, after the hauteur we had experienced on the slave-path. The stream which ran past her village was quite impassable for a distance of about a mile both up and down stream, the bog being soft and about six feet deep.

On the 25th we reached the village of the chief Bango (lat. 12° 22' 53" S., long. 20° 58' E.), who brought us a handsome

present of meal, and the meat of an entire pallah. We here slaughtered the last of the cows we had brought with us, and we offered a leg of it to Bango; but he informed us that neither he nor his people ever partook of beef, as they looked upon cattle as human, and living at home like men. Several other tribes refuse to keep cattle, on the ground that oxen bring enemies and war; but this is the first instance I have met with in which they have been refused as food when offered by others. The fact of killing the pallahs for food shows that the objection does not extend to meat in general.

The little streams in this part of the country do not flow in deep dells, nor were we troubled with the gigantic grasses which annoyed our eyes on the banks of the streams before we came to Cabango. The country here was quite flat, and the people cultivated manioc very extensively. The villages were small and numerous, an arrangement which is highly popular among the Africans, inasmuch as the head-man of every village, whether great or small, fancies himself a chief. We had now entered again the country of the game; and we saw many chiefs coming from distant parts with the flesh of buffaloes and antelopes as the tribute claimed by Bango. The country was at this time covered with yellowish grass quite dry: some of the bushes and trees were green; and others were shedding their leaves, the young buds pushing off the old foliage. Trees, which in the south stand bare during the winter months, have here but a short period of leaflessness. Occasionally, however, a cold south wind comes up even as far as Cabango, and spreads a wintry aspect on all the exposed vegetation, scorching the tender shoots of the evergreen trees on the south side, and killing the leaves of manioc, pumpkins, and other tender plants. All parts of the interior of South Africa have a distinct winter, varying in intensity with the latitude. In the central parts of the Cape colony the cold is often severe, and the ground covered with snow. At Kuru-man snow seldom falls, but the frost is keen. There is frost even as far as the Chobe, and a partial winter in the Barotse valley; but north of the Orange river cold and damp are never combined: indeed, a shower of rain seldom falls during winter, and hence the healthiness of the Bechuana climate. From the Barotse valley northwards, it is questionable if it

ever freezes; but during the prevalence of the south wind the thermometer sinks as low as 42°, and conveys the impression of bitter cold.

May 30th.—We left Bango, and proceeded to the river Loembwe, which flows to the N.N.E., through a valley about a quarter of a mile wide, remarkable for its picturesque, parkish scenery. Like all the African rivers in this quarter, it has morasses on each bank, and abounds in hippopotami. The villages are widely apart and difficult of access, the paths being so covered with tall grass that even an ox can scarcely follow the track. The grass cut the feet of my men; yet we met a woman with a little child, and a girl, wending their way home with loads of manioc without appearing to suffer from this cause. The unexpected sight of a white man always infuses a tremor into their dark bosoms, and in every case of the kind they appeared immensely relieved when I had fairly passed. In the villages the dogs run away with their tails between their legs, as if they had seen a lion; the women peer from behind the walls till he comes near them, and then hastily dash into the house; little children meeting you in the street set up such a screaming that they seem to be on the point of going into fits. Among the Bechuanas I have been obliged to reprove the women for making a hobgoblin of the white man, and telling their children that they would send for him to bite them.

Having passed the Loembwe, we entered a more open country, occasionally intersected by small valleys, through which ran rills in the midst of bogs. These were always difficult to pass, and, being numerous, kept the lower part of the person constantly wet. At different points in our course we came upon votive offerings to the Barimo, usually consisting of food; every deserted village still contained its idols and little sheds with pots of medicine in them. One afternoon we passed a small frame-house, with the head of an ox in it as an object of worship. The dreary uniformity of gloomy forests and open flats must have a depressing influence on the minds of the people. Some villages appear more superstitious than others, if we may judge from the greater number of idols they contain.

Only on one occasion did we witness a specimen of quarrel-

ling. An old woman, standing by our camp, continued for hours to belabour a young man with her tongue. Irritated at last, he uttered some words of impatience, when another man sprang at him, exclaiming, "How dare you curse my 'mama'?" They caught each other, and a sort of wrestling-match ensued, which ended by one falling under the other. This trifling incident was of interest to me, for during the whole period of my residence in the Bechuana country I never saw unarmed men strike each other. Their disputes are usually conducted with great volubility and noisy swearing, but generally terminate by both parties bursting into a laugh.

Throughout this region the women are almost entirely naked, their gowns being a patch of cloth frightfully narrow, with no flounces; and nothing could exceed the eagerness with which they offered to purchase strips of calico of an inferior description. They were delighted at getting pieces about two feet long in exchange for a fowl and a basket of upwards of 20 lbs. of meal. Many of the women, with true maternal feelings, held up their little naked babies, entreating us to sell only a little rag for them. The fire, they say, is their only clothing by night, and the little ones derive heat by clinging closely to their parents. Instead of a skin or cloth to carry their babies in, the women plait a belt, about four inches broad, of the inner bark of a tree, and this, hung like a soldier's belt, enables them to support the child by placing it on their side in a sitting position.

On the evening of the 2nd of June we reached the village of Kawawa, consisting of forty or fifty huts, in the midst of a forest. Drums were beating over the body of a man who had died the preceding day, and some women were making a clamorous wail at the door of his hut, and addressing the deceased as if alive. A person fantastically dressed with a great number of feathers, who was intended to represent one of the Barimo, left the people at the dance, and went away into the deep forest in the morning, to return again to the obsequies in the evening.

In the morning Kawawa visited us, and we spent nearly the whole day in conversation with him and his people. When we visited him in return we found him in his large court-house, which, though of a beehive shape, was remarkably well

built. As I had shown him a number of curiosities, he now produced a jug of English ware, shaped like an old man holding a can of beer in his hand, as the greatest curiosity he had to exhibit. In the evening I exhibited the pictures of the magic-lantern, and all were delighted except Kawawa himself. He showed symptoms of dread, and several times started up as if to run away, but was prevented by the crowd behind.

Nothing could exceed the civilities which had passed between Kawawa and ourselves; but he had heard that the Chibouque had forced us to pay an ox, and now thought he might do the same. When therefore I sent next morning to let him know that we were ready to start, he replied in his figurative way, "If an ox came in the way of a man, ought he not to eat it?" I had given one to the Chibouque, and therefore he claimed the same, together with a gun, gunpowder, and a black robe like one he had seen the day before; if I refused an ox, I was told that I must give one of my men, and a book by which he might see the state of Matiamvo's heart towards him, and which would forewarn him, should Matiamvo ever resolve to cut off his head. Kawawa came in the coolest manner possible to our encampment after sending this message, and told me he had seen all our goods, and must have all he asked, otherwise he would prevent us from passing the Kasai. I replied that I would never have it said that a white man had paid tribute to a black; and that I should cross the Kasai in spite of him. He ordered his people to arm themselves, and, when my men saw them rushing for their weapons, some of them became somewhat panic-stricken. I ordered them to move away, and took the lead, expecting them all to follow. Many however remained behind, upon which I jumped off the ox, and made a rush at them with the revolver in my hand. Kawawa ran away amongst his people, who also turned their backs. I shouted to my men to take up their luggage and march; and then we all moved in the forest, the people of Kawawa standing about a hundred yards off, gazing, but not firing a shot or an arrow. Kawawa was not to be balked of his supposed rights by the unceremonious way in which we had left him, for, when we reached the ford of the Kasai about ten miles distant, we found that he had sent four of his men with orders to the ferrymen to refuse us passage. The

canoes were taken away before our eyes, and we were supposed to be quite helpless without them, with a river before us a good hundred yards broad, and very deep. Pitsane stood on the bank, gazing with apparent indifference on the stream, but all the while making an accurate observation of the spot where the canoes were hidden among the reeds. After it was dark one of them was quietly abstracted from its hiding-place, and we were soon snug in our bivouac on the southern bank of the Kasai. I left some beads, as payment for some meal which had been presented by the ferrymen; and as the canoe was left on the north side of the river, Pitsane and his companions laughed uproariously at the idea of our enemies' perplexity as to who had paddled us across. As we were about to depart in the morning, Kawawa's people appeared on the opposite heights, and could scarcely believe their eyes when they saw us prepared to start away to the south. At last one of them called out, "Ah! ye are bad." To which Pitsane and his companions retorted, "Ah! ye are good; and we thank you for the loan of your canoe."

CHAPTER XXIV.

THE LOTEMBWA.—WATERSHEDS.—POSITION OF ROCKS.—RAIN SOUTH AND NORTH OF EQUATOR.—DILOLO.—THE LEEBA.—SOCIAL CONDITION OF TRIBES.—RECEPTION AT LIBONTA.

AFTER leaving the Kasai we entered upon the extensive level plains which we had formerly found flooded. The water on them was not yet dried up, but still remained in hollow spots. Vultures were seen floating in the air, showing that carrion was to be found; and, indeed, we saw several of the large game, but so exceedingly wild as to be unapproachable. Numbers of caterpillars mounted the stalks of grass, and dragonflies and butterflies made their appearance, though it was now winter. The presence of the caprimulgus or goat-sucker, swifts, and different kinds of swallows, with a fiery-red bee-eater in flocks, showed that the lowest temperature here does not destroy the insects on which they feed. Jet-black

larks, with yellow shoulders, enlivened the mornings with their songs. We also saw the pretty white ardea flying over the spots not yet dried up, and wild ducks occasionally in sufficient numbers to remind us that we were approaching the Zambesi.

