

# TRAVELS ANI) RESEARCHES IN SOUTH AFRICA 



THE VIGTORIA FALLS OF THE: LEEAMBYE OR ZAMBESI RIVEB, CALLED BY THE NATIVES MOSYOATUNYA (SMOKE-SOUNDING)

## missionary travels and researches



Mode in which the femate Hippopotamus carries her calf while young

WITH MAI AND ILLUSTKATIONS

NEW EDITION

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THE MISSIONARY'S ESCAPE FROM THE JION

# JOURNEYS AND RESEARCHES 

IN

## SOUTH AFRICA.

## INTRODUCTION.

## Personal Sketch.-Voyage tu the Cape and algoa Bay.

My own inclination would lead me to say as little as possible about myself; but several friends have suggested that, as the reader likes to know something about an author, a short account of my origin and early life would lend additional interest to this book. Such is my excuse for the following egotism.

My great-grandfather fell at the battle of Culloden, fighting for the old line of kings; and my grandfather was a small farmer in Ulva, where my father was born. It is one of that eluster of the Hebrides thus alluded to by Walter Scott :-
> " And Ulva dark, and Colonsay, And all the group of islets gay That guard famed Staffa round."*

My grandfather was intimately acquainted with all the legends which that great writer has since made use of in the 'Tales of a Grandfather' and other works. As a boy I remember listening to him with delight. Many of his neverendiug stock of stories were wonderfully like those I have since heard while sitting by the African fires. My grandmother used to sing Gaelic songs, some of which, as she believed, had been composed by captive islanders languishing hopelessly annong the Turks.

* Lord of the Isles, canto iv.
grandfather could give particulars of his ancestors fo: ra generations before him; and the only point of the tradi tion I feel proud of is this. One of these poor islanders wa: renowned in the district for great wisdom; and when he wai on his deathbed, he called his children around him and said "I have searched carefully through all the traditions of oun family, and I never could discover that there was a dishonest man among our forefathers. If therefore any of you should takt to dishonest ways, it will not be because it runs in our blood. I leave this precept with you: Be honest." Should I in the following pages perchance fall into errors, I hope they will be legarded as unintentional, and not as indicating that I have forgotten our ancient motto. This event took place at a time when the Highlanders, according to Macaulay, were much like the Cape Caffres, and any one could escape punishment for cattle-stealing by presenting a share of the plunder to hir chieftain. Our ancestors were Roman Catholics; they were made Protestants by the laird coming round with a man who carried a yellow staff, and the new religion went long afterwards, perhaps it does so still, by the name of " the religion of the yellow stick."

Finding his farm in Ulva insufficient to support a numerous family, my grandfather removed to Blantyre Works, a large cotton manufactory on the beautiful Clyde, above Glasgow ; and his sons, who had received the best education the Hebrides afforded, were gladly taken as clerks by the proprietors, Monteith and Co. He himself was highly esteemed for his unflinching honesty, and was employed in the conveyance of large sums of money from Glasgow to the works. In his old age, according to the custom of that company, he was pensioned off, so as to spend his declining years in ease and comfort.

My uncles all entered His Majesty's service during the last French war, either as soldiers or sailors; but my father remained at home, and, though too conscientious ever to grow rich as a small tea-dealer, yet by his winning ways he made the heartstrings of his children twine around him as firmly as if Le could have bestowed upon them every worldly advantage. He reared us in connection with the Kirk of Scotland-an establishment which has been an incalculable blessing to that conintry but he afterwards left it, and for the last twenly
years of his life held the office of deacon of an independent church in Hamilton. He deserved my lasting gratitude for presenting me from infancy with a consistent example of piety like that which is so beautifully portrayed in Burns' 'Cottar's Saturday night.' He died in February, 1856, in peaceful hope of mercy through the death of our Lord and Saviour. I was then on my way below Zumbo, anticipating no greater pleasure than sitting by his cottage fire and telling him my travels. I revere his memory.

The earliest recollection of my mother recalls a picture often seen among the Scottish poor-that of the anxious housewife striving to make both ends meet. At the age of ten I went to the factory as a "piecer." With a part of my first week's wages I purchased Ruddiman's 'Rudiments of Latin,' and studied that language for many years with unabated ardour, at an evening school which met between the hours of eight and ten. I continued my labours when I got home till twelve o'clock, or later, if my mother did not interfere by snatching the books out of my hands. I had to be back in the factory by six in the morning, and my work lasted, with intervals for breakfast and dinner, till eight o'clock at night. I read in this way many of the classical authors, and knew Virgil and Horace better at sixteen than I do now. Our schoolmaster was supported in part by the company; he was attentive and kind, and so moderate in his charges that all who wished for education could obtain it. Some of my schoolfellows are now in positions far above what appeared likely then; and if the system were established in England, it would prove a never ending blessing to the poor.

I read everything I could lay my hands on except novels. scientific works and books of travels were my especial delight; though my father, believing, with many of his time who ought to have known better, that the former were inimical to religion. would have preferred to see me poring over the ' Cloud of II itnesses,' or Boston's 'Fourfold State.' My difference of opinion reached the point of open rebellion, and his last application of the rod was on my refusal to peruse Wıberforce's ' Practical Christianity.' This dislike to religious reading continued for years: but having lighted on those admirable works of Dr. Thomas Dick, 'The Philosophy of

Religion,' and 'The Philosophy of a Future State,' it was gratifying to find that he had enforced my own conviction, that religion and science were friendly to each other.

Great pains had been taken by my parents to instil the doctrines of Christianity into my mind, and I had no difficulty in understanding the theory of free salvation by the atonement of our Saviour, but it was only about this time that I began to feel the necessity of a personal application of the dontrine to my own case. The change was like what it may be supposed would take place were it possible to cure a case of "colour blindness." The fullness with which the pardon of all our guilt is offered in God's book drew forth feelings of affectionate love to Him who bought us with His blood, which in some small measure has influenced my conduct ever since. But I shall not again refer to the inner spiritual life which I believe then began, nor do I intend to specify with any prominence the evangelistic labours to which the love of Christ has since impelled me: this book will speak not so much of what has been done, as of what still remains to be performed before the gospel can be said to be preached to all nations.

In the glow of love which Christianity inspires, I soon resolved to devote my life to the alleviation of human misery. I felt that to be a pioneer of Christianity in China might lead to the material benefit of some portions of that immense empire ; and therefore set myself to obtain a medical education, in order to be qualified for that enterprise.

In identifying the herbs mentioned in my first medical treatise, that extraordinary old work on astrological medicine, Culpeper's 'Herbal,' I had the guidance of a book on the plants of Lanarkshire, by Patrick. Limited as my time was, I managed to scour the whole country-side, "collecting simples." Deep and anxious were my studies on the still more perplexing profundities of astrology, and I got as far into that abyss of fantasies as my author said he dared to lead me. It seemed perilous ground to tread on farther, for the dark hint appeared to my youthful mind to loom towards "selling soul and body to the devil." These excursions, often in cumpany with brothers, one now in Canada, and the other a clergyman in the United States, gratified my intense love of nature; and though we generally returned so hungry and fatigued that the
embryo parson shed tears, we yet discovered so many interesting things that he was always eager to join us.

On one of these exploring tours-long before geology was so popular as it is now-we entered a limestone quarry. It is impossible to describe the wonder with which I began to collect the shells of the carboniferous limestone which crops cut in High Blantyre and Cambuslang. A quarryman looked at me with that pitying eye which the benevolent assume when viewing the insane. "How ever," said I, "did these shells come into these rocks?" "When God made the rocks, He made the shells in them," was the damping reply.

My reading in the factory was carried on by placing the book on a portion of the spinning jenny, so that I could catch sentence after sentence as I passed at my work; I thus kept up a pretty constant study undisturbed by the roar of the machinery. To this part of my education I owe my power of completly abstracting my mind from surrounding noises, so as to read and write with perfect comfort amidst the play of children or the dancing and songs of savages. The labour of cotton-spinning, to which I was promoted in my nineteenth year, was excessively severe on a slim lad, but it was well paid, and enabled me to support myself while attending medical and Greek classes in Glasgow in winter, and the divinity lectures of Dr. Wardlaw in summer. Looking back now on that period of toil, I cannot but feel thankful that it formed such a material part of my early education; and were I to begin life over again, I should like to pass through the same hardy training. I never received a farthing from any one, and should have accomplished my project of going to China as a medical missionary by my own efforts, had not some friends advised my joining the London Missionary Society on account of its unsectarian character. It "sends neither episcopacy, nor presbyterianism, nor independency, but the gospel of Christ to the heathen" This exactly agreed with my ideas of what a Missionary Society ought to do; but it was not without a pang that I offered myself, for it was not agreeable to one accustomed to work his own way to become in a measure dependent on others.

Time and travel have not effaced the feelings of respect I mbibed for the inhabitants of my native village. For mo
rality, honesty, and intelligence, they were in general good specimens of the Scottish poor. In addition to the common run of men, there were some characters of sterling worth and ability, who exerted a most beneficial influence on the youth of the place by imparting gratuitous religious instruction.* Much intelligent interest was felt by the villagers in all public questions, and they furnished a proof that education did not render them an unsafe portion of the population. They much respected those of the neighbouring gentry who, like the late Lord Douglas, placed some confidence in their sense of honour. Through the kindness of that nobleman, the poorest among us could stroll at pleasure over the ancient domains of Bothwell, and other spots hallowed by venerable associations: and few of us could view the dear memorials of the past without feeling that these monuments were our own. The mass of the working people of Scotland have read history, and are no levellers. They rejoice in the memories of "Wallace and Bruce and a' the lave," who are still much revered as the former champions of freedom. While foreigners imagine that we want the spirit to overturn aristocracy, we in truth hate those stupid revolutions which sweep away time-honoured institutions, dear alike to rich and poor.

Having finished the medical curriculum and presented a thesis on a subject which required the use of the stethescope for its diagnosis, I unwittingly procured for myself an examination rather more severe than usual, in consequence of a difference of opinion between me and the examiners as to whether this instrument could do what was asserted. However, I was admitted a Licentiate of Faculty of Physicians and Surgeons, and it was with unfeigned delight I became a member of a profession which with unwearied energy pursues from age to age its endeavours to lessen human woe.

But though now qualified for my original plan; the opium war was raging, and it was deemed inexpedient for me to pro-

[^0]ceed to China. I hisd hoped to gain access to that then closed empire by means of the healing art; but there being no prospect of an early peace, I was induced to turn my thoughts to Africa; I embarked in 1840, and reached the Cape after a voyage of three months. I shortly afterwards went to Algoa Bay, and soon proceeded inland to the Kuruman mission station in the Bechuana country. This station is about seven hundred iniles from Cape Town, and had been established, nearly thirty years before, by Messrs. Hamilton and Moffat. The missionhouses and church are built of stone. The gardens, irrigated by a rivulet, are well stocked with fruit-trees and vines, and yield European vegetables and grain readily. 'The pleasantness of the place is enhanced by the contrast it presents to the surrounding scenery, and the fact that it owes all its beanty to the manual labour of the missionaries. Externally it presents a picture of civilised comfort to the adjacent tribes; and the printing-press, worked by the original founders of the mission, and several younger men who have entered into their labours, gradually diffuses the light of Christianity through the neighbouring region. This oasis became doubly interesting to me, from something like a practical exposition of the text, Mark x. 29; for after nearly four years of African life as a bachelor, I screwed up courage to put a question beneath one of the fruit-trees, the result of which was that in 1844 I became united in marriage to Mr. Moffat's eldest daughter, Mary. Having been born in the country, and being expert in household matters, she was always the best spoke in the wheel at home; and when I took her with me on two occasions to Lake Ngami, and far beyond, she endured more than some who have written large books of travels. In process of time our solitude was cheered by three boys and a girl, and I think it useful to mention that we never had the least difficulty in teaching them to speak English. We made it a rule never to talk to them, nor allow them to talk to us, except in our own tongte. Indeed they rarely attempted to use the native language, though they spoke it perfectly. When they went on board ship they refused to utter another word of it, and have now lost it entirely.

In consequence of droughts at our station further inward, we were mainly dependent for supplies of food on Kuruman, and were often indebted to the fruit-trees there and to Mrs

Moffat's kind foresight for the continuance of good bealth. When visitors arrive at most mission stations, the best of everything is provided for them; but having heard that some graceless fellows, who had been feasted, went back to the colony, saying, "These missionaries live like fighting cocks," we never made any change in our fare even for our friends.

I have spent the sixteen years from 1840 to 1856 in medical and missionary labours in Africa, and my life has not been favourable to literary pursuits. This has made composition irksome to me, and I think I would rather crcos the African continent again than compose another book. It is far easier to travel than to write. I intended on going abroad to continue my studies; but as I could not brook the idea of entering into other men's labours, I undertook, in addition to teaching, building and other handicraft work, which left me generally as much exhausted and unfit for study in the evenings as when I was a cotton-spinner. The want of time for self-improvement was the only regret I experienced during my African career. The reader remembering this will make allowances for the deficiencies of a student who has the vanity to think himself " not.yet too old to learn."

## OHAPTER I.

Reblence at Kuruman, Leprlole, and. Kolobeng.-Sketch of career of Sechele, chief of the Bakwains, and notices of his tride.

The instructions I received from the Directors of the London Missionary Society led me, as soon as I reached Kuruman or Lattakoo, their farthest inland station from the Cape, to turn my attention to the north. Without waiting longer than was necessary to recruit the oxen. which were pretty well tired by the long journey from Algoa Bay, I proceeded, in company with another missionary, to the Bakuéna or Bakwains, whe are a section of the people called Bechuanas.

The Bechuanas are divided into numerons tribes, named
 times they were addicted to animal-worshin like foroqignf, Egyptians. The term Bakatla means "they de the fortay;" Bakuena, " they of the alligator ;" Batlapi." theymof the fism ${ }^{\text {a }}$ When you wish to ascertain what tribe they belong to.ege say, "What do you dance?" from which it may be inferred that dancing was also a part of their ancient rites. Each tribe has a superstitious dread of the animal after which it is called. and never eats its namesake. They use the term "ila,"-hate or dread-in reference to killing it. We find traces of many extinct tribes in individual descendants-such as the Batáu, " they of the lion :" the Banóga, " they of the serpent;" ( 1 ) though no such tribes now exist. The use of the personal pronoun they, Ba-Ma, Wa, Va, or Ova, Am-Ki, \&c., prevails very extensively in the names of tribes in Africa. A single individual is indicated by the terms Mo or Le. Thus Mokwáin is a single person of the Bakwain tribe, and Lekóa is a single white man or Englishman. Makóa is the name for Englishmen.

We did not stay long on our first visit to the Bakwains, but retraced our steps to Kuruman. As the object I had in view was not, however, to be attained by a temporary excursion, I determined to make a fresh start into the interior as soon as possible. Accordingly, after resting three months at Kuruman, which is a kind of head station, I went to a spot called Lepelóle (now Litubarúba). Here I secluded myself from all European society for about six months, in order to obtain a knowledge of the native tongue, and gained by this ordeal an insight into the habits, ways of thinking, laws, and language of the Bakwains, which has proved of incalculable advantage in my intercourse with them ever since.

In this. my second journey to Lepelole-so called from a cavern of that name-I began preparations for a settlement, by making a canal to irrigate gardens, from a stream then flowing copiously, but now quite dry. When the work was well advanced, I went northwards to the Bakáa, Bamangwáto, and Makaláka tribes, living between $22^{\circ}$ and $23^{\circ}$ south lat. The Bakaa mountains had before been visited by a trader, who, with his people, all perished from fever. Most of my journey beyond Shokuane was performed on foot, in consequence of the draught oxen being sick. Some of my companions, who
bad recently joined us, and did not know that I uuderstood a little of their language, were overheard by me discussing my appearance: " He is not strong, he is quite slim, and only appears stout because be puts himself into those bags (trousers); he will soon knock up." This made my Highland blood rise, and I kept them all at the top of their speed for days together, until I heard them express a favourable opinion of my pedestrian powers.

I returned to Kuruman, to bring my luggage to our proposed settiement, and was followed by the news that the tribe of Bakwains, who had shown themselves so friendly towards me, had been driven from Lepelole by the Barolongs. Thus my prospect of forming a settlement there was for the present at an end. One of the periodical wars, for the possession of cattle, had burst forth in the land, and had so changed the relations of the tribes to each other, that I was obliged to set out anew to look for a suitable locality for a station. As we journeyed north again, a comet blazed on our sight, exciting the wonder of every tribe we visited. That of 1816 had been
(2) followed by an irruption of the Matebéle, a tribe of Caffres, and the most cruel enemies the Bechuanas ever knew. The present prodigy they thought might prove as portentous, or might only foreshadow the death of a principal personage. As some of the Bamangwato people had accompanied me to Kuruman, I was obliged to restore them and their goods to their chief Sekómi. This made it necessary to go back to his residence, and, for the first time, I travelled a distance of some hundred miles on ox-back. Returning towards Kuruman, I selected the beautiful valley of Mabotsa (lat. $25^{\circ} 14$ south, long. $26^{\circ} 30^{\prime}$ ?) as the site of a missionary station; and thither I removed in 1843. Here an occurrence took place, which, but for the importunities of friends, I meant to have kept to tell my children when in iny dotage.

The Bakátla of the village Mabotsa were troubled by lions, which leaped into the cattle-pens by night and destroyed their cows. They even attacked the herds in open day. This was so unusual an occurrence that the people believed themselves bewitched--" given," as they said, " into the power of the lions by a neighbouring tribe." They went once to attack the animals, but, being rather cowardly in comparison witli
the Bechuanas in general, they returned without slaying any. It is well known that if one in a troop of lions is killed the remainder leave that part of the country. The next time, therefore, the herds were attacked, I went with the people to encourage them to rid themselves of the annoyance by destroying one of the marauders. We found the animals on a small hill covered with trees. The men formed round it in a circle, and gradually closed up as they advanced. Being below on the plain with a native schoolmaster named Mebálwe, I saw one of the lions sitting on a pieee of rock within the ring. Mebalwe fired at him, and the ball hit the rock on which the animal was sitting. He bit at the spot struck, as a dog does at a stick or stone thrown at him: and then leaping away, broke through the circle and escaped unhurt. If the Bakatla had acted according to the custom of the country, they would have speared him in his attempt to get out, but they were afraid to attack him. When the circle was reformed, we saw two other lions in it; but dared not fire lest we should shoot some of the people. The beasts burst through the line, and, as it was evident the men could not be prevailed on to face their foes, we bent our footsteps towards the village. In going round the end of the hill I saw a lion sitting on a piece of rock, about thirty yards off, with a little bush in front of him. I took a good aim at him through the bush, and fired both barrels into it. The men called out, "He is shot, he is shot!" Others cried, "He has been shot by another man too; let us go to him!" I saw the lion's tail erected in anger, and, turning to the people, said, "Stop a little till 1 load again." When in the act of ramming down the bullets I heard a shout, and, looking half round. I saw the lion in the act of springing upon me. He caught me by the shoulder, and we both came to the ground together. Growling horribly he shook me as a terrier dog does a rat. The shock produced a stupor similar to that which seems to be felt by a mouse after the first gripe of the cat. It caused a sort of dreaminess, in which there was no sense of pain nor feeling of terror, though I was quite conscious of all that was happening. It was like what patients partially under the influence of chloroform describe: they see the operation, but do not feel the knife. This placidity is probably produced in all animals
killed by the carnivora; and if so, is a merciful provision of the Creator for lessening the pain of death. As he had one paw on the back of my head, I turned round to relieve myself of the weight, and saw his eyes directed to Mebalwe, who was aiming at him from a distance of ten or fifteen yards. His gun, which was a flint one, missed fire in both barrels. The animal immediately left me to attack him, and bit his thigh. Another man, whose life I had saved after he had been tossed by a buffalo, attempted to spear the lion, upon which he turned from Mebalwe and seized this fresh foe by the shoulder. At that moment the bullets the beast had received took effect, and he fell down dead. The whole was the work of a few moments, and must have been his paroxysm of dying rage In order to take out the charm from him, the Bakatla on the following day made a huge bonfire over thecarcase, which was declared to be the largest ever seen. Besides crunching the bone intu splinters, eleven of his teeth had penetrated the upper part of my arm. The bite of a lion resembles a gun-shot wound. It is generally followed by a great deal of sloughing and discharge, and ever afterwards pains are felt periodically in the part. I bad on a tartan jacket, which I believe wiped off the virus from the teeth that pierced the flesh, for my two companions in the affray have both suffered from the usual pains, while I have escaped with only the inconvenience of a false joint in my limb. The wound of the man who was bit in the shoulder actually burst forth afresh on the same month of the following year. This curious point deserves the attention of inquirers.

From 1840 to $184 \bar{o}$ I was employed in preparatory labours, and associated with other missionaries at Kuruman and Mabotsa. From 1845 to 1849 I worked at Chonuane and Kolobeng, aided only by Mrs. Livingstone and two native teachers. I attached nyself to the tribe called Bakuena, or Bakwains, the chief of which, named Sechele, was then living with his subjects at a place called Shokuane. I was from the first struck by his intelligence, and by the especial manuer in wbich we felt drawn to each other. He was tall, rather corpulent, had large eyes, and more of the negro features than is common. As this remarkable man has not only
$\rightarrow$ mbraced Christianity, but expounds its doctrines to his people, I will here give a brief sketch of his career.

His great-grandfather Mochoaséle was a great traveller, and the first that ever told the Bakwains of the existence of white men. In his father's lifetime two white men, whom I suppose to have been Dr. Cowan and Captain Donovan, passed through the country (in 1808), and descended the river Limpópo. They and their party all died of fever. The rain-makers, fearing lest their waggons might drive away the rain, ordered them to be thrown into the stream. A son of the chief at whose village they perished remembered, when a boy, partaking of one of the horses, and said it tasted like zebra's flesh. The Bakwains were then rich in cattle; and it is one of the many evidences of the subsequent desiccation of the country, that streams are pointed out where thousands and thousands of cattle formerly drank, and in which water now never flows.

When Sechele was still a boy, his father, also named Mochoasele, was murdered by his own people for taking to himself the wiv 3 of his rich underchiefs. The children were spared, and their friends invited Sebituane, the chief of the Makololo, who was then in thc.se parts, to reinstate them in the chieftainship. He undertook the task, and surrounded the town of the Bakwains by night. Just as it began to dawn his herald proclained in a loud voice that he had come to revenge the death of Mochoasele. His followers, who encircled the place, beat loudly on their shields, and the panic was tremendous. There was a rush like that from a theatre on fire, while the Makololo used their javelins on the terrified fugitives with a dexterity which they alone can employ. Sebituane had given orders that the sons of Mochoasele should te spared. One of the men, meeting Sechele, put him in ward by giving him such a blow on the head with a club as to render him insensible. The usurper was killed, and Sechele was restored to the chieftainship.

He married the daughters of three of his underchiefs who, on account of their blood relationship, had stood by him in his adversity. This is one of the modes adopted for cementing the allegiance of a tribe. They are fond of the relationship to great families. If you meet a party of strangers, and the
head-man's connection with a chief is not proclaimed by his attendants, you may hear him whispering, "'rell him who I am." This usually involves a counting on the fingers of a part of his genealogical tree : and ends in the important announcement that he is half-cousin to sume well-known ruler. The government is patriarchal, each man being, by virtue of paternity, chief of his own children, and the greater their number the more his importance increases. The towns are formed of numerous circle of huts, and near the centre of each circle there is a spot called a"kotla," with a fireplace; here they work, eat, or sit and gossip over the news of the day. A poor man attaches himself to the kotla of a rich one. and is considered a child of the latter. The circle of an underchief is girt by a number of subsidiary circles, and in the middle of all is the great circle of the principal chief, composed of the huts of his wives and blood relations.

On the first occasion in which I ever attempted to hold a public religious service, Sechele remarked that it was the custom of his nation to put questions when any new subject was brought hefore them. He then inquired if my forefathers knew of a future judgment. I replied in the affirmative, and began to describe the scene of the "great white throne, and Him who shall sit on it, from whose face the heaven and earth shall flee away," \&c. "You startle me," he replied; "these words make all my bones to shake; I have no more strength in me: but my forefathers were living at the same time yours were, and how is it that they did not send them word about these terrible things sooner? They all passed axay into darkness without knowing whither they were going." I explained the geographical barriers in the North, and the gradual spread of knowledge from the South, to which we first had access by means of ships; adding my belief that, as Christ had declared, the whole world would be enlightened by the Gospel. Pointing to the great Kalahári desert, he replied, "You never can cross that country to the tribes beyond; it is utterly impossible even for us black men, except in certain seasons, when more than the usual supply of rain falls, and an extraordinary growth of water-melons follows."

As soon as he had an opportunity of learning, he set himself to read with such close application that, from being
comparatively thin, the effect of being addicted to the chase, he became corpulent from want of exercise. He acquired the alphabet on the first day of my residence at Chonuane, and I never went into the town but I was pressed to hear him read some chapters of the Bible. Isaiah was a great favourite with him; and he was wont to exclaim, "He was a fine man. that Isaiah; he knew how to speak."

He seconded my anxiety that his subjects should become converts to Christianity, and said, "Do you imagine these people will ever believe by your merely talking to them? I can make them do nothing except by thrashing them; and if you like, I shall call my head-men, and with our whips of rhinoceros-hide we will soon make them all believe together." 'The idea of using persuasion to subjects, whose opinion he would not have condescended to ask on any other matter, was especially surprising to him. He considered that they ought to be happy to embrace Christianity at his command. During the space of two years and a half he continued to profess to his people his full conviction of its truth, and acted uprightly in all the relations of life. He felt the difficulties of his situation, and often said, "O, I wish you had come to this country before I was entangled in the meshes of our customs!" In fact, he could not get rid of his superfluous wives without (3) appearing to be ungrateful to their parents, who had done so much for him in his adversity.

In the hope of inducing others to accept his new faith, he asked me to have family worship in his house. This I did, and by-and-by I was surprised to hear how well he conducted the prayer in his own simple and beautiful style, for he was a thorough master of his language. At this time we were suffering from the effects of a drought, which was ascribed by the natives to Christianity, and none except his family, whom he ordered to attend, came near his meeting. "In Cormer times," said he, "when a chief was fond of hunting, all his peuple got dogs and became fond of hunting too. If he was fond of dancing or music, all showed a liking to these amusements too. If the chief loved beer, they all rejoiced in strong drink. But in this case it is different. I love the Word of God, and not one of my brethren will join me."

He continued to make a consistent profession for aboui
three years. Perceiving the difficulties of his case, and feeling compassion for the poor women, who were by far the best of our scholars, I had no desire that he should be in a hurry to make a full profession by baptism, and put away all his wives but one. His principal wife, too, was the most unlikely person in the tribe to partake his views. I have seen him again and again send her out of church to put on her gown, and she walked away with her lips shot out, the very picture of unutterable disgust at his new-fangled notions.

When he at last applied for baptism, I asked him how, being acquainted with the Bible, he thought he ought to act. He went home, and gave each of his supernumerary wives new clothing, together with all the goods they had been accustomed to keep in their huts for him. He then sent them to their parents with an intimation that he had no fault to find with them, but that he wished to follow the will of God. When he and his children were baptized, great numbers came to see the ceremony Some thought, from a stupid story which had been circulated by the enemies to Christianity in the south, that the converts would be made to drink an infusion of "dead men's brains," and were astonished to find that only water was used. Seeing several old men in tears during the service, I afterwards asked them the cause of their weeping. They were crying to see their father, as the Scotch remark of a case of suicide, "so far left to himself." They seemed to think that I had thrown the glamour over him and that he had become mine. All the friends of the divorced wives now becams the opponents of our religion. The attendance at school and charch dwindled down to very few besides the family of the chief. They all continued to treat us with respectful kindness, but to Sechele himself they uttered things which, had they ventured on in former times, would, as he often remarked, have cost them their lives.

I pass from the chief to give a rapid sketch of our dealing with his people, the Bakuena, or Bakwains. When first we went to reside at Chonuane about $5 l$. worth of goods were given for a small piece of land sufficient for a garden. This purchase seemed strange to a tribe with whom the idea of buying land was entirely new; but we explained to them that we wished to avoid any cause of future dispute when ground had
become more valuable. They readily acquiesced, and agreod that a similar piece should be allotted to any other missionary; at any other place to which the tribe might remove.

In rur relations with this people we exercised no authority whatever. Our control depended entirely on persuasion; and, having taught them by kind conversation as well as by public instruction, I expected them to do what their own sense of right and wrong dictated. Five instances are known to me in which by our influence on public opinion war was prevented; and where, in individual cases, we failed to do good, the people at least behaved no worse than before. In general they were slow, like all the African people, in coming to a decision on religious subjects; but in questions affecting their worldly affairs they were keenly alive to their own interests. They were stupid in matters which had not come within the sphere of their observation, but in other things they showed more intelligence than our own uneducuted peasantry. They are knowing in cattle, sheep, and goats, and can tell exactly the kind of pasturage suited to each. They distinguish with equal judgment the varieties of voil which are best suited to different kinds of grain. They are familiar with the habits of wild animals, and are well up in the maxims which embody their ideas of political wisdom.

During the first year of our residence at Chonuane we were visited by one of those droughts which occur from time to time in even the most favoured districts of Africa. The belief in the power of rain-making is one of the most deeplyrooted articles of faith in this country. The chief Sechele was himself a noted rain-doctor, and he often assured me that he found it more difficult to give up this superstition than anything else which Christianity required him to abjure. I pointed out to him that the only way to water the gardens was to select some never-failing river, make a canal, and irrigate the adjacent lands. The whole tribe moved accordingly to the Kolobeng, a stream about forty miles distant. The Bakwains made the canal and dam in exchange for my labour in assisting to build a square house for their chief. They also erected their school under my superintendence. Our house at the river Kolobeng, which gave a name to the settlement, was the third I had reared with my own hands

A native smith taught me to weld iron; and having acquired some further information in this art as well as in carpentering and gardening from Mr. Moffat, I was becoming handy at most mechanical employments in addition to medicine and preaching. My wife could make candles, soap, and clothes; and thus we had nearly attained to the indispensable accomplishments of a missionary family in Central Africa, - the husband to be a jack-of-all-trades without doors, and the wife a maid of-all-work within.

In our second year again scarce any rain fell. The third was marked by the same extraordinary drought, aud during these two years the whole downfall did not amount to ten inches. The Kolobeng ran dry, and so many fish died that the hyænas from the country round collected to the feast, and were unable to clear away the putrid mass. A large old alligator was left high and dry in the mud among the victims. The fuurth year was equally unpropitious, the rain being insufficient to bring the grain to maturity. Needles lying out of doors for months did not rust ; and a mixture of sulphuric acid and water, used in a galvanic battery, parted with all its moisture to the air, instead of imbibing more from the atmosphere as would have happened in England. The leaves of the trees drooped, and were soft and shrivelled, though not dead. Those of the mimose were closed at midday, the same as at night. I put the bulb of a thermometer three inches under the soil in the sun at midday, and found that the temperature was from $132^{\circ}$ to $134^{\circ}$. When certain kinds of beetles were placed on the surface, they ran about for a few seconds and expired. But this broiling heat only augmented the never-tiring activity of the long-legged black ants. Where do they get their moisture? Our house was built on a hard ferruginous eonglomerate, in order to be out of the way of the white ant. Their black brethren got in despite the precantion; and not only were they able to moisten soil to the consistency of mortar for the formation of galleries, which they do by night, that they may be screened in the day from the observation of birds as they are passing and repassing towards any vegetable matter they may wish to devour, but their inner chambers were surprisingly humid, though lew there was none, and, our welling being placed on a
rock, they sould have no subterranean passage to the piger which ran about three hundred yards below the hill. Can it lie that they have the power of combining by vital forcethe uxygen and hydrogen of their vegetable food so as to form water?*

Rain, huwever, would not fall; the Bakwains believed that I had bound Sechele with some magic spell, and 1 received deputations of the old counsellors, entreating me to allow him to make only a few showers: "The corn will die if you refuse, and we shall become scattered. Only let him make rain this once, and we shall all, men, women, and children, come to the school and sing and pray as long as you please."

The method by which the natives imagine they can charm the clouds to pour out their refreshing treasure is by burning a variety of preparations, such as charcoal made of bats; inspissated renal deposit $\dagger$ of the mountain coney (Hyrax "apersis), which is also used in the form of pills as a good antispasmodic ; jackals' livers, baboons' and lionk' hearts, hairy calculi from the bowels of old cows, serpents' skins and vertebre, and every kind of tuber, root, and plant to be found in the country. Conscious that civility is useful every where, you kindly state that you think they are mistaker as to their power; the rain-doctor selects a particular bulb, pounds it, and administers a cold infusion to a sheep, which in five minutes afterwards expires in convulsions. Part of the same bulb is converted into smoke, and ascends towards the sky; rain follows in a day or two. The inference is obvious. Were we as much harassed by droughts, the logic would be irresistible in England in 1857.

The Bakwains still went on treating us with kindness, and I am not aware of ever having had an enemy in the tribe. but as they believed that there must be some connection between the presence of "God's Word" in their town and these successive droughts, they looked with no good will at the church-bell. "We like you," said the uncle of Sechele, a very influential and sensible person, "as well as if you had been born among us; you are the only white man we can

[^1]become familiar with; but we wish you to give up that everlasting preaching and praying; we cannot become familiar with that at all. You see we never get rain, while those tribes who never pray as we do obtain abundance." This was a fact; and we often saw it raining on the hills, ten miles off, while it would not look at ns "even with one eye."

The rain-makers believe that medicines act by a mysterious charm, and they are all ready with such arguments as the following.

Medical Doctor.-Hail, friend! How very many medicines you have about you this morning! I hy, you have every medicine in the country here.

Rain Doctor.-Very true, my friend; and I ought: for the whole country needs the rain which I am naking.
M. D.-So you really believe that you can command the clouds? I think that can be done by God alone.
R. D.-We both believe the very same thing. It is God that makes the rain, but I pray to Him by means of these medicines, and, the rain coming, of course it is then mine. It was I who made it for the Bakwains for many years,' when they were at Shokuane; through my wisdom, too, their women became fat and shining. Ask them ; they will tell you the same as I do.
M. D.-But we are distinctly told in the parting words of our Saviour that we can pray to God acceptably in His name alone, and not by means of medicines.
R. I).-Truly! but God told us differently. He made black men first, and did not love us, as he did the white men He made you beautiful, and gave you clothing, and guns, and gunpowder, and horses, and waggons, and many other things about which we know nothing. But toward us He had no heart. He gave us nothing except the assegai, and cattle, and rain-making; and He did not give us hearts like yours. We never love each other. Other tribes place medicines about our country to prevent the rain, so that we may be dispersed by hunger, and go to them, and augment their power. We must dissolve their charms by our medicines. God has given us one little thing which you know nothing of. He has given us the knowledge of certain medicines by which we can make rain. We do not despise those things which


THE HOPO, OR TRAP FUK DRIVING GAME


THE PIT AT THE EXTREMITY OF THE HOPO
you possess, though we are ignorant of them. You ought not to despise our little knowledge, though you are ignorant of it.

This is a brief specimen of their mode of reasoning, which is often remarkably acute. I never succeeded in convincing a single individual of the fallacy of his belief, and the usual effect of discussion is to produce the impression that you yourself are not anxious for rain.