While passing across these interminable plains the eye rested with pleasure on a small flower which exists in such numbers as to give its own hue to the ground. One broad band of yellow stretched across our path, and, on examining the flowers which formed this golden carpet, we saw every variety of tint, from the palest lemon to the richest orange. Crossing a hundred yards of this, we came upon another broad band of the same flower, but now of a blue colour, and this too varied from the lightest tint to dark blue and even purple. I had before observed the same flower possessing different colours in different parts of the country; but never before did I see such a marked change, as from yellow to blue, exhibited repeatedly on the same plain. Another beautiful plant attracted my attention on these plains, which I found to my great delight to be an old home acquaintance, a species of *Drosera*, closely resembling our own sundew (*Drosera Anglica*); the flower-stalk attained a height of two or three inches, and the leaves were covered with reddish hairs, each of which had a drop of clammy fluid at its tip, making the whole appear as if spangled with small diamonds. At first I imagined the appearance was caused by the morning sun shining on drops of dew, but I afterwards found on investigation that the effect was produced by capsules of clear glutinous matter exuded from the tips of the hairs, and not liable to evaporation as dewdrops are. The clammy fluid is intended to entrap insects, which, dying on the leaf, probably yield nutriment to the plant.

During our second day on this extensive plain I suffered from my twenty-seventh attack of fever, at a spot where no surface water was to be found. We never thought it necessary to carry water with us in this region; and now, when I was quite unable to move on, my men soon found water to allay my burning thirst by digging a few feet beneath the surface. We had thus an opportunity of observing the state of these remarkable plains at different seasons of the year. Next day

we pursued our way, and on the 8th of June we forded the Lotembwa to the N.W. of Dilolo, and regained our former path. The Lotembwa here is about a mile wide, about three feet deep, and full of the lotus, papyrus, arum, mat-rushes, and other aquatic plants. I did not observe the course in which the water flowed, while crossing; but I supposed it to be simply a prolongation of the river which we had seen on our previous progress running southwards from lake Dilolo. When, however, we came to the Southern Lotembwa, we were informed by Shakatwala that the river we had crossed flowed in an opposite direction,—not into Dilolo, but northwards into the Kasai. This phenomenon of a river running in opposite directions struck even his mind as strange; but I have no doubt that his assertion was correct, and that the Dilolo is actually the watershed between the river systems that flow to the east and west. I now for the first time apprehended the true form of the river systems and continent. I had learnt, partly from my own observation and partly from information derived from others, that the rivers of this part of Africa took their rise in the same elevated region, and that all united in two main drains, the one flowing to the N. by the Congo, and the other to the S. by the Zambesi. I was now standing on the central ridge that divided these two systems, and I was surprised to find how slight its elevation was: instead of the lofty snow-clad mountains which we might have expected, we found perfectly flat plains not more than 4000 feet above the level of the sea, and 1000 feet lower than the western ridge we had already passed. I was not then aware that any one else had discovered the elevated trough form of the centre of Africa. I had observed that the old schistose rocks on the sides dipped in towards the centre of the country, and that their strike nearly corresponded with the major axis of the continent; and also that, where the later erupted trap-rocks had been spread out in tabular masses over the central plateau, they had borne angular fragments of the older rocks in their substance. This latter feature was always a puzzle to me, till favoured with Sir Roderick Murchison's explanation* of the original form of the continent, for then

* After dwelling upon the geological structure of the Cape Colony as developed by Mr. A. Bain, and the existence in very remote periods of lacustrine conditions

I could see clearly that these angular fragments formed the bottom of the original lacustrine basin, and that the traps, in bursting through, had broken them off and preserved them. There are, besides, ranges of hills in the central parts, composed of clay and sandstone schists, with the ripple-mark distinct, in which no fossils have been discovered; but as they are usually tilted away from the masses of horizontal trap, it is probable that they too were a portion of the original bottom, and fossils may yet be found in them.

The characteristics of the rainy season in this wonderfully humid region may account in some measure for the periodical floods of the Zambesi. The rains seem to follow the course of the sun, for they fall in October and November, when the sun passes over this zone to the south. When the sun reaches the tropic of Capricorn in December, a dry season ensues, and injurious droughts are much dreaded in December and January. As the sun returns again to the north, in February, March, and April, the great rains of the year fall; and the plains, which in October and November had imbibed rain like sponges, now become supersaturated, and pour forth those floods of clear water which inundate the banks of the Zambesi. Somewhat the same phenomenon probably causes the periodical inundations of the Nile, and the difference in the period of

in the central part of South Africa, as proved by freshwater and terrestrial fossils, Sir Roderick Murchison thus writes:—

“Such as South Africa is now, such have been her main features during countless past ages, anterior to the creation of the human race. For the old rocks which form her outer fringe unquestionably circled round an interior marshy or lacustrine country, in which the *Dicynodon* flourished, at a time when not a single animal was similar to any living thing which now inhabits the surface of our globe. The present central and meridian zone of waters, whether lakes or marshes, extending from lake Tchad to lake Ngami, with hippopotami on their banks, are therefore but the great modern residual geographical phenomena of those of a mesozoic age. The differences, however, between the geological past of Africa and her present state are enormous. Since that primeval time the lands have been much elevated above the sea-level—eruptive rocks piercing in parts through them; deep rents and defiles have been suddenly formed in the subtending ridges through which some rivers escape outwards.

“Travellers will eventually ascertain whether the basin-shaped structure, which is here announced as having been the great feature of the most ancient, as it is of the actual geography of South Africa (*i.e.* from primeval times to the present day), does, or does not, extend into Northern Africa. Looking at that much broader portion of the continent, we have some reason to surmise that the higher mountains also form, in a general sense, its flanks only.”—p. cxxiii. *President's Address, Royal Geographical Society, 1852.*

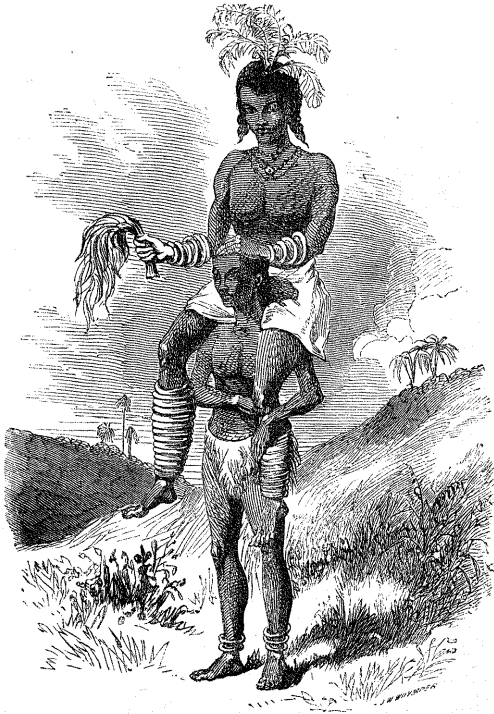
flood possibly arises from the more northerly position of the latter river.

I was informed by some Arabs of Zanzibar that the region to the east of Londa resembles in its conformation the parts over which we have recently travelled. They report swampy steppes, some of which have no trees, where the inhabitants use grass and stalks of native corn for fuel. A large shallow lake is also pointed out in that direction, named Tanganyika, which requires three days for crossing in canoes. It is connected with another named Kalagwe (Garague?), farther north, which may be the Nyana. From the former is derived, by numerous small streams, the river Loapula, the eastern branch of the Zambesi, which flows past the town of Cazembe. Probably this lake is the watershed between the Zambesi and the Nile, as lake Dilolo is between the Leeba and the Kasai. But however this may be, the phenomena of the rainy season show that it is not necessary to assume the existence of high snowy mountains.

After crossing the Northern Lotembwa we met a party of the people of Kanganke, who had treated us kindly on our way to the north; we sent him a robe of striped calico, with an explanation of our reason for not returning through his village. We then went on to lake Dilolo. Though labouring under fever, the sight of the blue waters, and the waves lashing the shore, had a most soothing influence on my mind, after the monotony of the lifeless, flat, and gloomy forest. We found Moene Dilolo (Lord of the Lake) a fat jolly fellow, who lamented that he was always out of beer when strangers happened to arrive. He gave us a handsome present of meal and putrid buffalo's flesh, which latter is used here in small quantities as a sauce to the tasteless manioc. His men were at this time hunting antelopes, in order to send the skins as a tribute to Matiamvo.

June 14th.—We reached the collection of straggling villages over which Katema rules, and were thankful to see old familiar faces again. In the absence of Katema, who was hunting skins for Matiamvo, Shakatwala performed the part of a chief by bringing forth abundant supplies of food in his master's name. On the 15th Katema came home, having heard of our arrival. He desired me to rest myself and eat abundantly;

and he took good care to give the means of doing so. All the people in these parts were extremely kind and liberal with their food, and Katema was not behindhand. When he visited our encampment I presented him, according to the promise I had made in going to Loanda, with a cloak of red baize, ornamented with gold tinsel, which cost thirty shillings, as well as a cotton robe, large and small beads, an iron spoon, and a tin pannikin containing a quarter of a pound of powder. He seemed greatly pleased with the liberality shown, and asked if I could not make a dress for him like the one I wore,



so that he might appear as a white man when any stranger visited him. On departing he mounted on the shoulders of his spokesman, as the most dignified mode of retiring. The spokesman being a slender man, and the chief six feet high

and stout in proportion, there would have been a breakdown, had he not been accustomed to it. On the morrow he presented us with a cow, to eat with the abundant supplies of meal he had given. He then departed for the hunting-ground, after assuring me that the town and everything in it were mine, and that his factotum, Shakatwala, would remain and attend to every want, and also conduct us to the Leebea.

On attempting to slaughter the cow presented to us, we found the herd as wild as buffaloes; at the sound of a gun they fled many miles into the forest, and were with great difficulty brought back: even the herdsman was afraid to go near them. The majority of them were white, and they were all beautiful animals. After hunting our cow for two days it was at last despatched.

Leaving Katema's town on the 19th, and proceeding four miles to the eastward, we forded the southern branch of lake Dilolo, which was here a mile and a quarter broad. The ford was waist-deep, and much encumbered with masses of arum and rushes. Going to the eastward about three miles, we came to the Southern Lotembwa itself, which issues from the branch of the lake above referred to, and runs in a valley two miles broad. It is here eighty or ninety yards wide, and contains numerous islands covered with a dense sylvan vegetation. In the rainy season the valley is flooded, and, as the waters retire, great multitudes of fish are caught by means of weirs. A species of small fish, about the size of the minnow, which is caught in great abundance, is dried in the sun, and has a pungent aromatic flavour. On many of the paths which had been flooded a nasty sort of slime of decayed vegetable matter is left behind, inducing much sickness. We did not find our friend Mozinkwa at his pleasant home on the Lokaloeje; his wife was dead, and he had removed elsewhere. He followed us some distance, but our reappearance seemed only to revive his sorrow. We found the pontoon at the village in which we left it. It had been carefully preserved; but a mouse had eaten a hole in it, and rendered it useless.

We traversed the extended plain on the north bank of the Leebea, and crossed this river a little farther on at Kanyonke's village, about twenty miles west of our former ford. The first stage beyond the Leebea brought us to the village of Chebende.

nephew of Shinte; and next day we met Chebende himself, returning from his father's funeral, looking thin and haggard, probably from the effect of the orgies in which he had been engaged. Pitsane and Mohorisi, having concocted the project of a Makololo village on the banks of the Leeba as an approach to the white man's market, spoke to Chebende on the subject, but he cautiously avoided expressing an opinion. Their idea of forming an establishment somewhere near the confluence of the Leeba and Zambesi commended itself to my judgment as a point geographically suitable for civilization and commerce. The right bank of the Leeba there is never flooded; and from that point there is communication by means of canoes to the country of the Kanyika, and also to Cazembe. There is no obstruction down to the Barotse valley; and there is probably canoe navigation down the Kafue or Bashukulompo river, which flows through the fertile and well-peopled district of the Bamasasa.

As it was now mid-winter, it may be mentioned that the temperature of the water in the morning was 47° , and that of the air 50° , which, being loaded with moisture, was very cold to the feelings. Yet the sun was very hot by day, the temperature in the shade ranging from 88° to 90° , and in the evenings from 76° to 78° .

Before reaching the town of Shinte we passed through many large villages of the Balobale, who had fled from their chief, Kangerke. The Mambari from Bihe come constantly to him for trade; and as he sells his people, great numbers of them escape to Shinte and Katema, who refuse to give them up. We reached our friend Shinte, and received a hearty welcome from the old man, accompanied with abundance of provisions. As I had been desirous of introducing some of the fruit-trees of Angola, we had brought a pot containing cuttings of orange, cashew, custard-apple (*anona*), and fig-trees, with coffee, aracas (*Araça pomifera*), and papaws (*Carica papaya*). Fearing that, if we took them further south, they might be killed by the cold, we planted them out in an enclosure of one of Shinte's principal men, and, at his request, promised to give Shinte a share when grown. My men had collected quantities of seeds in Angola, and now distributed them amongst their friends. Some even carried onions, garlic, and bird's-eye

pepper, growing in pannikins. The courts of the Balonda, planted with tobacco, sugar-cane, and plants used as relishes, led me to the belief that care would be taken of my little nursery. They know the value of fruits, but at present have only wild ones. As a proof of this I may mention that Shinte eagerly accepted some of the seeds of the palm-oil tree (*Elois Guineensis*), when told that this would produce oil in much greater quantity than their native tree, which is not a palm, but a wild tree, the fruit of which when boiled yields a considerable quantity of oil.

On the 6th of July we parted on the best possible terms with our friend Shinte, and proceeded by our former path to the village of his sister Nyamoana, who was now a widow. She received us with much apparent feeling, and said, "We had removed from our former abode to the place where you found us, and had no idea then that it was the spot where my husband was to die." As they never remain in a place where death has once visited them, she had come to the river Lofujé. We borrowed five small canoes from her, to proceed down the Leeba. My companions purchased also a number of small canoes from the Balonda. These are made quite thin and light, and as sharp as racing-skiffs, in order that they may be used in hunting animals in the water. The price paid was a string of beads equal to the length of the canoe. I thought the Leeba at least a third larger than the Coanza at Massangano, and upwards of two hundred yards wide. It had risen above forty feet during the late flood, but this was probably more than usual.

In descending the Leeba we saw many herds of wild animals, especially the tahetsi (*Aigoceros equina*), a magnificent antelope, the putokuane (*Antilope niger*), and two fine lions. The Balobale, however, are getting well supplied with guns, and will soon thin out the large game. At one of the villages we were entreated to attack some buffaloes, which destroyed the manioc in the gardens every night. As we all longed to have a meal of meat, we followed the footprints of a number of old bulls. They showed a great amount of cunning, by selecting the densest parts of the forest as their haunt during the day. We came within six yards of them several times without knowing that they were so near, and were then only

made aware of their presence by hearing them rush away among the crashing branches. It was somewhat exciting to feel, as with stealthy steps we trod the dry leaves, that we might next moment be charged by one of the most dangerous beasts of the forest. We threaded out their doublings for hours, but never got a shot. In passing along the Leebea I was struck by the sight of a light-green toad about an inch long, which possessed the faculty of leaping on a blade of grass with remarkable precision; even if the leaf were perpendicular, it stuck to it like a fly. It was of the same size as the *Brachymerus bi-fasciatus* (Smith),* which I saw only once in the Bakwain country. Though small, it was hideous, being coloured jet-black, with vermilion spots. The same faculty is possessed, though in a less marked degree, by the small green frog (*Rana fasciata*, Boié), which is found in great numbers on the Zambesi and the Chobe.

Before reaching the Makondo rivulet, in latitude 13° 23' 12" S., we came upon the tsetse in such numbers that my poor ox was bitten in several places, in spite of a man with a branch warding them off. Next morning the bites were marked by patches of hair, about half an inch broad, being wetted by exudation. Poor Sinbad had carried me from the Leebea to Golungo Alto, and back again, without losing any of his peculiarities, or ever becoming reconciled to his hard fate in

* The discovery of this last species is thus mentioned by that accomplished naturalist, Dr. Smith: "On the banks of the Limpopo river, close to the tropic of Capricorn, a massive tree was cut down to obtain wood to repair a waggon. The workman, while sawing the trunk longitudinally nearly along its centre, remarked, on reaching a certain point, 'It is hollow, and will not answer the purpose for which it is wanted.' He persevered, however, and when a division into equal halves was effected, it was discovered that the saw in its course had crossed a large hole in which were five specimens of the species just described, each about an inch in length. Every exertion was made to discover a means of communication between the external air and the cavity, but without success. Every part of the latter was probed with the utmost care, and water was kept in each half for a considerable time, without any passing into the wood. The inner surface of the cavity was black, as if charred, and so was likewise the adjoining wood for half an inch from the cavity. The tree, at the part where the latter existed, was 19 inches in diameter, the length of the trunk was 18 feet. The age, which was observed at the time, I regret to say does not appear to be noted. When the Batrachia above mentioned were discovered, they appeared inanimate, but the influence of a warm sun, to which they were subjected, soon imparted to them a moderate degree of vigour. In a few hours from the time they were liberated they were tolerably active, and able to move from place to place apparently with great ease."

being forced away each morning from the pleasant pasturage on which he had fed. I wished to give the climax to his usefulness by having him slaughtered at once, but my men had some compunction on this head, and therefore we carried him to end his days in peace at Naliele.

Having despatched a message to our old friend Manenko, we halted for a day opposite her village, which was about fifteen miles from the river. She was unable to come so far herself, but her husband was instantly despatched to meet us, with liberal presents of food. Sambanza gave us a detailed account of the political affairs of the country, and next morning performed the ceremony called "*Kasendi*," for cementing our friendship. It is accomplished thus:—The hands of the parties are joined, and small incisions are made on them, as well as on the pit of the stomach and on the right cheek and forehead of each. A small quantity of blood is taken off from these points by means of a stalk of grass, and that of each person is put into a separate pot of beer; each then drinks the other's blood, and they are supposed to become perpetual friends or relations. During the drinking of the beer some of the party beat the ground with short clubs, and utter sentences by way of ratifying the treaty. The men belonging to each then finish the beer. The principals in the performance of "*Kasendi*" are henceforth considered blood-relations, and are bound to disclose to each other any impending evil. In the present case Pitsane and Sambanza were the parties engaged: if then Sekeletu should resolve to attack the Balonda, Pitsane would be under an obligation to give Sambanza due warning of it, and *vice versa*. They now presented each other with the most valuable presents they had to bestow. Sambanza walked off with Pitsane's suit of green-baize faced with red, which had been made in Loanda; and Pitsane, besides abundant supplies of food, obtained two shells similar to the one I had received from Shinte.

On one occasion I became blood-relation to a young woman by accident. She wished me to remove a tumour which had grown between the bones of the fore-arm, and which had gradually enlarged until she became unable to work. While performing the operation, one of the small arteries squirted some blood into my eye. As I was wiping the blood out of it

she remarked, "You were a friend before, now you are a blood-relation; whenever you pass this way, send me word, that I may cook food for you." In creating these friendships, my men had the full intention of returning; each one had his *Molekane* (friend) in every village of the friendly Balonda. Mohorisi even married a wife in the town of Katema, and Pitsane took another in the town of Shinte. These alliances were looked upon with great favour by the Balonda chiefs, as securing the goodwill of the Makololo.