During this long-continued drought the women parted with most of their ornaments to purchase corn from more fortunate tribes. The children scoured the country in search of the numerous bulbs and roots which can sustain life, and the men engaged in hunting. Great numbers of buffaloes, zebras, giraffes, tsessebes, kamas or hartebeests, kokongs or gnus, pallas, rhinoceroses, \&c., congregated at some fountains near Kolobeng, and the trap called "hopo" was constructed for their destruction. The hopo consists of two hedges in the form of the letter V. They are made very high and thick near the angle, where they do not however touch, and at the extremity is a pit six or eight feet deep, and twelve or fifteen in breadth and length. Trunks of trees are laid across the margins of the pit, and form an overlapping border, so as to render it almost impossible for the animal to leap out. The whole is carefully decked with short green rushes. As the hedges are frequently about a mile long, and about as much apart at the opening, a tribe which makes a circle round the country adjacent, and gradually closes up, is almost sure to sweep before it a large body of game. It is driven up witb shouts to the narrow part of the hopo, where men are secreted who throw their javelins into the affrighted herds. The animals rush to the narrow opening presented at the converging hedges, and fall into the pit. Some escape by running over the others, as a Smithfield market dog runs over the backs of the sheep. It is a frightful scene. The men, wild witn excitement, spear the lovely animals with mad delight: others, borwe down by the weight of their dead and dying companions, will every now and then make the whole mass heave by their struggles.
'I'he Bakwains often killed between sixty and seventy head of large game at the different hopos in a single week; and an every one, both rich and poor, partook of the prey, the meat
prevented the bad effects of an exclusively vegetable diet. The district being destitute of salt, the rich alone could afford to buy it, and, when the poor, who had none, were forced to live entirely on roots, they were often troubled with indigestion. The native doctors, aware of the cause of the malady, usually prescribed some of that condiment with their medicines. Either milk or meat was equally remedial, though not so rapid in its effects as salt. Long afterwards, when at two distinct periods I was myself deprived of it for four months, I felt no craving for it, but had a great longing for milk and meat. This continued as long as I was confined to a vegetable diet, and whet I procured a meal of flesh, though boiled in perfectly fresh rain-water, it tasted pleasantly saltish.

In addition to other adverse influences, the necessity of frequent absence for the purpose of either hunting game or collecting roots and fruits, proved a scrious barrier to the progress of the people in knowledge. Sending the Gospel to the heathen must include much more than is implied in the usual picture of a missionary, which is that of a man going about with a Bible under his arm. The promotion of commerce ought to be specially attended to, as this, more speedily than anything else, demolishes that sense of isolaticu which heathenism engenders, and makes the tribes feel themselves mutually dependent on each other. Those laws which still prevent free commercial intercourse among civilized nations seem to be nothing but the remains of cur own heathenism. By commerce we may not only put a stop to the slave-trade, but introduce the negro family into the body corporate of nations, no one member of which can suffer without the others suffering with it. 'This, in both Eastern and Western Africa, would lead to a much larger diffusion of the blessings of civilization than efforts exclusively spinitual and educational confined to any one tribe. These should of course be carried on at the same time at large central and healthy stations. Neither civilization nor Christianity can be oromoted alone In fact, they aro inseparable.

## OHAPTER 11.

Tey Borbs: their infamous treatment of natives.-The Kalahari Desert.-Busimen and Bakalahari.

Ons: of the difficulties with which the mission had to contend was the vicinity of the Boers of the Cashan Mountains, otherwise named "Magaliesberg." The word Boer simply means "farmer," and is not synonymous with our word boor. The Magaliesberg Boers are not to be confounded with the Cape colonists, who sometimes pass by the name, and who for the most part are sober, industrious, and hospitable. Those, however, who have fled from English law, and have been joined by every variety of bad character, are of a very different stamp. Many of them felt aggrieved by the emancipation of their llottentot slaves, and determined to remove to distant localities where they could erect themselves into a republic, and pursue without molestation the "proper treatment of the blacks." This "proper treatment" has always involved the essential element of slavery,-compulsory unpaid labour.

One section of this class of persons penetrated the interior as far as the Cashan Mountains, whence a Zulu or Caffre chief, named Mosilikátze, had been expelled by the well-known Caffre Dingaan. They canie with the prestige of white men and deliverers; but the Bechuanas, who had just escaped the hard sway of the tyrannical Caffres, suon found, as they expressed it, "that Mosilikatze was cruel to his enemies, and kind to those he conquered; but that the Boers destroyed their enemies, and made slaves of their friends." The tribes, while retaining the semblance of independence, are forced to perform gratuitously all the labour of the fields, and have at the same time to support themselves. I have myself seen Boers come to a village, and, according to their custom, demand twenty or thirty women to weed their gardens These poor creatures accordingly proceeded to the scene of unrequited toil, carrying their own food on their heads, theis
children on their backs, and instruments of labour on their shoulders. "We make the people work for us," said the Boers," in consideration of allowing them to live in oris country." During the several journeys I made to the enslaved tribes I was invariably treated by the whites with respect; but it is most unfortunate that they should have been left uncared for by their own Church till they have become as degraded as the blacks, whom the stupid prejudice against colour leads them to detest.

This new and mean species of slavery which they have adopted serves to supply the lack of field-labour only. The demand for domestic servants must be met by forays on tribes which have good supplies of cattle. The individuals among the Boers who would not engage in the raid for the sake of capturing slaves can seldom resist the two-fold plea of an intended uprising of the doomed tribe, and the prospect of a handsome share of the pilfered herds. It is difficult to conceive that men possessing the common attributes of humanity (and these Boers are by no means destitute of the better feelings of our nature) should set out, after caressing their wives and children, and proceed to shoot down men and women whose affections are as warm as their own. It was long before I could give credit to the tales of bloodshed told by native witnesses; but when I heard the Boers either bewailing or boasting the bloody scenes in which they had themselves been actors, I was compelled to admit the validity of the testimony. They are all traditionally religious, and trace their descent from some of the best men (Huguenots and Dutch) the world ever saw. In their own estimation they are the chosen people of God, and all the coloured race are "black property" or "creatures"-heathen given to them for an inheritance. Living in the midst of a much more numerous native population and at fountains removed many miles from each other, the Boers feel themselves insecure; and when they receive reports against any tribe from some dissatisfied black the direst vengeance appears to the most mildly disposed among them a simple measure of self-defence. However bloody the massacre, no qualms of conscience ensue. Indeed the leader, the late Mr. Hendrick Potgeiter, believed himself to be the great peacemaker of the country. There is not, how-
ever, a single instance of the Bechuanas attacking either he Boers or the English. They have defended themselves wheu assailed, but have never engaged in offensive war with Europeans. We have a different tale to tell of the Caffres, and the result has been that from the hour they obtained fire-arms not one Boer has attempted to settle in Caffreland, or even to face the enemy in the field. These magnanimous colonists have manifested a marked antipathy to anything but "longshot" warfare, and, sidling away in their emigrations towards the more effeminate Bechuanas, have left their quarrels with the Caffres to be fought out by the English, and the wars to be paid for by English gold.

The Bakwains at Kolobeng had the spectacle of various tribes enslaved before their eyes. 'Ihe Bakatla, the Batlókua, the Bahúkeng, the Bamosétla, and two other tribes were all groaning under the oppression of unrequited labour. This would not have been felt as so great an evil, but that the young men, as the only means of rising to importance, were in the habit of sallying forth to procure work in the Cape Colony. After labouring rhere three or four years, in building stone dykes and dams for the Dutch farmers, they were content if they could return at the end of that time with as many cows. On presenting one to their chief they ranked ever afterwards as respectable men in the tribe. These volunteers were highly esteemed among the Dutch, under the name of Mantátees, and received a shilling a day and a large loaf of bread between six of them. The system was distasteful to the Boers of the Cashan or Magaliesberg country. "If they want," it was said, "to work, let them work for us their masters," though these masters boasted that they would not pay for the services rendered. A law was made, in consequence, to deprive these poor fellows of their hardly-earned cattle, and compel them to labour gratis at home. Fraud becomes as natural to the slave-owner as "paying one's way" is to the rest of mankind.

Wherever a missionary lives, traders are sure to come; they are mutually dependent, and each aids the other: but experience shows that the two employments cannot well be combined in the same person. Nothing would be more fair, and apostolical too, than that the man who devotes his time
to the spiritual welfare of a people should derive tempora] advantage from upright commerce; but the present system of missions renders it inexpedient. No missionary with whom I ever came in contact traded; and while the traders, whom we introduced into the country, waxed rich, the missionaries have invariably remained poor. The Jesuits in Africa were wiser in their generation. They were a large community, and went on the plan of devuting the abilities of every one to that pursuit in which he was most likely to excel. One studied natural history, another literature, and a third, skilful in barter, was sent in search of ivory and gold-dust, that while pushing forward the mission to distant tribes he might yet afford pecuniary aid to the brethren whom he had left at the central settlement.* We Protestants provide missionaries with a bare sub.istence, and are unsparing in our praise of them fur nut being worldly-minded when our niggardliness compels them to live as did the prodigal son. I do not need to speak for myself, and for that very reason I feel at liberty to interpose a word in behalf of others. It is quite possible to find men whose devotion to the work of spreading the Gospel will make them ready to submit to any sacrifice. What, however, can be thought of the justice of (hristians who not only work their agents at the lowest terms, but regard what they give as charity!
linglish traders had sold the Bakwains what the Poers most dread,-arms and ammunition. When the guns amounted to five, so much alarm was excited among our neighbours that an expedition of several hundred whites was seriously planned to seize these weapons. Knowing that their owners would have fled to the Kalahari Desert rather than deliver them up, I proceeded to the commandant, Mr. Gert Krieger, and prevailed upon him to defer the attack. He wished in return that I should act as a spy over the people. I explained the impussibility of compliance, even if my principles had not stood in the way, by referring to an instance in which Sechele had gone, unknown to me, with his whole force, to punish a

[^2]rebellious under-chief. This happened wher we had just come to live with the Bakwains Sechele consulted me, and I advised mild measures. The messengers he despatched to the rebel were answered by a taunt: "He only pretends to wish to follow the advice of the teacher: Sechele is a coward; let lim come and fight if he dare." On the next offence Sechele told me he was going to hunt elephants; and asked the loan ,f a black-metal pot to cook with. I knew nothing further until we saw the Bakwains carrying home their wounded, and heard some of the women uttering the loud wail of sorrow for the dead, while others pealed forth the clear scream of victory. It was then clear that Sechele had attacked and driven away the rebel.

Having made this statement to the commandant, I had soon an example how quickly a story can grow among idle people. The five guns were, within one month, multiplied into five hundred, and the cooking-pot, now in a museum at Cape Town, was magnified into a caunon; "I had myself confessed to the loan." Where the five hundred guns came from it was easy to divine; for, as I used a sextant, my connection with Government was a thing of course ; and, as I must know all Her Majesty's counsels, I was questioned on the indistinct rumours which had reached them of Lord Rosse's telescope. "What right," said they, "has your government to set up that large glass at the Cape to look after us behind the Cashan Mountains?" Many of the Boers visited us afterwards at Kolobeng, some for medical advice, and others to trade in those very muskets and powder which their own laws and policy forbad them to sell to the natives. Many attempts were made during these visits to elicit the truth respecting the guns and cannon. Espionage, which is a proof of barbarism, is as well developed among the savages as in Austria or Russia, and every mau in a tribe feels himself bound to tell the chief all that comes to his knowledge. Sechele was therefore acquainted with every question put to his people, and asked me how they ought to answer. My reply was, "Tel] the truth." Every one then declared that no cannon existed; and our friends, judging of the denial by what they themselves would have said in similar circumstances, were only confirmed in the opinion that the Bakwains possessed artillerv.

This was in soms degree beneficial to us; the fear it :nspired prevented any foray in our direction for eight years.

During the whole of that period no winter passed without some of the tribes in the East country being plundered of both cattle and children by the Boers. It is only in winter, when horses can be used without danger of dying from disease, that these expeditions can take place. One or two friendly tribes are forced to accompany a party of mounted Boers, and are ranged in front to form "a shield." The Boers then coolly fire over their heads till the devoted people flee and leave cattle, wives, and children to the captors. This was done in nine cases during my residence in the interior, and on no occasion was a drop of Boer blood shed. Letters were repeatedly sent by them to Sechele ordering him to surrender himself as their vassal, and stop English traders from proceeding into the country with firearms for sale. He replied, "I was made an independent chief and placed here by God, and not by you. I was never conquered by Mosilikatze, as those tribes whom you rule over ; and the English are my friends. I get everything I wish from them. I cannot hinder them from going where they like."

I attempted to benefit the tribes among the Boers of Magaliesberg by placing native teachers at different points. "You must teach the blacks," said Mr. Hendrick Potgeiter, the commandant in chief, " that they are not equal to us." Other Boers said, "I might as well teach the baboons on the rocks as the Africans." These sneerers declined my proposition to examine whether they or my native attendants could read best. When Sir George Catheart proclaimed the independence of the Boers, a treaty was made with them by which they undertook to allow the English a free passage to the country beyond, and to abolish slavery. "But what about the missionaries?" they inquired. "You may do as you please with them," is said to have been the answer of the "Commissioner." This remark, if uttered at all, was probably made in joke. The general belief in its seriousness doubtless led to the destruction of three mission stations immediately after. The Boers, four hundred in number, were sent by thlate Mr. Pretorius to attack the Bakwains in 1852, and, besideis alaughtering a considerable number of adults, carried off two
hundred of our school-children into slavery. Tne people under Sechele defended themselves till the approach of night enabled them to flee to the mountains; and having killed a number of the enemy, the first ever slain by Bechuanas, I had the credit of having taught them to destroy Boers! My house was plundered in revenge. English gentlemen, who had come in the footsteps of Mr. Cumming to hunt in the country beyond, and had left large quantities of stores in the keeping of the natives, were robbed of everything; and when they came back to Kolobeng found the skeletons of the guardians strewed about the place. The books of a good librarymy solace in our solitude-were torn to pieces and scattered about. My stock of medicines was smashed; and all our furniture and clothing were carried off and sold by public auction to pay the expenses of the foray.

A short sketch of African housekeeping may not prove uninteresting. The entire absence of shops obliged us to make everything we needed from the raw materials. If you want bricks to build a house you must proceed to the field, cut down a tree, and saw it into planks to make the brick-moulds. The people cannot assist yon much; for, thongh willing to labour for wages, the Bakwains have a curious inability to make things square. As with all Bechuanas, their cwn dwellings are round. I erected three large houses at different times, and every brick and stick had to be put square by my own hand. A house of decent dimensions, costing an immense amount of manual labour, is necessary to secure the respect of the natives.

Bread is often baked in an extempure oven constructed by scooping out a large hole in an anthill, and using a slab of stone for a door. Another plan is to make a good fire on the ground, and when it is thoroughly heated to place the dough in a short-handled frying-pan, or simply on the hot ashes. A metal pot is then put over it, and a small fire is kindled on the top.

We made our own candles, and soap was procured from the ashes of the plant salsola, or else from wood-ashes, which in Africa contain so little alkaline matter that the boiling of successive leys has to be continued for a month or six weeks before the fat is saponified. There was not much hardship in
being thus dependent on our own ingenuity, and married life is all the sweeter when so many comforts emanate directly from the thrifty housewife's hands.

We rose early, because, however hot the day, the evening, night, and morning at Kolobeng were deliciously refreshing. You can sit out till midnight with no fear of coughs or rheumatism. After family worship and breakfast between six and seven, we kept school, men, women, and children being all invited. This lasted till eleven o'clock. The missionary's wife then betook herself to her domestic affairs, and the missionary engaged in some manual labour, as that of a smith, carpenter, or gardener. If he did jobs for the people, they worked for him in iurn and exchanged their unskilled labour for his skilled. Dinner and an hour's rest succeeded, when the wife attended her infant-school, which the young liked amazingly, and generally mustered a hundred strong; or she varied it with sewing-classes for the girls, which was equally well relished. After sunset the husband went into the town to converse, either on general subjects or on religion. We had a public service on three nights of the week, and on another instruction on secular subjects aided by pictures and specimens. In addition to these duties we prescribed for the sick and furnished food to the poor. The smallest acts of friendship, even an obliging word and civil look, are, as St. Xavier thought, no despicable part of the missionary armour. Nor ought the good opinion of the most abject to be neglected when politeness may secure it. Their good word in the aggregate forms a reputation which procures favour fur the Gospel. Show kindness to the reckless opponents of Christianity on the bed of sickness, and they never can become your personal enemies. Here, if anywhere, love begets love.

When at Kolobeng, during the droughts we were entirely dependent on Kuraman for supplies of corn. Once we were reduced to living on bran, which we had to grind three times over to reduce it to fine meal. We were mnch in want of animal food, which here seems essential to health. We craved as large a quantity as in England, and no bilious effects folluw the free use of flesh as in other hot climates. A vecretable diet causes acidity and heartburn. Secheln had by
right of chieftainship the breast of every animal slaughtered gither at home or abroad, and he obligingly sent us a liberal share during the whule period of our sojourn. But these supplies were so irregular, that we were sometimes fain to accept a dish of locusts. They have a strong vegetable taste, which varies with the plants on which they feed. There is a physiological reason why lucusts and honey shonld be eaten together : the laxative properties of the last correct the astringent qualities of the first. Locusts are often roasted and pounded into meal, when they will keep for months. Boiled they are disagreeable; but when roasted I much prefer them to shrimps, though I would avoid buth if possible. The scarcity of meat was felt more especially by my children; and the natives, to show their sympathy, often gave them a large kind of caterpillar, which they seemed to relish. These insects could not be unwholesome, for the natives devoured them in large quantities themselves.

Another dainty of which our children partook with eagerness was the enormous frog called "Matlamétlo."* When cooked it looks like a chicken. These creatures are supposed by the natives to fall down from thunder-clouds, because, after heavy storms, the pools, being filled with water which is retained a few days, become instantly alive with this loud-croaking game. As they rush forth into the hollows into which the rain is falling, and the Bechuanas are cowering under their skin garments, the sudden chorus struck up from all sides seems to indicate a descent from the heavens. The phenomenon takes place in the driest parts of the desert, where to an ordinary observer there is not a sign of life. I afterwards learned from the Bushmen that the matlametlo makes a hole at the root of certain bushes, and th.ere ensconces himself during the months of drought. As he seldom emerges. a large variety of spider takes advantage of the hole, and makes its web across the orifice. No one but a Bushman would think of searching bencath a spider's web for a frog.

It is remarkable that more attempts have not been made to domesticate some of the African animals in England. The

[^3]eland, the most magnificent of antelopes, would grace the parks of our nobility, and its excellent flesh be a delicacy at their tables. The noble esculent frog might prove a welcome addition to the eatables of France.

The scavenger beetle is one of the most useful of insects, for it effectually answers the object indicated by the name. Where they abound, as at Kuruman, the villages are clean. No sooner are animal excretions dropped than, attracted by the scent, the scavengers are heard coming booming up the wind. They roll away the droppings of cattle in round pieces often as large as billiard-balls till they reach a place proper by its softness for excavating. They then dig the soil out from beneath the ball, and, when it is let down into the ground and covered, they lay their eggs within the mass. The larve devour the inside of their little globe before coming up to the surface to begin life for themselves. The beetles with their gigantic balls look like Atlas with the world on his shoulders. Their progression, however, is backwards, and, keeping their heads down, they push with the hind legs, as if a boy should roll a snowball with his feet, while standing on his crown.

In trying to benefit the tribes living under the Boers of the Cashan mountains, I twice performed a journey of about three hundred miles to the eastward of Kolobeng. Sechele had become so obnoxious to the whites, that, though anxious to accompany $m e$, he dared not trust himself among them. His independence and love of the English were his only faults. In my last journey he gave me two servants on parting, "to be," as he said, "his arms to serve me," and expressed his regret that he could not go himself. "Suppose we went north," I said, "would you come?" This was the first time I had thought of crossing the Desert to Lake Ngami.*

When I reached the Boers and spoke to Mr. Hendrick Potgeiter of the danger of hindering the Gospel of Christ among these poor savages, he berame greatly exciied. He

[^4]threatened to attack any tribe that might receive a native teacher, yet promised to use his influence to prevent those under him from throwing obstacles in our way. I plainly perceived that nothing more could be done, and commenced collecting information about the Desert, with the intention of crossing it. Sekomi, the chief of the Bamangwato, was acquainted with a route which he kept carefully concealed, because the Lake country abounded in ivory, which he obtained in large quantities at small cost to himself. Sechele, who valued highly everything European, and was always alive to his own interest, was anxious to get a share of the trade. In age and family he was the superior of Sekomi; for when the original tribe broke up into Bamangwato, Bangwakétse, and Bakwains. the latter retained the hereditary chieftainship. If the two were travelling or hunting together, Sechele would take, by right, the heads of the game shot by Sekomi.

Sechele, by my advice, sent men to Sekomi, to ask leave for me to pass along his path. This request was accompanied with the present of an ox. Sekomi's mother, who possesses great influence over him, refused permission, because she had not been propitiated. An ox was therefore sent for both Sekomi and his mother, but with no better success. "The Matebele," it was said, "the mortal enemies of the Bechuanas, are in the direction of the lake, and should they kill the white man we shall incur great blame from all his nation."

The exact position of the Lake Ngami had, for half a century at least, been correctly pointed out by the natives, who had visited it when rains were more copious in the Desert than in recent times. Many attempts had since been made to reach it, but this was found impossible, even by Griquas, who may be supposed to be more capable of enduring thirst than Europeans. It was clear that our only chance of success was by going round the Desert instead of through it. I communicated my intention to an African traveller, Colonel Steele, and he made it known to another gentleman, Mr. Oswell. He undertook to defray the entire expenses of the guides, and fully executed his generous intention. When he joined me he brought Mr. Murray with him.

Before narrating the incidents of the journey I must give
some account of the great Kalahari Desert. The space from the Orange River in the south, lat. $29^{\circ}$, to Lake Ngami in the north, and from about $24^{\circ}$ east long. to near the west coast, has leen called a desert because, though intersected by the beds of ancient rivers, it coutains no running water, and very little in wells. Far from being destitute of vegetation, it is covered with grass and creeping plants ; and there are large patches of bushes and even trees. It is remarkably flat, and prodigious herds of antelopes, which require little or no water, roam over the trackless plains. The Bushmen and Bakalahari prey on the game and on the countless rodentia and small species of the feline race. In general the soil is light-coloured soft sand, nearly pure silica. The beds of the former streams contain much alluvial soil, which being baked hard by the burning sun, rain-water in some places stands in pools for several months in the year.

The quantity of grass which grows on this remarkable region is astonishing, even to those who are familiar with India. It usually rises in tufts with bare spaces between, or the intervals are occupied by the creeping-plants, the roots of which, being buried far beneath the soil, feel little the effects of the scorching sun. The ncmber of these which have tuberous roots is very great; a structure which is intended to supply moisture during the long droughts. One of the cucurbitace:, which produces a small scarlet-coloured eatable sucumber, though not generally tuber-bearing, becomes so here, where that appendage is necessary to act as a reservoir for preserving its life. The same thing vecurs in Angola with a species of grape-bearing vine. A vegetable, named Leroshúa, is a blessing to the inhabitants of the Desert. It is a small plant, with linear leaves. and has a stalk not thicker than a crow's-quill; but on digging down a foot or eighteen inches beneath the soil we come to a tuber often as large as the head of a young child. When the rind is removed we find a mass of cellular tissue, filled with fluid much like that in a young turnip, and which, owing to the depth it grows beneath the surface, is generally deliciously cool. Another kind, named Mokuri, is met with in other parts of the country, and produces a number of tubers. some as big as a man's head, in a circle, of which the circumference is a yard or more from the
stem. The matives strike the ground with stones, and the nature of the sound tells them where to dig.

But the most surprising plant of the Desert is the watermelun, "Lengwe or leeme" (Cucumis caffer). When murt than the usual quantity of rain falls, vast tracts of the country are literally covered with these melons. This happens commonly every ten or eleven years. Then animals of every sort and name, including man, rejoice in the rich supply. The elephant, true lord of the forest, and the different species of rhinoceros, revel in the fruit, althongh naturally so diverse in their choice of pasture. The various kinds of antelopes feed on them with avidity, aud lions, byænas, jackals, and mice, all seem to appreciate the common blessing. These melons are not, howerer, all eatable; some being sweet, and others bitter. The natives select them by striking them with a hatchet. and applying the tongue to the gashes. This peculiarity of one species of plants bearing both sweet and bitter fruits occurs also in a cucumber. It is about four inches long, and about an inch and a half in diameter, and is of a bright scarlet col-ur when ripe. Eren melons in a garden may be made bitter by a few bitter kengwe in the vicinity, for the bees convey the pollen from wne to the other.

The inhabitants of this tract consist of Bushmen and Baka- (5) lahari. The former are probably the aborigines of the southern portion of the continent, the latter the remnants of the first emigration of Bechuanas. The Bushmen live in the Desert from choice, the Bakalahari from compulsion, and both possess an intense love of liberty. The liushmen are distinct in language, race, habits, and appearance, and are the only real nomads in the countiy. 'They never cultivate the soil nor rear any animal, save wretched dogs. They are intimately acquainted with the habits of the game, and chiefly subsist upon their flesh, eked out by the roots and beans and fruits of the Desert. Those who inhabit the hot sandy plains have generally thin, wiry forms, and are capable of great exertion and of severe privations. Many are of low stature, though not dwarfish. The specimens brought to Earope have been selected, like costermongers' dogs, on account of their extreme ugliness. That they are, to some extent, like babooms is true, just as these are in some points frightfully human.

The Bakalahari are supposed to be the oldest of the Be chuana tribes, and are said to have possessed enormous herds of the large horned cattle mentioned by Bruce, until they were driven into the Desert by a fresh migration of their own nation. Living for centuries on the same plains with the Bushmen, subjected to the same influences of climate, enduring the same thirst, and subsisting on similar food, they seem to supply a proof that locality is not always sufficient to account for difference in races. The Bakalahari retain in undying vigour the Bechuana love for agriculture and domestic animals. They hoe their gardens annually, though often all they can hope for is a supply of melons and pumpkins. They carefully rear small herds of goats, and I have seen them lift water for them out of small wells with a bit of ostrich eggshell. They generally attach themselves to influential men in the different Bechuana tribes, adjacent to their desert home, in order to obtain supplies of spears, knives, tobacco, and dogs, in exchange for the skins of the animals they may kill. These include two species of jackal, the dark and the golden ; the former, " motlose" (Megalotis capensis or Cape fennec), has the warmest fur the country yields; the latter, "pukuye" (Canis mesomelas and C.aureus), is very handsome when made into the mantle called kaross. Next in value follow the " tsipa" or small ocelot (Felis nigripes), the "tuane" or lynx, the wild rat, the spotted cat, and others. They procure in addition great numbers of puti (düiker) and puruhuru (steinbuck) skins, besides those of lions, leopards, panthers, and hyænas. During the time I was in the Bechuana country between twenty and thirty thousand skins were made up into kirosses. Part of them were worn by the inhabitants, and part sold to traders: many, I believe, find their way to China. The Bakwains bought tobacco from the eastern tribes, purchased skins with it from the Bakalahari, tanned them, and sewed them into karosses. When made up they carried therr. south and purchased heifer-calves with them, cows tcing the highest form of riches known. I have often been asked "if Queen Victoria had many cows." Injustice is often perpetrated by one tribe of Bechuanas compelling the Bakalahari of another tribe to deliver up skins which they may be keeping for their friends. They are a timid race, and in bodily levelopment often resemble the aborigines of Australia.

They have thin legs and arms, and large protruding abdomens, caused by the coarse indigestible food they eat. Their children's eyes lack lustre. I never saw them at play. A few Bechuanas may go into a village of Bakalahari, and domineer over the whole with impunity; but when these same adventurers meet the Bushmen, they are fain to change their manners to fawning sycophancy. They know that, if the request for tobacco is refused, these free sons of the Desert may settle the point by a poisoned arrow.

The dread of visits from Bechuanas of strange tribes causes the Bakalahari to reside far from water; and they not unfrequently hide their supplies by filling the pits with sand and making a fire over the spot. When they wish to draw water the women come with a bag or net on their backs, in which are twenty or thirty ostrich egg-shells, with a hole in the end of each of the size of a finger. Tying a bunch of grass to one end of a reed about two feet long, they insert it in a hole dug as deep as the arm will reach, and ram the wet sand firmly round it. The grass absorbs the water, which is then sucked up by the woman through the reed. A straw goes from her mouth to one of the egg-shells on the ground, and, as she draws mouthful after mouthful from below, she makes the water trickle along the outside of the straw into the shell. I have visited villages where, had we acted a domincering part and rummaged every hut, we should have found nothing; but by waiting with patience the people were led to form a favourable opinion of us, and would bring out a shellful of the precious fluid.

Besides supporting multitudes of animals, the so-called Desert contributes something to the market of the world, and has proved a refuge to many a fugitive tribe when their lands were overrun by the tribe of true Caffres called Matebele. The Bakwains, the Bangwaketze, and the Bamangwato all fled thither; and the Matebele marauders, who came from the well-watered east, perished by hundreds in their attempts to follow them. One of the Bangwaketze chiefs, more wily than the rest, sent false guides to lead them on a track where, for hundreds of miles, not a drop of water could be found, and they were parched to death in consequence. Many of the Bakwains themselves sunk under the privation, and their old
men, who could have told us ancient stories, died in these flights. An intelligent Mokwain informed me that a party of his tribe came in a state of burning thirst to a village of Bushmen and demanded water. The Bushmen replied that they never drank any. Their visitors watcked tien to no purpose night and day. The Bakwains at last were compelled to exclaim, "Yak! yak! these are not inen; let us go." Probably the Bushmen had contrived to draw secretly upon a store which was hidden under ground.

## CHAP'IER III.

Cbosarg the Desert.-The Zouga.-Discovery of Lake Naami.Return to Kolobeng.

Such was the Desert which we were now preparing to cross,a region formerly terrible to the Bechuanas from the numbers of serpents which infested it, and from the intense thirst which these people often endured when their water-vessels were insufficient to hold the requisite supply till the next well could be reached. Just before the arrival of my companions a party of the people of the lake came to Kolobeng to ask me to visit their country. They brought flaming accounts of the quantities of ivory to be found there, and talked of cattle-pens made of elephants' tusks of enormous size.

We started for the unknown region on the 1st of June, 1849. Passing through a range of tree-covered hills to Shokuane, formerly the residence of the Bakwains, we soon after entered on the high road to the Bamangwato, which lies mainly in the bed of an ancient river or wady that must formerly have flowed N. to S. The adjacent country is perfectly flat. The soil is sandy, and there are here and there indications that at spots which now afford no water there were formerly wells and cattle-stations. The land is covered with open forest, bush, and abundance of grass. The trees are mostly a kind of acacia called "Monáto," which appears a little to the south of this region, and is common as far as Angola. A large caterpillar, called "Nato," feeds by night on the leaves, and
hides itself by day at the root in the sand, in order to escapt the piercing rays of the sun. The people are fond of it when ruasted, on account of its pleasant vegetable taste. When about to pass into the chrysalis state it buries itself in the suil, and comes forth, if left undisturbed, a beautiful butterfly. I sometimes referred to the transmutation with good effect as an illustration of our own resurrection.

Boatlanáma, our next station. is a lovely spot in this otherwise arid region. The wells from which we had to lift the water for our cattle were deep, but well filled. A few villages of Bakalahari were found near them, and great numbers of pallahs, springbucks, guinea-fowl, and small monkeys.

Lopépe came next, and afforded another proof of the desiccation of the country. 'The first time I passed bere there was a large pool with a stream flowing out of it to the south, and now it was with difficulty that we could get our cattle watered, by digging down in the buttom of a well.

At Mashüe we came upon a never-failing supply of pure water in a sandstone rocky hollow. Here we left the road tu the Bamangwato hills, and struck away to the north into the Desert. Having watered the cattle at a well called Lubotáni, we next proceeded to Serotli, a real Kalahari fountain. The country around is covered with bushes and trees of a kind of leguminosæ, with lilac flowers. The soil is soft white sand, very trying to the strength of the oxen, as the wheels sink into it over the felloes. At Serotli we found only a few hollows like those made by the buffalo and rhinuceros when they roll themselves in the mud. In a corner of one of these there was a little water, which would have been quickly lapped up ly our dugs, had we not driven them away. This was all the apparent supply for some eighty oxen, twenty horses, and about a score of men, and it was to serve for the next seventy miles-a journey of three days with the waggons. Our guide, Ramotóhi, who had spent his youth in the Desert, declared that there was plenty of water at hand. By the aid of spades and fingers two of the holes were cleared out till they formed pits six feet deep and about as many broad. Our guides were earnest in their injunctions to us not to break through the hard stratum of sand at the bottom, in which case "the water would go away." The value of the advice was
proved in the case of an Englishman who insisted upon dig. ging through the flooring of incipient sandstone in the wells at Mohotluáni, when the water immediately disappeared downwards. On reaching the stratum the water flowed in at the line where the soft sand came into contact with it. Enough accumulated for the horses that evening; but as there was not sufficient for the oxen, we sent them back to Lobotani, where they got a good supply, after thirsting four full days or ninety-six hours. Next morning we found the water ran in faster than at first, as invariably happens in these reservoirs, owing to the passages widening by the flow. The supply, which at the beginning may be only enough for a few men, becomes in a few days sufficient for the oxen as well. The Bakalahari are dependent on these wells, and, as they are generally in the hollows of ancient river-beds, they are probably the deposits from rains gravitating thither. In some cases they may be the actual fountains which formerly replenished the river, though they now no longer rise to the surface.

The buried fluid was perfectly inaccessible to the elands. Yet large numbers of them fed around us; and, when killed, they were not only in good condition, but their.stomachs actually contained considerable quantities of water. I examined the alimentary canal to see if there were any peculiarity which would account for this animal subsisting for months together without drinking. 1 found nothing. The düiker (Cephalopus mergens) or puti (of the Bechuanas), the steinbuck (Tragulus rupestris) or puruhuru, the gemsbuck (Oryx capensis) or kukama, and the porcupine (Hystrix cristata), are all able to exist without water for months by living on bulbs and tubers containing moisture. They have sharppointed hoofs well adapted for digging, and there is little difficulty in comprehending their mode of subsistence. The tolo or koodoo (Strepsiceros capensis), the springbuck (Gazella euchore), and the ostrich are also in a great degree independent of pools and streams. I believe, however, that they can subsist only when there is moisture in the vegetation on which they feed: for in a year of unusual drought we saw herds of elands and flocks of ostriches crowding to the Zouga from the Desert, and many of the latter were killed in pitfalls on the banks. The rhinoceros, the buffalo, and gnu (Catoblepar

[From a Drawing made on the spot (1850) by the late Alfred Ryder, Esq.
LAKE NGAMI, DISCOVERED BY OSWELL, MURRAY, AND LIVINGSTONE
$g n u$ ), the giraffe, the zebra, and pallah (Antibope melampus), are never seen but in the vicinity of water. Their presence is a sure indication that it will be found within seven or eight miles.

In the evening of our second day at Serotli a hyæna appeared suddenly among the grass and raised a panic among our cattle. This false mode of attack is the plan this cowardly creature always adopts, for his courage only permits him to fall upon animals which are running terrified away. Seventeen of our draught oxen fled into the hands of Sekomi, (7) who was unfriendly to our expedition. He sent them back with a message strongly dissuading us from attempting to cross the Desert. "Where are you going? You will be killed by the sun and thirst, and then all the white men will blame me for not saving you." We replied by assuring the messengers that the white men would attribute our deaths to our own stupidity, "as we did not intend to allow our conpanions and guides to return till they had put us into our graves." We sent a handsome present to Sekomi, with a promise that, if he allowed the Bakalahari to keep the wells open for us, we would repeat the gift on our return.