On leaving this place we were deserted by one of our party, Mboenga, an Ambonda man, who had accompanied us all the way to Loanda and back. His father was living with Masiko, and it was natural for him to wish to join his own family again. He went off honestly, with the exception of taking a fine "tari" skin given me by Nyamoana. I regretted parting with him thus, and sent notice to him that he need not have run away, and that, if he wished to come to Sekeletu again, he would be welcome. We subsequently met a large party of Barotse fleeing in the same direction, but, when I represented to them that there was a probability of their being sold as slaves in Londa, they determined to return. They feel it a sore grievance to be obliged to live with Sekeletu at Linyanti, where there is neither fish, fowl, nor any other kind of food equal in quantity to what they enjoy in their own rich valley.

A short distance below the confluence of the Leebea and Zambesi we met a number of hunters belonging to the tribe called Mambowe, who live under Masiko. They stalk the animals disguised in headdresses made to represent the head either of a leche or a crane. With these they crawl through the grass, and can easily raise their heads so far as to see their prey without being recognised until they are within bowshot. They presented me with three fine water-turtles, one of which had upwards of forty eggs in its body. The egg has a flexible shell, and is of the same size at both ends, like the alligator's. The flesh, and especially the liver, is excellent. The Mambowe hunters joined our party, and on the following day discovered a dead hippopotamus, which they had previously wounded. This was the first feast of flesh my men had enjoyed, for, though the game was wonderfully

abundant, I had quite got out of the way of shooting, and missed perpetually. Once I went with the determination of getting so close that I should not miss a zebra. We followed one of the ramifications of the river in a small canoe, and two men, stooping down as low as they could, paddled it slowly along to an open space near to a herd of zebras and pokus. Although I had been most careful to approach near enough, I unfortunately only broke the hind leg of a zebra. My two men pursued it, but the loss of a hind leg does not prevent this animal from a gallop. As I walked slowly after the men on an extensive plain covered with a great crop of grass, which was laid flat by its own weight, I observed a solitary buffalo coming at me at a full gallop. I glanced around, but the only tree on the plain was a hundred yards off, and there was no escape elsewhere. I therefore cocked my rifle, with the intention of giving him a steady shot in the forehead when he should come within three or four yards of me. The thought flashed across my mind, "What if my gun were to miss fire?" I placed it to my shoulder as he came thundering and lumbering along at a tremendous pace. A small bush fifteen yards off made him swerve a little, and exposed his shoulder. I just heard the ball crack there, as I fell flat on my face. The pain made him renounce his purpose, for he bounded close past me on to the water, where he was found dead. In expressing my thankfulness to God among my men, they expressed themselves as much vexed at not having been present to shield me from this danger. The tree near me was a camel-thorn, which reminded me that we had returned from the land of evergreens to that of thorns.

July 27th.—We reached the town of Libonta, and were received with the most extravagant demonstrations of joy. The women came forth to meet us with curious gestures and loud lulliloes. Some carried a mat and stick, in imitation of a spear and shield. Others rushed forward to kiss the hands and cheeks of their friends, raising such a dust that it was quite a relief to get the men assembled with proper African decorum in the kotla. We were looked upon as men risen from the dead, for the most skilful of their diviners had pronounced us to have perished long ago. After many expressions of joy at meeting, I rose and explained the causes of our long

delay, leaving the detailed report to be made by their own countrymen. Pitsane then delivered a speech of upwards of an hour in length, giving a highly flattering picture of the whole journey, of the kindness of the white men in general, and of Mr. Gabriel in particular. He concluded by saying that I had done more for them than they expected; that I had not only opened up a path for them to the other white men, but had conciliated all the chiefs along the route. The following day was observed as one of thanksgiving to God for His goodness in restoring us in safety to our friends. My men decked themselves out in their best, and I found that, although their goods were finished, they had managed to save some suits of white European clothing, which, with their red caps, gave them rather a dashing appearance. They tried to walk like the soldiers they had seen in Loanda, and called themselves my "braves" (batlabani). During the service they all sat with their guns over their shoulders, to the unbounded admiration of the women and children. I addressed them all on the goodness of God in preserving us from all the various dangers of strange tribes and disease. The men gave us two fine oxen for slaughter, and the women supplied us abundantly with milk, meal, and butter. On our apologizing for having nothing to present in return, the Libontese answered gracefully, "It does not matter; you have opened a path for us, and we shall have sleep." Strangers flocked in from a distance, generally bringing presents, which I distributed amongst my men.

Our progress down the Barotse valley was quite an ovation; the people were wonderfully kind, and every village gave us an ox, and sometimes two. I felt most deeply grateful, and tried to benefit them in the only way I could, by imparting the knowledge of that Saviour who alone can comfort them in the time of need, and of that good Spirit who alone can instruct them and lead them into his kingdom. In passing them on our way to the north, their liberality might have been attributed to the hope of repayment on our return, for the white man's land is imagined to be the source of every ornament they prize most. But their present conduct proved that they had not been influenced by such an unworthy motive; for we received equal liberality now, though our own

goods were exhausted. They saw that I had been exerting myself for their benefit alone, and even my men remarked, "Though we return as poor as we went, we have not gone in vain." They began immediately to collect tusks of hippopotami and other ivory for a second journey.

CHAPTER XXV.

NALIELE.—GONYE.—LINYANTL.—THE CHIEF SEKELETU.—NOTICES OF THE MAKOLOLO.—DISEASES, CLIMATE, &c.

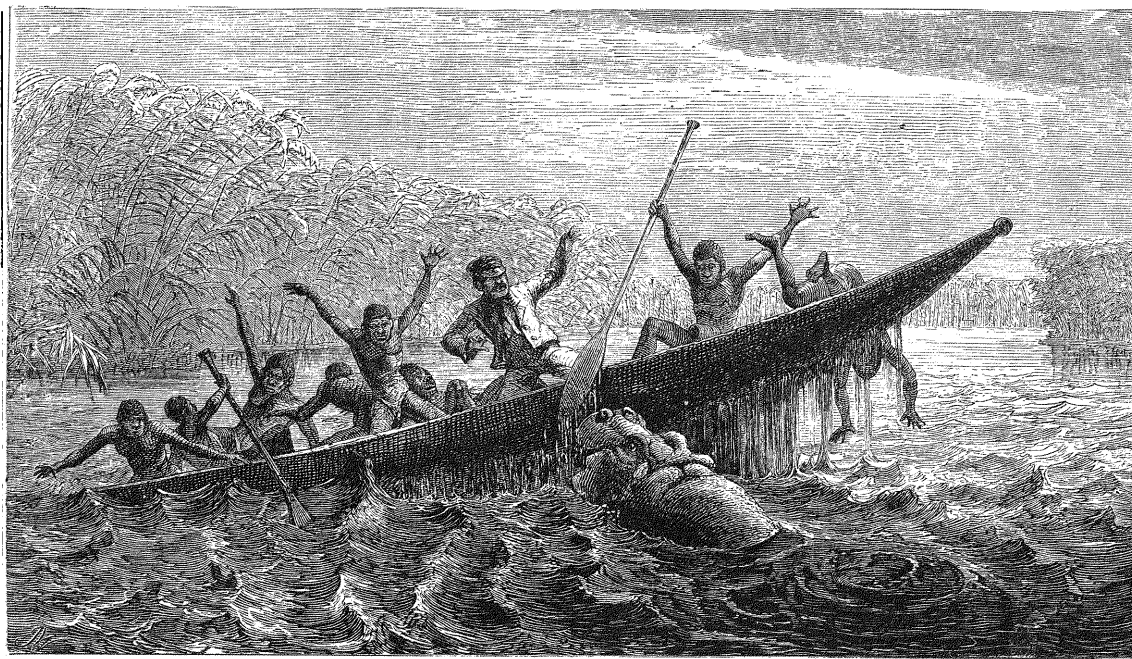
ON the 31st of July we parted with our kind Libonta friends. We planted some of our palm-tree seeds in different villages of this valley, but unfortunately they were always destroyed by the mice. At Chitlane's village we collected the young of a colony of the linkololo (*Anastomus lamalligerus*), a black long-legged bird of gregarious habits, somewhat larger than a crow, which lives on shellfish (*Ampullaria*), and breeds among the reeds. Its haunts, being unchanged from year to year, are well known, and belong to the chiefs, who at particular times of the year gather most of the young. The produce of this "harvest," as they call it, which was presented to me, was a hundred and seventy-five unfledged birds. Double this amount would have been obtained if they had been gathered at an earlier period. The old ones look lean and scraggy, but the young are very fat, and when roasted are esteemed one of the dainties of the Barotse valley. In presents of this kind, it is customary for the person to whom they are presented to entertain his friends with them. We generally slaughtered each ox at the village where it was presented, and then our friends enjoyed themselves with us.

The village of Chitlane is situated, like all others in the Barotse valley, on an eminence above the level of the floods; this last year the water approached nearer to an entire submergence of the valley than on any previous occasion within the memory of man. Great numbers of people were now suffering from sickness, which always prevails during the subsidence of the waters; and I found much demand for the

medicines I had brought from Loanda. The great variation of the temperature each day must have a trying effect upon the health. At this village there is a real Indian banyan-tree, which has spread itself over a considerable space by means of roots from its branches; it has been termed in consequence "the tree with legs" (more oa maotu). It is curious that trees of this family are looked upon with veneration, as they are supposed to have the faculty of averting misfortune from their neighbourhood. On reaching Naliele on the 1st of August we found Mpololo in great affliction on account of the death of his daughter, who had been murdered by one of the Makololo out of spite to him. The murderer was detected, and both he and his wife were thrown into the river, the latter for not having revealed her husband's intentions. She declared she had dissuaded him from the crime, and, had any one interposed a word, she might have been spared.