All around Serotli the country is perfectly flat, and com posed of soft white sand. There is a peculiar glare of bright sunlight from a cloudless sky over the entire scene; and one clump of trees and bushes, with open spaces between, looks: so exactly like another, that if you leave the wells, and walk a quarter of a mile in any direction, it is difficult to return. Oswell and Murray went, accompanied by one of the 13akalahari, to procure an eland. The perfect sameness of the country caused even the son of the Desert to lose his way, which gave rise to a ludicrous misconception. One of the commonest phrases of the perple is "Kia ituméla," I thank you, or I am pleased; but there is a word very similar in sound, " Kia timéla," I am wandering. The perfect of this latter term is "Ki timétse," I have wandered, which again resembles the word for water, "metse." Hence Mr. Murray and Mr. Oswell mistook the verb "wander." for " to be pleased," and " water," and a colloquy went on at intervals between then: and their guide during the whole of a bitterly cold night in somewhat the following style:-

Englishman.-"Where are the waggons?"
Real answer of guide.-" I don't know. I have wandered. I never wandered before. I am quite lost."

Supposed answer.-"I don't know. I want water. I am glad,'I am quite pleased. I am thankful to you."

Englishman.-"Take us to the waggons, and you will get plenty of water."

Real answer of guide (looking vacantly around).-" How did I wander? Perhaps the well is there, perhaps not. I don't know. I have wandered."

Supposed answer.-"Something about thanks; he says he is pleased, and mentions water again."

The guide's vacant stare, while trying to remember, is thought to indicate mental imbecility, and the repeated thanks were supposed to indicate a wish to deprecaṭe their wrath.

First Englichman.-"Well, Livingstone has played us a pretty trick, giving us in charge of an idiot. Catch us trusting him again. What can this fellow meait by his thanks and talk about water? 0 , you born fool! take us to the waggons, and you will get both meat and water. Wouldn't a thrashing bring him to his senses again?"

Second Englishman.-"No, no, for then he will run away, and we shall be worse off than we are now."

The hunters regained the waggons next day by their own sagacity, which becomes wonderfully quickened by a sojourn in the Desert.

I sometimes felt annoyed at the low estimation in which some of my hunting friends were held; for believing that the contest with wild beasts is well adapted for fostering that coolness in emergencies which we all admire, I was anxious that the natives should entertain a higher opinion of my countrymen. "Have these hunters, who come so far and work so hard, no meat at home ?"-" Why, these men are rich, and could slaughter oxen every day of their lives."-" And yet they come here, and endure so much thirst, for the sake of this dry meat, none of which is equal to beef ?"-" Yes, it is for the sake of the play ${ }^{*}$ it affords." This produces a laugh, as much as to say, "Ah, you know better;" or, "Your friends are fools." When they can get a man to kill large quantities

[^5]of game for them, whatever he may think of himself or of his achievements, they pride themselves in having turned to good account the folly of an itinerant butcher.

When we had procured sufficient water we left Serotli. The sun, even in winter, is always powerful, and we could only travel in the momings and evenings. A single day is the hot sun and heavy sand would have knocked up the oxen. 'The second night our trocheamer* showed that we had made but twenty-five miles from Serotli. Ramotobi was angry at the slowness of our progress, and told us that, as the next water was three days in front, we should never get there at all. Cracking of whips, screaming, and beating, got only nineteen miles out of the poor beasts the following day, and they were more exhausted by the sandy ground, and the thirst, than if they had travelled double the distance over a hard road where they could drink. At this season the grass becomes so dry as to crumble to powder in the hands. Without taking a single fresh mouthful, the oxen stood wearily chewing, and lowed painfully at the smell of the water in our waggons.

The knowledge retained by Ramotsbi of the trackless waste of scrub through which we wele passing was surprising. For sixty or seventy miles beyond Serotli one clump of bushes and trees seemed exactly like another. Yet, as we walked together, he remarked, "When we come to that hollow we shall light upon the highway of Sekomi; and beyond that again lies the river Mokóko." After breakfast some of the men, who had gone forward on a little path which showed upon it footprints of water-loving animals, returned with the joyful tidings of "metse," and exhibited the mud on their knees in confirmation of the news. This pool of rainwater was called Mathuluáni. The thirsty oxen rushed in until the delicious drink was nearly level with their throats, when they drew slowly in the long refreshing mouthfuls, until their collapsed sides distended as if they would burst. After giving the cattle a rest at this spot we proceeded down the dry bed of the river Mokoko. There are permanent wells

[^6]in several parts of it, and Ramotobi assured us that we should suffer no more from thirst. The adjacent country is covered with grass, low thorny scrub, and here and there clumps of the "wait-a-bit thorn," or Acacia rietinens. At Lotlakáni (a little reed), another spring further un, we met with twenty-six palmyra-trees, the first we had seen in South Africa.

The ancient Mokoko must have been joined by other rivers lower down, for it becomes broad, and expands into a large bed, of which the lake to which we were travelling formed but a very small part. Wherever an anteater had made his hole, shells were thrown out identical with the species now alive in the lake. When we left the Mukoko Mr. Oswell happened to spy a Bushwoman running away in a bent position to escape observation. He took her for a lion, and galloped up to her. She thunght herself captured, and offered to deliver up her property, which consisted of a few traps made of cords. When I explained that we only wanted water, and would pay her if she led us to it, she walked briskly before our horses fur eight miles, and brought us to Nchokotsa. We rewarded her with a piece of meat and a good large bunch of beads. At the sight of the latter she burst into a merry laugh.

At Nchokotsa we came upon the first of a great number of saltpans, covered with an efflorescence of lime, probably the nitrate. When the pan, which is twenty miles in circumference, burst upon our view, the setting sun was casting a beautiful blue haze over the white incrustations, and caused the expanse to look exactly like a lake. Oswell threw up his hat in the air at the sight, and shouted out a huzza which made the poor Bushwuman and the Bakwains think him mad. I was as much deceived as he. We did not dream that the long-looked-for lake was more than three hundred miles distant. The mirage on these salinas is truly marvellous. The waves danced, and the shaduws of the trees were reflected in such a perfect manner, that the loose cattle, horses, dogs, and even Hottentots, whose thirst had not been sufficiently slaked by the brackish water of Nchokctsa, hastened towards the deceitful pools. A herd of zebras in the mirage looked exactly like elephants, and Oswell began to saddle a horse in order to hunt them. A sort of break in the haze dispelled the illusion.
On the 4th of July we went forward on horseback, and again
and again did we seem to see the lake. At last we came to the Zouga, and found it to be a river running to the N.E. A village of Bakurutse lay on the opposite bank, and the people informed us that the stream came out of the Ngami. The news gladdened all our hearts. We had the river Zouga at our feet, and ly following it we should at last reach the broad water.

Next day two of the Bamangwato, who had been sent on before us by Sekomi to drive away all the Bushmen and Bakalahari from our path, that they might not assist or guide us, came and sat down by our fire. They seemed to feel no enmity, but, on leaving us and ascending the Zouga in our front, they circulated the report that our object was to plunder all the tribes living on the river and lake. When they had proceeded some way the principal man sickened of fever, turned back and died. His death had a good effect, for the villagers connected it with the injury he was attempting to do to us, and, though at first they came to us armed, kind treatment soon produced perfect confidence.

When we had gone up the bank of this beautiful river about ninety-six miles from the point where we first struck it, the Bechuana chief of the Lake region, who had sent the glowing account of the stores of ivory to Sechele, ordered the people to assist us. We were received by a community whose language clearly shows that they bear an affinity to the tribes in the north. They call themselves Bayeige, i. e. men; but the Bechuanas call them Bakoba, a term which carries with it some idea of slaves. They have a tradition that their forefathers, in their first essays at war, made their bows of the Palma-Christi; and when these broke they gave up fighting. They have never been known to use arms, and have invariably submitted to the rule of every horde which has overrun the countries adjacent to the rivers on which they specially love to dwell. They are thus the Quakers of the body politic in Africa. A long time after our visit, the chief of the Lake furnished them with shields. "Ah!" they exclaimed, "we never had these before; that is the .reason we have always succumbed. Now we will fight." They were soon visited by a marauding party from the Makololo, and the "Friends" at once paddled night and day down the Zouga, nor ever dared to look behind them till they reached the end of the river.

The canoes of these inland sailors are primitive crafi nollowed with iron adzes out of the trunks of single trees If the tree has a bend, so has the canoe. I found they r garded their rude vessels as the Arab does his camel. The have always fires in them, and prefer sleeping in them while or a journey to spending the night on shore. "On land," say they "you have lions, serpents, hyæuas, and your enemies: but it your canoe, behind a bank of reed, nothing can harm you."

While ascending the beautifully-wooded river, we arrivec at a large stream flowing into it. This was the Tamunak'le I inquired whence it came. " Oh , from a country full of rivers-so many no one can tell their number-and full of larg4 trees!" This was a confirmation of what I had heard from the Bakwains, that the country beyond was not "the large sand) plateau" of the philosophers. The notion that there might be a highway, capable of being traversed by boats, to an unexplorec and populous region, grew from that time stronger and stronges in my mind; and when we actually came to the lake this idea was so predominant that the actual discovery seemed of little importance. It was on the 1st of August that we reached the north-east end of the Ngami ; and for the first time this fine sheet of water was beheld by Europeans. The direction of the lake seemed to be N.N.E. and S.S.W. by compass. The southern portion is said to bend round to the west, and to receive the Teoughe from the north at its north-west extremity. We could detect no horizon where we stood; nor could we form any idea of its extent except from the reports of the people, who professed to go round it in three days, which, at the rate of twenty-five miles a-day, would make it seventyfive miles in circumference. It is shallow, and can never be of much value as a commercial highway. In the months preceding the annual supply of water from the north, it is with difficulty the cattle can approach to drink through the boggy, reedy banks. These are low on all sides. On the west there is a space devoid of trees, which shows that the waters have retired thence at no very ancient date-another proof of the desiccation that has been going on throughout the country. We were informed by the Payeiye, who live on the lake, that, when the annual inundation begins, not only trees of great size, but antplopes, such as the springbuck and tsessebe

[From a Drawing made on the spot (1850) by the late Alfred Ryder, Esq.
LAKE NGAMI, DISCOVERED BY OSWELL, MURRAY, AND LIVINGSTONE
(Acronotus lunata), are swept down by its rushing waters. The trees are gradually driven by the winds to the opposite side, and become embedded in mud.

The water of the lake is fresh when full, but brackish when low. This region, compared with that from which we had come, was clearly a hollow, the lowest level being Lake Kumadau. The point of the ebullition of water, as shown by one of Newman's barometric thermometers, was only between $207 \frac{1}{2}^{\circ}$ and $206^{\circ}$, which gives an elevation of not much more than two thousand feet above the level of the sea. We had descended abore two thousand feet in coming from Kolobeng. A little of that water from the tropical rains, which inundates large tracts of country farther north, flows as far south as $20^{\circ} 20^{\prime}$, and fails into the lake as into a reservoir. It is brought by the Embarrah, which divides into the rivers Tzo and Teonghe, and the Tzo again divides into the Tamunakle and Mababe. Of these the Tamunak'le discharges itself into the Zouga, and the Teoughe into the lake. The flow begins either in March or April, and the descending waters find the channels of all the rivers dried up, except in certain pools in their beds, which have long dry spaces between them. The lake itself is very low.

The Zouga is only a prolongation of the Tamunak'le, and an arm of the lake reaches up to the point where the latter ends and the former begins. The Zouga is broad and deep when it leaves the Tamunak'le, but becomes gradually narrower as it descends for about two hundred miles. It then flows into the Kumadau, a small lake about three or four miles broad and twelve long. The water does not make much progress in filling this lake till the end of June. In September the rivers cease to run. When the supply has been more than usually abundant a little water gets beyond the Kumadau, and if the quantity were larger it might go further in the dry rocky bed of the Zouga. The channel is perfect, but, before the water finds its way much beyond Kumadau, the upper supply ceases to run, and the rest becomes evaporated. There is, I am convinced, no such thing in the country as a river becoming lost in the sand. This fancied phenomenon haunted me for years; but I have failed in discovering anything beyond a most insignificant realisation of it.
(8) Near the lake was a half-tribe of the Bamangwato, called Bataú́na. Their chief was a young man named Lechulatébe. His uncle had ransomed him after Sebituane had conquered his father. He had just come into power, and, to show his independence, acted directly contrary to everything his uncle advised. The latter recommended him to treat us handsomely, and therefore, when we wished to purchase some goats or oxen, Lechulatebe, in a spirit of opposition, offered us elephants' tusks. "No, we cannot eat these; we want something to fill our stomachs." "Neither can I; but I hear you white men are all very fond of these bones, so I offer them; I want to put the goats into my own stomach." A trader, who accompanied us, purchased ivory at the rate of ten large tusks for a musket worth thirteen shillings. I myself saw eight instances in which the tusks had been left to rot with the bones where the elephant fell. In less than two years not a man of the Batauana could be found who was not keenly alive to their value.

My principal object was to visit Sebituane, the great chief of the Makololo, who was reported to live some two hundred miles beyond Lake Ngami. The day after our arrival I applied to Lechulatebe for guides. He objected, fearing lest other white men should go thither also and give Sebituane guns; whereas he hoped by obtaining a monopoly of firearms to get the ascendency. He at last unwillingly promised to give us guides, then again declined, and sent men to the Bayeiye with orders to refuse us a passage across the river. I tried hard to furm a raft, but the dry wood was so wormeaten that it would not bear the weight of a single person. I worked many hours in the water, for 1 was not then aware of the number of alligators in the Zouga, and never think of my labours without feeling thankful that I escaped their jaws. The season was now far advanced ; and as Mr. Oswell volunteered to go to the Cape and bring up a boat, we resolved to make our way south again.

Coming down the Zouga, we had time to look at its banks. They are very beautiful, and resemble in many parts the river Clyde above Glasgow. The side to which the water swinge is perpendicular, the other is sloping and grassy. The Rayeiye dig pitfalls on these declivities to entrap the


NEW AFRICAN ANTELOPES (POKU AND LECHÉ) DISCOVERED BY OSWELL, MURRAY, AND LIVINGSTONE
animals as they come to drink. The holes are seven or eight feet deep, about as long at the mouth, and three or four feet wide. They gradually decrease as they descend, till they are only about a foot in width at the bottom. This occasions the animal to wedge himself firmly in by his weight and struggles. They are usually in pairs, with a wall a foot thick between the ends of each, in order that, if the beast, when he feels his fore legs descending, should try to save himself, he may spring forward into the second. All the excavated earth is removed to a distance, so as not to excite suspicion in the animals. Reeds and grass are laid across the top; and are then strewn with sand, which is watered, that it may appear exactly like the surrounding ground. Some of our party plumped, more than once, into these pitfalls, even when searching for them that they might open them and prevent the loss of our cattle. Old elephants have been known to precede the herd and whisk off the coverings of the traps on each side the whole way down to the water.

The trees which adorn the banks of the Zouga are magnificent. T'wo enormous baobabs (Adansonia digituta), or mowanas, grow near its confluence with the lake. The largest was 76 feet in girth. The palmyra appears here and there. The mokuchong or moshoma bears an edible fruit of indifferent quality, but the tree itself would be a fine specimen of arboreal beauty in any part of the world. The trunk is often converted into canoes. The motsouri, which produces a pink plum cuntaining a pleasant acid juice, resembles an orangetree in its dark evergreen foliage, and a cypress in its form. It was now winter-time, and we saw nothing of the flora. Wild indigo abounded, as indeed it does over large tracts of Africa. It is called mohetolo, or the "changer," by the boys, who colour their ornaments of straw with the juice. There are two kinds of cotton in the country, and the Mashona, who convert it into cloth, dye it blue with this plant.

We found the elephants in prodigious numbers on the southern bank. They come to drink by night, and throw large quantities of water over their bodies. While enjoying the luxury they may be heard screaming with delight. They evince their horror of pitfalls by proceeding in a straight line to the Desert, and never diverge till they are eight or ten
miles off. At the Limpopo, to the south-east, they are upwards of twelve feet high; here they were only eleven; and further north they are only nine feet. The koodoo, or tolo, seemed smaller than those to which we had been accustomed. We saw specimens of the kuabaöba, or straight-horned rhinoceros ( $R$. Oswellii), which is a variety of the white ( $R . \operatorname{simus}$ ); and we found that, from the horn being projected downwards, it did not obstruct the line of vision, which enables this species to be much more wary than its neighbours.

W'e discovered an entirely new and beautiful species of water-antelope, called leché or lerthwi. It is of a light brownishyellow colour: The chest, belly, and orbits are nearly white. The horns, which are exactly like those of the Aigcceros ellipsiprimuus, the water-buck, or tumogga of the Bechuanas, rise from the head with a slight bend backwards, and then curve forwards at the points. From the horns to the withers the male has a small mane of the same yellowish colour with the rest of the skin, and the tail has a tuft of black hair. It is never found a mile from water. Islets in marshes and rivers are its favourite haunts, and it is quite unknown except in the central humid basin of Africa. As it stands gazing with head erect at the approaching stranger, it presents a noble appearance. When about to decamp it lowers its head, and lays its horns down to a level with the withers. It begins at starting with a waddling trot, which ends in its galloping and springing over bushes like the pallahs. It invariably runs to the water, and crosses it by a succession of bounds, eaoh of which appears to be from the bottom. We thought the flesh good at first, but soon got tired of it.

Great shoals of excellent fish come down annually with the waters. The mullet (Mugil Africanus) is the most abundant. They are caught in nets. The Glanis siluris, a large broadheaded fish, without scales, and barbed-called by the natives " mosala"-grows to such an enormous size, that when-a man carries one over his shoulder the tail reaches the ground. It is a vegetable feeder, and in many of its habits resembles the eel. Like most lophoid fishes, it has the power of retaining a large quantity of water in its great head, and can thus leave the river, and even be buried in the mud of dried-up pools, without being destroyed. Another fish, named clarias
capensis by Dr. Smith, resembles it closely, and is widely diffused throughout the interior. They often leave the rivers to feed in pools, and, as these dry up, large numbers of them are entrapped hy the people. A water-snake, spotted yellow and dark brown, is frequently seen swimming with its head above the water. It is quite harmless, and is relished as food by the Bayeiye. They live much on fish, which are an abomination to the Bechuanas in the south. They are caught in large numbers by nets made of the fine strong fibres of the hibiscus, which grows abundantly in all moist places. The mode of knotting the nets is identical with our own. The floatropes of the Bayeiye are made of the ifé, or, as it is now called, the Sanseviera Angolensis, a flag-looking plant, with a strong fibre, that abounds from Kolobeng to Angola. 'The floats themselves are pieces of a water-plant with valves at each joint, which retain the air in cells about an inch long. The Bayeiye also spear the fish with javelins. They show great dexterity in harpooning the hippopotamus. The barbed blade of the spear is attached to a rope made of the young leaves of the palmyra, and the animal cannot rid himself of the canoe, except by smashing it, which he not unfrequently does by his teeth or by a stroke of his hind foot.

## CHAPTER IV.

Second and third journeys from Kolobeng.-The Chobe.-Ravages of Tsetse.-The Makololo: career of their chief Sfbituane.-Discovery of the Zambesi.-Slaye-trade.-Beturn to the Cape.

I returned to Kolobeng and remained there till April, 1850. I then left, in company with Mrs. Livingstone, our three children, and the chief Sechele, with the intention of crossing the Zouga at its lower end, and proceeding uy the northern bank till we gained the Tamunak'le. My purpose was next to ascend that river and visit Sebituane in the north. Sekomi had given orders to fill up the wells which we had dug with so much labour at Serotli, and induced us to take the
more eastern route through the Bamangwato town and by Letloche.

Parting at the ford with Sechele, who was eager to visit Lechulatebe, we went along the northern woody bank of the Zouga. We had to cut down many trees to allow the waggons to pass, and our losses by oxen falling into pitfalls were heavy. The Bayeiye kindly opened the pits when they knew of our approach. On drawing near to the confluence of the Tamunak'le we were informed that the fly called tsétse* abounded on its banks. This was a barrier we did not expect; and as it might have brought our waggons to a complete standstill in a wilderness, where no supplies for the children could be obtained, we were reluctantly compelled to recross the Zouga.

From the Bayeiye we learned that a party of Englishmen, who had come to the lake in search of ivory, were ill with fever. We hastily travelled about sixty miles to render what aid was in our power, and found that Mr. Alfred Rider, an enterprising young artist who had come to make sketches of the country, had died before our arrival. By the aid of medicines and such comforts as could be provided by the only English lady who ever visited the lake, the others happily recovered.
'When I was ready to set out on my road to visit Sebituane our little boy and girl were seized with fever. On the day following all our servants were down with the same complaint. I was now forced to give up my journey for that year. On our return we met Mr. Oswell on the Zouga. He devoted the rest of this season to the chase of the elephant, in which the natives declare he is the greatost adept that ever came into the country. He performed the feat of hunting without dogs. A few yelping curs distract the attention of the elephant and make him quite incapable of attending to man. He endeavours to crush them by falling on his knees; and sometimes places his forehead against a tree ten inches in diameter, and pushes it down before him. The only danger the huntsman has to apprehend is that the dogs may run towards him, and bring the elephant along with them. The inhabitante

[^7]conceived from Mr. Oswell's prowess a high idea of English courage, and when they wished to flatter me rould say, "If you were not a missionary you would be just like Oswell; you would not hunt with dogs either." He has been known to kill four large old males in a day, and the value of the ivory would be one hundred guineas.

When Sebituane heard of our attempts to visit him, he despatched three detachments of his men with thirteen brown cows to Lechulatebe, thirteen white cows to Sekomi, and thirteen black cows to Sechele, with a request to each to assist the white men to reach him. 'Their policy, however, was to act as his agents in purchasing with his ivory the goods he wanted. We had gone to Kuruman ; and Sechele allowed all the messengers to leave before our return to Kolenberg. This monopolising spirit pervades all Africa; and as that continent is without friths and arms of the sea, the tribes in the centre have always been debarred from European intercourse.

When we set out on our third journey Sekomi was more than usually gracious, and even furnished us with a guide. No one, however, knew the path beyond Nchokotsa. When we reached that point we found that the mainspring of the gun of a man who was well acquainted with the Bushmen, through whose country we should pass, had opportunely broken. I never undertook to mend a gun with greater zest. Under a promise of the guidance of its owner we went to the nortn instead of westward.

We passed quickly over a hard flat country. A little soil lying un calcareous tufa supports over a tract of several hundreds of miles a vegetation of sweet short grass and mopane and baobab trees. In several parts we found large salipans, one of which, Ntwétwe, is fifteen miles broad and one hundred long. The latitude might have been taken on its horizon as well as upon the sea. Although these curious spots seem perfectly level, they have a gentle slope to the north-east, which is the direction of the Zouga. As the rain-water gently gravitates thither it carries with it the salt it has dissolved, which by this means has all been transferred to one pan named Chuantsa, where we have a cake of salt and lime an inch and a half thick. Some of the pans are covered thickly with shells, which are identical with those of the mollusca of Lake

Ngami and the Zouga. There are three varieties-spiral, univalve, and bivalve.-

On one side of every saltpan in the country there is a spring of water which is brackish and contains the nitrate of soda. If this supply came from beds of rock-salt the water would not be drinkable, and in some instances, where the salt in the pan has been removed by human agency, no fresh deposit occurs. It is therefore probable that the salt is the leavings of the slightly brackish lakes of antiquity, large portions of which must have been dried out in the general desiccation. We have already seen that Lake Ngami tastes brackish when the water becomes low and is greatly reduced in bulk. My conjecture seems supported by the fact that the largest quantities of salt have been found in the deepest hollows, which have no outlet.

We found a great number of wells in this tufa. As they occasionally become full in seasons when no rain falls, it is probable they receive some water by percolation from the river system in the country beyond. A place called Matlo-magan-yána, or the "Links," is quite a chain of never-failing springs. Here we found many families of Bushmen. Unlike those on the plains of the Kalahari. who are generally of short stature and light-yellow colour, these were tall strapping fellows, of dark complexion. Heat alone does not produce blackness of skin, but heat with moisture seems to insure the deepest hue.

One of the Bushmen, named Shobo, consented to be our guide over the waste between these springs and the country of Sebituane. It is impossible to convey an idea of the dreary scene on which we entered after leaving the Links. The only vegetation was a low scrub in deep sand; not a bird or insect enlivened the landscape. 'To make matters worse, our guide Shobo wandered to all points of the compass on the trails of elephants which had been here in the rainy season. He would then sit down in the path and say, "No water, all country only;-Shobo sleeps;-he breaks down;-country only." Upon this he would coolly curl himself up and was soon wrapt in slumber. On the morning of the fourth day he professed ignorance of everything, and vanished altogether. We continued in the direction in which we last saw him, and
about eleven o'cluck we ubserved some lirds, and next the trail of a rhinocesos. At this we unyoked the oxen, which rushed along towards the river Mabábe, which comes from the Tamunak'le, and lay to the west of us. The supply of water in the waggons had been wasted by one of our servants, and by the afternoon unly a small portion remained for the children. The next morning there was still less of water, and the little rogues became thirstier than ever. The idea of their perishing before our eyes was terrible. Not one syllable of upbraiding was uttered by their mother, though the tearful eye told the agony within. In the afternoon of the fifth day, to uur inexpressible relief, some of the men returned with a supply of that fluid of which we had never before felt the true value.
'lhe cattle in rushing along to the Mababe probably crossed a small patch of trees containing tsetse, an insect which was shurtly to become a perfect pest to us. Shobo had found his way to the Bayeiye, and appeared, when we came up to the river, at the head of a party. As he wished to show his importance before his friends, he walked up boldly and commanded our whole cavalcade to halt, and to loring forth fire and tobacco. We stopped to admire the acting. and, though he had left us in the lurch, we all liked this fine specimen of that wonderfal people the Bushmen.

Next day we came to a village of Banajoa, a tribe which extends far to the eastward. They were living on the borders of a marsh in which the Mababe terminates. They had lost their crop of corn (Holcus sorghum), and now subsisted almost entirely on the root called " tsitla." a kind of aroidoea, which contains a large quantity of sweet-tasted starch. When dried, pounded into meal, and allowed to ferment, it forms a not unpleasant article of food. The women shave all the hair off their heads, and seem darker than the Bechuanas. Their huts were built on poles, and they make a fire in them at night, that the smoke may drive away the mosquitoes, which abound on the Mababe and 'Tamunak'le more than in any other part of the country. The head-man of this village, Majáne, seemed a little wanting in ability; but had had wit enough to promote a younger member of the family to the office, who proved an active guide to us across the river Sonta, and to the banks of the ('hohe, in the country of Sebituane.

We had come through another tsetse district by night, and at once passed our cattle over to the northern bank, which, though only fifty yards distent, was entirely free from the pest. This was the more singular that we often saw natives carrying over raw meat with many tsetse upon it. This insect, Glossina morsitans of the naturalist, is not much larger than the common house-fly, and is nearly of the same brown colour as the honeybee. 'The after part of the body has three or four yellow bars across it. It is remarkably alert, and evades dexterously all attempts to capture it with the hand at common temperatures.


1. The Tsetse; size of life.-2. The same magnified. -3 . The proboscis.

In the cool of the mornings and evenings it is less agile. Its peculiar buzz when once heard can never be forgotten by the traveller whose means of locomotion are domestic animals; for its bite is death to the ox, horse, and dog. In this journey, though we watched the animals carefully, and believe that not a score of flies were ever upon them, they destroyed forty-three fine oxen. A most remarkable feature is the perfect harmlessness of the bite in man and wild animals, and even calves so long as they continue to suck the cows, though it is no protection to the dog to feed him on milk.

The poison does not seem to be injected by a sting, or by ova placed beneath the skin, for, when the insect is allowed to feed freely on the hand, it inserts the middle prong of three portions, into which the proboscis divides, somewhat deeply into the true skin. It then draws the prong out a little way, and it assumes a crimson colour as the mandibles come into brisk operation. The previously shrunken belly swells out, and, if left undisturbed, the fly quietly departs when it is full. A slight itching irritation follows the bite. In the ox the immediate effects are no greater than in man; but a few days afterwards the eye and nose begin to run, the coat stares, a swelling appears under the jaw, and sometimes at the navel; and, though the poor creature continues to graze, emaciation commences, accompanied with a peculiar flaccidity of the muscles. This proceeds unchecked until, perhaps months afterwards, purging comes on, and the victim dies in a state of extreme exhaustion. The animals which are in good condition often perish soon after the bite is inflicted with staggering and blindness, as if the brain were affected. Sudden changes of temperature produced by falls of rain seem to hasten the progress of the complaint; but in general the wasting goes on for months.

When the carcase is opened, the cellular tissue beneath the skin is found injected with air, as if a quantity of soap-bubbles were scattered over it. The blood is small in quantity, and scarcely stains the hands in dissection. The fat is of a greenish-yellow colour and of an oily consistence. All the muscles are flabby, and the heart is uften so soft that the fingers may be made to meet thrrugh it. The lungs and liver partake of the disease. The stomach and bowels are pale and empty, and the gall-bladder is distended with bile. These symptoms seem to indicate poison in the blood; the germ of which enters when the proboscis is inserted.

The mule, ass, and goat enjoy the same immunity from the tsetse as man and the game. Many large tribes on the Zambesi can keep no domestic animals except the goat, in consequence of the scourge existing in their country. Our children were frequently titten, yet suffered no harm; and we saw around us numbers of zebras, buffaloes, pigs, pallahs and other antelopes, feeding quietly in the very habitat of
the fly. 'There is not so much difference in the natures of the horse and zebra, the buffalo and ox, the sheep and antelope, as to afford any satisfactery explanation of the phenomenon. Is not man as much a domestic animal as a dog? The disgust which the tsetse shows to animal excreta is turned to account by some of the doctors. They mix droppings of animals, human milk, and some medicines together, and smear the animals that are about to pass through an infested district. This, though a preventive at the time, is not a permanent protection. Inoculation does not insure immunity, as animals which have been slightly bitten in one year may perish by a greater number of bites in the next. It is probable that with the increase of guns the game will perish, as has happened in the south, and the tsetse, deprived of food, may become extinct simultaneously with the larger (9) animals. The ravages it commits are sometimes enormous. Sebituane once lost nearly the entire cattle of his tribe, amounting to many thousands, by unwittingly intruding upon the haunts of this murderous insect.

The Makololo whom we met on the Chobe were delighted to see us. As their chief Sebituane was about twenty miles down the river, Mr. Uswell and I proceeded in canoes to his temporary residence. He had started from the Barótse town of Naliéle down to Seshéke as soon as he heard of white men being in search of him, and now came one hundred miles more to bid us welcome into his country. He was upon an island with all his principal men around him, engaged in singing, when we arrived. It was more like church music than the singsong $\overline{\mathbf{e}} \overline{\mathbf{e}} \overline{\mathrm{e}}, \mathfrak{æ} æ \nsupseteq$, of the Bechuanas in the south. They continued the tune for some seconds after we approached. He signified his joy, and added, "Your cattle are all bitten by the tsetse and will certainly die; but never mind : I have oxen, and will give you as many as you need." He presented us with an ox and a jar of honey as food, and (10) handed us over to the care of Mahále, who had headed the messengers sent to Kolobeng. and would now fain appropriate to himself the whole credit of our visit. Prepared skins of oxen as soft as cloth were provided as a covering through the night; and since nothing could be returned to the chief, Mahale became the owner of them. Long before it was day

Sebituane came, and sat down by the fire which was lighted for us behind the hedge where we lay. As his career has been most remarkable, and he was unquestionably the greatest man in that country, I shall give a short sketch of his life.

He was about forty-five years of age; of a tall and wiry form, an olive or coffee-and-milk complexion, and slightly bald. Itis manner was cool and collected, and he was more frank in his answers than any other chief I have met. He was the greatest warrior ever heard of beyond the colony, and always led his men into batttle himself. When he saw the enemy he felt the edge of his battle-axe and said," Aba! it is sharp, and whoever turns his back on the enemy will feel its edge." He was so fleet of foot, that all his people knew there was no escape for the coward. In some instances of skulking he allowed the individual to return home. Then he summoned him into his presence and said, "Ah, you prefer dying. at home to dying in the field, do you? You shall have your desire." This was the signal for his immediate execution.

He came from the country near the sources of the Likwa and Namagari rivers in the south, and was now eight or nine hundred miles from his birthplace. He was not the son of a chief, though related closely to the reigning family of the Basútu. He was one in that immense horde of savages driven back by the Griquas from Kuruman in 1824, and he fled to the north with an insignificant party of men and cattle. At Melita the Bangwaketse collected the Bakwains, Bakátla, and Bahurutse, to "eat them up." Placing his men in front, and the women behind the cattle, he routed the whole of his enemies at one blow. Having thus conquered Makabe, the chief of the Bangwaketse, he took immediate possession of his town and all his goods.

Sebituane subsequently settled at Litubaruba, where Sechele now dwells, and his people suffered severely in one of those unrecorded attacks by white men, in which murder is committed and materials laid up in the conscience for a future judgment. A great variety of fortune followed him in the northern part of the Bechuana country. Twice he lost all his cattle by the attacks of thu Matebele, but always kept his people together, and retook more than he lost. He then crossed the Desert by nearly the same path that we did.

Many of his cattle kurst away from him in the frenzy of thirst. He stocked himself again among the Batletli, on Lake Kumadau, whose herds were of the large-horned species of cattle.* After some further adventures he moved down the Leeambye among the Bashubia and Batoka. The Batoka lived on large islands in the Leeambye, or Zambesi; and being perfectly secure in their fastnesses, often allured fugitive or wandering tribes on to uninhabited islets on pretence of ferrying them across, and there left them to perish. This was done for the sake of their goods. Sebituane, with his usual foresight, requested the island chief to take his seat in the canoe with him, and there our wily adventurer detained him till all the people and cattle were safely landed. The whole Batoka country was then densely peopled, and they had a curious taste for ornamenting their villages with the skulls of strangers. When Sebituane appeared near the great falls, an immense army collected to make trophies of the heads of the Makololo skulls. Instead of succeeding, they gave the strangers a good excuse for fighting, and they captured so many cattle that they were incapable of taking rote of the sheep and goats. He overran all the high lands towards the river Kafúe, and settled in a pastoral country, of gently undulating plains, covered with short grass and but little forest. The Makololo have never lost their love for this fine healthy region.

But the Matebele, a Caffre or Zclu tribe, under Mosilikatse, crossed the Zambesi; and, attacking Sebituane in this choice spot, captured his cattle and women. Rallying his men, ho followed and recaptured the whole. A fresh attack was repulsed by him, and he thought of going further down the Zambesi to the country of the whites. He had an idea that if he had a cannon he might live in peace. A prophet induced him to turn his face again to the westward. This man, by name Tlapáne, was called a " senoga"-one wio holds intercourse with the gods. He probably had a touch of insanity, for he was in the habit of retiring, no one knew whither,

[^8]until the moon was full. He returned emaciated to the tribe, and worked himself into a state of ecstacy. These prophets stamp, leap, shout, and beat the ground with a club till they induce a kind of fit. They pretend that the utterances they give forth under its influence are unknown to themselves. Tlapane, pointing eastwards, said, "There, Sebituane, I behold a fire; shun it; it is a fire which may scorch thee. The gods say, Go not thither." Then, turning to the west, he said, "I see a city and a nation of black men-men of the water ; their cattle are red ; thine own tribe, Sebituane, is perishing, and will be all consumed; thou wilt govern black men, and, when thy warriors have captured red cattle, let not the owners be killed; they are thy future tribe-they are thy city; let them be spared to cause thee to build. And thou, Ramosínií, thy village will perish utterly. If Mokari removes from that village he will perish first, and thou, Ramosinii, wilt be the last to die." Concerning himself he added, "The gods have caused other men to drink water, but to me they have given bitter water of the chukuru (rhinoceros). They call me away myself. I cannot stay much longer."

This vaticination, which loses much in the translation, I have given rather fully, because it shows an observant mind The policy recommended was wise, and his prophecy was verified by the destruction soon afterwards of the village, and the death of himself and the two men he had named. It is not therefore wonderful that Sebituane should have followed the warning voice. The fire pointed to was evidently the Portuguese fire-arms, of which he must have heard. The black men were the Barotse, or, as they term themselves, Baloiána; and Sebitvane spared their chiefs, even though they attacked him first.

After he had ascended the Barotse valley he was pursued by the Matebele, as Mosilikatse never could forgive his former defeats. Sebituane placed some goats on one of the large islands of the Zambesi, as a bait to the warriors, and some men in canoes to co-operate in the manoeuvre. When all the Matebele were ferried over, the canoes were removed, and the enemy found themselves in a trap. They subsisted for some time on the roots of grass after the goats were eaten, but gradually became so emaciated, that. when the Makololo
landed, they had only to perform the part of executioners on the adults, and adopted the rest into their own tribe. Mosilikatse next sent an immense army who carried canoes with them that no such mishap might occur again. Sebituane collected his men and cattle on the island of Loyélo, and watched the Matebele so closely that they could not cross the river without parting their forces. At last he went towards them, and, addressing them by an interpreter, asked why they wished to kill him; he had never attacked them, never harmed their chief: "Au!" he continued, "the guilt is on your side." The Matebele made no reply; but their canoes were found smashed and the owners gone. They set out to return to their own country, but fever, famine, and the Batoka destroyed them, and only five men got back to Mosilikatse.

Sebituane had now not only conquered all the black trikes over an immense tract of country, but had made himself dreaded even by the terrible Mosilikatse. He was as benevolent in peace as he had been courageous in war. He had the art of gaining the affections both of his own people and of strangers. When a party of poor men came to his town to sell their hoes or skins, he would go alone to them, and inquire if they were hungry. He would then order an attendant to bring meal, milk, and honey, and make them feast, perhaps for the first time in their lives, on a lordly dish. Delighted with his affability, they gave him all the information in their power, and he knew everything that happened in the country. He never allowed a party of strangers to go away without giving a present to every one of them, servants and all. Thus his praises were sounded far and wide. "He has a heart! he is wise!" were the usual expressions we heard before we saw him.

He was much pleased with the proof of confidence we had shown in bringing our children, and promised to take us to see his country, that we might choose a part in which to settle. Our plan was, that I should remain in the pursuit of my objects as a missionary, while Mr. Oswell explored the Zambesi to the east. Just however as he had established relations with the white man, which had lung been his predominant desire, Sebituane fell sick of inflammation of the
lungs, which originated in an old wound got ar itllita. saw his danger, but I was afraid to treat him medically, in the event of his death, I should be blamed by his people. I mentioned this to one of his doctors, who said, "Your fear is prudent and wise; they would blame you." He had been cared the year before by the Barotse making a large number of free incisions in the chest. The Makololo doctors now scarcely cut the skin. I visited him in company with my little boy Robert on the Sunday afternoon in which he died. "Come near," said Sebituane, " and see if I am any longer a man; I am done." I ventured to assent, and added a single sentence regarding hope after death. "Why do you speak of death?" said one of a relay of fresh doctors; "Sebituane will never die." After sitting with him some time, and commending him to the mercy of God, I rose to depart, when he raised himself up a little, called a servant, and said, "Take Robert to Maunku (one of his wives), and tell her to give him soms milk." These were the last words of Sebituane.

The burial of a Bechuana chief takes place in his cattle-pen, and the cattle are driven for an hour or two around and over the grave, that it may be entirely obliterated. We spoke to the people, advising them to keep together and support the heir. They took this kindly; and in turn told us not to be alarmed, for they would not think of ascribing the death of Sebituane to us. He was decidedly the best specimen of a native chief I ever met. I was never so much grieved by the loss of a black man before; and it was impossible not to follow him in thought into the other world, and to realise somewhat of the feelings of those who pray for the dead. The dark question of what is to become of such as he, must, however, be left where we find it. The "Judge of all the earth will do right."

At Sebituane's death the chieftainship devolved on a daughter named Ma-mochisane, who was living twelve days to the north, at Naliele. She gave us perfect liberty to visit any part of the country we chose, and Mr. Oswell and myself proceeded one hundred and thirty miles to the north-east, to Sesheke. In the end of June, 1851, we were rewarded by the discovery of the Zambesi, in the centre of the continent. This was a most important point, for that river was not
previuusly kuown to exist there at all. The Portuguese maps all represent it as rising far to the east of where we now were. We saw it at the end of the dry season, and yet there was a breadth of from three hundred to six hundred yards of deep flowing water. At the period of its annual inundation it rises twenty feet in perpendicular height, and floods fifteen or twenty miles of lands adjacent to its banks.
'I'he country over which we had travelled from the Chobs was perfectly flat, except where large ant-hills formed mounds a few feet high. These are generally covered with wild date-trees and palmyras, and in some parts there are forests of mimosæ and mopane. The tract between the Chobe and Zambesi is occasionally flooded, and there are large patches of swamps lying either near the former or on its banks. The Makololo lived among these swamps for the sake of the protection the deep reedy rivers afforded them against their enemies. There was no suitable place for a settlement. The healthy districts were defenceless, and the safe localities were so deleterious to human life, that the original Basutos had nearly all been cut off by the fever. I therefore feared to subject my family to the scourge.

As we were the first white men the inhabitants had ever seen, we were visited by prodigious numbers. One of our visitors appeared in a gaudy dressing-gown of printed calico; others had garments of printed cotton, and of blue, green, and red baize. These had been purchased, in exchange for boys,
(12) from a tribe called Mambári, which is situated near Bihé, and who only began the slave-trade with the Makololo in 1850. They had a number of old l'ortuguese guns, which Sebituane thought would be most important in any future invasion of Matebele. He offered to buy them with cattle or ivory, but their owners refused everything except boys about fourteen years of age. The desire to possess the guns at length prevailed, and eight were obtained in exchange for as many boys. These were not Makololo children, but captives of the black races they had conquered. I have never known in Africa an (13) instance of a parent selling his own offspring. The Makololo afterwards made a foray, in conjunction with the Mambari, against some tribes to the eastward. The Mambari were to have the captives, and the Makololo were to have the
cattle. At least two hundred slaves were carried off that yoar. In the course of the raid the Makololo met some Arabs from Zanzibar, who presented them with three English muskets, and received about thirty captives in return.

As there was no hope of the Boers allowing the peaceable instruction of the natives at Kolobeng, I resolved to save my family from exposure to this unhealthy region and send them to England, while I returned to explore the country in search of a healthy district that might prove a centre of civilization, and open up the interior by a path to either the east or west coast. Our route to Cape Town, in April, 1852, carried us through the centre of the colony during the twentieth month of a Caffre war; and those who periodically pay enormous sums for these inglorious affairs may like to know that our little unprotected party could travel with as little danger as if we had been in England. Where does the money go, and who has been benefited by the blood and treasure expended?

My visit to Cape Town was the first I had paid to the scenes of civilization during eleven years. The Astronomer Royal, Mr. Maclear, enabled me recall the little astronomical knowledge which the engrossing nature of missionary duties had effaced from my mind, and he taught me much more, which was of great assistance in enabling me to lay down geographical positions in my subsequent route.

## GHAPTER V.

Last journey from Cape 'Town.-The Kalahari: its plants and animals. Griquas and Bechuanas.

Having sent my family home to England, I again started on my travels in the beginning of June 1852. This journey extended from the southern extremity of the continent to St. Paul de Loando, the capital of Angola, on the west coast, and thence across South Central Africa in an oblique direction to Kilimane (Quilimane) in Fastern Africa. I proceeded in the usual conveyance of the country, the heavy lumbering Cape waggon drawn by ten oxen, and was accompanied by
two Christian Bechuanas frum Kuruman, -than whom I never saw better servants,-by two Bakwain men, and two young girls, who, having come as nurses with our children to the Cape, were returning to their home at Kolobeng. Waggontravelling in Africa has been so often described, that I need say no more than that it is a prolonged system of picnicking, excellent for the health, and agreeable to those who are not over fastidious about trifles, and who delight in the open air.

Our route to the north lay near the centre of the coneshaped mass of land which constitutes the promontory of the Cape. If we suppose this cono to be divided into three zones or longitudinal bands, we find each presenting distinct peculiarities of climate, physical appearance, and population. The eastern zone is often furnished with mountains, well wooded with evergreen succulent trees, on which neither fire nor droughts can have the smallest effect (Strelitzia, Zamia horrida, Portulacca afra, Schotia speciosu, Euphorbias, and Aloe arbe.escens). Its seaboard gorges are clad with gigantic timber, and it is comparatively well watered with streams and rivers. The supply of rain is considerable, and the inhabitants (Caffres or Zulus) are tail, muscular, and well made; shrewd, energetic, and brave; and altogether merit the character given them by military authorities, of being "magnificent savages." Their splendid physical development and form of skull show that, but for the black skin and woolly hair, they would take rank among the foremost Europeans.
'I'he next division, which embraces the centre of the continent, consists for the most part of extensive, slightly undulating plains. There are few springs, and still fewer streams. Rain is far from abundant, and droughts may be expected every few years. Without artificial irrigation no European grain can be raised, and the inhabitants (Bechuanas), are inferior to the Caffres in physical development.

The western division is still more level than the middle, being only rugged near the coast. It includes the great plain of the Kalahari Desert.

The probable reason why so little rain falls on this extensive tract is that the prevailing winds of most of the interior are. easterly, and the water taken up by the atmosphere from the Indian Ccean is deposited on the eastern hilly slope. It is a
familiar law of science that the greater the temperature of the air the more moisture it will hold in an invisible form. When the drifting atmosphere arrives at the Kalahari, and comes in contact with the hot currents from the Desert, its capacity for retaining what remains of humidity is increased. Thus the vapour can never be condensed into raindrops. That the Kalahari should nevertheless be clothed with vegetation may be explained by the geolugical formation of the country. A rim of ancient rocks surrounds a great centra] yalley. Though vast areas have been so distorted that but little trace of this formation appears externally, it is highly probable that the basin-shape prevails over large districts; and as the strata on the slopes, where most of the rain falls, dip in towards the centre, the water trickles along heneath the surface till it reaches the Kalahari plains.

The route we followed at this time ran along the middle, or skirted the western zone, until we reached the latitude of Lake Ngami, where a totally different country begins. We passed through districts inhabited by the descendants of Dutch and French refugees who had fled from religiuus persecution. 'lhose living near the capital differ but little from the middle classes in English counties, and are distinguished by public spirit and general intelligence; while those situated far from the centres of civilization are less informed, but are a body of frugal; industrious, and hospitable peasantry. A most efficient system of public instruction was established by Governor Sir George Napier, on a plan drawn up in a great measure by Sir John Herschel. The system had to contend with less sectarian rancour than elsewhere. Until quite recently indeed, that spirit, except in a mild form, was unknown.

Population among the Buers increases rapidly; they marry soon, and continue to have children late. Orphans are never allowed to remain long destitute; and instances are frequent in which a tender-hearted farmer has adupted a fatherless child, and when it came of age has portioned it as his own. Two centuries of the South African climate have not had much effect upon the physical condition of the Boers. They are a shade darker, or rather ruddier, than ordinary whites, and are never cadaverous-looking, as descendants of Europeans are said to be elsewhere. There is a tendency to the development
of steatopyga, so characteristic of Arabs and other African tribes.
'The farms of the Boers usually consist of a small patch of cultivated land in the midst of some miles of pasturage. They are thus less an agricultural than a pastoral people. Each farm must have its fountain; and where no supply of water exists the lands are unsalcable. An acre in England is generally worth more than a square mile in Africa; but the value of colonial farms increases year by year, and they are capable of vast improvement. If dams and tanks were formed, greater fruitfulness would certainly follow.

As cattle and sheep farmers the colonists are very successful. Larger quantities of wool are produced every year. But this pastoral system requires a rapid extension of ground, and the farmers are gradually spreading to the north. The movement proves prejudicial to the country behind, by drawing off the labour which would otherwise be directed to the improvement of the territory already occupied. Encroachment upon the interior actually diminishes cultivation, for less land is put under the plough than was before subjected to the native hoe. The Basutos and Zulus, or Caffres of Natal, undersell our farmers wherever they have a fair field and no favour.

The parts of the colony through which we passed were of sterile aspect; and as the present winter had been preceded by a severe drought, many farmers had lost two-thirds of their stock. The landscape was uninviting; the hills, destitute of trees, were of a dark-brown colour, and the scanty vegetation on the plains made me feel that they were more deserving of the name of Desert than the Kalahari. The soil is said to have beeu originally covered with a coating of grass, which has disappeared with the antelopes which fed upon it, and a crop of mesembryanthemums and crassulas occupies its place. It is curious to observe how organizations the most dissimilar depend on each other for their perpetuation. Here the first grasses owed their dissemination to the animals, which scattered the seeds. When, by the death of the antelopes, no fresh sowing was made, the African droughts proved too much for the crop. But another family of plants stood ready to prevent the sterility which must otherwise have ensued. The mesembryanthemums possess seed-vessels which remain firmly
shut wh.le the soil is dry, and thus the vegetative power is preserved during the highest heat of the torrid sum. When rain falls the seed-vessel opens and sheds its contents just when there is the greatest probability of their growth. In other plants it is heat and drought which cause the seed-vessels to burst and scatter their progeny over the soil.

One of this family is edible (Mesembryanthemum edule); another possesses a tuberous root, which may be eaten raw ; and all are furnished with thick fleshy leaves, having pores capable of imbibing and retaining moisture. If a leaf is broken during a period of the greatest drought, it shows abundant sap. The plants of this family are found much further north, but the excess of grass prevents them from making any show. There, however, they are, ready to fill up any gap which may occur in the prevailing vegetation. It is a reserve supply which would answer the same end as a fresh act of creative power.

Another of the family, M. turbiniforme, is so coloured as to blend in hue with the soil and stoness around it. A gryllus of the same colour feeds on it, and is compensated for its deficiency in the power of motion by thus eluding the notice of birds. The continuation of the species may be presumed in the case of the insect to be the end in view, and with the plant the same device is perhaps adopted, that by hiding it from animals at one period its extensive propagation may serve at another to sustain them.

As this plant is better adapted for sheep and goats in a dry country than grass, the Boers imitate the process by which graminivorous antelopes have disseminated the seeds of the herbage on which they feed. A few waggon-loads of mesem-bryanthemum-plants, in seed, are given to the sheep. The seeds by this means get dropped over the grazing-grounds. While noticing a clever imitation of one process in nature by the Cape farmers, I venture to suggest another for their consideration. The country beyond south lat. $18^{\circ}$ abounds in three varieties of grape-bearing vines; and one of these is furnished with oblong tubers, which are less affected than the common root by the scorching sun. This increase of power to withstand the effects of climate might prove of value in the more arid parts of the Cape colony, grapes being an cacellent restorative in the debility produced by heat, and. by
engrafting, a kind might be secured better adapted to the country than the foreign vines at present cultivated. The Americans find that some of their native vines yield wines superior to those made from the very best plants imported from France and Portugal.

The slow pace at which we wound our way through the (14) colony made almost any subject interesting. The attention is attracted to the names of different places, because they indicate the former existence of buffaloes, elands, and elephants, now to be-found only hundreds of miles beyond. A few blesbucks (Antilope pygarga), gnus, bluebucks (A.cerulea), steinbucks, and the ostrich (Struthio camelus), continue, like the Bushmen, to maintain a precarious existence. The elephant, the most sagacious of animals, flees from the sound of firearms first; the gnu and ostrich, the most wary and the most stupid, vanish last. The earliest emigrants found the Hottentots in possession of prodigious herds of fine cattle, but no horses, asses, or camels. The natives universally believe that they travelled hitherward from the north-north-east. They brought cattle, sheep, goats, and dogs: why not the horse, the delight of savage hordes?

The tsetse would not prove a barrier after its well-defined habitat was known, but the disease passing under the term of horse-sickness (peripneumonia) exists in such virulence over nearly seven degrees of latitude that it would be certainly fatal It is only by great care in stabling that the horse can be kept anywhere between $20^{\circ}$ and $27^{\circ} \mathrm{S}$. from December to April. One attack seems to secure immunity from a second. Cattle are also subject to the disorder at intervals of a few, or sometimes many, years; but it never makes a clean sweep of a herd, as it would do of a troop of fifty horses. This appears to be the reason why the Hottentots did not succeed in bringing the horse to the south with their cattle, shaep, and goats.

The disease attacks wild animals. During our residence at Chonuane numerous tolos, or koodoos, were attracted to the gardens of the Bakwains, which were abandoned at the period of harvest because there was no prospect of the corn (Holcus sorghum) bearing that year. 'l'he koodoo is fond of the green staliks of this kind of millet, and free feeding produced the fai-
ness favourable for the development of the disease. No fewer than twenty-five died on the hill opposite our house. Great numbers of gnus and zebras perished from the same cause, but the mortality produced no sensible diminution in the quantity of the game.

When the flesn of animals that have died of peripneumonia is eaten, it causes a malignant carbuncle; and when this appears over any important organ, it proves rapidly fatal. It is more especially dangerous over the pit of the stomach. The effects of the poison have been experienced by missionaries who had partaken of food not visibly affected by the disease. Many of the Bakwains who persisted in devouring the flesh of animals which had perished from the distemper died in consequence. The virus is destroyed neither by boiling nor roasting. This fact, of which we have had innumerable examples, shows the superiority of experiments on a large scale to those of physiologists in the laboratory, for a well-known physician of Paris, after careful investigation, considered that the virus was completely neutralized by boiling.

Before we reached the Orange river we saw the last portion of a migration of springbucks (Gazella euchore, or tsépe). They come from the great Kalahari Desert, and, when first they cross the colonial boundary, are said to exceed forty thousand in number. I cannot venture on an estimate, for they spread over a vast expanse of country, and make a quivering motion as they graze, and toss their graceful horns. They live chiefly on grass; and as they come from the north about the time when grass most abounds, it cannot be want of food that prompts the movement. Nor is it want of water, for this antelope is one of the most abstemious in that respect. The cause of the migration would seem to be their preference for places where they can watch the approach of a foe. When oxen are taken into a country of high grass, their sense of danger is increased by the power of concealment which the cover affords, and they will often start off in terror at the ill-defined outlines of each other. The springbuck possesses this feeling in an intense degree, and, being eminently gregarious, gets uneasy as the grass of the Kalahari grows tall. The vegetation being scantier in the more arid south, the herds turn in that direction. As they advance and increase in numbers,
the pasturage gets so scarce, that in order to subsist they are at last obliged to cross the Orange river, and become the pest of the sheep-farmer in a country which contains little of their favourite food. If they light on a field of wheat in their way, an army of locusts could not make a cleaner sweep of the whole They have never been seen returning. Many perish from want, and the rest become scattered over the colony. Notwithstanding their constant destruction by firearms, they will probably continue long to hold their place. The Bakalahari take advantage of the love of the springbuck for an uninterrupted view and burn off large patches of grass, both to attract the game by the fresh herbage which springs up, and to form bare spots for them to range over.

On crossing the Orange river we come intu the indepeudent territory inhabited by Griquas and Bechuanas. By Griquas is meant any mixed race sprung from natives and Europeans. These were of Dutch extraction, through association with Hottentots and Bushwomen. Half-castes of the first generation consider themselves superior to those of the second, and all possess in some degree the characteristics of both parents. They were governed for many years by an elected chief named Waterboer, who proved a most efficient guard of our north-west boundary. He drove back a formidable force of marauding Mantatees that threatened to invade the colony, and, except for his firm and brave rule, there is every probability that the north-west would have given the colonists as much trouble as the eastern frontier. Large numbers among the original Griquas had as little scruple about robbing farmers of cattle as the Caffres, but, on his election to the chieftainship, he declared that no marauding should be allowed. Some of his principal men disregarded the injunction and plundered certain villages of Corannas. He seized six of the ringleaders, summoned his council, and tried, condemned, and publicly executed them all. This produced an insurrection, and the insurgents twice attacked his capital, Griqua Town. He defeated both attempts, and during his long reign of thirty years no plundering expedition ever issued from his territory.

Cen years after he was firmly established in power, be sntered into a treaty with the Colonial Government; and,
during the twenty years which followed, not a single charge was ever brought against either him or his people. Sir George Cathcart not only abrogated the treaty with the Griquas, but prohibited their purchasing gunpowder for their own defence. An exception was made in favour of the Transvaal Boers and Caffres, our avowed enemies, while the Bechuanas and Griquas, our constant allies, are debarred from obtaining a single ounce. Such an error could not have been committed by a man of local knowledge and experience, and such instances of confounding friend and foe, under the idea of promoting colonial interests, will probably lead the C'ape community to assert the right of choosing their own goveri:ors.

Many hundreds of both Griquas and Bechuanas have become Christians and partially civilized through the teaching of English missionaries. My first impression was that the accounts of the effect which the Gospel had had upon them were too highly coloured. When, however, I passed on to true heathens in countries beyond the sphere of missionary influence, I came to the conclusion that the change produced was unquestionably great.

The Griquas and Bechuanas were in former times clad much like the Caffres, if the expression may be used when there was scarcely any clothing at all. A bunch of leather strings about eighteen inches long hung from the lady's waist in front, and a prepared skin of a sheep or antelope covered the shoulders. 'The breast and abdomen were left bare. The men wore a patch of apron about as big as the crown of a hat, and a mantle exactly like that of the women. To protect the skin from the sun by day and from the cold by night, they smeared themselves with a compound of fat and ochre: the head was anvinted with pounded blue mica schist mixed with grease. The particles of shining mica, as they fell on the body and on strings of beads and brass rings, were considered highly ornamental. They now come to church in decent clothing. Sunday is well observed, and, even in localities where no missionary lives, religious meetings are regularly held, and children and adults taught to read, by the more advanced of their fellow-countrymen.

It is a proof of the success of the Bechuana Mission that when we came back from the interior we always felt on
reaching Kuruman that we had returned to civilized life. The people are more stingy and covetous than onr poor at home; but in many respects the two are exactly alike. On asking an intelligent chief what he thought of the converts, he replied, "You white men have no idea how wicked we are; we know each other better than you; some feign belief to ingratiate themselves with the missionaries; some profess Shristianity because they like the new system, which gives so much more importance to the poor, and desire that the old system may pass away: and the rest-a pretty large number -profess, because they are really true believers." This account is very nearly correct.

There is little prospect of their country ever producing much material for commerce with the exception of wool. At present the chief article of trade is karosses or mantles. Ivory is next in importance, but the quantity cannot be great now that the powder for shooting elephants is debarred entrance into the country. A few skins and horns, and some cattle, make up the remainder of the exports. English goods, sugar, tea, and coffee are the commodities received in exchange. The natives soon become extremely fond of coffee. The acmé of respectability among the Bechuanas is the possession of cattle and a waggon; and though the waggon requires frequent repairs, not a man among $t$ ' om has ever learnt to mend it. Forges, tools, and teachers have been at their service, but, beyond putting together a camp-stool they have made nc effort to acquire a knowledge of the trades. They will watch a missionary at work until they understand whether a tire is well welded, and, having pronounced upon its merits with great emphasis, their ambition is satisfied. It was in vain I tried to indoctrinate them with the idea that criticism did not imply any superiority over the workman, or even an equality (15) with him.

## CHAPTER VI.

Kublyan.-Missionaries : their duties and labours_-Outbag of Boers.-Retaliation.-Notices of Bakwains.

The permanence of the Kuruman station depends entirely on the fine ever-flowing fountain of that name. The water usually issues at a temperature of $72^{\circ}$ Fahr., and probably comes from the old silurian schists, which formed the bottom of the great primæval valley of the continent. I could not detect any diminution in the supply during my residence in the country; but when Mr. Moffat first attempted a settlement here, thirty-five years ago, he made a dam six or seven miles off, which is now never reached by a single drop of the fountain water. 'There are places fourteen miles below the Kuruman gardens, which are pointed out as being frequented by hippopotami within the memory of living people, and having pools sufficient to drown both men and cattle. This diminution of the water must be ascribed to the general desiccation of the country, though much of what formerly passed onwards is consumed by the irrigation carried on at the mission station along both banks of the stream.

The Kuruman district presents evidence that this dry southern region was at no distant date as well watered as the country north of Lake Ngami is at present. Ancient riverbeds abound, and the very eyes of fountains long since dried up may be seen, in which the flow of centuries has worn these orifices from a slit to an oval form. On their sides are the tufa, which was abundantly deposited from the primitive waters. Many of these fountains run no longer, because the outlet is now too high, or because the elevation of the western side of the country lifts the land away from the water-supply below. If a cutting is made from a lower level to the springs they gush forth in a perennial stream. Several of these ancient fountains have been resuscitated by the Bechuanas near Kuruman. Their hydraulic works are not always remarkable for the intelligence displayed in them. They will
labsur for months at deep cuttings, which, having once begun, they feel bound in honour to persevere in, though told by a missionary that they can never force water to run up hill.

The Boers in this region make long and deep canals from lower levels up to spots which afford no other indication that water exists beneath than a few rushes and a coarse reddishcoloured grass. These grow in a hollow, which anciently must have been the eye of a fountain, but is now filled up with soft tufa. In other instances rushes growing on a long sandy ridge a foot or two in height, instead of in a furrow, is the sign of the water which lurks below. A deep transverse cutting made through the ridge is rewarded by a running stream. The ground over the water is raised above the surrounding level by the dust and sand which get blown against the rushes. The moisture which rises at night fixes the particles securely among the roots, and a height instead of a hollow is the result.

The aspect of this part of the country during must of the year is of a light yellow colour; but for some months during the rainy season a pleasant green predominates over the yellow. Kanges of hills appear in the west, but east of them we find hundreds of miles of grass-covered plains. Large patrhes of these flats are covered with white calcareous tufa, and the vegetation upon it consists of fine grass growing in tufts among low bushes of the " wait-a-bit" thorn (Acacia detinens), with its annoying fish-hook-like spines. Where the soil consists of yellow sand tall coarse grasses grow among berry-yielding bushes, named moretloa (Grewia flava) and mohatla (Tarchonanthus), the last of which has sufficient aromatic resinous matter to buin brightly, though perfectly green. In more sheltered spots we come on clumps of the white-thorned mimosa (Acacia horrida, and A. atomiphylla), great abundance of wild sage (Salvia Africana), and various leguminosæ, ixias, and large-flowering bulbs. The Amaryllis toxicaria and $A$. Brunsvigia multiflora (the former a poisonous bulb) yield in the decayed lamellæ a soft silky down, which is a good material for stuffing mattresses.

In some few parts of the country the remains of ancient forests of wild olive-trees (Olea similis), and of the camel-thorn (Acacia giraffe), are still to be met with ; but when the camel
thorns are felled in the proximity of a Bechuana village no successors spring up. It is probable that this is the tree of which the Ark of the Covenant and the Tabernacle were constructed, as it is reported to be found on the spot where the Israelites were at the time these were made. It is an imperishable wood, while that which is usually supposed to have been the "shittim" (Acacia nilotica) wants beauty, and soon decays.

In company with the camel-thorn we find a curious plant, named ngotuané, which bears a profusion of fine yellow flowers, and which have so strong a scent that they perfume the air. Nearly all the other plants in the dry parts of Africa have either no smell or else emit a disagreeable odour. The ngotuane contains an active poison, and a mere taste of it causes a burning sensation in the throat. A French gentleman, having drunk a mouthful or two of an infusion of its flowers as tea, was rendered nearly powerless. The puison is neutralized when mised with vinegar. A single glassful of this antidote proved with the Frenchman a complete and instantaneous cure. As soon as he had taken it he felt, he said, as if electricity had run along his nerves. The usual proximity of the ngotuane to the oamel-thorn may be accounted for by the probability that the giraffe, which feeds on the tree, makes use of the plant as a medicine.

During the period of my visit at Kuruman, Mr. Moffat, who has been io missionary in Africa upwards of forty years, was engaged in carrying the Bible, in the language of the Bechuanas, through the press at his station. As he was the first to reduce their speech-which is called Sichuana-to a writteri form, and has had his attention directed to the study for thirty years, he may be supposed to be better adapted for the task than any man living. The compreliensive meaning of the terms in this tongue may be inferred from the fact that there are fewer words in the Pentateuch in Mr. Moffat's translation than in the Greek Septuagint, and far less than in our English version. It is fortunate that the task has been completed before the language became adulterated with half-uttered foreign words, and while those who have heard the eloquence of the native assemblies are still living. The young who are brought up in our schools know less of the tongue than the
missionaries. The Sichuana vocabulary is extraordinarily copious. Mr. Moffat never spends a week at his work without discovering new words. Yet a person who acted as interpreter to Sir George Cathcart told him that the language of the Basutos was not capable of expressing the substance of a chier's diplomatic paper, thaugh the chief who sent it could have worded it again off-hand in three or four different ways. The interpreter could scarcely have done as much in English. 'The Sichuana is, however, so simple in its construction, that its copiousness by no means requires the explanation that the people have fallen from a former state of civilization. Language seems to be an attribute of the human mind. Since the vocabulary is so extensive, the phenomenon of any man who, after a few months or years' study of a native tongue, cackles forth a torrent of words, may well be wondered at. Though I have had as much intercourse with the purest idiom as most Englishmen, I am always obliged to utter an important statement very slowly, and repeat it afterwards, lest the foreign accent, distinctly perceptible in all Europeans, should render the same unintelligible. In this I follow the example of the Bechuana orators, who, on matters of moment, always speak deliberately, and with reiteration. Both rich and poor talk their language correctly; there is no vulgar style. Children have a patois of their own, and use many words in their play which men would scorn to employ. The Bamapela have adopted a click into their dialect, and a large infusion of the ringing $\bar{n}$, which seems to have been introduced for the purpose of preventing others from understanding them.

It would be no cause for congratulation if the Bechuana Bible was likely to meet the fate of Elliot's Choctaw version, in which we have God's word in a language which no tongue can articulate, and no mortal can understand. A better destiny seems in store for Mr. Moffat's labours, for the Sichuana has been introduced into the new country beyond Lake Ngami, where it is the court language, and will carry a stranger through a district larger than France. The Bechúanas in addition probably possess that imperishable property which forms so remarkable a feature in the entire African race.

Wher converts arc made from heathenism it becomes an
interesting question whether their faith has the elements of permanence, or is only an exotic too tender for self-propagation when the fostering care of the foreign cultivators is withdrawn. If habits of self-reliance are not encouraged the most promising converts are apt to become like spoiled children. In Madagascar a few Christians were left with no other aid than their Bibles; and though exposed to persecution, and even death itself, they increased tenfold in numbers, and are, if possible, more decided believers than when, by an edict of the queen of that island, the missionaries ceased their teaching. In South Africa such an experiment could not be made, for a variety of Christian sects have followed the successful footsteps of the London Missionary Society, and if any converts are thrown on their own resources they are eagerly adopted by one of these denominations. The people are in this way more likely to be injured than trained to the manly Christian virtues. Another misfortune is that the Missionary Societies consider the Cape Colony itself as the proper sphere for their operations, although, in addition to a well-organised Dutch Established Church, and schools for secular instruction, maintained by Government, in every village of any extent, there are a number of other sectsWesleyans, Episcopalians, Moravians-all labouring at the same good work. It is deeply to be regretted that so much zeal should be expended in a district where there is so little scope for success, to the neglect of the millions of unenlightened beings in the regions beyond. I would earnestly recommend all young missionaries to go at once to the real heathen.

When Sechele understood that we could ro longer remain with him at Kolobeng, he sent his five children for instruction in all the knowledge of the white men to Mr. Moffat, at Kuruman, who liberally received the young folks and their attendants into his family.

Having been detained at Kuruman about a fortnight by the breaking of a waggon-wheel, I was providentially prevented from being present at the attack of the Boers on the Bakwains. The news was brought by Masebele, the wife of Sechele, who had herself been hidden in a cleft of a rock, over which a number of their assailants were firing. She brought Mr. Moffat a letter, which tells its own tale:-
" Friend of my heart's love, and of all the confiden ee of my heart, I am Sechele; I am undone by the Boers, who attacked me, though I had no guilt with them. They demanded that I should be in their kingdom, and 1 refused; they demanded that I should prevent the English and Griquas from passing (northwards). I replied, These are my friends, and I can prevent no one (of them). They came on Saturday, and I besought them not to fight on Sunday, and they assented. They began on Monday morning at twilight, and fired with all their might, and burned the town with fire, and scattered us. They killed sixty of my people, and captured women, and children, and men. And the mother of Baleriling (a former wife of Sechele) they also took prisoner. They took all the cattle and all the goods of the Bakwains; and the house of Livingstone they plundered, taking away all his goods. The number of waggons they had was eighty-five, and a cannon; and after they had stolen my own waggon and that of Macabe, then the number of their waggons (counting the cannon as one) was eighty-eight. All the goods of the hunters (certain English gentlemen hunting and expluring in the north) were burned in the town : and of the Boers were killed twenty-eight. Yes, my beloved friend, now my wife goes to see the children, and Kobus Hae will convey her to you.

> "I am, Sechele.
> " The Son of Mochoasele."

Ihis statement is in exact accordance with the account given by some of the Boers themselves to the public colonial papers. The only cause they alleged was that "Sechele was getting too saucy." Their demand that he should be subject to them and prevent the English traders passing northwards was kept out of view. Soon after Pretorius had despatched this marauding party against Kolobeng he was called away to the Great 'Tribunal. His policy is justified by the Boers - from the instructions given to the Jewish warriors in Deuteronomy xx. 10-14. Hence the obituary notice of him ended with the words, "Blessed are the dead who die in the Lord."

The report of this outrage on the Bakwains, coupled with the denunciations against myself for having, as it was asserted, faught them to kill Boers, produced such a panic in the
country, that I could not prevail upon a single servant to accompany me to the north. Loud vows of vengeance were nttered against me by the Boers, and threat.s of instant pursuit by a large party on horseback, should I dare to go into or beyond their country. After I had been detained for months at Kuruman from inability to procure waggon-drivers, I at last found three servants who, in spite of imprecations, were willing to risk the journey. A man of colour, named George Fleming, who wished to establish a trade with the Makololo, had managed to get a similar number. To be sure they were all the worst possible specimens of those who imbibe the rices without the virtues of Europeans, but we had no choice, and were glad to get away on any terms.

We left Kuruman on the 20th of November. When we reached Motito, forty miles off, we met Sechele, on his way, as he said, "to the Queen of England." Two of his children, and their mother, a former wife, were among the captives seized by the Boers ; and as he had a strong belief in English justice, he was convinced that he should obtain redress from our sovereign. He employed all his eloquence to induce me to accompany him, and I in turn endeavoured to dissuade him from his project. "Will the Queen nut listen to me," he inquired, "supposing I should reach her?" I replied, "I believe she would listen, but the difficulty is to get to her." "Well," said he, "I shall reach her." When he got to Bloemfontein he found the English army just returning from a battle with the Basutos, in which both parties claimed the victory, and both were glad that a second engagement was not tried. Our officers invited Sechele to dine with them, heard his story, and collected a handsome sum of money to enable him to pursue his journey to England. He proceeded as fur as the Cape, when, his resources being expended, he was obliged to go back to his own country, one thousand miles distant, without accomplishing his intention. On his return he adopted the punishment be had witnessed in the colony, of making criminals work on the public roads. He has since, I am informed, become himself the missionary to his own people. He is very dark; and his subjects swear by "Black Sechele." He has great intelligence, reads well, and is a tluent speaker. Such is his influence that numbers of the
tribes, formerly living under the Boers, have taken refuge under his sway, and he is now greater in power than before the attack on Kolobeng.