Mpololo exerted himself in every way to supply us with canoes in lieu of Shinte's, which we left with him. My men were exceedingly delighted with the cordial reception we met with everywhere; but they suffered an unlooked-for annoyance in finding in many cases that their wives had become the property of other husbands during our absence. Mashauana thus lost a wife who had borne him two children; he affected not to feel it, saying, "Why, wives are as plentiful as grass, and I can get another: she may go:" but he would add, "If I had that fellow, I would open his ears for him." As most of them had more wives than one, I tried to console them by saying that they had enough left; but they felt galled by the reflection that, while they were toiling, another had been devouring their corn. Some of their wives came back with very young infants in their arms, a circumstance which excited no discontent; in other cases the wives were restored by order of the chief.

Sunday, August 5th.—A large audience listened most attentively to my morning address. Surely some who would never have thought of our merciful Father, but for this visit, will remember the ideas conveyed, and pray to Him. The invariably kind treatment I received from these and many other heathen tribes in this central country, has led me to the belief that, if a person were to exert himself for their good, he



BOAT CAPSIZED BY A HIPPOPOTAMUS ROBBED OF HER YOUNG.

will never be ill treated; there may be opposition to his doctrine, but none to himself.

I left Naliele on the 13th of August, and while proceeding down the river a female hippopotamus struck the canoe with her forehead, lifting one half of it quite out of the water, so as nearly to overturn it. The force of the butt she gave tilted Mashauana into the river: the rest of us swam to the shore, which was only about ten yards off. Glancing back, I saw the animal come to the surface a short way off, and look at the canoe, as if to see if she had done much mischief. This occurrence is so unusual when the precaution is taken to coast along the shore, that my men exclaimed, "Is the beast mad?" It turned out that her young one had been speared the day before. There were eight of us in the canoe at the time, and the shake it received shows the immense power of this animal in the water: no damage, however, was done beyond a wetting. On reaching Gonye, Mokwala the head-man having presented me with a tusk, I gave it to Pitsane, as he was eagerly collecting ivory for the Loanda market.

August 22nd.—It was now the end of winter. The trees which lined the banks were beginning to bud and blossom; and the old foliage had assumed an orange hue of such brilliancy that I mistook it for masses of yellow blossom. The leaves exhibited every variety of shade,—yellow, purple, copper, liver-colour, and even inky black. From Gonye we proceeded down the river towards Sesheke, and were as much struck as formerly with this noble stream. The scenery is lovely, though its appearance was somewhat impaired by the peculiar murkiness of the atmosphere which prevails here as well as more to the south during the winter, the cause of which I am unable to explain.

The amount of organic life is perfectly astonishing. When the river begins to rise, the *Ibis religiosa* comes down in flocks of fifties, with prodigious numbers of other water-fowl. Some of the sandbanks appeared whitened during the day with flocks of pelicans, while others were brown with ducks (*Anas histriónica*); and the surface of the stream was covered with great numbers of gulls (*Procellaria turtur*, Smith). The vast quantity of small birds, which feed on insects, show that the river teems with the more minute forms of organic life. In walk-

ing among bushes on the banks we were occasionally stung by hornets, which hang their nests, in form like those of our own wasp, on the branches of trees. The ferocity of this insect in the breeding season is such that it will pursue any one who happens to brush too closely past its nest for twenty or thirty yards. Its sting is more like a discharge of electricity from a powerful machine than anything else, and produces momentary insensibility, followed by the most pungent pain. Tsetse were numerous between Nameta and Sekhosi, and we observed an insect of prey, about an inch in length, long-legged and gaunt-looking, which springs with the greatest ferocity upon tsetse and other flies, and, sucking out their blood, throws the bodies aside.

Long before reaching Sesheke we had been informed that a party of Matebele had brought some packages of goods for me from Mr. Moffat to the south bank of the river, near the Victoria Falls. The Makololo imagined that the parcels were directed to me as a mere trick, whereby to place witchcraft-medicine into their hands. When therefore the Matebele on the south bank called to the Makololo on the north to come over in canoes and receive the goods sent by Moffat to "Nake," the Makololo replied, "Go along with you; we know better than that; how could he tell Moffat to send his things here, he having gone away to the north?" The Matebele answered, "Here are the goods; we place them before you; and if they perish, the guilt will be yours." When they had departed, the Makololo, with fear and trembling, carried the packages carefully to an island in the middle of the stream, and built a hut over them to protect them from the weather; and there I found them in September, 1855, after a year's interval, in perfect safety. I found the news was very old, and had lost much of its interest by keeping, but there were some good eatables from Mrs. Moffat.

Having waited a few days at Sesheke for the horses which we had left at Linyanti, we proceeded to that town, and found the waggon and everything we had left in November 1853, perfectly safe. A grand meeting of all the people was convened to receive our report and the articles which had been sent by the governor and merchants of Loanda. I explained that none of these were my property, but that they were sent

to show the friendly feelings of the white men, and their eagerness to enter into commercial relations with the Makololo. I then requested my companions to give a true account of what they had seen. The wonderful things lost nothing in the telling, the climax always being that they had finished the whole world, and had turned only when there was no more land. One glib old gentleman asked—"Then you reached Ma Robert (Mrs. L.)?" They were obliged to confess that she lived a little beyond the world! The presents were received with expressions of great satisfaction and delight; and on Sunday, when Sekeletu made his appearance at church in his uniform, he attracted more attention than the sermon; but the expressions they used towards myself were so very flattering that I felt inclined to shut my eyes to this peccadillo. Sekeletu immediately made arrangements to send a fresh party with a load of ivory to Loanda, while my companions remained at home to rest themselves. This party arrived on the west coast, but the ivory had been disposed of to some Portuguese merchants in the interior, and the men had been obliged to carry it down to Loanda. Mr. Gabriel, having learnt that they were in the city, went to them, and pronounced the names Pitsane, Mashauana, when all started up and crowded round him. He behaved to them in the same liberal manner as he had done to my companions, and they departed for their distant home after bidding him a formal and affectionate adieu.

The Makololo expressed great satisfaction with the route we had opened up to the west, and soon after our arrival a "picho" was called, in order to discuss the question of removal to the Barotse valley, so that they might be nearer the market. Some of the older men objected to abandoning the line of defence afforded by the rivers Chobe and Zambesi against their southern enemies the Matebele. The Makololo generally dislike the Barotse valley, on account of the fevers which are engendered in it by the subsidence of the waters. They prefer it only as a cattle station, for, though the herds are frequently thinned by an epidemic disease (*peripneumonia*), they breed so fast that the losses are soon made good. Wherever else the Makololo go, they always leave a portion of their stock in the charge of herdsmen in that prolific valley. Some of the younger men objected to removal, because the rankness of

the grass at the Barotse did not allow of their running fast, and because there "it never becomes cool." Sekeletu at last stood up, and said, "I am perfectly satisfied as to the great advantages of the path which you have opened, and think that we ought to go to the Barotse, in order to shorten the way to Loanda; but with whom am I to live there? If you were coming with us, I would remove to-morrow, but now you are going to the white man's country to bring Ma Robert, and when you return you will find me near to the spot on which you wish to dwell."

The fever is certainly a drawback to this otherwise important missionary field. The great humidity produced by heavy rains and inundations, the exuberant vegetation caused by fervid heat in rich moist soil, the stagnation of the air caused by the numerous forests, and the prodigious amount of decaying vegetable matter annually exposed after the inundations to the rays of a torrid sun, combine to render the climate far from salubrious. But fever is almost the only disease prevalent in it. There is no consumption or scrofula, and but little insanity. Smallpox and measles visited the country some thirty years ago, but they have not again appeared, although the former has been almost constantly on some part of the coast. Singularly enough, the people used inoculation for this disease; and in one village they seem to have chosen a malignant case from which to inoculate the rest, for nearly the whole population was cut off. I have seen but one case of hydrocephalus, a few of epilepsy, and none of cholera or cancer, while many diseases common in England are quite unknown. It is true that I suffered severely from fever, but my experience cannot be taken as a fair criterion in the matter. Compelled to sleep on the damp ground month after month, exposed to drenching showers, and getting the lower extremities wetted two or three times every day, living on manioc-roots and meal, and exposed during many hours each day to the direct rays of the sun with the thermometer standing above 96° in the shade—these constitute a more pitiful hygiene than any succeeding missionaries will ever have to endure.

I believe that the interior of this country presents a much more inviting field for the philanthropist than the west coast,

where missionaries of the Church Missionary, United Presbyterian, and other societies, have long laboured with most astonishing devotedness and never-flagging zeal. Not that any of the numerous tribes here are anxious for instruction; but that there is no impediment in the way of instruction. Every head-man would be proud of a European visitor or resident in his territory, and there is perfect security for life and property all over the interior country. The great barriers which have kept Africa closed are—firstly, the unhealthiness of the coast; secondly, the exclusive, illiberal disposition of the border tribes; and thirdly, the absence of inlets and estuaries along the line of coast, whereby only a small fringe of its population has come into contact with the rest of mankind.

Having found it impracticable to open up a carriage-way to the west, it became a question as to which part of the east coast we should direct our steps. Some Arabs, who had come from Zanzibar through a peaceful country, assured me that the powerful chiefs beyond the Cazembe on the N.E. would have no objection to my passing through their country. They described the population as located in small villages like the Balonda, and that no difficulty is experienced in travelling amongst them. This route then appeared to me to be the safest; but as my object was to obtain water rather than land carriage, it did not promise so much as that by the Zambesi. The Makololo knew all the country eastwards as far as the Kafue, from having lived in former times near the confluence of that river with the Zambesi, and they all advised this path in preference to that by the way of Zanzibar. The only difficulty that they described arose from the falls of Victoria. Some recommended me to cross over from Sesheke in a N.E. direction to the Kafue, six days distant, and then descend that river to the Zambesi: others to follow the south bank of the Zambesi until I had passed the falls, and then proceed down the river in canoes. All spoke strongly of the difficulties of travelling on the north bank, on account of the excessively broken and rocky nature of the country near the river on that side. After much deliberation I decided on going down the Zambesi, and keeping on the north bank, under the impression that Tete, the farthest inland station of the Portuguese, lay on that side. Being near the end of September,

the rains were expected daily; the clouds were collecting, and the wind blew strongly from the east, but it was excessively hot. The Makololo urged me strongly to remain till the ground should be cooled by the rains; and as it was probable that I should be laid up with fever if I commenced my journey now, I resolved to wait. The district between the 17th and 18th parallels is a kind of debateable border-land between the dry and the humid regions, and partakes occasionally of the characteristics of each. Some idea may be formed of the heat in October by the fact that the thermometer in the shade of my waggon, and protected from the wind, stood at 100° through the day. It rose to 110° when exposed to the wind; after sunset it showed 89°, at 10 o'clock P.M. 80°, and then gradually sank to 70° at sunrise, which is usually the period of greatest cold in the twenty-four hours in this region. During the period of greatest heat the natives keep in their huts, which are always pleasantly cool by day, but close and suffocating by night. Those who are able to afford it sit guzzling beer or boyaloo, and keep up a continuous fire of bantering, raillery, laughing, and swearing. In the evenings they set to work dancing, and keep it up in the moonlight till past midnight, the women clapping their hands continuously, and the old men applauding and pronouncing it to be "really very fine!" Crowds came to see me, and I employed much of my time in conversation, which is a good mode of conveying instruction. In the public meetings for worship the people listened very attentively, and behaved with more decorum than formerly. They really form a very inviting field for a missionary. Surely the oft-told tale of the goodness and love of our Heavenly Father, in giving His own Son to die for us sinners, will, by the power of His Holy Spirit, beget love in some of these heathen hearts.

I had an opportunity of witnessing a summary mode of deciding between the claims of rival suitors. A maidservant of Sekeletu, pronounced by the Makololo to be goodlooking, was sought in marriage by no less than five young men. Sekeletu, happening to be at my waggon when one of these preferred his suit, very coolly ordered all five to stand in a row before the young woman, that she might make her choice. This was an unusual proceeding, as the consent of the young

women is seldom asked. Two refused to stand, apparently because they could not brook the idea of a repulse: the remaining three stood forth, and she unhesitatingly selected the one who was best looking. It was amusing to see the mortification exhibited on the black faces of the unsuccessful candidates, while the spectators greeted them with a hearty laugh.

During the whole of my stay with the Makololo, Sekeletu supplied my wants abundantly, and, when I proposed to depart on the 20th of October, protested against my going off in such a hot sun. "Only wait," said he, "for the first shower, and then I will let you go." The heat had increased considerably during the last three weeks: the thermometer rose in the sun to 138°, and in the shade to 108°. There was much sickness in the town, caused by the stagnant water left by the inundation, which still formed a large pond in the centre. Even the plains between Linyanti and Sesheke had not yet been freed from the floods, which had risen so much higher than usual, that canoes were able to pass from one place to another, for a distance of upwards of 120 miles, in nearly a straight line. Many pools of stagnant water, when disturbed, emitted a strong effluvia of sulphuretted hydrogen. Others exhibited an efflorescence of the nitrate of soda, and also contained abundance of lime, probably from decaying vegetable matter: these may have engendered the malaria which caused the present sickness.

I had plenty of employment, for, besides attending to the severer cases, I had perpetual calls on my attention, as every one of the 7000 inhabitants in the town thought that he might come and at least look at me. My medical intercourse with them enabled me to ascertain their moral status better than a mere religious teacher could do. They did not attempt to hide the evil from me, as men often do from a mere spiritual instructor; but I have found it difficult to come to a conclusion on their character. They perform actions sometimes remarkably good, and sometimes equally the reverse; and I have been unable to ascertain the state of mind in which they did either the one or the other. On the whole, I think they exhibit just the same strange mixture of good and evil as men do elsewhere. There is not among them that constant stream

of benevolence flowing from the rich to the poor which we have in England, nor yet the unostentatious attentions which we have among our own poor to each other. The rich show kindness to the poor only in expectation of services in return; while a poor person who has no relatives will seldom be supplied even with water in illness, and when dead will be dragged out to be devoured by the hyenas, instead of being buried. Relatives alone will condescend to touch a dead body. It would be easy to enumerate instances of inhumanity which I have witnessed. An interesting-looking girl came to my waggon one day, in a state of nudity, and almost a skeleton. She was a captive from another tribe, and had been neglected by her master on the ground that he had been unsuccessful in raising a crop of corn, and had no food to give her. I volunteered to take her; but he said that after I had fed her up a bit he should take her away. I was thus precluded from attending to her wants, and in a day or two after she perished miserably, having gone out a little way from the town, and being too weak to return. Another day I saw a poor captive boy, apparently in a starving condition, going to the water to drink. This case I brought before the chief in council, and found that his emaciation was ascribed to disease and want combined. Sekeletu decided that the owner of this boy should give up his alleged right, rather than destroy the child. When I took him he was so far gone as to be in the cold stage of starvation, but was soon brought round by a little milk given three or four times a day. On leaving Linyanti I handed him over to the charge of his chief Sekeletu, who feeds his servants very well. Having thus far noticed the dark side of the native character, I must not omit to add that I have witnessed frequent acts of kindness and liberality. I have seen instances in which both men and women have taken up little orphans, and carefully reared them as their own children. It would not be difficult therefore by a selection of cases of either kind to make these people appear either excessively good or excessively bad.

I still possessed some of the coffee which I had brought from Angola, and some of the sugar which I had left in my waggon. So long as the sugar lasted, Sekeletu favoured me with his company at meals; but it soon came to an end. The

Makololo were well acquainted with the sugar-cane, but never knew that sugar could be got from it. When I explained the process by which it was produced, Sekeletu gave me an order for a sugar-mill. He also ordered all the different varieties of clothing that he had ever seen, especially a mohair coat, a good rifle, beads, brass-wire, &c. &c., and wound up by saying, "and any other beautiful thing you may see in your own country." As to the quantity of ivory required to execute the commission, I said I feared that a large amount would be necessary. Both he and his councillors replied, "The ivory is all your own; if you leave any in the country it will be your own fault." He was also anxious for horses, as the two I had left with him when I went to Loanda had been of great use to him in hunting the giraffe and eland. The donkeys, which I had brought from Loanda, travelled very well until we reached the Zambesi; but the amount of water they were obliged subsequently to cross exhausted their strength considerably, and we were at last obliged to leave them at Naliele. They excited the unbounded admiration of my men by their discrimination of different kinds of plants, which, as they remarked, "the animals had never before seen in their own country;" and when they indulged in their music they startled the inhabitants more than if they had been lions. As they were not affected by the bite of the tsetse, there was every probability of the experiment of their introduction proving successful.

27th October, 1855.—The first continuous rain of the season commenced during the night with the wind from the N.E., as at Kolobeng on similar occasions. The rainy season was thus begun, and I made ready to go. The mother of Sekeletu prepared a bag of ground-nuts, by frying them in cream with a little salt, as a sort of sandwich for my journey. This is considered food fit for a chief. Others ground the maize from my own garden into meal, and Sekeletu pointed out Sekwébu and Kanyata as the persons who should head the party intended to form my company. Sekwebu had been captured by the Matebele when a little boy, and the tribe in which he was a captive had migrated to the country near Tete: he had travelled along both banks of the Zambesi several times, and was intimately acquainted with the dialects spoken there. He

at once recommended our keeping well away from the river, both on account of the tsetse and the rocky country, and also because the Zambesi beyond the falls turns round to the N.N.E. Mamire, who had married the mother of Sekeletu, on coming to bid me farewell before starting, said, "You are now going among people who cannot be trusted because we have used them badly, but you go with a different message from any they ever heard before, and Jesus will be with you, and help you, though among enemies; and if he carries you safely and brings you and Ma Robert back again, I shall say he has bestowed a great favour upon me. May we obtain a path whereby we may visit and be visited by other tribes, and by white men!"

CHAPTER XXVI.

DESCENT OF THE ZAMBESI.—VICTORIA FALLS.—THE LEKONE.—
ANCIENT LAKES.—THE BATOKA.—THE UNGUESI.

ON the 3rd of November we bade adieu to our friends at Linyanti, and departed accompanied by Sekeletu and 200 followers, who were all fed at his expense. We encountered a fearful thunderstorm as we were passing by night through the district occupied by the tsetse between Linyanti and Sesheke. About ten o'clock it became so pitchy dark that both horses and men were completely blinded, and this darkness was soon intensified by flashes of the most vivid lightning, which momentarily lit up the whole country, spreading over the sky in eight or ten branches at a time, in shape exactly like those of a tree. The horses trembled, snorted, and started, and every new flash revealed the men taking different directions, laughing, and stumbling against each other. The thunder was of that tremendously loud kind peculiar to tropical countries, and which appears to be louder in Africa than in India. The pelting rain, which followed, completed our confusion. After the intense heat of the day we soon felt miserably cold, and turned aside to a fire which had been made by some travellers; for this path is seldom without numbers of strangers passing

to and from the capital. My clothing having gone on with an advanced guard of our party, I lay down on the cold ground, expecting to spend a miserable night, but Sekeletu kindly covered me with his own blanket, and lay uncovered himself. I was much affected by this little act of genuine kindness. If such men must perish by the advance of civilization, as certain races of animals do before others, it is a pity. God grant that ere this time comes they may receive that gospel which is a solace for the soul in death!