Having parted with Sechele, we skirted along the Kaiahari Desert, and sometimes went within its borders, giving the Boers a wide berth. A larger fall of rain than usual had occurred in 1852, which completed a cycle of eleven or twelve years, when the same phenomenon is reported to have happened on three occasions. An unusually large crop of melons had appeared in consequence. We had the pleasure of meeting with Mr. J. Macabe returning from Lake Ngami, which he had reached by going right across the Desert from a point a little to the south of Kolobeng. His cattle had subsisted on the water-melons for twenty-one days; and when they reached water did not seem to care much about it. Before the lake was discovered Macabe wrote a letter in one of the Cape papers recommending a certain route as likely to lead to it. The Transvaal Boers fined him 500 dollars for writing abont " onze velt," our country, and imprisoned him till the fine was paid. I now learned from his own lips that this story was true. His companion, Mahar, was mistaken by a tribe of Barolongs for a Boer, and shot as he approached their village. When Macabe came up and explsined that the victim was an Englishman, they expressed the utmost regret, and helped to bury him. We afterwards heard that there had been some fighting between these Barolongs and the Boers, and that there had been capturing of cattle on both sides. If the report was true, it was the first time that I ever knew of cattle being taken by Bechuanas. This was a Caffre war in stage the second; the third stage is when both sides are equally well armed and afraid of each other; the fourth, when the English take up a quarrel not their own, and the Boers slip out of the fray.

During the dry, seasons which succeed our winter and precede our rains, a hot wind occasionally blows over the Desert from north to south. It feels as if it came from an oven, and seldom lasts longer than three days at a time. It resembles in its effects the harmattan of the north of Africa, and at the time the missionaries first settled in the country, thirty-five years ago, it came loaded with fine reddish-colowred
sand. It is so devoid of moisture as to cause the wood of the best seasoned English boses and furniture to shrink. The air is full of electricity, and a bunch of ostrich-feathers held for a few seconds against the wind becomes as strongly charged as if attached to a powerful electrical machine. Even at other times the movement of a native in his kaross will often produce a stream of small sparks. The first time I noticed this appearance was while a chief was travelling with me, when the fur of his mantle, being slightly chafed by the movement of the waggon, assumed a luminous appearance. I rubbed it smartly with my hand, and it gave out bright sparks, which were accompanied with a sharp crackling sound. "Don't you see this?" said I. "The white men did not show us this," he replied; "we had it long before white men came into the country, we and our forefathers of old." Otto von Guerrike is said to have been the first that ever observed the phenomenon in Europe. It had been familiar to the Bechuanas for ages, but nothing came of it. The human mind has here remained stagnant in reference to the physical operations of the universe. No science has been developed, and few questions are discussed except those which have connexion with the wants of the stomach.

Large flocks of swifts (Cypselus apus) were observed flying over the plains north of Kuruman. I counted a stream of them which must have numbered upwards of four thousand. Only a few of these birds breed in this country. I have often observed that there was no appearance of pairing, nc chasing of each other, nor any playing together. There are several other birds which continue in flocks, and move about during the breeding season, which happens in this country between the cold and hot weather; for cold acts here like the genial warmth of spring in less sultry climes. Are these the migratory birds of Europe, which return there to breed and rear their young?

On the 31 st December, 1852 , we reached the town of Sechele, which is called Litubaruba from the part of the range on which it is situatad. Near the village there exists a care named Lepelole, which no one dared to enter, for it was the common belief that it was the habitation of the Deity. I proposed to explore it. The old men said that every one who
went in remained there for ever, and added, "If the teacher is so mad as to kill himself, let him do so alone, we shall not lie to blame." The declaration of Sechele, that he would follow where I led, produced the greatest consternation. There was little enough to reward curiosity. An entrance about ten feet square became narrowed into two water-worn branches, ending in round orifices through which the water once flowed. The only inhabitants it seems ever to have had were baboons.

I never saw the Bakwains looking so haggard and lean as at this time. Most of their cattle had been swept away by the Boers, and all their corn, clothing, and furniture had been consumed in the flames. They were now literally starving. Some young men having ventured to go to meet a party of Boers returning from hunting, the latter were terrified and ran off. The young men brought their waggons to Litubaruba, and the affrighted colonists conceived an idea that the Bakwains had commenced a guerilla war. The Boers sent four of their number to ask for peace! I was present and heard the condition: "Sechele's children must be restored to him." Strong bodies of armed Bakwains occupied every pass in the hills; and had not the four ambassadors promised much more than they performed, that day would have been their last. The commandant Scholz had taken the children of Sechele to be his own domestic slaves. I saw one of them returned to his mother. He had been allowed to roll into the fire, and there were three large unbound sores on his budy. His mother and the women received him with floods of tears. I took down the names of some scores of boys and girls, many of whom I knew to be our scholars; but I could not comfort the weeping mothers with any hope of their return from captivity. The Boers know from experience that adults may as well be left alone, for escape is so easy in a wild country that no fugitive slave-law can come into operation. They therefore seize only the young, that they may forget their parents and remain in perpetual bondage.

The Bechuanas are universally much attached to children. A little child who toddles near a party of men while they are eating is sure to get a handful of the food. The parents take the name of the offspring, and often address them as Ma (mother).
or Ra (father). Mrs. Livingstone, after the birth of our eldest boy Robert, was always addressed as Ma-Robert.

I have examined several cases in which a grandmother has suckled a grandchild. Sina, of Kuruman, married when she was seventeen or eighteen, and had twins; Masina, her mother, after an interval of fifteen years since she suckled a child, applied one of them to her shrivelled breast, the milk flowed, and she was able to nurse the infant entirely. She was at this time at least forty years old I have witnessed several other analogous cases. Is it not possible that the story in the 'Cloud of Witnesses,' of a man yielding milk when he put his child to his breast during the persecution in Scotland may have been literally true? As anatomists declare the structure of male and female breasts to be identical. there is nothing impossible in the alleged result. Indeed Baror Humboldt quotes an instance where the male gave forth milk.

In conversation with some of my friends I learned that Maleke, a chief of the Bakwains, had died from the bite of a mad dog. I never heard of another case, and could not satisfy myself that this was real hydrophobia. While I was at Mabotsa some dogs were affected by a disorder which led them to run about in an incoherent state; but I doubt whether it was anything but an affection of the brain. No animal took the complaint by inoculation from their teeth; and the prevailing idea that hydrophobia does not exist within the tropics appears to be correct.

The diseases of the Bakwains are few. There is no consumption or scrofula, and insanity and hydrocephalus are rare. Cancer and cholera are quite unknown. Small-pox and measles passed through the country about twenty years ago and committed great ravages; but though the former has since repeatedly broken out on the coast, neither malady has again travelled inland Inoculation for the small-pox was common. In one village they seem to have selected the matter from a virulent case, for nearly all the inhabitants were swept off by the scourge in its malignant confluent form. In other parts the natives inoculated the forehead with some animal deposit. Where the Bakwains got the idea I cannot conceive.' When they adopted the practice tney had no intercourse whatever with the southern missionaries. They readily make use of the vaccine virus when it is brourlt within their reach.

A certain loathsome disease which decimates the North American Indians, and threatens extirpation to the South Sea islanders. dies out in the interior of Africa. The Bangwaketse, who brought it from the west coast, lost it when they came into their own land south-west of Kolobeng. It seems incapable of permanence in the centre of the country in persons of pure African blood. Among the Portuguese, Corannas, and Griquas of mixed breed it produces the same ravages as elsewhere. The virulence of the secondary symptoms, in all the cases that came under my care, seemed in exact proportion to the amouni of European blood. Among the Barotse I found a disease called manassah, which closely resembles that of the fceda mulier of history.

Stone in the bladder and gravel are unknown, though the waters are often so strongly impregnated with sulphate of lime that kettles quickly become incrusted with the salt. Some of my patients, who were troubled with indigestion; believed that their stomachs had got into the same condition with their kettles. The immunity from calculi would appear to be one of the privileges of the Negro race, for seldom in the United States have the most famed lithotomists met with a case among them.

The most prevalent diseases are pneumonia, produced by sudden changes of temperature, and other inflammations, as of the bowels, stomach, and pleura, with rheumatism, and disease of the heart. These become most rare as the people adopt the European dress. Every year the period preceding the rains is marked by an epidemic. Sometimes it is general ophthalmia, resembling that which prevails in Egypt. At another time it is a kind of diarrhoea, which no medicine will cure until there is a fall of rain, when anything acts as a charm. Once the annual visitation was a disease which looked like pneuruonia but with the peculiar symptom of great pain in the seventh cervical process. The persons who died of it were in a camatose state for many hours or days. As no inspection of the body is allowed by these people, and the place of sepulture is carefully concealed, I had to rest satisfied with conjecture. Frequently the Bakwains buried their friends in the huts where they died, for fear the witches (Baloi) should disinter them and use some part of the corpse in their fiendish arts. Scarcely is the breath out of the body when it is hurried away
to be interred. An anteater's hole is often selected, to save the troukle of digging a grave. On two occasions while I was there the buried men returned home to their affrighted relatives. They kad recovered while in their graves from prolonged swoons.

In ophthalmia the doctors apply the pungent smoke of certain roots to the eyes, the patient at the same time taking strong draughts of it up his nostrils. Two or three grains of nitrate of silver dissolved in an ounce of rain-water answered the end so much more effectually, that every morning the people came in crowds for the remedy. This solution is a good preventive of an acute attack if poured into the eyes as soon as the pain begins, and might prove valuable for travellers. The native practitioners also cup on the temples for the disorder. The skin is scarified, and the large end of a goat or antelope horn placed over the cuts. The edges of the horn are wetted with water to make it adhere more completely. At the small end a little hole is pierced, through which the air is sucked out till a vacuum is formed. The hole is then stopped up with wax, and the pressure of the atmosphere having been removed from the blood it flows out into the horn. The operation is well performed, though the doctor cannot always resist the temptation to join quackery with science, and occasionally separates the fibrine from the blood in a basin of water by his side, and pretends that he has extracted something pernicious He thus explains the rationale of the cure, and the ocular de monstration is convincing to the patient.

Those doctors who have inherited their profession as an heirloom generally possess some valuable knowledge, the result of long observation. The rest are usually quacks. With the regular practitioners I always remained on the best terms, and refrained from appearing to doubt their skill in the presence of their patients. Any explanation in private was thankfully received, and wrong treatment readily changed for more rational methods. English drugs were eagerly accepted : and we always found medical knowledge an important aid in couvincing the people that we were anxious for their welfare.

The surgical skill of the natives is at a low ebb. Nc one ever attempted to remove a tumour except by external application. A man had one on the nape of his neck as largr
as u child's head. Some famous doctor attempted tu dissolve it by kindling on it a little fire made of a few small nieces of medicinal roots. 1 removed this tumour, as I did an immense number of others, witl perfect safety. They are chiefly of a fatty and fibrous kind. All the natives have the vis medicatrix in remarkable activity. Both men and women submit to an operation without wincing. The women pride themselves on their ability to bear pain. A mother will address her little girl, from whose foot a thorn is to be extracted, with "Now, Ma, you are a woman; a woman does not cry." A man scorns to shed tears. The son of an aged father was drowned in one of the deep wells in the Kalahari, while playing on its brink. The father uttered an exceedingly great and bitter cry, the only instance I ever met with of a man weeping in this country.

Their ideas on obstetrics are unscientific, and for a medical man to go near a woman at her confinement would appear to them more out of place than a female medical student would appear to us in the dissecting-room. A case of twins occurred in which the ointments of all the doctors of the town proved utterly unavailing. A few seconds of English art afforded relief, and the prejudice vanished at once. I reserved myself for the difficult cases; and had often the satisfaction of rendering great assistance to mothers in their hour of sorrow. The poor creatures are often placed in a little hut built for the purposc, and are left without any aid whatever. Umbilical hernia was frequent in consequence. They suffer less at their confinement than in civilised countries; perbaps from their treating it as a simple operation of nature, which requires no change except a feast of meat and abundance of fresh air. The husband on these occasions is bound to slaughter for his lady an ox, goat, or sheep, according to his means.

My knowledge of midwifery procured for me great fame n a department in which 1 could lay no claim to merit: A woman came a distance of one hundred miles to consult me in a complaint which seemed to have baffled the native doctors. A complete cure was the rewnit. and some twelve months after she bore a son to her husband, who had previously reproached her for being barren. She sent me a handsome present, and proclaimed that I possessed a medicine
for the removal of sterility. The result was, that I was teased with applications from husbands and wives from all parts of the country. Some came upwards of two hundred miles to purchase the boon, and it was in vain for me to explain that 1 had prescribed for an entirely different complaint, whatever might have been the consequential effects of the case. The more I denied, the higher their offers rose ; they would give any money for the "child medicine;" and it was really heartrending to hear the earnest entreaty, and see the tearful eye, which spoke the intense desire for offspring. I I am getting old," a woman would say ; "you see grey bairs here and there on my head, and I have no child : you know how Bechuana husbands cast their old wives away ; what can I do? I have no child to bring water to me when I am sick." \&c.

The whole of the country adjacent to the Desert, from Kuruman to Kolobeng, or Litubaruba, and beyond up to the latitude of Lake Ngami, is remarkable for the salubrity of its climate. Europeans whose constitutions have been impaired by an Indian residence, feel its restorative powers. The health and longevity of the missionaries have always been fair, though mission-work is not usually conducive to either. Cases have been known in which patients have come from the sea-side with complaints which closely resembled consumption; and they have recovered by the change of residence alune. The parts near the coast, where we have such favourable reports of the bealth of the British troops, are inferior for persons suffering frora pulmonary complaints to any locality which is not sribiected to the influence of sea-air.

Mr. Oswell thought the climate much superior to that of Peru, and, were it not for the great expense of such a trip, I should have no hesitation in recommending the horders of the Kalahari Desert as admirably suited for pulmonary complaints. It is the complete antipodes of our raw English atmosphere. The winter, which begins in May and ends in August, is perfectly dry. Not a drop of rain falls during that period, and damp and cold are never combined. During many months there is scarcely any dew. However hot the day might have been at Kolobeng, -and the thermometer sometimes rose to $96^{\circ}$ in the coolest part of our house,-yet the
almosphere never had that steamy feeling and those dehilitating effects which prevail in India and on the coast of Africa itself. Nothing can exceed the balminess of the evenings and mornings throughout the year. You wish for an increase neither of cold nor keat.

## CHAPTER VII.

Digeabes of antmals.-The lion.-Serpents.-Native customs. Bamangwato Hills.-The ostrich.

Having remained five days with the wretched Bakwains. we prepared to depart on the 15th January, 1853. Several doge had taken up their residence at the water. No one would own them; it was plain they had
"Held o'er the dead their carnival"
after the slaughter committed by the Boers, and hence the disgust with which they were viewed.

On our way from Khopong, along the ancient river-bed which forms the pathway to Boatlanama, I found a species of sactus. I had seen only two before in the country, -one in the colony with a bright red flower, and another at Lake Ngami, the flower of which was liver-coloured. The present specimen was not in bloom.

On the 21st January we reached the wells of Boatlanama, and found them for the first time empty. Lopepe, where I had formerly seen a stream running from a large reedy pool. was also dry. We pushed on for the delicious waters of Mashüe. In travelling through this region the olfactory nerres are frequently excited by a strong disagreable odour, which is caused by a large jet-black ant named "Leshónya." It is nearly an inch in length, and emits a pungent smeil when alarmed, in the same manner as the skunk.

Occasionally we lighted upon land tortoises, whish, with their unlard eggs, make a very agreeable dish. It is wonderful how this reptile holds its place in the country, for it possesses neither speed nor cunning; even its bony covering
from which the teeth of the hyæna glance off foiled, does no: protect it from man. Its yellow and brown colour, by its similarity to the surrounding grass and brushwood, helps to render it indistinguishable. The young are taken for the sake of their shells. These are made into boxes, which the women fill with sweet-smelling roots and hang them round their persons. When older the animal is eaten, and its armour converted into a rude basin to hold food or water. When about to deposit its eggs, it lets itself into the ground by throwing the earth up round the shell, until the top only is visible; the eggs laid, it covers them up and leaves them. When the rains begin to fall and the fresh herbage appears, the young ones come out, and, unattended by their dam, begin the world for themselves. Their food is tender grass and a plant named thotona. They frequently devour woodashes, and travel great distances to places where they can get health-giving salt.

Inquiries among the Bushmen and Bakalahari, who are intimately acquainted with the habits of the game, lead to the belief that many diseases prevail among wild animals. I have seen the kokong or gnu, káma or hartebeest, the tsessébe, kukama, and the giraffe, so mangy as to be uneatable even by the natives. Numerous zebras are found dead with masses of foam at the nostrils, exactly as occurs in the common " horsesickness." I once found a buffalo sightless from ophthalmia by the fountain Otse; when he attewpted to run he lifted up his feet in the manner peculiar to blind animals. The rhinoceros has often worms on the conjunction of his eyes; but the inability to see correctly which makes him charge past a man who has wounded him, if he stands perfectly still, in the belief that his enemy is a tree, probably arises from the horn being placed in the line of vision. All the wild animals are subject to intestinal worms. The zebras and elephants are seldom without them. The zebra, giraffe, eland, and kukama, sometimes become mere skeletons from decay of their teeth. Lions get lean and perish miserably from the same cause. When they grow too old to catch game, they frequently take to killing goats in the villages: a woman or child who happens to go out at night falls into their clutches. As they have no other resource, they continue to visit in
habited places; and from this circumstance has arisen the idea that the lion, when he has once tasted human flesh, loves it better than any other. A man-eater is invariably an old lion; and when he comes for goats, the people remark, "His teeth are worn, he will soon kill men." They at once turn out to destroy him. When living far away from the haunts of men, or when he entertains a dread of the Bushmen and Bakalahari, he beyins, as soon as old age overtakes him, to catch mice and uther small rodents. He even eats grass, though this perhaps he dues, like dogs, as medicine. The natives, observing undigested vegetable matter in his droppings, follow up his trail in the certainty of finding him under some tree scarcely able to move. They then despatch him without difficulty.

The fear of man often remains excessively strong in the carnivora. The lioness, in the vicinity of towns where the large game have been driven away by fire-arms, has been known to assuage her hunger by devouring her young.* Yet so many lions came about our half-deserted houses at Chonuane while we were removing to Kolobeng, that the natives were terrified to stir out-of-doors in the evenings.

The African lion is somewhat larger than the biggest dog, and the face, which is not much like the usual drawings, partakes very strongly of the canine features. If he is encountered in the daytime he turns slowly round after first gazing a second or two, walks as slowly away for a dozen paces looking over his shoulder, quickens his step to a trot till he thinks himself out of sight, and then bounds off like a greyhound. As a rule, there is not the smallest danger of a lion which is unmolested attacking man in the light. When the moon was shining we seldom tied up our oxen, but let them lie louse by the waggon, while on a dark rainy night, if there was a single beast in the neighbourhood, he was almost sure to attempt to kill one of our cattle. His approach is always stealthy except when wounded. A lion however with whelps will brave almost any danger. A person has only to cross where the wind blows from him to the animals, and both male and female will rush at him. In one case a man was

[^9]bitten before he could climb a tree : and occasionally a man on horseback has been caught by the leg under the same circumstances.

When a lion is very hungry, and lying in wait, the sight of an animal may excite him to go after it. A hunter who was stealthily crawling towards a rhinuceros happened to glance behind him, and found to his horror a lion stalking him. He only escaped by springing up a tree like a cat. At Lopepe a lioness sprang on the after quarter of Mr. Oswell's horse, which started away, and the rider, caught by a wait-a-bit thorn, was dragged to the ground and rendered insensible. His dogs saved him. 'I'he lion has a characteristic which he seems to possess in common with the rest of the feline species, that any appearance of a trap brings him to a stand. When a goat is picketed in India on a plain as a bait for a tiger, the latter whips off the animal so quickly that no one can take aim. A small pit is therefore dug, and the goat is tied to a stake at the bottom. This renders the tiger suspicious, and he walks round and round the pit, which allows the hunter, who is lying in wait, to have a fair shot. The lion is equally cautious; one eprang at Captain Codrington, who shot him dead in the neck. A horse ran away, and was stopped by the bridle catching a stump. He remained a prisoner two days, and Captain Codringtion found the whole space around marked by the footprints of liuns. They had been afraid to attack the haltered horse, from the apprehension that it was a trap. A couple came by night to within three yards of the place where the oxen were tied to a waggon, and a sheep to a tree. They stood roaring, but were afraid to make a spring. On another occasion three of our party were lying sound asleep, when a lion approached within a yard or two and began to roar. 'I'he fact that their riding-ox was fastened to the bush deprived him of the courage to seize his prey. He retired to a knoll three hundred yards distant. where he roared all night. and continued growling as the men moved off next morning.

Nothing that I ever learned of the lion would lead me to attribute to it either the ferocious or noble character ascribed to it elsewhere. He chiefly preys upon defenceless creatures: and frequently, when a buffalo calf is caught by him, the cow rushes to the rescue, and a toss from her often kills him. On the plain, south of Sebitusne's ford, a herd of these animal.
kept a number of lions from their young by the males turning their heads to the enemy. A toss, indeed, from a bull would put an end to the strongest lion that ever breathed. It is questionable if a single beast ever engages a full-grown buffalo, for when one falls a victim the amount of roaring seems to indicate that there has been a league to effect the slaughter. Messrs. Oswell and Vardon once saw three lions combine to pull a buffalo down, and they could not accomplish it without a struggle, though he was mortally wounded by a two-ounce ball. I have been informed that in India even the tame buffaloes will chase a tiger up the hills, bellowing as if they enjoyed the sport. The calves of elephants are sometimes torn by lions, but every living thing retires before the lordly parent, though even a full-grown specimen would be an easier
(17) prey than the rhinoceros. The mere sight of the latter is sufficient to make the lion rush away. Yet of his great strength there can be no doubt. The immense masses of muscle around his jaws, shoulders, and forearms, proclaim tremendous force, but he seems in this respect to be inferior to the Indian tiger. When he performs such feats as taking away an ox he does not carry the carcase, but drags it along the ground.

It is doubtful whether the lion ever attempts to seize an animal by the withers, and he seldom mounts on its hindquarters. He either springs at the throat below the jaw or flies at the flank. The last is the most common point of attack, and it is the part he begins to feast on first. An eland may be seen disembowelled so completely, that he scarcely seems cut up at all. The entrails and fatty parts form a full meal for even the largest lion. When gorged, he falls fast asleep, and is then easily despatched. He sometimes lays dead the jackal by a stroke from his paw as he comes sniffing about the prey.

Where game is abundant, lions may be expected in proportion. They are never seen in herds, but six or eight, who are probably of one family, occasionally hunt together. There is less danger of being devoured by them in Africa than of being run over when walking in the streets of London. Hanting them with dogs involves little peril when compared with hunting the tiger in India, for the dogs drive them from the


THREE LIONS ATTEMPTING TO DRAG DOWN A BUFFALO, AS SEEN BY MR OSWELL AND MAJOR VERNON
cover, and as they stand at bay the sportsman has plenty of time for a deliberate shot. In short, nothing that I have seen or heard about lions would constitute a barrier in the way of men of ordinary courage.

The same feeling which has induced the modern painter to exaggerate the form of the "king of beasts" has led the sentimentalist to consider his roar the most terrific of earthly sounds; " majestic" is the common epithet applied to it. It is calculated to inspire fear when heard in a pitchy dark night amidst the tremendous peals of an African thunderstorm, and the vivid flashes of lightning which leave on the eye the impression of stone-blindness, while the rain pouring down extinguishes the fire, and there is neither the protection of a tree, nor a chance that your gun will go off. But when any one is snug in a house or waggon, the roar of the lion inspires no awe A European cannot distinguish between the note of a lion and that of an ostrich. In general the voice of the former seems to come deeper from the chest; but to this day I can only pronounce with certainty from which of the two it proceeds, by knowing that the ostrich roars by day and the lion by night. The natives assert that they can detect a difference at the commencement of the sound. There is, it must be admitted, a considerable distinction between the singingnoise of a lion when full and his deep gruff growl when hungry.

The African lion is of a tawny colour, like that of some mastiffs. The mane in the male is large, and gives the idea of great power. In some specimens the ends of the hair are black, and these go by the name of black-maned lions, though as a whole they look of the usual yellow tawny colour. At lake Ngami Messrs. Oswell and Wilson shot two animals of another variety. One was an old lion, whose teeth were mere stumps, and his claws worn quite blunt; the other was full grown, in the prime of life, with white perfect teeth. Both were destitute of mane. The lions in the country noar the lake give tongue less than those further south. We scarcely heard them roar at all.

In the country adjacent to Mashue numbers of different kinds of mice exist. The ground is often so undermined with their burrows that the foot sinks in at every step. Little hay.
cocks, about two feet high, and rather more in breadth, are made by one variety of these little creatures. This is done for obvious reasons in regions which are annually covered with snow, but it is difficult to divine the purpose of the haymaking in the climate of Africa.*

Wherever mice abound, serpents may be expected, for the one preys on the other. A cat, by clearing off the food which attracts these reptiles, is a good preventive against their entrance into a house. Occasionally, however, they find their way in. At Mabotsa one morning a man came to me early, and going to the door in the dark I set my foot on a serpent. The moment I felt the cold scaly skin twine round my leg ! jumped up higher than I ever did before, or hope to do again. The reptile was shaken off by my leap. Several varieties, when alarmed, emit a peculiar odour, which betrays their presence in a house. In the country these reptiles inspire none of that loathing which we experience when sitting reading about them in England. Even the most venomous sorts bite only when put in bodily fear, or when trodden upon, or when the sexes come together. I once found a coil of their skins, denoting that a number of them had twisted together in the manner described by the Druids of old.

Some of the serpents are particularly venomous. One species 'picakholu) which we killed at Kolobeng continued to distil slear poison from the fangs for hours after its head was cut off. So copious is the supply that, when a number of dogs attack it, the first bitten dies almost instantaneously, the second in about five minutes, the third in an hour or so, while the fourth may live several hours. This reptile commits great havoc in a cattle-pen. Our specimen was of a dark brown, nearly black colour, and eight feet three inches long. It is probably the same kind as that which passes by the name of the "spitting serpent," and which is believed to be able to eject its poison into the eyes when the wind favours its forciblo expiration. We have the puff-adder in Africa, various vipers and cobras (Naia haje, Smith) of several colours. When annoyed they raise their heads about a foot from the ground,

[^10]flatten the neck, and dart out the tongue and retract it with great velocity, while their fixed glassy eyes glare as if in anger. All reptiles require water, and go long distances to the Zouga, and other rivers and pools, in search of it.

There is a serpent named by the inhabitants " Noga-putsane," or serpent of a kid, which utters a cry by night exactly like the bleating of that animal. I heard one at a spot where no kid could possibly be. It is supposed by the natives to lure travellers by this device. The mode in which some of the snake tribe catch their prey is curious. The Bucephalus viridis climbs trees in search of birds and eggs, and is soon discovered by all the birds in the neighbourhood collecting and sounding an alarm.* The fangs of this species are not so much formed for injecting poison on external objects as for preventing any animal or bird of which they have got hold from escaping from their jaws. The Dasypeltis inornatus (Smith) has small teeth, which permit the passage of thin-shelled eggs without breaking till within the gullet or about $\check{2}$ inches behind the head. There they come in contact with the gular teeth, which crack the shells without the contents being spilled, as would

[^11]happen if the front teeth were large. The shell is then ajected. Some snakes are eaten, such as the python, metse pallab, or täri, of which the largest specimens are about 15 or 20 feet in length. They live on small animals, chiefly the rodentia, though occasionally the steinbuck and pallah fall victims, and are sucked into its comparatively little mouth in boa-constrictor fashion. To man they are perfectly harmless. One which we shot, through the spine was 11 feet 10 inches long, and as thick as a man's leg. It was still capable of lifting itself up about five feet high, and opened its mouth in a threatening manner, but its inclination was to crawl away. The flesh is much relished by the Bakalahari and Bushmen. Each carries away his portion on his shoulders like a log of wood.

Some of the Bayeiye we met at Sebituane's ford pretended to be unaffected by the bite of serpents, and lacerated their arms with the teeth of the harmless kinds. Dr. Andrew Smith put their sincerity to the test by offering them the fangs of a poisonous variety, and found they shrank from the experiment.

When we reached the Bamangwato the chief Sekomi was particularly friendly, brought all his people to our religious services, and explained his reasons for obliging some Englishmen to surrender up to him a horse. "They would not sell him any powder, though they had plenty; so he compelled them to give it and the horse for nothing. He would not deny the extortion to me; that would be swindling." He thus thought extortion better than swindling; but his ideas of honesty are the lowest I have met with in any Bechuana chief. Englishmen have always refused to countenance the idea, which would hereafter prove tronblesome, that payment ought to be made for passage through a country.

All the Bechuana and Caffre tribes south of the Zambesi practise circumcision (boguera), but the rites observed are carefully concealed. At Bamangwato I was once a spectator of the second part of the ceremony, called "sechu." Just at the dawn of day, a row of boys, nearly fourteen years of age, stood naked in the kotla. Each had a pair of sandals as a shield on his hands. The men, equally naked, were ranged opposite to them, and were armed with long wands, of a tough.
supple bush called moretloa (Grevia fava). They started off into a dance named "koha," in the course of which they pu questions to the boys, as "Will you guard the chief well "Will you herd the cattle well?" As the lads give an affirmative response, the men rush forward, and each aims : full blow at his vis-à-vis. The boy shields his head with the sandals, and causes the supple wand to descend upon his bact Every stroke makes the blood sqnirt out from a wound a foo or eighteen inches long. By the end of the dance the whole back is seamed with wheals, of which the scars remain through life. The beating is intended to harden the young soldjers. After this initiation has been gone through. and they have killed a rhinoceros, they may marry a wife.

In the "koha" dance the same respect is shown to age as in many other of their customs. A younger man, who exercises his wand on the boys, may himself be chastised by an older person. On the occasion on which I was present. Sekomi received a severe cut on the leg from a grey-haired disciplinarian. I joked with some of the young fellows on their want of courage. notwithstanding the scourgings of which they bore marks, and hinted that our soldiers did not need so much suffering to make them brave. A man rose up and said, "Ask him if, when he and I were compelled by a lion to stop and make a fire, 1 did not lie down and sleep as well as himself." In other parts a challenge would have been given to run a race: grown men frequently adopt this mode of testing superiority, like so many children.

The sechu is practised by three tribes only. Boguera, which is a civil rather than a religious rite, is observed by all the Bechuanas and ('affres, but not by the negro tribes beyond $20^{\circ}$ south. All the boys between ten and fourteen or fifteen are selected to be the companions for life of one of the sons of the chief. They are taken to some retired spot in the forest, and huts are erected for their accommodation. There the old men teach them to dance and initiate them into all the mysteries of African government. Each is expected to compose an oration in praise of himself, called a " leina " or name, and must repeat it with fluency.

When at Sekomi's we generally heard his praises sounded by a man who rose at break of day and uttered at the top of
his voice the panegyric which that ruler is said to have pro(18) nounced at his boguera. This repetition of his " leina" is so pleasing to a chief that he generally sends a handsome present to the person who performs the office.

A good deal of beating is required to bring the young scholars up to the mark, and when they return they have generally a number of scars on their backs. On their return from the ceremonies of initiation a prize is given to the lad who can run fastest. They are then considered men, and car. sit among the elders in the kotla.

These bands or regiments, which are named mepato in the plural and mopato in the singular, receive particular appellations; as, the Matsatsi, or "the suns;" the Mabusa, or " the rulers." Though living in different parts of a town, they turn out at the call, and act under the chief's son. 'I'hey recognise a sort of equality, and address one another by the title of molekane or comrade. If a member commits any offence against the rules, such as cowardice or eating alone when his mates are within call, the rest may strike him. A person who belongs to an older mopato may chastise a culprit in a younger, but no one in a junior band may meddle with his seniors. When three or four companies have been formed the oldest no longer takes the field in time of war, but remains as a guard over the women and children. When a fugitive comes to a tribe he is incorporated into the mopato analogous to that to which he belonged in his own tribe. No native knows his own age. If asked how old he is, he (19) answers, "Does a man remember when he was born ?" They reckon solely by the number of mepato which have been formed since their own. When they have witnessed four or five they are no longer obliged to bear arms. The oldest man I ever met boasted that he had seen eleven sets of boys submit to the boguera. If he was fifteen at his own initiation, and fresh bands were added every six or seven years, he may have been about seventy-five or eighty, which is no great age; but it seemed so to people who are considered superannuated at forty.

The Mopato system is an ingenious plan for attaching the tribe to the chief's family, and for imparting a discipline which renders the people easy of command. The first
missionaries set their faces against the boguera, both on account of its connection with heathenism, and because the youths learned much evil and became disobedient to their parents. From the general success of the pioneers of Christianity, it is perhaps better that younger missionaries should tread in their footsteps. So much mischief may result from breaking down the authority on which our whole influence with those who cannot read appears to rest, that innovators ought to be made io propose their new measures as the Locrians did new laws-with ropes around their necks.

A somewhat analogous ceremony (boyale) takes place for young women. Clad in a dress composed of ropes made of alternate pumpkin-seeds and bits of reed strung together, and wound round the body in a figure-of-eight fashion, they are drilled under the superintendence of an old woman, and are inured to bear fatigue and carry large pots of water. They have often scars from bits of burning charcoal having been applied to the forearm, which must have been done to test their power of bearing pain.

The Bamangwato hills are part of the range called Bakaa. The Bakaa tribe, however, removed io Kolobeng, and is now joined to that of Sechele. The range stands about 700 or 800 feet above the plains, and is composed of great masses of black basalt. At the eastern end the hills have curious fungoid or cup-shaped hollows, of a size which suggests the idea of craters. Within these are masses of rock crystallized in a columnar form : the tops of the pillars are hexagonal, like the bottom of the cells of a honeycomb, but are not separated from each other as in the Cave of Fingal. In many places the lava-streams may be recognised. The cold in the evening, suddenly contracting portions of the rock, which had been expanded by the heat of the day, wrenched them off, and they fell with a ringing noise which leads people to fancy that they contain abundance of iron. Huge fragments slipping down the sides of the hills and impinging against each other had formed cavities in which the Bakaa hid themselves from their enemies. The numerous chinks which were left made it quite impossible to smoke out the fugitives, as was done by the Boers to the people of Mankopane. This mass of basalt, which is ahout six miles long, has, like all the
recent volcanic rocks of the country, a hot fountain in its vicinity.

In passing through these hills on our way north we enter a pass named Manakalongwe, or Unicorn's Pass. The unicorn here is a large edible caterpillar, with an erect horn-like tail. The country beyond consisted of large patches of trap-covered tufa, having little vegetation except tufts of grass and wait-abit thorns, in the midst of extensive sandy grass-covered plains. The yellow or dun-colour prevails during a great part of the year, and, with the moretloa and mahatla bushes, forms quite a characteristic feature of the country. The Bakwain hills are an exception; unlike the usual flat surface, they are covered with trees to their tops, and the valleys are ofien of the most lovely green-even the Bakwain plains contain trees instead of bushes.