At Sesheke, Sekeletu supplied me with twelve oxen—three of which were accustomed to being ridden upon, as well as with hoes, and beads to purchase a canoe, when we should strike the Zambesi beyond the falls. He likewise presented abundance of good fresh butter and honey, and did everything in his power to make me comfortable for the journey.

On the 13th we left Sesheke, some sailing down the river to the confluence of the Chobe, while others drove the cattle along the banks. We spent one night at Mparia, the island at the confluence of the Chobe, which is composed of trap, containing crystals of quartz encrusted with green copper ore. Attempting to proceed down the river next day, we were detained some hours by a strong east wind, which raised waves so large as to threaten to swamp the canoes. The river is here very large and deep, and contains two considerable islands, which seem from either bank to be joined to the opposite shore. While waiting for the wind to moderate, my friends related the traditions of these islands: they were formerly occupied by the Batoka, who used to entice wandering tribes to them, and there starved them: Sebituane on one occasion defeated this project with praiseworthy craft, by compelling the chiefs to remain by his side till all his cattle and people were ferried over. The Barotse believe that at certain parts of the river a tremendous monster lies hid, which lays hold of a canoe and keeps it motionless, in spite of the utmost exertions of the paddlers. Near Nameta they even objected to pass a spot supposed to be haunted, and proceeded along a branch instead of the main stream.

Having descended about ten miles, we came to the island of Nampéne, at the beginning of the rapids, where we were obliged to leave the canoes and proceed along the banks on

foot. The next evening we slept opposite the island of Chondo, and, then crossing the Lekóne or Lekwine, reached early the following morning the island of Sekóte, called Kaláí, which is surrounded by a rocky shore and deep channels, and is large enough to contain a considerable town. On the northern side I found the kotla of the elder Sekote, garnished with numbers of human skulls mounted on poles: a large heap of the crania of hippopotami, the tusks untouched except by time, stood on one side. Near it, under some trees, we saw the grave of Sekote, surrounded with an ornamental fence of seventy large elephants' tusks, planted with the points turned inwards; thirty more were placed over the resting-places of his relatives. Most of these were decaying from the effects of the sun and weather; but a few, which had enjoyed the shade, were in a pretty good condition. I felt inclined to take a specimen of the tusks of the hippopotami, as they were the largest I had ever seen; but I feared lest the people should look upon such an act as sacrilegious, and should regard any unfavourable event which might afterwards occur as a punishment for it. The Batoka believe that Sekote had a pot of medicine buried here, which, when opened, would cause an epidemic in the country. These tyrants acted much on the fears of their people.

As this was the point from which we intended to strike off to the north-east, I resolved on the following day to visit the celebrated falls of the Zambesi. We had often heard of these since we came into the country: indeed one of the questions asked by Sebituane was, "Have you smoke that sounds in your country?" The Makololo had not ventured near enough to examine them, but, viewing them with awe at a distance, said, in reference to the vapour and noise, "Mosi oa tunya," (smoke sounds there), and had hence given them the name of Mosiotunya. Previously to this they had been called Shongwe, the meaning of which I conjecture to be "seething caldron;" but I am not certain of it. Being persuaded that Mr. Oswell and myself were the very first Europeans who ever visited the Zambesi in the heart of the country, I decided to use the same liberty as the Makololo had done, and named them the "Falls of Victoria"—the only English name I have affixed to any part of the country.

Sekeletu intended to accompany me, but, as only one canoe had come instead of the two he had ordered, he resigned it to me. After twenty minutes' sail from Kalai we came in sight of the columns of vapour, rising at a distance of five or six miles. There were five of them, their white bases standing out distinctly against a dark background of wooded hill, while their summits seemed to mingle with the clouds, and, apparently becoming darker as they ascended, made the resemblance to smoke remarkably exact. The whole scene is extremely beautiful; the banks and islands dotted over the river are adorned with sylvan vegetation of every variety of colour and form, and at the period of our visit several trees were spangled over with blossoms. Here, towering over all, stands the great burly baobab, each of whose enormous arms would form the trunk of a large tree; there, beside it, are groups of graceful palms, with their feathery-shaped leaves depicted on the sky, reminding us by their foreign appearance that we are far away from home. In another spot the silvery mohonono, which resembles the cedar of Lebanon, contrasts with the dark colour of the motsouri, whose cypress-form was then dotted over with its pleasant scarlet fruit. Some trees, again, resemble the great spreading oak, while others assume the character of our elms and chesnuts. The falls are bounded on three sides by ridges 300 or 400 feet in height, covered with forest, with the red soil appearing here and there among the trees. When about half a mile from the falls I left the canoe by which I had come thus far, and embarked in a lighter one, manned by natives well acquainted with the rapids, who, availing themselves of the eddies and still pools caused by the jutting rocks, brought me to an island in the middle of the river, and on the very edge of the lip over which the water rolls. In coming hither there was danger of being swept down by the currents which rushed along on each side of the island; but the river was now low, otherwise it would have been impossible to reach the spot. From the end of the island where we first landed, though it was within a few yards of the falls, yet no one could perceive where the vast body of water went; it seemed to lose itself in the earth, disappearing into a transverse fissure only 80 feet wide. Creeping with awe to the extremity of the island, I peered

down into a large rent which had been made from bank to bank of the broad Zambesi, and saw that a stream of a thousand yards broad leaped down a hundred feet, and then became suddenly compressed into a space of fifteen or twenty yards. The falls are simply caused by a crack made in a hard basaltic rock from the right to the left bank of the Zambesi, and then prolonged from the left bank away through thirty or forty miles of hills. It is as though the Thames at London were to plunge into a chasm running at right angles to its general course (in other words in the direction of the Tunnel), and were to be carried along some thirty miles in the same direction, seething and roaring between steep banks of black basaltic rock, only 100 feet apart from each other. In looking down into the fissure on the right of the island, nothing is visible but a dense white cloud, which, at the time we visited the spot, had two bright rainbows on it. From this cloud a great jet of vapour exactly like steam mounted up to a height of 200 or 300 feet; and then condensing, changed its hue to that of dark smoke, and came back in a constant shower, which soon wetted us to the skin.

From the left of the island the water at the bottom may be seen moving away in a white rolling mass to the prolongation of the fissure. A piece of rock has fallen off a spot on the left of the island, and juts out from the water below, and from it I judged the distance which the water falls to be about 100 feet. The walls of this gigantic crack are perpendicular, and composed of one homogeneous mass of rock of a dark-brown colour. The edge of the side over which the water falls is worn off two or three feet, and pieces have fallen away, so as to give it a somewhat serrated appearance. The other edge is in a perfect state except at the left corner, where a piece seems inclined to fall off. On the left side of the island we had a good view of the mass of water which throws up one of the columns of vapour, as it leaps quite clear of the rock, and forms a thick unbroken snow-white fleece all the way to the bottom. In falling it breaks up into a number of separate masses of water, each of which throws off several rays of foam. I can only compare the effect of these descending masses to the appearance of myriads of small comets rushing on in one direction, each drawing after it a long tail of foam. Of the five columns

which I mentioned above, two on the right and one on the left of the island were the largest, and the streams forming them seemed each to exceed in size the Clyde at Stonebyres, when that river is in flood. This was the period of low water in the Zambesi, but, as far as I could guess, it had a width of five or six hundred yards of water, and a depth, at the edge of the fall, of at least three feet. I estimated the total width of the river above the falls at a thousand yards, which is its ascertained width at Tete.

The fissure is said by the Makololo to be very much deeper farther to the eastward; at one part the walls are so sloping that people can go down by descending in a sitting position. The Makololo, on one occasion pursuing some fugitive Batoka, saw them, unable to stop the impetus of their flight at the edge, literally dashed to pieces at the bottom. They beheld the stream like a "white cord" at the bottom, and so far down (probably 300 feet) that they became giddy, and were glad to turn away. With regard to the width of the stream at the bottom I am unable to give any information; from the hardness of the rock it might almost be inferred that the fissure was no broader at bottom than at top, yet it is probable that, beyond the falls, the sides of the fissure may have given way, and that the parts out of sight may be broader than the "white cord" on the surface. There may even be some ramifications of the fissure, which take a portion of the stream quite beneath the rocks; but this I did not learn.

At three spots near these falls, one of them being the island on which we were standing, three Batoka chiefs offered up prayers and sacrifices to the Barimo. They chose their places of prayer within the sound of the roar of the cataract, and in sight of the bright bows in the cloud. They must have looked upon the scene with awe, enhanced by the character of mysteriousness with which the whole river is invested. The words of the canoe-song are—

"The Leeambye! Nobody knows
Whence it comes and whither it goes."

The prismatic colours displayed on the spray, which they had seen elsewhere only as the rainbow, may have led them to

the idea that this was the abode of Deity. Some of the Makololo who went with me near to Gonye looked upon the same sign with awe. When seen in the heavens it is named "motsé oa barimo"—the pestle of the gods. Here they could approach the emblem, and see it stand steadily above the blustering uproar below—a type of Him who sits supreme—alone unchangeable, though ruling over all changing things. But not aware of His true character, they had no admiration of the beautiful and good in their bosoms.

Having feasted my eyes long on the beautiful sight, I returned to my friends at Kalai, and on the following day revisited the island in company with Sekeletu, with the double object of ascertaining its position and of planting on it the peach and apricot-stones and the coffee-seeds that I had brought with me from the west coast. I selected a spot—not too near the chasm, for there the constant deposition of moisture nourished numbers of polypi of a mushroom shape and fleshy consistence—but somewhat back, and there I planted the stones and seeds. I had attempted fruit-trees before, but, when left in charge of my Makololo friends, they were always allowed to wither for want of moisture; here they would not suffer from this cause, as the ground was kept perpetually moist from the spray of the falls. I bargained for a hedge with one of the Makololo, and, if he is faithful, I have great hopes of Mosioatunya's abilities as a nurseryman. My only source of fear is the hippopotami, whose footprints I saw on the island. When the garden was prepared I cut my initials on a tree, and the date 1855. This was the only instance in which I indulged in this piece of vanity. We then went up to Kalai again, and, on passing up, we had a view of the hut where my goods had lain so long in safety. It was under a group of palm-trees, and Sekeletu informed me that, so fully persuaded were most of the Makololo of the presence of dangerous charms in the packages, that, had I not returned to tell them the contrary, they never would have been touched.