In no part of this country could European grain be cultivated without irrigation. The natives rear the dourrha or Holcus sorghum, maize, pumpkins, melons, cucumbers, and different kinds of beans; and are entively dependent for their growth upon rains. The instrument of culture is the hoe, and the chief labour falls on the female portion of the community. In this particular the Bechuanas resemble the Caffres. The men engage in hunting, milk the cows, and have the entire control of the cattle. It is their office also to prepare the skins and make the clothing, and in many respects they may be considered a nation of tailors.

January 28th.-Passing on to Letloche, about twenty miles beyond the Bamangwato, we found a fine supply of water. This is a point of so much interest that the first question we ask of passers-by is, "Have you had water?" The first inquiry a native puts to a fellow-countryman is, "Where is the rain ?" Though by no means an untruthful nation, the usual answer is, "I don't know- there is none-we are killed with hunger and by the sun." If asked for news, they reply, "There is none, I heard some lief only," and then they tell everything.

Letloche was Mr. Gordon Cumming's furthest station north. As our house at Kolobeng was quite in the game country, we were favoured by visits from this famous hunter during each of the five years of his warfare with wild animals. As
his guides were furnished through my influence, and after wards told me most of those adventures which have since been given to the world, I had a tolerably good opportunity of testing their accuracy, and I have no hesitation in saying that his book conveys a truthful idea of South African hunting. The native guides learnt to depend implicitly on the word of an Englishman for the subsequent payment for their services, and they gladly went for five or six months to the north, enduring all the hardships of a very trying mode of life, with little else but meat of game to subsist on -nay, they willingly travelled seven or eight hundred miles to Graham's Town, receiving for wages only a musket worth fifteen shillings. Only one man ever deceived them; and as I believed that he was afflicted with greediness to a slight degree of insanity, I upheld the honour of the English name by paying his debts.

The statement of Mr. Cumming as to the number of animals he killed is by no means improbable when we consider the amount of large game which was then in the country. Two other gentlemen in the same region destroyed no fewer than seventy-eight rhinoceroses in a single season. The guns introduced among the tribes cause these fine animals to melt away like snow in spring. In the more remote districts, where firearms have not yet penetrated, the game, with the single exception of the rhinoceros, is to be found in quantities much greater than Mr. Cumming ever saw. The tsetse is, however, an insuperable barrier to hunting with horses, and Europeans can do nothing on foot. Even with the aid of a steed the sport partakes too much of the fearful. The step of the elephant when he charges is so long that, though apparently not quick, the pace equals the speed of a good nag at a canter. His scream, or trumpeting, when infuriated, will sometimes paralyze the horse that is unused to it; the animal stands shivering instead of taking his master out of danger. It not unfrequently happens that the poor creature's legs do their duty so badly that he falls and exposes his rider to be trodden into a mummy ; or the rider may lose his presence of mind, and crack his cranium against a branch by allowing the horse to dash under a tree.

Advancing to some wells beyond Letloche, at a spot named

Kanne, we found them carefully hedged round by the peoplo of a Bakalahari village. There was one sucking-place, around which were congregated great numbers of Bushwomen with their egg-shells and reeds. We had sixty miles in front without water, for the most part through a tract of deep soft sand, very distressing for the oxen. We therefore sent them across the country to the deep well Nkauane, and half wandered on the way. When found at last they had been five days without water. Large numbers of elands were met with as usual. though they seldom can get a sip of drink. Many of the plains here havo large expanses of grass without trees, but it is rare to find a treeless horizon.

The ostrich generally feeds on some spot where no one can approach him without being detected by his wary eye, which is placed so high that he can see a great way. As the waggon moves along far to the windward, he thinks there is an intention to circumvent him, and he comes rushing from the distance of perhaps a mile so near to the front oxen that the traveller sometimes gets a shot at the silly bird. When he begins to run all the game in sight follow his example. The natives who cume upon him in a valley open at both ends sometimes take advantage of his folly. They commence running, as if to cut off his retreat from the passage through which the wind blows; and although free to go out at the upposite outlet, he madly rushes forward to get past the men, and is speared. He never swerves from the course he once adopts. Terror only causes him to increase his speed and ran faster into the snare. If pursued by dogs he will turn upon them and inflict a kick which sometimes breaks the back of the animal that receives it. The lion occasionally contrives to catch him. -When feeding his pace is from twenty to twenty-two inches; when walking at other times it is about four inches more; and when terrified it is from eleven and a half to thirteen and even fourteen feet in length. In general the eye can no more follow the legs than the spokes of a carriage-wheel in rapid motion; but I was once able to count the steps by a stop-watch, and, if I am not mistaken, the bird made thirty strides in ten seconds. Reckoning each stride at twelve feet, we have a speed of twenty-six miles an hour. These rapid runners are sometimes shot by a horseman
making a cross cut to their undeviating course, but few Englishmen ever succeed in killing them.

The ostrich begins to lay her eggs before she has fixed on a spot for a nest. Solitary eggs, named by the Bechuanas "lesetla," are thus found lying all over the country, and become a prey to the jackal. The nest is only a hollow a few inches deep in the sand, and about a yard in diameter. She seems averse to select a place for it, and often lays in the resort of another ostrich. As many as forty-five eggs have been found together. Some of them contain small concretions of the matter which forms the shell, which has given rise to the idea that they have stones in them. Both male and female assist in the incubation. Several eggs are left outside the nest, and are thought to be intended as food for the first hatched of the brood, till the rest coming out the whole can start together in quest of food. I have several times seen young in charge of a cock, who made a very good attempt at appearing lame in the plover fashion, in order to draw off the attention of pursuers. The little ones squat down and remain immovable when too small to run far, but attain a wonderful degree of speed when about the size of common fowls. It cannot be asserted that ostriches are polygamous, though they often appear to be so. When caught they are easily tamed, but are of no use in their domesticated state. The flesh is white and coarse, and when in good condition has some resemblance to tuugh turkey.

The egg is possessed of great vital power. One which had been kept in a room during more than three months, in a temperature of about $60^{\circ}$, was found to have a partially developed live chick in it. The Bushmen, when they find a nest, carefully avoid touching the eggs, or leaving marks of buman feet near them. They go up the wind to the spot, and with a long stick occasionally remove some of them. Thus, by praventing any suspicion, they keep the hen laying on for months, as we do with fowls. The eggs have a strong disagreeable flavour, and it requires the keen appetite engendered by the Desert to make them tolerable to a European. The Hottentots turn their trowsers into a bag for carrying homo the twenty or twenty-five eggs usually found in a nest. It has happened that an Englishman, imitating this knowing
lodge, has reached the waggons with blistered legs, and, after great tuil, found all the eggs uneatable from having been some time sat upon. Our countrymen invariably do best when they speak and act in their own character.

The food of the ostrich consists of pods and seeds of different kinds of leguminous plants, with leaves of various shrnbs; and, as these are often hard and dry, he picks up a great quantity of pebbles, many of which are as large as marbles. ! Ie eats small bulbs, and occasionally a wild melon for the sake of the moisture. One was found choked by a melon which had stuck in his throat. It requires the utmost address of the Bushmen, crawling for miles on their stomachs, to stalk them successfully; yet the quantity of feathers collected annually shows that the slaughter must be considerable, as each bird has only a few in the wings and tail. The full-grown male is of a jet-black glossy colour, with the single exception of the white feathers, which are objects of trade. Nothing can be finer than the adaptation of these flossy feathers for the climate of the Kalahari, where these birds abound; for they afford a perfect shade to the body, with free ventilation beneath them. The half-grown cocks are of a dark brownish-grey colour.

## CHAPTER VIII.

Missionary laboubs. - Trees. - Bobhimen. - The Sanghureh and Сповe.

Tme Bakalahari, who live at Motlatsa wells, have always been very friendly to us, and listen attentively to instruction in their own tongue. It is, however, difficult to give an idea to an European of the little effect the instruction produces, oecause no one can realize the degradation to which the people have been sunk by centuries of barbarism and the hard struggle for the necessaries of life. When we kneel and address an unseen Being, the act often appears to them so ridiculous that they burst into laughter. After a few services they get over this tendency. I was once present when a missionary
attempted to sing among a wild tribe of Bechuanas, and the effect on the risible faculties of the audience was such that the tears ran down their cheeks. Nearly all their thoughts are directed to the supply of their bodily wants. If I am asked what effect the preaching of the Gospel has upon them, I can only say that some have confessed long afterwards that they then first begin to pray in secret. When kindly treated in sickness they often utter imploring words to Jesus, and we may hope that they find mercy through His blood, though so little able to apprecoate His sacrifice. The existence of a God, and of a future state, has always been admitted by all the Bechuanas. Everything that cannot be accounted for by common causes is ascribed to the Deity, as creation, sudden death, \&c. "How curiously God made these things !" " He was not killed by disease, he was killed by God," are common expressions. And, when speaking of the departed, they say, "He has gone to the gods." The Bakwains profess that nothing which appears sin to us ever appeared otherwise to them, except tbat they did not think wrong to have more than one wife. They declare that they ascribed the rain which was given in answer to prayers of the rain-makers, and the deliverance granted in times of danger, to the power of the Deity, but they show so little consciousness of any religious sentiment that it is not wonderful that they should have been supposed to be totally destitute of it. The want, indeed, of any outward form of worship, makes the Bechuanas appear among the most godless races of mortals. The same (20) may be said of the Caffres, but with Caffres and Bushmen I have had no intercourse in their own tongue. How much depends upon this for the right comprebension of their ideas may be judged from a trifling incident. At Lotlakani we met an old Bushman who sat by our fire relating his early adventures. Among these was the killing five other Bushmen. "Two," said he, counting on his tingers, " were females, one a male, and the other two calves." "What a villain," I exclaimed, " you are, to boast of killing women and childres of your own nation! what will God say when you appear before Him ?"-" He will say," replied he, " that I was a very clever fellow." I at last discovered that, though the word he used was the same which the Bakwains emplny when speaking
of the Deity, he had only the idea of a chief. He was referring to Sskomi, and his victims were a party of rebels against whom he had been sent.

Leaving Motlatsa on the 8th February, 1853, we passed down the Mukoko, which, in the memory of persons now living, was a flowing stream. Between Lotlakani and Nchokotsa we passed the small well named Orapa; and ten miles to the north-east of Orapa is the saltpan Chuantsa. having a cake of salt one inch and a half in thickness. The deposit contains some bitter in addition,-probably the nitrate of lime, -and the natives, to render it palatable, mix it with the juice of a gummy plant, place it in the sand, and bake it by making a fire over it. This renders the lime insoluble and tasteless.

The Bamangwato keep large flocks of sheep and goats at various spots on this side of the Desert. They thrive wonderfully well wherever salt and bushes are to be found. The milk of goats on account of its richness does not curdle with facility; but the natives have discovered that the infusion of the fruit of a solanaceous plant, Toluane, quickly produces the effect. The Bechuanas put their milk into sacks made of untanned hide with the hair taken off. These they hang in the sun. Their contents soon coagulate. The whey is drawn off by a plug at the bottom, and fresh milk is adiled until the sack is full of a thick sour curd : this when the palate gets accustomed to it is delicious. The rich mix it in their meal porridge, and, as the latter is thus rendered more nutritious, the poor are sometimes called in scorn "mere water-porridge men."

The rainy season was delayed this year beyond the usual time, and we found the thermometer at Nchokotsa stand at $96^{\circ}$ in the shade. This temperature at Kolobeng always portended rain at hand. At Kurumana it may be considered near when the mercury rises above $84^{\circ}$, while farther north it rises above $100^{\circ}$ before the downfall can be expected. Here the thermometer, when the bulb was placed two inches beneath the soil, showed $128^{\circ}$. All around Nchokotsa the country looked parched, and the glare from the white efflorescence which covers the extensive pans was most distressing to the eyes. The water was bitter, and presented indications
not to be mistaken of having passed through animal systems before. It contained nitrates. which stimulated the kidneys and increased the thirst. The fresh supplies required from time to time in cuoking. each imparting its own portion of salt to the meat, made us grumble at the cook for putting too much seasoning, when in fact he had put none. Of disgusting water I have drunk not a few nanseous draughts; you may try what remedy you please, but the ammonia and other salts remain there still; and the only resource is to push forward as quickly as possible to the north.

We dug out several wells; and on each occasion we had to wait a day or two till sufficient water flowed in to allow our cattle to slake their thirst. Our progress was therefore slow. At Koobe there was such a mass of mud in the pond, worked up by the wallowing rhinoceros to the consistency of nortar, that it was only by great exertion we could get a space cleared at one side for the water to ooze through. If the rhinoceros had come back, a single roll would have rendered all our labour vain, and we were consequently obliged to guard the spot by night. Herds of zebras, gnus, and occasionally buffaloes, stood for days on the wide-spread flats around us, looking wistfully towards the wells for a share of the nasty water. It is wanton cruelty to take advantage of the needs of these poor creatures to destroy them, without intending to make the smallest use of flesh, skins, or horns. Those who commit such havoc for the mere leve of destruction must be far gone in the hunting form of insunity. In shooting by night, animals are more frequently wounded than killed; the flowing life-stream increases the craving for water, and they seek it in desperation regardless of danger,"I must drink, though I die." The ostrich, even when not hurt, cannot with all his wariness resist the excessive desire. to slake his burning thirst. The Bushmen may be excused for profiting by its piteous necessities; for they eat the flesh and wear or sell the feathers.

We passed over the immense saltpan Ntwetwe, and about two miles beyond its northern bank we unyoked under a fine specimen of the baobab, here called, in the language of Bechuanas, Mowana. It consisted of six branches unired into one trunk, and at three feet from the ground it was eighty-
five feet in circumference. It is the same species as those which Adanson and others believed, from specimens seer in Western Africa, to have been alive before the Flosd. These savans came to the conclusion that " therefore there never was any Flood at all." I would back a true mowana to survive a dozen floods. I do not however believe that any of the specimens now existing reach back to the Deluge. I counted the concentric rings in one of these trees in three different parts, and found that upon an average there were eighty-one and a half to a foot. Supposing each ring to be the growth of one year, a mowana one hundred feet in circumference, ol with a semi-diameter of about seventeen feet, would be only fourteen centuries old, which is some centuries less ancient than the Christian era.

As the natives make a strong cord from the fibres of the (21) mowana-bark, the whole of the trunk, as high as they can reach, is often denuded of its covering. The bare wood throws out fresh bark, and the process is repeated so often that it is common to see the lower five or six feet an inch or two less in diameter than the part above. Almost any other tree would be killed by such treatment, but such is the wonderful vitality of the mowana that strips of bark which are torn off, and only remain attached at one end, continue to grow. No external injury, not even a fire, destroys this tenacious plant from without; and so little does it regard any injury within that it is common to find it hollow. I have seen a specimen of this kind in which twenty or thirty men could lie down. Even felling does not extinguish its vitality. I was witness of an instance in Angola in which each of eighty-four concentric rings grew an inch in length after it was lying on the ground. Those trees called exogenous increase in balk by means of successive layers on the outside. The inside may be removed without affecting the life of the plant. This is the case with most of the trees of our climate. The second class is called endogenous, and increases by layers applied to the inside; the outside may be cut without stopping the growth. Any injury is felt most severely by the first class on the bark -by the second on the interior wood. The mowana possesses the powers of both, because each of the laminæ has an independent vitality of its own : in fact, it is rather a gigantic
bulb run up to seed than a tree. The roots, which often extend forty or fifty yards from the trunk, are equally indestructible and retain their life after the tree is laid low. The l'ortuguese have discovered that the best way to treat the mowana is to let it alone, for it occupies more room when cut lown than when growing. The wood is spongy, and an axe can be struck into it so far with a single blow that there is difficulty in pulling it out again.
'I'he Mopané-tree (Bauhinia) is remarkable for the little whade its leaves afford. They fold together and stand noarl.


Hupane or Bauhinia leaves, with the insect and Its ediblo secretions.
perpendicular during the heat of the day, and only the shadow of their edges is cast upon the ground. A winged insecta species of Psylla-covers them with a sweet gummy secretion. The people collect this in great quantities, and use it as fuod. The lopané-large caterpillars three inches long, which feed on the leaves-share the same fate.

In passing along we everywhere see the power of vegetation in breaking up the outer crust of tufa. A mopane-tree, growing in a small chink, as it increases in size lifts up large fragments of the rock and subjects them to the disintegrating influence of the atmosphere. The wood is hard and of a fine
red colour, and is named iron-wood by the Portuguese. The inhabitants state that the mopane is more frequently struck by lightning than other trees, and caution travellers never to seek its shade when a thunderstorm is near. "Lightning hates it." Ansther tree, the "Morala," which has three spines opposite each other on the branches, has never, in compensation, been known to be touched by lightning, and is esteemed, even as far as Angola, a protection against the electric fluid. Branches of it may be seen placed on the houses of the Portuguese. The natives believe, in addition, that if a man can get into the shade of this wonderful preserver it will be an effectual protection from an enraged elephant.

At Rapesh we came among our old friends the Bushmen, under Horoye. He and some others were at least six feet high, and of a darker colour than the Bushmen of the south. They frequent the Zouga, and have always plenty of food and water They refrain from eating the goat, which is significant of their feelings to the only animal they could have domesticated in their desert home. They are a merry laughing set, and have more appearance of worship than the Bechuanas. The observances we once witnessed at a grave showed that they regarded the dead man as still in another state of being; for they requested him not to be offended even thongh they wished to remain a little while longer in this world.

These Bushmen killed many elephants. They hunted by night when the moon was full for the sake of the coolness. They choose the moment succeeding a charge, when the elephant is out of breath, to run in and give him a stab with their long-bladed spears. The chace of the elephant is the best test of courage the country affords, and the number killed in the course of a season by Bechuanas, Griquas, Boers, and Englishmen, will give some idea of the prowess of the respective races. The average for the natives was less than one per man, for the Griquas one, for the Boers two, and for the English officers twenty each. This was the more remarkable since the Griquas, Boers, and Bechuanas employed both dogs and natives to assist them, while the English hunters had seldom assistance from either. The reason of the superiority of our countrymen was that they had the coolness to
$\mu^{1}$ proach within thirty yards of the animal before firing: while the others stood at the safe distance of a hundred yards, or even more, and spent all the force of their bullets on the air. Mr. Oswell found an elephant with a crowd of bullets in his side, not one of which had gone near the vital parts. It would thus appear that our more barbarous neighbours do not possess loalf the courage of the civilized sportsman. In this respect, as well as in physical development, it is probable that we are superior to our ancesturs. The coats of mail and greaves of the Knights of Malta, and the armour from the Tower exhibited at the Eglinton tournament, is decisive to show the greater size we have attained in modern times.

1st March. The thermometer in the shade generally stood at $98^{\circ}$ from 1 to 3 r.m., but as it sank as low as $65^{\circ}$ by night the heat was by no means exhausting. At the surface of the ground, in the sun, the thermometer marked $125^{\circ}$. The hand caunot be held on the earth, and even the horny feet of the natives must be protected by sandals of hide. The ants, nevertheless, were busy working on the fiery soil. The water in the ponds was as high as $100^{\circ}$; but as it does not readily couduct heat downwards, drink deliciously cool might bo obtained by walking into the middle and lifting up the water from the bottom.

Proceeding to the north, from Kama-kama, we entered intc dense mohonono-bush, which required the constant application of the axe by three of our party for two days before we emerged into the plains beyond. I'his bush has fine silvery leaves, and the bark has a sweet taste. The elephant, with his usual delicacy of taste, feeds much on it.

The rains had been copious, but the water in the ponds was capidly disappearing. The lotus abounded in them, and a low sweet-scented plant covered their banks. Breezes came occasionally to us from the drying-up pools; but the pleasant odour they carried caused sneezing both to myself and my people; and on the 10 th of March (when in lat. $19^{\circ} 16^{\prime} 11^{\prime \prime}$ S., long. $24^{\circ} 24^{\prime} \mathrm{E}$.) we were brought to a stand by four of the party being seized with African fever. I at first imagined it was only a bilious attack, arising from full feeding on flesh, for the large game had been abundant. Every man was in a few lays laid low, except a Bakwain lad and myself. He managed
the cattle, while I looked after the patients. The tall grass made the oxen uneasy, and the appearance one night of a hyæna set them galloping away into the forest to the east of us. The Bakwain lad went after them, as is common with the members of his tribe in such cases. They dash through bush and brake for miles, till they think the panic is a little subsided. They then whistie to the cattle in the same manner as when milking cows. Having calmed them, they remain as a guard till the morning, and generally return with their shins well pealed by the thorns. The lad lost sight of our oxen in their rush through the flat trackless forest. He remained on their trail the whole of the next day, found them late in the afternoon, had been obliged to stand by them all night, and brought them back on Sunday morning. It was wonderful how he managed without a compass, and in such a country, to find his way home, and to keep forty oxen together.

The Bechuanas will remain on the sick-list as long as they feel weak, and I began to be anxious that they should try to get furward. By making beds in the waggons for our worst cases, we managed to move slowly on. The want of power in the man who guided the front oxen, or, as he was called, the " leader," caused us to be entangled with trees, both standing and fallen, and the labour of cutting them down was more severe than ordinary; but notwithstanding an immense amount of work, my health continued good. We wished to avoid the tsetse of our former route, and the necessity of making a new path much increased our toil. In lat. $18^{\circ}$ we were rewarded by a luxury we had not enjoyed the year before. Our eyes were greeted by large patches of vines, a sight so unexpected that I stood some time gazing at the clusters of grapes, with no more thought of plucking them than if I had beheld them in a dream. The elephants are fond of plant, root, and fruit alike; but the fruit is not well flavoured, on account of the great astringency of the seeds, which in shape and size are like split peas.

I here found an insect, about an inch and a quarter long, as thick as a crow-quill, and covered with black hair, which puts its head into a little hole in the ground, and quivers its tail rapidly. The ants, attracted by the movement, approach to look at it, and are snapped up the moment they get within the range of the forceps on the tail. As the mead of this
creature is beneath the soil, it becomes a question how it ${ }^{8} 0$ guide the other end to its prey. It is probably a new specter of antlion (Myrmeleon formicaleo), of which great numbers are met with, both in the larva and complete state. The ground under every tree is dotted over with their ingenious pitfalls. The from of the perfect insect is familiar to us in the dragontHy, which uses its tail in the same active manner. Two may often be seen joined in their flight, the one holding on by the tail-forceps to the neck of the other.
'lie forest daily became more dense, and we were kept almost constantly at work with the axe. There was much more foliage on the trees than farther south. The leaves are chiefly of the pinnate and bi-pinnate forms, and are exceedingly beautiful when seen against the sky. Fleming, who had hitherto assisted to conduct his own waggon, knocked up at the end of March. As I could not drive two waggons, I shared the remaining water with him, about half a caskful, and went in search of a fresh supply. A heavy rain commenced; I was employed the whole day in cutting down trees, and every stroke of the axe brought down a thick shower on my back and into my shoes, which in the hard work was very refreshing. In the evening we met some Bushmen, who volunteered to show us a pool. - I unyoked and walked some miles in search of it. On returning to our waggon we found that the loss of our companionship had brought out some of Fleming's energy, for he had managed to come up.

As the water in this pond dried up, we were soon obliged to move again. One of the Bushmen took out his dice, and, after throwing them, said that God told him to go home. He threw again in order to show me the command, but the opposite result followed. He remained and was useful, for a lion drove off the oxen to a great distance. The lions here are not often heard. They seem to have a dread of the Bushmen, who, when they observe evidence that one of these beasts has made a full meal, follow up his spoor so quietly that his slumbers are not disturbed. One discharges a poisoned arrow from a distance of a few feet, while another throws his skin cloak over the animal's head The surprise causes the lion to lose his presence of mind, and he bounds away in terror

The poison used by our present friends was the entrails of a caterpillar called N'gwa, half an inch long. They squeeze the virulent matter upon the barb, and leave it to dry in the sum. They are very careful in cleaning their nails after the operation, for if a small portion gets into a scratch the agony is excessive. The sufferer cuts himself, calls for his mother'breast, as if in imagination he had returned to the days of his infancy, and often flies from human habitations, a raging maniac. The effects on the lion are equally terrible. He is heard moaning in distress, and bites the trees and ground in his fury.

The Bushmen have the reputation of being able to neutralise the poison. This they said they effected by administering the caterpillar itself in combination with fat, at the same time rubbing fat into the wound. "I'he N'gwa," they explained, "wants fat, and, when it does not find it in the budy, kills the man: we give it what it wants, and it is content." Father l'edro, a Jesuit, who lived at Zumbo, made a balsam, from a number of plants and castor oil, which is asserted to ba a remedy for poisoned arrow-wounds. It is probable he derived the essential part of his prescription from the natives, and that the reputed efficacy of the balsam is owing to its fatty constituent. In the case of a bite from a serpent, a small key nught to be pressed down firmly on the puncture to force uut the poison until a cupping-glass can be got from one of the natives, when the exhaustion of the air $\rho v e r$ the wound will produce a still freer flow. If stung by a scorpiun, a watch-key will serve to squeeze out the virus, and a mixture of fat or oil and ipecacuanha relieves the pain.

The poison in most general use is the milky juice of the tree euphorbia ( $E$. arborescens). This is particularly deadly to the equine race, and when a quantity is mixed with the water of a pond a whole herd of zebras will fall dead before they have moved away two miles. On oxen or men it only acts as a purgative. In sume places the venom of serpents and a certain bulb, Amaryllis toxi:aria, are added, in order tc increase the virulence.

Believing that frequent change of place was conducive to the recovery of the sick, we moved as much as we could, and same to the hill N'gwa (lat. $18^{\circ} 27^{\prime} 20^{\prime \prime}$ S.. long. $24^{\circ} 13^{\prime} 36^{\prime \prime}$
E.). It is three or four hundred feet high, and covered with trees; and as it was the only hill we had seen since leaving the Bamangwato, we felt inclined to take off our hats to it. The valley Kandehái, on its northern side, an open glade surrounded by forest trees of various hues, with a little stream meandering in the centre, is as picturesque a spot as is to be seen in this part of Africa.

The game hereabouts is very tame. A herd of reddishcoloured antelopes (pallahs) remained looking at us; while gnus, tsessebes, and zebras gazed in astonishment at the intruders. Some fed carelessly, and others put on the peculiar air of displeasure which they sometimes assume before they resolve on flight. Several buffaloes, with their dark visages, stood under the trees, and a large white rhinoceros passed along the valley with his slow sauntering gait without regarding us. It was Sunday, and all was peace.

On one occasion a lion came at daybreak, went round and round the oxen, and then began to roar at the top of his voice. As he could not succeed in scaring them, he went off in disgust, and continued to vociferate his displeasure for a long time in the distance. I could not see that he had a mane, and, if he had none, even the maneless variety can use their tongues. Others tried in vain to frighten the oxen, and, when they failed, became equally angry, as we knew from their tones.

The Bushmen of these districts are generally fine men. They are fond of a root somewhat like a kidney potato, and the kernel of a nut which Fleming thought was a kind of betel. It came from a large spreading tree with palmate leaves. From the quantities of berries and the abundance of game in these parts, the Bushmen can scarcely ever be badly off for food. As I could keep them well supplied with meat, and was anxious for them to remain, I proposed that they should bring their wives to get a share, but they remarked that the women could always take care of themselves. They soon afterwards wished to leave us, and, as there was no use in trying to thwart them, I allowed them to go. The pay ment I made them acted as a charm on some strangers who happened to be present, and induced them to volunteer their aid

As we went north the country became lovely. The grass was green and often higher than the waggons, and tho riner
festooned the trees. Among these were the real banian (Ficus indica), with its drop-shoots, the wild date and palmyra, and several which were altogether new to me. The hollows contained large patches of water. Next came watercourses, which now resembled small rivers, and were twenty yards broad and four feet deep. The further we went, the broader and deeper they grew. The elephants wading in them had made numbers of holes, in which the oxen floundered desperately. Our waggon-pole was broken, and we were compelled to work up to the breast in water for three hours and a half.

The great quantity of water we had passed through was part of the annual inundation of the Chobe. We at last came to the Sanshureh, which is only one of the branches by which it sends its overflowings to the south-east. Yet it was a large deep river, filled in many places with reeds, and having hippopotàmi in it. As it presented an insuperable barrier, we drew up under a magnificent baobab-tree (lat. $18^{\circ} 4^{\prime} 27^{\prime \prime}$ S., long. $24^{\circ} 6^{\prime} 20^{\prime \prime}$ E.), and resolved to search for a passage. In company with the Bushmen I explored the banks, waded a long way among the reeds in water breast high, and always found a broad deep space free from vegetation, and unfordable A peculiar kind of lichen, which grows on the surface of the soil, becomes detached and floats on the water, giving out, in particular spots, a disagreeable odour, like sulphuretted hydrogen.

We made so many attempts to get over the Sanshureh, in the hope of reaching some of the Makololo on the Chobe, that my Bushmen friends became tired of the work. By means of presents I got them to remain some days. At last they slipped away by night, and I was compelled to take one of the strongest of my still weak companions and cross the river in a pontoon, the gift of Captains Codrington and Webb. We penetrated about twenty miles to the westward, in the hope of striking the Chobe, which was much nearer to us in a northerly direction, though we did not then know it. The plain, over which we splashed the whole of the first day, wed covered with thick grass which reached above the knees, and with water ankle-deep. In the evening we came to an immense wall of reeds, six or eight feet high. When we tried to enter, the water became so degp that we were fain to desist We directed our course to soree trees which appeared
in the south, in order to get a bed and a view of the adjacent locality. Having shot a leche, and made a glorious fire, we had a good cup of tea and a comfortable night. While collecting wood I found a bird's nest consisting of live leaves sewn together with films of the spider's web. The threads had been pushed through small punctures and thickened tis rescmble a knot. Nothing could exceed the airiness of this pretty contrivance. I unfortunately lost it. This was the second nest I had seen resembling that of the tailor-bird of India

On climbing the highest trees next morning we beheld a large sheet of water, surrounded on all sides by the same impenetrable belt of reeds. This is the broad part of the river Chube, and is called Zabesa. Our first effort was to get to two tree-covered islands which seemed much nearer to the water than the point where we stood. The reeds were not the only obstacle to our progress. Mingled with them was a peculiar serrated grass, which at certain angles cut the hands like a razor, and the entire mass was bound together by the climbing convolvulus, with its stalks as strong as whipcord. We felt like pigmies in this tall dense thicket of vegetation, and often the only way we could get on was for both of us to lean against the barrier, and bend it down till we could stand upon it. There was no ventilation among the reeds, and as the sun rose high the heat was stifling. The perspiration streamed from our bodies, and the water, which was up to our knees, felt agreeably refreshing. After several hours of toil we reached one of the islands. Here we met an old friend, the bramble-bush. The legs of my companion were bleeding, and his leather trowsers were torn. My own, which were of strong moleskin, were worn through at the knees, and, tearing my handkerchief in two, I tied the pieces round the holes. We were still forty or fifty yards from the clear water, and now encountered another difficulty. We were opposed by great masses of papyrus, eight or ten feet high, and an inch and a half in diameter, and so strongly laced together by twining convolvulus, that the weight of both of us had no effect upon them. At last we found a passage prepared by a hippopotamus. Eager to look along the vista to clear water, I stepped in and found it took me at once up to the neck.

Returning nearly worn out, we proceeded up the bank of
the Chobe, till we came to the point of departure of the branch Sanshureh. Then we turned and went in the opposite direction. Still we could see nothing from the highest trees except one vast expanse of reed. After a hard day's work we came to a deserted Bayeiye hut on an anthill. Not a bit of fuel could be got for a fire, except the grass and sticks of the dwelling itself. I dreaded the "tampans," so common in all old huts; but as we were tormented outside by thousands of mosquitoes, and the cold dew began to fall, we were fain to crawl beneath its shelter.

We were close to the reeds, and listened to the strange sounds which issued from them. By day I had seen watersnakes putting up their heads and swimming about. There were great numbers of otters (Lutra inunguis, F. Cuvier), which have made a multitude of little spoors, as they go in search of the fishes, among the tall grass of these flooded prairies. Curious birds jerked and wriggled among the reedy mass, and we heard human-like voices and unearthly sounds, with splash and guggle, as if rare fun were going on in these uncouth haunts. Once a sound greeted our ears like that of an advancing canoe. Thinking it to be the Makololo, we got up, listened, and shouted; receiving no reply, we discharged a gun several times without effect, for the noise continued for an hour. After a damp cold night we early in the morning recommenced our work of exploring. Some of the anthills here are thirty feet high, and of a base so broad that trees grow on them; while the lands annually flooded bear nothing but grass. Where the water remains long no forest will survive. From one of the great mounds we discovered an inlet to the Chobe; and we forthwith launched in our pontoon upon a deer river, which at this point was from eighty to one hundred yards wide. A hippopotamus came up at one side and went off with a desperate plunge. We had passed over him. The wave he made caused the pontoon to glide quickly away from him.

We paddled on from midday till sunset. There was nothing but a wall of reed on each bank, and we saw every prospect of spending a supperless night in our float, till, just as the short twilight of these parts was commencing, we perceived on the north bank the village of Moremi, one of the Makololo, whose acquaintance I had made on our former visit-

He was now located on the island Mahonta (lat. $17^{\circ} 58^{\prime} \mathrm{S}_{\mathrm{S}}$, long. $24^{\circ} 6^{\prime}$ E.). The inhabitants looked like people who bad seen a ghost. and in their figurative way of speaking exclaimed, "He has dropped among us from the clouds, yet came riding on the back of a hippopotamus! We Makololo thought no one could cross the Chobe without our knowledge, but here he drops among us like a bird."

Next day we returned across the flooded lands in canoes to uur waggons, and found that in our absence the men had allowed the cattle to wander into a small patch of wood to the west infested by tsetse. This carelessness cost me ten fine oxen. After we had remained a few days some of the head-men of the Makololo came down from Linyanti, with a large party of Barotse, to conduct us over the river. This they did in fine style. They took the waggons to pieces and carried them across on a number of canoes lashed together, while they themselves swum and dived among the oxen more like alligators than men. We were now among friends. After advancing about thirty miles to the north, in order to avoid the still flooded lands on the north of the Chobe, we turned westwards towards Linyanti (lat. $18^{\circ} 17^{\prime} 20^{\prime \prime} \mathrm{S}$., long. $23^{\circ} 50^{\prime} 9^{\prime \prime}$ E.), where we arrived on the 23rd of May, 1853. 'This is the capital town of the Makololo, and only a short distance from our waggon-stand of 1851 (lat. $18^{\circ} 20^{\prime} \mathrm{S}$., long. $23^{\circ} 50^{\prime}$ E.).

## CHAPTER IX.

## linyanti.-The chief Sekelete.-Customs of tee Makololo.

T're whole population of Linyanti, numbering between six and seven thousand, turned out to see the waggons in motion. They had never witnessed the phenomenon before, for on the former occasion we departed by night. Sekeletu, now in power, received us in royal style, and sent us pots of boyaloa, the beer of the country. These were brought by women, and each bearer took a good draught of the beer to show that it was not poisoned.

The court herald greeted us. This official utters all the proclamations, calls assemblies, keeps the kotla clean and the fire burning, and when a person is executed in public he drags away the body. The present herald was an old man who oocupied the post in Sebituane's time. He stood up, and after leaping, and shouting at the top of his voice, roared out some adulatory sentences, as, "Don't I see the white man? Don't I see the comrade of Sebituane? Don't I see the father of Sekeletu? We want sleep. Give your son sleep, my lord." The meaning of this request for sleep was that Sebituane had learnt that the white men had "a pot (a cannon) in their towns which would burn up any attacking party;" and the old warrior thought if he could get possession of this weapon he would be able to "sleep" the rest of his days in peace.

Sekeletu was a young man eighteen years of age, and of that dark yellow or coffee-and-milk colour, of which the Makololo are so proud, because it distinguishes them from the black tribes on the rivers. The women long for children of light colour so much that they sometimes chew the bark of a certain tree in the hope that it will have this effect. 'To my eye the dark skin is much more agreeable than the tawny hue of the half-caste, which that of the Makololo closely resembles.

In height Sekeletu was about five feet seven, not so goodlooking nor so able ar his father, but equally friendly to the English. Sebituane installed his daughter Mamochisáne into the chieftainship long before his death, and to prevent her having a superior in a husband he told her all the men were hers, that she might take any one, but ought to keep none. According to a saying in the country, "the tongues of women cannot be governed;" and as she lived this free independent life, they made her miserable by their remarks. One paramour she selected was even called her wife, and her son the child of Mamochisane's wife. The arrangement was so distasteful to her, that when Sebituane was dead she declared she never would consent to govern the Makololo while she had a brother alive. Sekeletu wished her to retain the authority, for fear that the pretensions of another member of the family to the chieftainship should prevail. Three days were spent in public discussion on the point. At last Mamo-
chisane stood up in the assembly and addressed her brothes with a womanly gush of tears: "I have been a chief only because my father wished it. I always would have preferred to be married and have a family like other women. You, Sekeletu, must be chief and build up your father's house."

After the Mambari, in 1850, took to the west a favourable report of this new Makololo market, a number of half-caste Portuguese slave-traders paid it a visit. One, who resembled closely a real Portuguese, came to Linyanti while I was there (23) in 1853. He had no merchandise, and pretended that his object was to inquire " what sort of goods were necessary for the market." He seemed much disconcerted by my presence. Sekeletu presented him with an elephant's tusk and an ox; and when he had departed about fifty miles to the westward he carried off an entire village of the Bakalahari belonging to the Makololo. He had a number of armed slaves with him; and as all the villagers-men, women, and children-were removed, and the fact was unknown until a considerable time afterwards, it is not certain whether he attained his object by violence or by promises.

Mpépe, the rival candidate for the chieftainship, favoured these slave-traders. A large party of Mambari had come to Linyanti while I was floundering on the prairies south of the Chobe. They fled precipitately by night when some Makololo, who had assisted us to cross the river, returned with hats which I had given them. The natives inquired the cause of their haste, and were told that, if I found them there, I should take all their slaves and goods from them. It afterwards appeared that they derived their impression from their knowledge of what was done by the English cruisers on the coast. They went to the north, where they erected a stockade of crrsiderable size, and, under the leadership of a native Portuguese, carried on the abominable traffic in human beings. Mpepe fed them with the cattle of Sekeletu, and formed a plan of raising himself, by means of their fire-arms, to be the head of the Makololo. The usual policy of slave traders is to side with the strongest party in a tribe, and get well paid by captures made from the weaker faction. Long secret conferences were held by these dealers in men and their rebel ally,
and it was agreed that Mpepe should cut down Sekeletn the first time they met.

My object being to examine the country for a healthy locality before attempting to make a path to the east or west coast, I proposed to Sekeletu to ascend the great river we had discovered in 1851. We had advanced about sixty miles on the road to Sesheke when we encountered Mpepe. The Makololo had never attempted to ride oxen until I advised it in 1851. Sekeletu and his companions were now mounted, though, having neither saddle nor bridle, they were perpetually falling off, and when Mpepe ran towards the chief he galloped off to an adjacent village. On our party coming up an interview took place between the rivals in a hut, and the intention of Mpepe was to execute here the murderous design which had been frustrated on the road. Being tired with riding, I asked Sekeletu where I should sleep. He replied, "Come, I will show you." As we rose together I unconsciously covered his body with mine, and saved him from the blow of the assassin. Some of the attendants had divulged the plot; and when Sekeletu showed me the hut in which I was to pass the night, he said, "That man wishes to kill me." The chief resolved to be beforehand with him. He immediately sent some persons to seize him, and he was led out a mile and speared. This is the common mode of executing criminals. Mpepe's men fled to the Barotse, and, it being unadvisable for us to go thither during the commotion which followed his death, we returned to Linyanti. The Mambari, in their stockade, now their protector had fallen were - placed in an awkward position. It was proposed to attack them and drive them out of the country, but, dreading a commencement of hostilities, I urged that their fortification, defended by perhaps forty muskets, would not be easy to take. "Hunger is strong enough for that," said an under-chief; "a very great fellow is he." As the chief sufferers from a blockade would have been the poor slaves chained in gangs, I interceded for them, and they were allowed to depart in peace.

This execution of Mpepe is a characteristic specimen of the Makololo mode of dealing with grave political offences. In common cases there is a greater show of deliberation. Tbe
accuser asks the accused to go with him to the head of the tribe. The complainant stands up in the kotla and states the charge before the chief and the people assembled there. The witnesses to whom he has referred then tell all they have seen or heard, but not anything they have heard from others. The case for the prosecution concluded, the defendant after a pause of a few minutes slowly rises, folds his cloak around him, and, in the most careless manner he can assumeyawning, blowing his nose, \&c.-makes his reply. Sometimes, when the complainant utters a sentence of dissent, the accused turns to him quietly, and says, "Be silent: I sat still while you were speaking; can't you do the same? Do you want to have it all to yourself?" When he has concluded, his witnesses, if he has any, give their evidence. No oath is administered; but occasionally, when a statement is questioned, a man will protest, "By my father," or "By the chief, it is so." Their truthfulness among each other is remarkable.

If the case is one of no importance, the chief decides it at once ; if frivolous, he may put a stop to it in the middle, or allow it to go on without heeding what is said. Family quarrels are often treated in this way, and a man may be seen arguing his case with great fluency, and not a soul listening to him. But if it is a dispute between influential men, or brought on by under-chiefs, the greatest decorum prevails. When the chief does not see his way to a verdict, he remains silent, and the elders give their opinions one by one. If there is a unanimity of sentiment, he delivers his judgment in accordance with it. He alone speaks sitting. No one refuses to acquiesce in his decision, for he has the power of life and death in his hands; but grumbling is allowed, and, when he shows marked favouritism to a relative, the people are not so astonished at the partiality as we should be in England.

This system was as well developed among the Makololo as among the Bakwains, and is no foreign importation. When I was at Cassange my men had a slight quarrel, and came to me, as to their chief, for judgment. I gave my decision, and they went off satisfied. Several Portuguese complimented me on my success in teaching them how to act in litigation; but 1 had only followed the plan which I fornd ready-made to me hands.

Soon after our arrival at Linyanti, Sekeletu pressed me to mention the things I hoped to get from him. Anything, sither in or out of his town, should be freely given if I would only mention it. I explained that my object was to elevate nim and his people to be Christians. He replied that he did not wish to iearn to read the Book, for he was afraid "it might change his heart, and make him content with only one wife, like Sechele." It was of little use to urge that the change of heart implied a contentment with a single consort equal to his present complacency in polygamy. "No, no; he wanted always to have five wives at least." According to the system of the Bechuanas he became possessor of his father's wives, and adopted two of them. The rest were given to influential under-chiefs. When an elder brother dies his wives are taken by the next brother. A chieftain has always a head wife, or queen. Her hut is called the great house, and her children inherit the chieftainship. If she dies, a new wife is selected for the same position.

The women complain that the proportion between the sexes is so changed that they are not valued as they deserve. The majority of the real Makololo have been cut off by fever. Those who remain are a mere fragment of the people who came to the north with Sebituane. Migrating from a healthy climate in the south, they were more subject to the febrile diseases of the valley than the black tribes they conquered. The women generally escaped the attack, but they are less fruitful than formerly, and mourn the want of children, of whom they are all excessively fond.

Each village does not contain above one or two families of true Makololo, who are themselves a compound of many tribes. The members of that miscellaneous nation are distributed as lords among the people they conquered, who are forced to render certain services, and to aid in tilling the soil. They are proud to be called Makololo, but their distinguishing title is Makalaka, which is often used in reproach, as betokening inferiority. The servitude which has resulted from their subjection by force of arms is very mild. Each has his own land onder cultivation, and lives nearly independent. It is so easy to escape to other tribes, that the Makololo are compelled to treat them rather as children than
as slaves. Some masters, who fail to secure their affections, frequently find themselves without a single servant.

The Makololo ladies are liberal in their presents of milk and other food. They seldom labour, except to adorn their own huts and court-yards. They drink large quantities of boyáloa, or o-álo, the búza of the Arabs, which, being made of the grain called Holcus sorghum, or "durasaif," in a minute state of subdivision, is very nutritious, and gives that plumpness of form which is considered beautiful. They dislike being seen at their potations by persons of the opposite sex. They cut their woolly hair short, and delight in having the whole person shining with butter. Their dress is a kilt reaching to the knees; its material is soft ox-hide, and is not ungraceful. A soft skin mantle is thrown across the shoulders when the lady is unemployed, but when engaged in any labour she lays this aside and works in the kilt alone. The ornaments most coveted are large brass anklets as thick as the little finger, and armlets of brass or ivory. The rings are so heavy that the ankles are often blistered by the weight; but "pride feels no pain," and the infliction is borne as magnanimously as tight lacing and tight shoes among ourselves. Strings of beads are hung around the neck. The fashionable colours are light green and pink, and a trader could get almost anything he chose to ask for beads of these colours.
'I'he women have somewhat the same ideas with ourselves of what constitutes comeliness. They frequently asked for the lcoking-glass; and the remarks they made while I was engaged in reading, and apparently not attending to them, were amusingly ridiculous. "Is that me?" "What a big mouth I have!" "My ears are as big as pumpkin-leaves." "I have no chin at all." Or, "I should have been pretty, but I am spoiled by these high cheek-bones." "See how my head shoots up in the middle!" As they spoke they laughed vociferously at their own jokes. One man came when he thought I was asleep, and, after twisting his mouth about in various directions, remarked to himself, "People say I am ugly, and how very ugly I am indeed!"

At our religious sevices in the kotla a small portion of the Bible was read, followed by a short explanatory address. The
congregation which attended at the summons of the herald, who acted as beadle, was often not less than from five to seven (23) hundred. The associations of the place were unfavourable to solemnity. Half an hour after our devotions were ended a dance would be got up on the very same spot. These habits could not be opposed at first, without appearing to assume too much over the people. Far greater influence is gained by gently leading them to act rightly as of their own free will. Yet the Makololo women behaved from the outset with decorum, except at the conclusion of the prayer. In kneeling down, many of them bent over their little ones; and the children, in terror of being crushed, set up a simultaneous yell. At this there was often a subdued titter, which was turned into a hearty laugh as soon as I pronounced Amen. Such incongruities were easier corrected than similar peccadilloes farther south. Long after we had settled at Mabotsa, when preaching on the most solemn subjects, a woman would give a nudge with her elbow to a neighbour seated on her dress, to make her move off. I'he offender would return it with interest, and perhaps the remark, "Take the nasty thing away, will you?" Three or four more would begin to hustle the disputants, and the men would swear at them all to enforce silence.

I refrained from attending the sick, unless their own doctors wished it, or had given up the case. This prevented all offence to the native practitioners, and limited my services, as I desired, to the severer attacks.

Some weeks after Sekeletu declined to learn to read, Motibe his father-in-law, and several others, determined to approach the mysterious book. A number of men acquired the alphabet in a short time and were set to teseh others, but before much progress could be made I was on my way to Loanda. On Motibe reporting that the proceeding was safe, Sekeletu and his young companions came forward to try for themselves. To all natives who have not acquired the art, the mode in which knowledge is conveyed through letters is unfathomable. It seems supernatural to them that we should distingaish things taking place in a book. Machinery is equally inexplicable, and money nearly as much so until they see it in use. They are familiar with barte: alone: and in the centre of the country,
where gold is unknown, if a button and sovereign were left to their choice, they would prefer the former on account of its naving an eye.

As I had declined to specify any article to Sekeletu which I wished to possess, except a canoe to take me up the river, he brought ten fine elephants' tusks. He would take no denial, and I afterwards gave them to some of his subjects to sell on their own account. During the eleven years I had been in the country, though we always made presents to the chiefs whom we visited, I invariably refused to take donations of ivory in return, from an idea that a religious instructor degraded himself by accepting gifts from those whose spiritual welfare he professed to seek. Though I received some tusks from Sebituane in 1851, it was only to purchase by the proceeds a variety of useful articles which I carried to his son. I had often handsome offers, but I always advised that the ivory should be sold to dealers, who would be sare to follow in my footsteps; and when my friends among the natives had become rich by barter, they might remember me or my children. At the time Lake Ngami was discovered I gave permission to a trader to form part of our company. The return I got for preferring his interest to my own was ar assertion in one of the Cape papers that he "was the true discoverer of the lake!"

Barter is the only means by which a missionary in the interior can pay his way, as money has no value. In all the journeys I had perviously undortaken for wider diffusion of the gospel, the extra expenses were defrayed from my salary of 100l. per annum. This is sufficient to enable a missionary to live in the interior of South Africa, if he has a garden which produces corn and vegetables. Without this adjunct the allowance is barely sufficient for the poorest fare and plainest apparel, unless the missionary spends six or eight months in journeys to the colony, for the sake of getting goods at a lower price than they can be had from itinerant traders. This we never felt ourselves justified in doing ; and when to our ordinary expenses were added the cost incurred in travelling, the wants of an increasing family, and liberal gifts to chiefs, it was difficult, with the utmost frugality, to make both ends meet. As, however, my opinion of the
inexpediency of combining the professions of missionary and merchant remained unchanged, I was glad of the proposal of Mr. Rutreerford, of Cape Town, to intrust a sum of money to Fleming, the West-Indian man of colour, for the purpose of developing a trade with the Makololo. The goods which he bought were ill adapted to the natives, but, though it was his first attempt at trading, and the distance he had to travel made the expenses enormous, he was not a loser by the trip. Other traders followed, who demanded 90 lbs. of ivory for a (26) musket; and as the Makololo knew nothing of steelyards, and supposed that the contrivance was meant to cheat them, they offered instead to exchange one bull and one cow elephant's tusk for each gun. These two tusks on an an average would contain 70 lbs. of ivory, which sells at the Cape for 5 s. per pound, while the total value of the secondhand musket was not more than 10s. Success in commerce is as much dependent on an acquaintance with the language as success in travelling. Not understanding each other's talk, no bargain was struck; and when I passed the spot some time afterwards, I found that the whole of the ivory had been destroyed by a tire which broke out in the village when all the people were absent.

I had brought with me as presents an improved description of goats, fowls, and a pair of cats. As the Makololo are fond of improving the breed of their domestic animals, they were much pleased with my selection. A superior bull, which was designed as a gift to Sekeletu, I was compelled to leave behind on account of its becoming footsore. I had brought it, in performance of a promise made to Sebituane before he died, and Sekeletu was much gratified by my attempt to keep my word to his father.

They are all remarkably fond of their cattle. They have iwo breeds. One called the Batoka, because captured from that tribe, is of diminutive size, but very beautiful, and closely resembles the short-horns of our own country. They are very tame, and remarkably playful. They may be seen lying on their sides by the fires in the evening; and when they go forth to their pasture, the herdsman often precedes them, and has only to commence capering to set them all gambolling. The meat is superior to that of the much larger Rarotse breed.
which comes from the fertile Barotse valley. These oxen stand ligh on their legs, and are often nearly six feet at the withers. They have big horns, and a pair which we brought from the lake measured eight and a half feet from tip to tip.

The Makulolo are in the habit of shaving a little bit from one side of the horns while they are growing, in order to make them carve in that direction and assume fantastio shapes. The stranger the curvature, the more handsome the ox is considered to be, and the longer he is spared to be an ornament to the herd. This is an ancient custom in Africa, for the tributary tribes of Ethiopia are pictured on some of the oldest Egyptian monuments bringing contorted-horned cattle into Egypt. This is not the only mode of adorning their oxen. Some are branded in lines with a hot knife, which causes a permanent discolouration of the hair, like the bands on the hide of a zebra. Another mode of decoration is to detach pieces of skin round the head, two or three inches long and broad, and these are allowed to heal in a dependent position.

The Makololo use the ox-hide for making either mantles os shields. For the former purpose it is stretched out by means of pegs, and dried. Ten or a dozen men collect round it, and with small adzes shave of the substance on the fleshy side until the skin is left quite thin. A quantity of brain and some thick milk are then smeared over it. It is next combed with an instrument made of a number of iron spikes tied round a piece of wood, so that the points only project beyond it. This loosens the fibres. Milk or butter is applied to it again, and it forms a garment nearly as soft as cloth.

The shields are made of hides partially dried in the sun, and beaten with hammers until they are stiff and dry. Two broad belts of a differently-coloured skin are sewed into them longitudinally, and sticks are inserted to make them rigid. In their battles they trust largely to their agility in springing aside from the flying javelins, but the shield is a great protection when so many are thrown that it is impossible not to receive some of them. From what I have seen them do in elephant-hunting, I believe, when they have room to make a run and discharge a spear, with the aid of the impulse imparted
by the motion, they can throw it between forty and fifty yards. I saw a man who had received one of these weapons in his shin. The blade split the bone, and became so impacted in the cleft that no amount of pulling would extract it. It was necessary to take an axe and force open the cleft before the javelin conld be taken out.

## OHAPTER X.

African fever.-The Makalaka.-Divisions of South, African FAMILY.

On the 30th of May I was seized with fever for the first time. Cold east winds prevail at this time; and as they come over the extensive flats inundated by the Chobe, as well as many other districts where the contents of the pools are vanishing into the air, they may be supposed to be loaded with malaria and watery vapour. An epidemic is the result. The usual symptoms of stopped secretion are manifested-shivering and a feeling of coldness, although the skin is hot to the touch. The temperature in the axilla, over the heart and region of the stomach, was in my case $100^{\circ}$; but $103^{\circ}$ at the nape of the neck and throughout the course of the spine.- There were pains along the latter, and frontal headache. The liver, in its efforts to free the blood of noxious particles, often secretes enormous quantities of bile. Anxious to ascertain whether the natives possessed any remedy of which we were ignorant, I requested the assistance of one of Sekeletu's doctors. He put some roots into a pot with water, and, when it was boiling. placed it near me and threw a blanket round it and me, that I might be shut in with the steam. This being attended by no immediate effect, he got a small bundle of medicinal woods, and, burned them nearly to ashes in a potsherd, that the smoke and hot air might assist to produce perspiration. After being stewed in their vapour-baths, and smoked like a red herring over green twigs, I concluded that I could cure the fever more quickly than they can. The native treatment is
however, of service, if employed in conjunction with a wet sheet and a mild aperient in combination with quinine. Purgatives, general bleedings, or indeed any violent remedies, are injurious. The appearance of a herpetic eruption near the mouth is regarded as an evidence that no internal organ is in danger. There is a good deal in not " giving in" to this disease. He who is low-spirited will die sooner than the man who is not of a melancholic nature.

On my visit in 1851 the Makololo made a garden and planted maize for me, that, as they remarked when I parted with them, I might have food to eat when I returned, as well as other people. The grain was now pounded by the women into fine mesl. This they perform in large wooden mortars, the exact counterpart of those which are depicted on the Egyptian monuments. To this good supply of maize Sekeletu added ten or twelve jars of honey, each of which contained about two gallons. A quantity of ground-nuts (Arachis hypogea) were also furnished every time the tributary tribes brought their dues to linyanti. An ox was given us fur slaughter every week or two, and Sekeletr appro.


Egyptian l'estle and Mortar, Sleves, Corn Vessels, and Kilt, identical with those in use by the Makololo and Makalika -From Sir G. Wilkinson's 'Ancient Egyptians.'
priated two cows to our use. This wasin accordance with the acknowledged rule throughout the country, that the chief should feed all strangers who come to him on special business, and take up their abode in his kotla. A present is usually given in return for the hospitality, but, except in cases where their aboriginal customs have been modified, nothing would be asked. Europeans spoil the feeling that hospitality is the sacred duty of the chiefs. No sooner do they arrive than they offer to purchase food, and, instead of waiting till a meal is prepared, cook for themselves, and often decline to partake of the dishes which have been got ready for them. Before long the natives come to expect a gift without having furnished any equivalent.

Strangers who have acquaintances among the under-chiefs are treated at their establishments on the same principle. So generally is the duty admitted, that one of the most cogent arguments for polygamy is, that a respectable man with only one wife could not entertain visitors as he ought. This reason has especial weight where the women are the chief cultivators of the soil, and have the control over the corn, as at Kolobeng. The poor, who have no friends, often suffer much hunger, and the kind attention lavished on them by Sebituane was one of the reasons of his great popularity in the country.

The Makololo cultivate a large extent of land around their villages. The nucleus of this miscellaneous nation were Basuto who came with Sebituane from a comparatively cold and hilly region in the south; and those who truly belong to that tribe retain its former habits, and may be seen going out with their wives, hoe in hand; a state of things never witnessed among the other Bechuanas. The younger Makololo lord it over the conquered Makalaka, and have unfortunately no desire to imitate the agricultural tastes of their fathers. They are the aristocracy of the country, and expect their subjects to perform all the manual labour. They once possessed almost unlimited power over their vassals, but their privileges were much abridged by Sebituane himselt. When he conquered the Bakwains, Bangwaketze, Bamangwato, Batauana, \&c., he incorporated the young of these tribes into his own. Great mortality by fever reduced the original stock.
and he wisely supplied the vacancies by extending the privilege to a large number of the subject Makalaka. Thus we found him with even the sons of the chiefs of the Barotse closely (271 attached to his person; and they say to this day that one and all they wonld have laid down their lives in his defence. The motto upon which he acted was, "All are children of the chief."

The Makalaka cultivate the Holcus sorghum, or dura, as the principal grain, with maize, two kinds of beans, ground-nuts (Aruchis hypogacu), pumpkins, water-melons, and cucumbers. Those who live in the Barotse valley raise in addition the sugar-cane, sweet-potato, and manioc (Jatropha manihot). The climate there, however, is warmer than at Linyanti, and the Makalaka increase the fertility of their gardens by rude attempts at artificial irrigation. The instrament of culture over all this region is a hoe. The Batoka and Banyeti obtain the iron in considerable quantities from the ore by smelting. Most of the hoes in use at Linyanti are the tax imposed on the smiths of those conquered tribes.

Sekeletu receives tribute from a great number of tribes in


A Batoks hoo.
corn or dura, ground-nuts, hoes, spears, honey, canoes, paddles, wooden vessels, tobacco, mutokuane (Cannabis sativa), various wild fruits (dried), prepared skins, and ivory. When these articles are brought into the kotla, the chief divides them among the loungers who usually congregate there

The ivory is sold with the approbation of his connsellors, and the proceeds are distributed in open day among the people. He retains a small portion only for his own share, and, if he is not more liberal to others than to himself, he loses in popularity. I have known instances in which individuals who had been overlooked fled to other chiefs.

An example of this will illustrate the mode in which contests are generated in Africa. A discontented person fled to Lechulatebe in the lake Ngami district, and was encouraged to go to a village of the Bapálleng, where he abstracted the tribute of ivory which ought to have come to sekeletu. This theft enraged the whole of the Makololo, who had part in the loss. To show their intention of resenting such usage, about five hundred of them went through a mimic fight, in the presence of some of Lechulatebe's people who came on a visit to Linyanti. The principal warriors pointed their spears towards the lake where the chief who had wronged them lived, and every thrust was answered by all with the shout, "H $\bar{o} \bar{o}$ !" while every stab on the ground drew forth a simultaneous "Huzz!" On these occasions everybody capable of bearing arms must turn out. In the time of the warlike Sebituane any one who remained in his house was killed.

The Makololo performance had no effect. Lechulatebe aggravated his offence by repeating it, and by a song which was sung in his town, expressive of joy at the death of Sebituane. That famous conqueror had carried off many cattle from Lechulatebe's father. The son had now got possession of fire-arms, and, considering himself more than a match for the Makololo, was bent on retaliation. I despatched a message to him, advising him to cease his provocation, and especially the song; because, though Sebituane was dead, the arms with which he had fought were still alive and strong. Sekeletu, remembering his father's injunctions to promote peace, sent ten cows to be exchanged for sheep. Lechulatebe took the cows and returned an equal number of sheep, though, according to the relative value of sheep and cows, he ought to have given sixty or seventy. One of the men who conducted the cattle was trying to purchase goats in a village without formal leave from the chief; Lechulatebe punished him by making hinu sit some hours on the broiling
sand. which was $130^{\circ}$ at least. This put a stop to amicable relations. l prevailed upon the Makololo to keep the peace during my stay, but it was easy to perceive that public opinion was against sparing a tribe of Bechuanas for whom they entertained the most sovereign contempt. The young men exclaimed, "Lechulatebe is herding our cows for us; let us only go, we shall 'lift' the price of them in sheep."

Such are the usual causes which produce an African war. The diffusion of fire-arms among them will render their coutests less frequent and less bloody. As nearly all the feuds in the south have been about cattle, the risk which must be incurred from long shots generally proves a preventive to the foray. It is rare, indeed, to hear of two tribes who have guns going out against each other. These weapons are only mischievous when they are an exclusive possession, and especially when they fall into the hands of a small tribe, commanded by a weak chief like Lechulatebe, who is thus tempted to try his strength with a numerous and warlike race.

As the Makololo are the most northerly of the Bechuanas, we may enumerate the various tribes included under that generic name before we proceed to the branch of the negro family distinguished by the term Makalaka.* The word (28) Bechuana seems derived from Chuana-alike, or equal-with the personal pronoun Ba (they) prefixed; and therefore means fellows or equals. When addressed with any degree of scorn, they still reply, "We are Bachuana, or equals-we are not inferior to any of our nation." Their name for the whites is Makōa, which might seem to mean "handsome," from the manner in which they use it to indicate beauty, but the conjecture of Burchell is probably correct. "The different Hottenot tribes were known by names terminating in kua, which means 'man,' and the Bechuanas simply added the prefix Ma-denoting a nation.". The language of the whites (or Makoa) is called Sekōa; that of the Bechuanas is termed Sichuana.

The Makololo, or Basuto, have arranged the different

[^12]portions of this great family of South Africans in three divisions: 1st. The Matebele, or Makonkobi-the Caffre family living on the castern side of the country; 2nd. The Bakoni, or Basuto ; and 3rd. The Bakalahari, or Bechuanas, inhabiting the central parts, which includes all the tribes living in or adjacent to the great Kalahari Desert.
lst. The Caffres are subdivided into various groups, as Amakosa, Amapanda, and other well-known titles. They consider the name Caffre as an insulting epithet.

The Zulus of Natal belong to this compartment, and are as famed for their honesty, as their brethren who live adjacent to our colonial frontier are renowned for cattle-lifting. The Recorder of Natal declared, that history does not present another instance in which so much security for life and property has been enjoyed as during the whole period of English occupation by ten thousand colonists in the midst of one hundred thousand Zulus.
(29) The Matebele of Mosilikatse, who live a short distance south of the Zambesi, and other tribes who live a little south of Tete and Senna, are also members of this family. They are not known beyond the Zambesi river, which was the limit of the Bechuana progress north until Sebituane pushed his conquests farther.

2nd. The Bakoni and Basuto division contains in the south (30) all the tribes which acknowledge Moshesh as their paramount chief ; among them we find the Batau, the Baputi, Makolókue, \&c., and some mountameers on the range Maluti, who are believed by those who have carefully sifted the evidence to have been at one time guilty of cannibalism. They ascribe the abandonment of the practice to Moshesh having provided them with cattle. They are called Marimo and Mayabathu, men-eaters, by the rest of the Basuto.

The Bakoni farther north than the Basuto are the Batlou, Bapēri, Bapō, and another tribe of Bakuena, Bamosetla, Bamapela or Balaka, Babiriri, Bapiri, Bahukeng, Batlokua, Baakhahela, \&c. \&c. The whole of these tribes, both Basuto and Bakoni, are much attached to agriculture, and raise large quantities of grain. It is on their industry that the distant Boers revel in slothful abundance. The chief toil of hoeing, driving away birds, reaping, and winnowing, falls to the
willing arms of the hard-working women; but, as the men labour as well as their wives, many have followed the advice of the missionaries, and use ploughs and oxen instead of the hoe.

3rd. The Bakalahari, or western branch of the Bechuana family, consists of Barolong, Bahurutse, Bakuena, Bangwaketse, Bakaa, Bamangwato, Bakurutse, Batauana, Bamatlaro, and Batlapi. It is among these last that the success of the missionaries has been greatest. 'They were an insignificant and filthy pecple when first discovered; but, being nearest to the colony, they have had opportunities of trading, and the long-continued peace they have enjoyed has enabled them to amass great numbers of cattle. The young, who do not realize their former degradation, often consider their present superiority over the tribes in the interior to be entirely owing to a primitve intellectual pre-eminence.

## CHAPTER XI.

## Linfantit to Seshere.-The Lefambye.

Hlaving waited a month at Linyanti, we again departed, for the purpose of ascending the river from Sesheke (lat. $17^{\circ} 31^{\prime}$ $38^{\prime \prime}$ S., long. $25^{\circ} 13^{\prime}$ E.) Not only Sekeletu, but many of the under-chiefs, accompanied us. The country between Linyanti and Sesheke is perfectly flat, except where patches are elevated a few feet above the surrounding level, or where the termites have thrown up their enormous mounds. No one who has not seen their gigantic structures can imagine the industry of these little labourers. They seem to impart fertility to the soil which has once passed through their mouths, for the Makololo find the sides of anthills the choice spots for rearing early maize, tobacco, or anything else which requires more than oldinary care. The mounds were generally covered with wild datetrees. The fruit is small, and as soon as it is ripe the Makololo cut down the tree rather than be at the trouble of climbing it. The other portions of the more elevated land have the camel-thurn (Acucia giraffa). white-thorned mimosa (Acacia
borrida, and baobabs. In sandy spots there are palmyras somewhat similar to the Indian, but with a smaller seed. The soil on the plain is a rich, dark, tenacious loam, known as the "cotton-ground" in India, and is covered with a dense matting of coarse grass, common on all damp spots in this country. The Chobe was on our right, and its scores of miles of reed formed the horizon. It was pleasant to look back on the longextended line of our attendants, as it twisted and bent accord. ing to the curves of the footpath, or in and out behind the mounds. Some had caps made of lions' manes; others, the white ends of ox-tails on their heads, or great bunches of black ostrich-feathers, which waved in the wind. Many wore red tunics, or various-coloured prints, which the chief had bought from Fleming. The common men acted as porters; the gentlemen walked with a small club of rhinoceros horn in their hands, and had servants to bear their shields." The "Machaka," or battle-axe men, carried their own, and were liable at any time to be sent off a hundred miles on an errand, and were expected to ruy all the way.

Sekeletu is always accompanied by his own Mopato, a num ber of young men of his own age. Those who are nearest eat out of the same dish, for the Makololo chiefs pride themselves on eating with their people. He takes a little, and then beckons to his neighbours to do the same. When they have had their turn, he perhaps makes a sign to some one at a distance, who starts forward, seizes the pot, and removes it to his own companions. The associates of Sekeletu, wishing to imitate him as he rode on my old horse, leaped on the backs of some half-broken oxen, but, having neither saddle nor bridle, the number of tumbles which ensued was a source of much amusement to the rest.

Troops of leches, or, as they are here called, " lechwés," were feeding heedlessly all over the flats. There are prodigious herds of them, although the numbers that are killed annually, as well as of the " nakong," another water antelope, must be enormous. When the lands we were treading are flooded, the leches betake themselves to the mounds. The Makalaka, who are most expert in the management of their small, light canoes, come gently towards them. When they perceive the antelopes beginning to move they increase their speed, making the
water dash away from the gunwale; and though the animals fly in a succession of prodigious bounds, their feet appearing to touch the bottom at each spring, their pursuers manage to spear great numbers of them.

The nakong is rather smaller than the leche, and, in shape. (3r) has more of paunchiness than any antelope I ever saw. It is of a greyish-brown colour, and, as the hair is long and rather sparse, it never looks sleek. The horns are twisted, like those if a koodoo, but are much smaller, and have a double ridge winding round them. The habitat of the nakong is the marsh and muddy bogs, where it is borne up by the great surface over which its weight is distributed-its foot, between the point of the toe and supplemental hoofs, leaving a print which is full twelve inches long. Its gait closely resembles the gallop of a dog when tired. It feeds by night. and lies hid among the reeds and rushes by day. When pursued, it dashes into sedgy places, and immerses the whole body, except the point of the nose and the ends of the horns. The hunters burn large patches of reed to drive it from its lair; but when it sees itself surrounded by enemies in canoes, it will rather allow the projecting tips of the horns to be scorched by the flames, than come forth from its hiding-place.

When we arrived at any village, the whole of the women tumed out to lulliloo their chief. Their shrill voices, to which they give a tremulous sound by a quick motion of the tongue, peal forth "Great lion!" "Great chief!" "Sleep, my lord!" \&c. The men utter similar salutations; all of which tre received by Sekeletu with lordly indifference. After the news has been told, the head-man of the village, who is almost llways a Makololo, brings forth a number of large pots of beer, each of which is given to some principal personage, who divides it with whom he pleases. As many as can partake of the beverage, and grasp the calabashes, which are used as drink-ing-cups, so eagerly that thej are in danger of being broken. Bowls of thick milk, some of which contain six or eight gallons, are likewise produced, and distributed in the same manner as the bcer. The milk is conveyed to the mouth in the hand. I often presented my friends with iron spoons, which delighted them exceedingly But the old habit of hand eating prevailed. They simply used the novel imple. ment to ladle out the mill into their hands.

The chief is expected to feed all who accompany him, and ne either selects an ox or two of his own from his numerous cattle stations in every part of the country, or he is presented by the head-men of the villages he visits with as many as he needs. The animals are killed by a thrust from a small javelin in the region of the heart. The wound is made purposely small to avoid the loss of the blood, which, with the internal parts, are the perquisites of the slaughterman. Hence all are eager to perform that office. Each tribe has its own way of distributing an animal. Among the Makolulo the hump and ribs belong to the chief; among the Bakwains the breast is his perquisite. After the oxen are cut up, the joints are placed before Sekeletu, who apportions them among the gentlemen of the party. The attendants rapidly prepare the meat for cooking by cutting it into long strips, so many of which are thrown into the fires at once that they are nearly put out. These strips are handed round when half broiled and burning hot. Every one gets a mouthful, but no one except the chief has time to masticate. The prolonged enjoyment of taste is not their aim, but to get as much food as possible during the short time their neighbours are cramming, They are eminently gregarious in their meals; and, as they despise any one who eats alone, I always when breaking my fast poured out two cups of coffee, that the chief, or some one of the principal men, might share it with me. Of this beverage they all become very fond; and some of the tribes attribute greater fecundity to its use. The raw material of one ingredient of the mixture is already a home-growth. They cultivate the sugar-cane in the Barotse country, but only use it for chewing. They knew nothing of the method of extracting the sugar from it. Sekeletu relished my sweet coffee and biscuits, and said, " he knew my heart loved him by finding his own heart warming to my food." He,had been visited during my absence at the Cape by some traders and Griquas, and "their coffee did not taste half so nice as mine, because they loved his ivory and not himself."