20th November.—Sekeletu and his large party having conveyed me thus far, and furnished me with a company of 114 men to carry the tusks to the coast, we bade adieu to the Makololo, and proceeded northwards to the river Lekone. The country

around is very beautiful, and was once well peopled with Batoka, who possessed enormous herds of cattle. They had been, however, displaced by the Makololo, who made a foray among them under Sebituane, and who obtained so many cattle that they could not take any note of the herds of sheep and goats. The tsetse has occasionally been brought by buffaloes into districts where formerly cattle abounded. This was the case here, and we were consequently obliged to travel the first few stages by night, and were unable to detect the nature of the country; the path, however, seemed to lead along the high bank of what may have been the ancient bed of the Zambesi before the fissure was made. The Lekone now winds in it, flowing back towards the centre of the country, in an opposite direction to that of the main stream. It was plain, then, that we were ascending as we went eastward, and I estimated the level of the lower portion of the Lekone to be about 200 feet above that of the Zambesi at the falls, and considerably more than the altitude of Linyanti; consequently, when the river flowed along this ancient bed, instead of through the rent, the whole country between this and the ridge beyond Libebe in the west, and between 17° and 21° S. latitude, was one vast fresh-water lake. There is abundant evidence of the existence of this lake; the whole of this space is paved with a bed of tufa, more or less soft, and, wherever anteaters make deep holes in this ancient bottom, fresh-water shells are thrown out identical with those now existing in the lake Ngami and the Zambesi. The Barotse valley was another lake of a similar nature; a third existed beyond Masiko; and a fourth near the Orange river. The whole of these lakes were drained by means of fissures made in their sides by the upheaval of the country. The fissure made at the Victoria Falls let out the water of this great valley, and left a small patch, the present lake Ngami, in what was probably its deepest portion. The Falls of Gonye furnished an outlet to the lake of the Barotse valley, and so of the other great lakes of remote times. In the west the Congo and the Orange river find their way to the sea through narrow fissures; while in the east, rents, such as those at the Victoria Falls and to the east of Tanganyenka, allow the central waters to escape in that direction. All the African

lakes hitherto discovered are shallow, in consequence of being the mere *residua* of very much larger bodies of water. There can be no doubt that this continent was, in former times, very much more copiously supplied with water than at present, but a natural process of drainage has been going on for ages.

In addition to the indications already noticed, the river-courses themselves bear testimony to the original lacustrine condition of this region, for they bear a strong resemblance to the depressions left in the mud of a shallow pool of water which has been drained off by an artificial duct. None of the rivers in the valley of the Zambesi have slopes down to their beds. Indeed, many are much like the Thames at the Isle of Dogs, only that the Zambesi has to rise twenty or thirty feet before it overflows its meadows. The rivers have each two beds,—one of low water, a simple furrow cut sharply out of the calcareous tufa which lined the channel of the ancient lake; and another of inundation. When the beds of inundation are filled, they assume the appearance of chains of lakes. Many of the rivers are very tortuous in their course, the Chobe and Simah particularly so; and if we may receive the testimony of the natives, they form a complicated network. For instance, they assured me that communications exist between the upper courses of the Simah and the Chobe, and between the Simah and the Kama to the south of the Zambesi, and between the Kafue and the Loangwa to the north of that river. And even though the interlacing may not be quite to the extent believed by the natives, the country is so level and the rivers so tortuous that I see no improbability in the conclusion that there is a network of waters of a very peculiar nature in this region. The reason why I am disposed to place a certain amount of confidence in the native reports is this, that in 1851 Mr. Oswell and I, being unable to ascend the Zambesi, employed the natives to draw a map embodying their ideas of that river. My own subsequent explorations of the river proved the general correctness of this map, and therefore I think that their views of the courses of other rivers are not unworthy of attention.

24th.—At the village of Moyara we left the valley in which the Lekone flows, as it here trends away to the eastward,

while our course is more to the N.E. The country is rough and rocky, the soil being red-sand, which is covered with beautiful green trees yielding an abundance of wild fruits. The father of Moyara was a powerful chief, but the son now sits among the ruins of the town, with four or five wives and very few people. At his hamlet I counted fifty-four human skulls hung on stakes. These were Matebele whom Moyara's father had overpowered when they were suffering from sickness and famine. When looking at these skulls I remarked to Moyara that many of them were those of mere boys, and I asked why his father had killed boys. "To show his fierceness," was the answer. When I told him that this probably would ensure his own death if the Matebele came again, he replied, "When I hear of their coming I shall hide the bones." He was evidently proud of these trophies of his father's ferocity, and I was assured by other Batoka that few strangers ever returned from a visit to this quarter.

When about to leave Moyara on the 25th he brought a root which, when pounded and sprinkled over the oxen, is believed to keep off the tsetse. He promised to show me the plant if I would give him an ox; but as we were travelling, and could not afford the time required for the experiment, I deferred the investigation till I returned. It is probably but an evanescent remedy, and capable of rendering the cattle safe for only one night. Moyara, who is quite a dependant of the Makololo, was compelled by my party to carry a tusk for them. When I relieved him he poured forth a shower of thanks at being allowed to go back to sleep beneath his skulls. Next day we came to Namilanga, where there is a well beneath a very large fig-tree, the shade of which renders the water delightfully cool. This well received its name, meaning "the Well of Joy," from the fact that in former times marauding parties, in returning with cattle, sat down here and were regaled with boyalooa, music, and the lullilooing of the women from the adjacent towns.

All the surrounding country was formerly densely peopled, though now desolate and still. The old head-man of this place told us that when he was a child his father went to Bambala (meaning probably Dambarari, close to Zumbo), where white traders lived, and returned when he had become

a boy of about ten years. He went again, and returned when it was time to knock out his son's teeth. As this takes place at the age of puberty, he must have spent at least five years in each journey. He added that many who went there never returned, because they liked that country better than this. This was the first intimation we had of intercourse with the whites. The Barotse, and all the other tribes in the central valley, have no such tradition as this; nor have either the one or the other any account of a trader's visit to them in ancient times.

All the Batoka tribes follow the curious custom of knocking out the upper front teeth at the age of puberty. This is done by both sexes, and, though the effect of it is that the under lip protrudes in a most unsightly way, no young woman thinks herself accomplished until she has got rid of the upper incisors. This custom gives all the Batoka an uncouth, old-man like appearance, and renders their laugh hideous; yet they are so attached to it, that even Sebituane was unable to eradicate the practice. In spite of his orders that none of the children living under him should be subjected to the custom by their parents, they still appeared in the streets without their incisors, and no one would confess to the deed. The only reason that the Batoka gave for this practice was that they wished to look like oxen, and not like zebras. Whether this was the true reason or not, it is difficult to say; but it is noticeable that the veneration for oxen which prevails in many tribes should here be associated with hatred to the zebra, as among the Bakwains, and that this operation should be performed at the same age that circumcision is in other tribes, and in countries where the latter ceremony is unknown. The custom is so universal that a person who has his teeth is considered ugly, and occasionally, when the Batoka borrowed my looking-glass, the disparaging remark would be made respecting boys or girls who still retained their teeth, "Look at the great teeth!"

The Batoka of the Zambesi are generally very dark in colour, while those who live on the high lands are frequently of a lighter hue. They are very degraded in their appearance, and are not likely to improve, either physically or mentally, while so much addicted to smoking the mutokwane (*Cannabis*

sativa). This pernicious weed has a very strong narcotic effect, causing even a species of frenzy. It is extensively used by all the tribes of the interior, though the violent fit of coughing which follows a couple of puffs of smoke appears distressing to a spectator. They have a disgusting practice of taking a mouthful of water, and squirting it out together with the smoke, and then uttering a string of half-incoherent sentences, usually in self-praise. I was unable to prevail on Sekeletu and the young Makololo to forego its use, although they cannot point to an old man in the tribe who has been addicted to this indulgence. Never having tried it, I cannot describe the pleasurable effects it is said to produce, but the hachshish in use among the Turks is simply an extract of the same plant, and, like opium, produces different effects on different individuals. To some everything appears as it would if viewed through a telescope, while to others things are wonderfully magnified, and in passing over a straw they will lift up their feet as if about to cross the trunk of a tree.

We had a large number of the Batoka of Mokwiné in our party, sent by Sekeletu to carry his tusks, and we also had a small party of Bashubia and Barotse under Tuba Mokoro, who had been furnished by Sekeletu on account of their ability to swim. They carried their paddles with them, and, as the Makololo suggested, were able to swim over the rivers by night and steal canoes, if the inhabitants should be so unreasonable as to refuse to lend them. The different parties who composed my escort assorted together in messes, and received their orders as well as their supplies of food through their head-man. Each party knew its own spot in the encampment: and as this always faced the west, being the direction opposite to that from whence the prevailing winds came, no time was lost in fixing the sheds of our encampment. They each took it in turn to pull grass to make my bed, so that I lay luxuriously.

November 26th.—As the oxen could only move at night, in consequence of a fear of the tsetse, I usually performed the march by day on foot, while some of the men brought on the oxen by night. On coming to the villages under Marimba, an old man, we crossed the Unguesi, a rivulet which, like the