Sekeletu and I had each a little gipsy-tent in which to sleep. The Makalaka huts are infested with vermin. Those of the Makololo are generally clean, owing to the habit of frequently smearing the floors with a plaster compuserl of
cowdung and earth. The best class of dwellings consist of three circular walls, with small holes for doors, as in a doghuuse. Even when on all-fours it is necessary to bend down the body to get in. The roof is formed of reeds or straight sticks, in shape like a Chinaman's hat, bound firmly together with circular bands, which are lashed with the strong inner bark of the mimosa-tree. The whole is thatched with fine grass. As the roof projects far beyond the walls, and reaches within four feet of the ground, the shade is the best to be found in the country. These habitations are cool in the hottest day, but are close and deficient in ventilation by night. The bed is a mat made of rushes sewn together with twine. 'The hip-bone pressing on the hard flat surface soon becomes sore, and it is not allowable to make a hole in the floor to receive the prominent part called trochanter by anatomists, as we do when sleeping on grass or sand. In sume villages we were driven to desert our tont for a hut, because the mice ran over our faces, or hungry dogs ate our shoes and left only the soles.

Our course at this time led us to a part above Sesheke, called Katonga-latitude $17^{\circ} 29^{\prime} 13^{\prime \prime}$, longitude $24^{\circ} 33^{\prime}$, where there is a village belonging to a Bashubia man named Sekhosi. The river here is certainly not less than six handred yards wide. When the canoes came from Sekhosi to take us across, one of the comrades of Sebituane rose. and, looking at Sekeletu, called out, "The elders of a host always take the lead in an attack." Sekeletu, and his young men, were accordingly obliged to give them precedence. It tock a considerable time to ferry over our large party, as, even with quick paddling, from six to eight minutes were spent in the passage from bank to bank.

Several days were spent in collecting canoes from different villages for the purpose of ascending the river. This we now learned is called by the whole of the Barotse the Liambai, or Leeambye, which means "the large river," or the river par excellence. Luambéji, Luambési, Ambézi, Ojimbési, and Zambési, \&cc., are names applied to it at different parts of its course, according to the dialect spoken. They have all the same signifcation, and express the native idea that this magnificent stream is the main drain of the country.

In order to assist in the support of our large party, and get a sight of the adjacent district, I went several times to the north of the village for game. The country is covered with clumps of beautiful trees, and between them fine open glades stretch away in every direction. When the river is in flood these glades are inundated. The soil is dark loam, as it is in all the parts which are washed by the overflow, while among the trees it is sandy, and not so densely covered with grass as elsewhere. A ridge, running parallel to, and about eight miles from the river, is the limit of the inundation on the north. The people enjoy rain in sufficient quantity to raise large supplies of grain and ground-nuts.

This district contains great numbers of a small antelope named Tianyane, unknown in the south. It stands about eighteen inches high, and is of a brownish-red colour on the sides and back, with the belly and lower part of the tail white. It is very graceful in its movements, and utters a cry of alarm not unlike that of the domestic fowl. Though extremely timid, the maternal affection it bears its young will often induce it to offer battle to a man. When her fawn is too tender to run about with her, she puts one foot on the prominence about the seventh cervical vertebra, or withers. to make it lie down in the place she selects, and there it remains till she summons it by her bleating. If a gregarious she-antelope is seen separated from the herd, she is sure to have laid her little one to sleep in some cozy spot. The colour of the hair in the young assimilates better with the ground than that of the older animals, which do not need to be screened from the observation of birds of prey. I remarked that the Arabs at Aden made their camels kneel by pressing the thumb on the withers. They have probably derived the custom from the gazelle of the Desert.

Such great numbers of buffaloes, zebras, tsessebes, tahaetsi, and eland or pohu, grazed undisturbed on these plains, that little difficulty was experienced in securing a fair supply of meat for our party during the inevitable delay. Hunting on foot, in this country, is very hard work. Winter though it was, the heat of the sun is so great, that, had there been any one on whom I could have devolved the office, he would have been welcome to all the sport. But the Makololo shot so


A NEW OR STRIPED VARIETY OF ELAND, FOUND NORTH OF SESHEKE
bedly, that I was obliged to go myself in order to save my powder.

We shot a beautiful cow-eland, standing in the shade of a fine tree. It was a new variety of this splendid $\varepsilon_{n}$ ntelope, marked with narrow white bands across the body, exactly like those of the koodoo. and baving a black patch of more than a hand-breadth on the outer side of the fore arm. Evidently she had lately had her calf killed by a lion, for there were five long deep scratches on both sides of her hind quarters, as if she had run to its rescue, and the beast had left it to attack herself, but was unable to pull her down. The milk which flowed from the distended udder showed that she had sought the shade from the distress caused by the accumulation of the fluid. A Makololo gentleman who accompanied me, struck with her beauty, said, " Jesus ought to have give" us these instead of cattle."

## CHAPTER XII.

> Abcent of the Leeambye. - Barotse Valley. - Banyett.Naliele.-Mambapi.-The Marile.-Sesieke.

Having at last collected a fleet of thirty-three canoes, and about one hundred and sixty men, we began to ascend the river. I had my choice from all the vessels, and selected the best, though not the biggest. It was thirty-four feet long and only twenty inches wide, and was manned by six paddlers. The larger canve of Sekeletu had ten. They stand upright, and keep the stroke with great precision, though they change from side to side as the course demands. The men at the head and stern are the strongest and most expert of the whole. The canoes, being flat-bottomed, can go into shallow water; and whenever the crew can touch the ground with their paddles, which are about eight feet long, they use them as poles to punt with. On land the Makalaka fear the Makololo; - on water, the superiority appertains to the former. They race with each other, and, dashing along at the top of their speed,
place their masters' lives in danger. In the event of a capsize many of the Makololo would sink like stones. On the first day of our voyage an old doctor had his canoe filled by one of those large waves which the east wind raises on the Leeambye, and he went forthwith to the bottom. The Barotse who were with him saved themselves by swimming, and were afraid of being punished with death in the evening for not rescuing the doctor. Had he been a man of more influence, they would certainly have been executed.

We skimmed rapidly along, and 1 felt the pleasure of looking on lands which had never been seen by a European before. The magnificent river is often more than a mile broad, and adorned with many islands of from three to five miles in length, which, at a little distance, seemed great rounded masses of sylvan vegetation reclining on the bosom of the glorious stream. The beanty of some of them was greatly increased by the gracefully curved fronds and refreshing lightgreen colour of the date-palm, while the lofty palmyra towered far above, and cast its feathery foliage against a cloudless sky. The banks of the river are equally covered with forest, and most of the trees on the brink of the water send down roots from their branches like the banian, or Ficus indica. The adjacent country is rocky and undulating, abounding in elephants and all the other large game, except leches and nakongs, which appear to shun stony ground. The soil is of a reddish colour, and very fertile, as is attested by the quantity of grain raised annually by the Banyeti. This poor and industrious eople are expert hunters, and proficients in the manufacture of articles of wood and iron. The whole of this part of the country being infested with the tsetse, they are unable to rear domestic animals, which may have led to their skill in handicraft works. Some make large wooden vessels with neat lids; and since the idea of sitting on stools has entered the Makololo mind, they have shown considerable taste in the forms they give to the legs.

Other Banyeti, or Manyetı, as they are called, construct neat and strong baskets of the split roots of some tree, whilst others excel in manufacturing iron articles and pottery. I cannot find that they have ever been warlike. Indeed, the contests in the centre of the country, where no slave-trade

existed, have seldom been about anything else than cattle and so much is this recognised that several tribes refuse ti keep them because they tempt their enemies to come anc steal. I have heard of but one war from another cause. Three Barolongs, who were brothers, fought for the possession of a woman, and the tribe has remained divided ever since.

From the bend up to the north, called Katima-molelo ("] quenched fire"). the bed of the river is rocky, and the stream runs fast, forming a succession of rapids, which prevent continuous navigation when the water is low. They are not visible when the river is full. There are cataracts however at Nambwe, Bombwe, and Kale, with a fall of between four and six feet, which must always be dangerous. The falls of Gonye present a still more serious obstacle. The drop is about thirty feet, and we were obliged to take up the canoes, and carry them more than a mile by land. The water, after it descends, goes boiling along, and gives the idea of great masses of it rolling over and over. For many miles below the fall the channel is narrowed to a hundred yards, and at the times of the inundaiion the river, where it is compressed between these high rocky banks, rises fifty or sixty feet in perpendicular height. Tradition reports that two hippopo-tamus-hunters, who were in eager pursuit of a wounded animal, ventured too far into the rush of water, and were whirled over the precipice by the roaring torrent. Another tradition states that a man of the Barotse came down the stream and availed himself of the falls for the purposes of irrigation. Such superior minds must have arisen from time to time in these regions, but, ignorant of letters, they have left no memorial behind them. We dug from his garden an inferior kind of potato (Sisingáne), which, when orce planted, never dies out. It was bitter and waxy. As it was not in flower, I cannot say whether it is a solanaceous plant or not.

As we passed up the river the different villages of Banyeti turned out to present Sekeletu with food and skins, as their tribute. The tsetse lighted on us even in the middle of the stream, but they appeared no more when we came to about $16^{\circ} 16^{\prime} \mathrm{s}$. latitude, where the lofty wooded banks left the river, and stretched away in ridges, two or three hundred feet high, to the N.N.E. and N.N.W., until they were twenty or
thirty miles apart. The intervening space, nearly one hundred miles in length, with the Leeambye winding gently near the middle, is the true Barotse valley. A great part of its bottom is formec. of rocks of reddish variegated hardened sandstone with madrepore holes in it, and of broad horizontal strata of trap, often covered with twelve or fifteen feet of soft calcareous tufa. It bears a close resemblance to the valley of the Nile, and is inundated annually by the Leeambye, exactly as Lower Egypt is flooded by the Nile.

The villages of the Barotse are built on mounds, which, during the inundation, when the whole valley assumes the appearance of a large lake, look like little islands in the surrounding waters. There are but few trees, and those which stand on the eminences have been planted there for shade. The soil is extremely fertile, and produces two crops of grain in a year. The Barotse are strongly attached to this fertile district, over which the Leeambye spreads " life and verdure." "Here," say they, " hnnger is not known." Unaided nature has covered the ground with coarse succulent grasses, which afford ample pasturage for large herds of cattle : these thrive wonderfully, and yield a copious supply of milk. During the season of the flood they are compelled to go to the higher lands, where they fall off in condition; their return is a time of joy. Yet this region is not put to a tithe of the use it might be. It is impossible to say whether it would raise wheat like the valley of the Nile, for from its excessive richness the corn might run entirely to straw. One species of.grass which we observed was twelve feet high, with a stem as thick as a man's thumb.

This visit was the first Sekeletu had made to these parts since he attained the chieftainship, and the persons who had taken part with his rival Mpepe were in great terror. The father of this aspirant had joined with another man in counselling Mamochisane to put Sekeletu to death and marry Mpepe. On our arriving at the town where these two conepirators lived they were seized and tossed into the river. When I remonstrated against human life being wasted in this off-hand way, my companions justified the act by the evidence given by Mamochisane, and calmly added. "Yon see we are still Boers; we are not yet taught."

The towns of the Barotso are not large. The mounds on which they are built are small, and the people are necessarily scattered to enable them to look after their cattle. Naliele, the capital (lat $15^{\circ} 24^{\prime} 17^{\prime \prime}$ S., long. $23^{\circ} 5^{\prime} 54^{\prime \prime} \mathrm{E}$.), is erected on an eminence which was thrown up by Santuru, a former chief, and was his storehouse for grain. His own capital stood about five hundred yards to the south, on a spot which now makes part of the bed of the river. Only a few cubic yards remain of a mound which it took the whole of his people many years to erect. The same thing has happened to another ancient site, Linangelo. It would seem, therefore, that the river must here be wearing eastwards. A rise of ten feet above the present low-water mark is the highest point the stream ever attains. Two or three feet more would deluge all the villages; and though this never happens, the water sometimes comes so near, that the people cannot move outside the walls of reeds which encircle their huts.
Santuru, at whose ancient granary we were staying, was a great hunter, and was fond of taming wild animals. His people brought him, among other things, two young hippopotami. These animals gambolled in the river by day, but never failed to go to Naliele for their suppers of milk and meal. They were the wonder of the country till a stranger, who came on a visit, saw them reclining in the sun, and speared one of them under the idea that it was wild. The same accident happened to one of the cats I had brought to Sekeletu. A native, seeing a new kind of animal, killed it, and brought the trophy to the chief, thinking that he had made a remarkable discovery. This cut short the breed of cats, of which, from the swarms of mice, we stood in great need.

The town or mound of Santuru's mother was shown to me; which was the first sympton I observed of that greater regard which is shown to the female sex in the districts to the north. There are few or no cases of women being elevated to the headships of towns south of this point. The Barotse showed some relics of their former chief, which evinced a greater amount of the religious feeling than I had ever known displayed among Bechuanas. His more recent capital, Lilnnda, which was also built on an artificial mound, is covered with
different kinds of trees, transplanted when young by himself In this grove are to be seen various instruments of iron in the state he left them. One looks like the guard of a baskethilted sword; another has an upright stem, on which are placed branches worked at the ends into miniature axes, hoes, and spears. To these he presented offerings, according as he desired to prosper in hewing, agriculture, or fighting. The people in charge of these articles were supported by presents from the chief; and the Makololo sometimes follow the example. This was the nearest approach to a priesthood I had met. When I asked them to part with one of the relics they replied, " $0 \div$ no, he refuses."-" Who refuses?""Santuru," was their reply, showing their belief in a future state of existence.

I inquired whether Santuru had ever seen white men, and could find no trace of any having been here till the arrival of Mr. Uswell and myself in 1851. Any remarkable event is commemorated in names borrowed from the persons or things concerned. Thus the year of our visit was dignified as the year when the white men came. Great numbers of children had been called Ma-Robert, or mother of Robert, in honour of my wife and her eldest boy; others were styled Gun, Horse,
(32) Waggon, Monare, Jesus, \&c.; but though our names, and those of the native Portuguese who came in 1853, were adopted, there is no earlier trace of anything of the kind. For a white man to make his appearance is such a memorable circumstance, that, had it taken place during the last three hundred years, there must have remained some tradition of $i t$.

But Santuru was once visited by the Mambari, and a distinct recollection of the incident is retained. They came to purchase human beings, and both he and his head-men refused them permission to buy any of the people. These traffickers in flesh and blood reside near Bihe, and profess to use the slave for domestic purposes only. Some of them visited us while at Naliele. They are of the Ambonda race, which inhabits the country south-east of Angola, and speak the Bunda dialect, which is of the same family of languages rith the Barotse, Bayeiye, \&c., or those black tribes comprebended under the general term Makalaka. They plait their
hair in three-fold cords, and lay them carefully down around the sides of the head. They are quite as dark as the Barotse, but have among them a number of half-castes, with their peculiar yellow sickly hue. They showed the habits which prevailed in their own country by digging up and eating, even here where large game abounds, the mice and moles which infest the district. The half-castes could all read and write, and the leader of the party, if not a real Portuguese, had, at least, European hair. I feel assured they were the first individuals of Portuguese blood who ever saw the (33) Zambesi in the centre of the continent, and they had not reached it till two years after our discovery in 1851.

While still at Naliele I walked out to Katongo (lat. $15^{\circ} 16^{\prime}$ $33^{\prime \prime}$ ), on the ridge which bounds the valley of the Barotse in that direction, and found it covered with trees. It is the commencement of the lands which are never inundated. Their gentle rise from the dead level of the valley much resembles the edge of the Desert in the valley of the Nile. But here the Banyeti have fine gardens, and raise great quantities of maize, millet, and native corn (Holcus sorghum), of large grain and beautifully white. They also grow pumpkins, melons, beans, ground-nuts, yams, sugar-cane, the Egyptian arum, the sweet potato (Convolvulus batates), and two kinds of manive or cassava (Jatropha manihot and J. utilissima, a variety which contains scarcely any poison). They have in addition wild fruits and water-fowl, and plenty of fish in the river, its branches and lagoons. The scene from the ridge, on looking back, was beautiful. 'The great river glanced out at different points, and fine large herds of cattle were quietly grazing among numbers of villages dotted over the landscape. Leches in hundreds fed securely beside the oxen, for the wild animals keep only out of bow-shot, or two hundred yards. When guns come into a country these sagacious creatures soon learn their range, and begin to run at a distance of five hundred yards.

I imagined in consequence of its slight elevation that Katongo might be healthy, but was informed that no part of this region is exempt from fever. When the waters begin to retire, masses of decayed vegetation and mud are exposed to the torrid sun. The grass is so rank in its growth that it completely conceals the black alluvial soil of this periodical
lake. Even when the herbage falls down in winter, or is "laid" by its own weight, it is necessary to lift the feet high, to avoid being tripped up by it. So much cover does it afford that young leches are hidden beneath it by their dams. The current of the river was about four and a half miles per hour, and in the higher lands, from which it seemed to come, I imagined we might find that wholesome locality of which I was in search. Determined not to abandon the idea till I had accomplished a complete examination of the Barotse country, I left Sekeletu at Naliele, and ascended the river. He furnished me with men, and among the rest with a herald, that I might enter his villages in what is considered a dignified manner. His habit was to shout, "Here comes the lord; the great lion;" the latter phrase being "tau e torna," which in his imperfect way of pronunciation became "sau e tǒna," and so like " the great sow," that I had to entreat him to be silent, much to the annoyance of my party.

In our ascent we visited a number of villages, and were always received with a hearty welcome, as messengers of "sleep" or peace. .These Makololo behaved well in public meetings, even at the first attendance, probably from the habit of commanding the Makalaka, crowds of whom swarm in every settlement, and whom the Makololo women seem to consider as especially under their charge.

The river presents the same appearance of low banks without trees as it had done from $16^{\circ} 16^{\prime}$, until we arrive at Libonta ( $14^{\circ} 59^{\prime} \mathrm{S}$. lat.). Twenty miles beyond that point there is forest down to the water's edge, and along with the woods there is tsetse. No locality can be inhabited by Europeans where that scourge exists; but I still pushed forward on hearing that we were not far from the confluence
(34) of the river of Lŏnda, or Lunda, named Leeba, or Loiba. At this confluence (latitude $14^{\circ} 11^{\prime} 3^{\prime \prime} \mathrm{S}$.) the Leeambye assumes the name Kabompo, and seems to be coming from the east. It is there about three hundred yards wide, and the Leeba two hundred and fifty. The Loeti, a branch of which is called Langebongo, comes from W.N.W., through a level grassy plain named Mango, and is about one hundred yards wide where it enters the Leeambye. The waters of the Loeti are of a light hue, those of the Leeba of a dark mossy tinge. After
the Loeti joins the Leeambye the different-colonred waters flow side by side for some distance unmixed.

Before reaching the Loeti we came to a number of people from the Lobale region, who were hunting hippopotami. They fled precipitately, leaving their canoes and all their utensils and clothing, as soon as they saw the Makololo. My own Makalaka, who were accustomed to plunder wherever they went, rushed after them like furies, regardless of my shouting. As this proceeding would have destroyed my character at Lobale, I forced them to lay down all the plunder on a sandbank, and leave it for its owners.

The numbers of large game above Libonta are prodigious, and they proved remarkably tame. Eighty-one buffaloes defiled in slow procession within gunshot before our fire one evening; and herds of splendid elands stood by day without fear at two hundred yards' distance. They were all of the striped variety, and with their forearm markings, large dewlaps, and sleek skins, were a beautiful sight. The lions here give tongue much more than in the south. One of these auimals stood for hours on the opposite side of the river roaring as loudly as he could, and putting his mouth near the ground, as he usually does on such occasions, to make the sound reverberate. Wherever the game abcunds lions exist in proportionate numbers. They were frequently seen in this district, and two of the largest seemed about as tall as common donkeys.

We came down a branch of the Leeambye called Marile, which departs from the main river in lat. $15^{\circ} 15^{\prime} 43^{\prime \prime} \mathrm{S}$. It is a fine deep stream about sixty yards wide, and makes the whole of the district around Naliele an island. A party of Arabs from Zanzibar were in the country at this time, and when we were sleeping at a village in the same latitude as Naliele two of them made their appearance. They were quite as dark as tho Makololo, but, having their heads shaved, I could not compare their hair with that of the natives. I asked them to help us to eat our ox. As they had scruples about partaking of it because it had not been killed in their own way, I gained their good will by saying I was quite of their opinion as to the propriety of draining out the blood, and gave them two
$k$ kgs of an animal slaughtered by themselves. They professed the greatest detestation of the Portuguese, " because they eat pigs;" and disliked the English, "because they thrash them for selling slaves." I ventured to tell them that I agreed with my countrymen that it was better to let the young grow up and comfort their mothers when they became uld, than to carry them away and sell them across the sea. This form of the traffic they never attempt to justify; " they want them only to. cultivate the land, and take care of them as their children." It is the same old story, justifying a monstrous wrong on pretence that it is a benefit to the victims.

These Arabs, or Moors, could read and write their own language; and, when speaking about our Saviour, I admired the boldness with which they informed me "that Christ was a very good prophet, but Mahomet was far greater." Their loathing of pork may have some foundation in their nature; for I have known Bechuanas, who fed on it without scruple, vomit it up again. The Bechuanas south of the lake have a prejudice against eating fish, and especially anything like a snake, which may arise from the remnants of serpent-worship floating in their minds, for they sometimes render a sort of obeisance to serpents by clapping their hands to them, and refusing to destroy them. In the case of the hog they are conscious of no superstitious feeling.

Having parted with our Arab friends, we proceeded down the Marile till we re-entered the Leeambye. Sekeletu had gone to the town of Ma-Sekeletu (mother of Sekeletu) and left us instructions to follow him. Thither we went. As soon as I arrived he presented me with a pot of boiled meat, while his mother handed me a large jar of butter, of which they make great quantities for the purpose of anointing their bodies. He had himself felt the benefit of my putting aside meat after a meal, and had now in turn ordered some to be kept for me. The Makololo usage is to devour every particle of an ox at a single sitting. Henceforth Sekeletu saved for me and I for him : and when some of the sticklers for custom grumbled, $I$ advised them to eat like men, and not like vultures.

As this was the first visit which Sekeletu had paid to this
part of his dominions, it was to many a season of great joy. The head-men of each village presented more oxen milk, and beer than the horde which accompanied him could devour, though their abilities in that line are something wonderful. The people usually show their joy and work off their excitement in dances and songs. The men stand nearly naked in a circle, with clubs or small battle-axes in their hands, and all roar at the top of their voices, while they simultaneously stamp heavily twice with one foot and then once with the other. 'The arms and head are thrown about in every direction. The perspiration streams off their hodies, the noise rends the air, and the continued stamping makes a cloud of dust ascend, and leaves a deep ring in th 3 ground. Greyheaded men joined in the performance witio as much zest as the young. The women stand by clapping their hands, and occasionally one advances into the circle, composed of a hundred persons, makes a few movements, and then retires. Motibe asked what I thought of it. I replied, "It is very hard work, and brings but small profit." "It is," replied he, "but it is very nice, and Sekeletu will give us an ox for dancing for him ;" which he usually does when the work is over.

As soon as I arrived at Ma-Sekeletu the chief was ready to return homewards. We proceeded down the river, and our speed as we floated with the stream was very great, for in one day we went from Litofe to Gonye, a distance, including the windings of the river, which could not be much less than sixty geographical miles. At this rate we soon reached Sesheke, and from thence the capital of Linyanti. I had failed to discover a healthy place for a settlement, and I at once determined to put in execution my second plan and endeavour to open a path to the coast.

During a nine weeks' tour I had been in closer contact with heathens than I had ever been before; and though all were as kind and attentive to me as possible, yet to endure the dancing, roaring, and singing, the jesting, grumbling, quarrelling, and murderings of these children of nature, was the severest penance I had yet undergone in the course of my missionary duties. I thence derived a more intense disgust of paganism than I had hitherto felt, and formed a greatly elevated opinion of the effects of missions in the south, among tribes which
are reported to have been as savage as the Makololo. The benefits which to a casual observer may be inappreciable arc worth all the money and labour that have been expended tr. produce them.

## GHAPTER XIII.

## Linyanti.-Descent of the Chobe.-Ascent of the Leeambye.

Linyanti, September, 1853.-The object proposed to the Makololo seemed so desirable, that it was resolved to proceed wiih it as soon as the cooling influence of the rains should be felt in November. The longitude and latitude of Linyanti showed that St. Philip de Benguela was much nearer to us than Loanda; and I might have easily made arrangements with the Mambari to allow me to accompany them as far as Bihe, which is on the road to that port ; but it is so undesirable to travel in a path once trodden by slave-traders, that I preferred to discover another line of march.

Accordingly, men were sent at my suggestion to examine all the country to the west, to see if a route could be found free from tsetse. The search was fruitless. The town and district of Linyanti are surrounded by forests infested by this poisonous insect, except at a few points, such as that by which we entered at Sanshureh and another at Sesheke. The Mambari had informed me that many English lived at Loanda. Thither I prepared to go, and the prospect of meeting with countrymen seemed to overbalance the toils of the longer march.

A "picho" was called to deliberate on the terms proposed. In these assemblies great freedom of speech is allowed; and on this occasion one of the old diviners said, "Where is he taking you to? This white man is throwing you away. Your garments already smell of blood." This man was a noted croaker. He always dreamed something dreadful at every expedition, and was certain that an eclipse or comet betokened the propriety of flight. Sebituane formerly set his visions
down to cowardice, and Sekeletu only langhed at him now. The general voice was in my favour, and a band of twentyseven unhired men were deputed to accompany me, to enable me to accomplish an object as much desired by the chief and his people as by myself. The sums which the Cape merchants could offer for the commodities of the country, after defraying the expenses of the journey, were so small, that it was scarce worth while for the natives to collect the produce; while the Mambari only exchanged a few bits of print and baize for elephants' tusks which were worth more pounds than they gave yards. The Makololo were therefore eager for direct trade with the sea-coast, and I, on my part, was convinced that no permanent elevation of a people can be effected without commerce. If missionaries were placed in this territory in its present isolation, they must descend in their mode of living to the level of the natives, for, even at Kolobeng, the traders demanded for the articles we needed three or four times their cost-price.

The three servants whom I had brought from Kuruman had frequent relapses of the fever; and finding tnat instead of serving me I had to wait on them, I decided that they should return to the south with Fleming. I was then entirely dependent on my twenty-seven men, whom I might name Zambesians, for there were two Makololo only, while the rest consisted of Barotse, Batoka, Bushubia, and two of the Ambŏnda.

The fever had caused considerable weakness in my own frame. I was seized with a strange giddiness when I looked up quickly at any object in the heavens. Everything appeared to rush to the left, and if $I$ did not catch hold of some support I fell heavily on the ground. What seemed a gush of bile along the duct from the liver caused the same fit to occur at night whenever I turned suddenly round.

The Makololo now put the question, "In the event of your death, will not the white people blame us for having allowed you to go away into an unknown country of enemies?" I replied that none of my friends would blame them, because I would leave a book with Sekeletu, which, if I did not return, would explain all that bad happened until the time of my de, arture. The book was a volume of my Journal, which
contained valuable notes on the habits of wild animals. As I was detained longer than I expected at Loanda, it was delivered by Sekeletu to a trader, and unfortunately I have been unable to trace it. When the prospect of passing away from this fair and beautiful world came before me in a plain matter-of-fact form, it did seem a serious thing to leave wife and children and enter on an untried state of existence. But I had always believed that, if we serve God at all, it ought to be done in a manly way, and I was determined to "succeed or perish" in the attempt to open up this part of Africa. I wrote to my brother, commending our little girl to his care. 'The Boers, by taking possession of all my goods, had saved me the trouble of making a will.

When I committed the waggon and remaining goods to the care of the Makololo, they took all the articles except one box into their huts. Two warriors, Ponuane and Mahale, brought forward each a fine heifer calf, and, after performing a number of warlike evolutions, they asked the chief to witness the agreement made between them, that whoever of the two should kill a Matebele warrior first, in defence of the waggon, should possess buth the calves.

I had three muskets for my people, and a rifle and a doublebarrelled smooth bore for myself. My ammunition was distributed in portions throughout the luggage, that, if an accident befell one part, we might not be left without a supply: Our chief hopes for food were on our guns; and having seen such abundance of game in my visit to the Leeba, I imagined that I could easily shoot enough for our wants. In case of failure, I carried about 20 lbs . of beads. worth 40 s . To avoid heavy loads, I only took a few biscuits, a few pounds of tea and sugar, and about twenty of coffee, which, as the Arabs find, though used without either milk or sugar, is a most refreshing drink after fatigue or exposure to the sun. One small tin canister, about fifteen inches square, was filled with spare shirts, trowsers, and shoes, to be used when we reached civilised life; another of the same size was stored with medicines; a third with books; and a (3j) fourth box contained a magic lantern, which we found of much service. The sextant and other instruments were carried apart. A bag contained the clothes we expected to wear out
in the journey, which, with a small gipsy tent, just sufficient to sleep in, a sheepskin mantle as a blanket, and a horse-rug as a bed, completed my equipment. I had always found that the art of saccessful travel consisted in taking as few "impedimenta" as porsible. 'The outfit was rather spare, and intended to be still more so when we should come to leave the canoes. An array of baggage would probably have excited the cupidity of the tribes through whose cuuntry we wished to pass.

11th of November, 1853.- We left the town of Linyanti, accompanied by Sekeletu and his principal men, to embark on the Chobe. We crossed five of its branches before we reached the main stream; and this ramification must be the reason why it appeared so small to Mr. Oswell and myself in 1851. When all the subdivisions re-enter, it is a large decp river. The chief lent me his own canoe, and, as it was broader than usual, I could turn about in it with ease.

The Chobe is much infested by hippopotami. As a rule they flec the approach of man, and are only dangerous if a canoe passes into the midst of a sleeping herd, when some of them may stril ? the vessel in terror. To avoid this mishap, it is generally recommended to travel by day near the bank, and by night in the middle of the stream. Certain elderly males, however, which have been expelled the community, become soured in their temper, and attack every one that passes near them. One of these "bachelors" issued out of his lair, and, putting down his head, ran after some of our company with considerable speed. Another, before we arrived, had smashed to pieces a canoe by a blow from his hind foot. I was informed by my men that, in the event of a similar assault, the proper course was to plunge to the bottom of the river, and remain there a few seconds, because the animal, after breaking a canoe, always looks for the people on the surface, and, if he finds none, soon moves off. I have seen some frightful gashe:s made on the legs of men who were unable to dive. The hippopotamus uses his teeth against foes as an offensive weapon, but he is altogether a herbivorous feeder.

The part of the river called Zabesa, or Zabenza, is spread out like a little lake, surrounded on all sides by dense masses of tall reeds. As it issues from this expanse, it is still a bundred or a hundred and twenty yards broad. and neves
dries up so as to become fordable. At certain points, where the partial absence of reeds affords a view of the cpposite banks, the Makololo have placed villages of observation to keep a look-out for their enemies the Matebele. We visited all these settlements, and found that everywhere orders had preceded us, " that Aáke (which means doctor) must not be allowed to become hungry."

The Chobe, like the Zouga, runs through soft calcareuns tufa, and has cut out for itself a deep, perpendicular-sided bed. - 11 here the banks are high, they are covered with magnificent trees, the habitat of tsetse, and the retreat of various antelopes, wild hogs, zebras, buffaloes, and elephants. Among the trees may be observed some species of the Ficus indica, light-green coloured acacias, the splendid motsintsela, and evergreen cypress-shaped motsouri. The fruit of the motsouri was ripe, and the villagers presented many-dishes of its beautiful pink-coloured plums, which are chiefly used to form a pleasant acid drink. The motsintsela is a lofty tree, and yields a wood of which good canoes are made. The fruit is nutritious, but the fleshy parts require to be enlarged by cul tivation: it is nearly all stone.

The course of the stream was extremely tortuous, and carried us to all points of the compass every dozen miles. Some of us walked in six hours from a bend at the village ot Moremi to a place which it took the canoes just twice the time to reach, though they moved at more than double our speed. The suddenness of the bendings in the river would prevent steam navigation; but, should the country ever become civilised, it would be a convenient natural canal.

The precise place of confluence of the Chobe and the Zambesi is ill defined, on account of each dividing into several branches as they inosculate. The former, up to its junction, is of a dark mossy hue. Here it suddenly assumes a lighter tint, indicative of a greater amount of mineral derived from a dyke of amygdalcid which exists at this point. The mass contains crystals, which the stream gradually dissolves, leaving the rock with a wormeaten appearance. Wherever the water has this mineral quality, there are not mosquitoes enough to annoy any person who is not of a very irritable temperament.

A few miles eist of the junction of the rivers are two large islands, upon one of which a Makalaka chief had, several years before, lured a number of fugitive Bamangwato men, after separating them from their wives. The women were appropriated, and their hasbands left to perish. Leaving the Chobe, we turned round and began to ascend the Zambesi. Un the 19th of November we again reached the town of Sesheke, which means " white sand-banks," many of which exist at this part. It stands on the north bank of the river, and contains a large population of Makalaka, under Moriantsane, brother-in-law of Sebituane. The Makololo sway, though essentially despotic, is modified by custum. One of the Makalaka had stabbed an ox, and was detected by his spear which he had been unable to extract. The culprit, bound hand and foot, was placed in the sun to force him to pay a fine. He continued to deny his guilt. His mother, believing in the innocence of her sun, came forward with hor hoe, and, threatening to cut down any one who interfered, untied the cords and touk him home. This open defiance of authurity was not resented by Moriantsane, but referred to Sekelets at Linyanti. Where the criminal nas unable to give direct compensation, it had not occurred to the chiefs to make him pay in work till I suggested the system on the occasion of a stranger, who visited Sesheke for the purpóse of barter, laving been rubbed by one of the Makalaka of most of his goods. The Makololo were much enraged at the idea of their good name being compromised; and as throwing the criminal into the river, their customary mode of punishing what they conceive to be a heinous offence, would not restore the lost property, they were sorely puzzled how to act. When the case was referred to me, I paid the value of the goods, and sentenced the thief to work out an equivalent with his hoe in a garden. Thieves are now condemned to raise an amount of corn propurtioned to their offences. Among the Bakwains, when a woman had stulen from the garden of another, her own became the property of the person she had injured.

A curious custom, not to be found among the Bechuanas, prevails among the black tribes beyond them. They watch eagerly for the first glimpse of the new moon ; and when they (36) perceive the faint outline after the sun has set deep in the
west, they utter a loud shout of "Kuā!" and vociferate prayers to it. My men, for instance, called outs. "Let our journey with the white man be prosperousl Let our enemies perish, and the children of Nake become rich! May he have plenty of meat on this journey!" \&c. \&c. The day after the appearance of the new moon is the only stated day of rest in ary part of this country, and then people merely refrain from going to their gardens.
.I gave many public addresses to the people of Sesheke under the outspreading camel-thorn tree, which serves as a shade to the kotla on the high bank of the river. It was pleasant to see the long lines of men, women, and children winding along from different quarters of the town, each party following behind their respective head-men. They often amounted to between five and six hundred souls, and were very attentive. Moriantsane, designing to please me, rose up once in the middle of the discourse, and hurled his staff at the heads of some young fellows who were employed upon a skin instead of listening. My audience sometimes put sensible questions on the subjects brought before them; at other times after hearing solemn truths they talked the most frivolous nonsense. Some begin to pray to Jesus in secret as soon as they hear of the white man's God, with but little comprehension of what they are doing. Others wake by night, and, recollecting what has been said about a future world, tell next day what a fright they got by it, and resolve not to listen to the teaching again. Many keep to the deter mination not to believe, like certain villagers in the south, who put all their cocks to death because they crowed the words, "Tlang lo rapeleng "-" Come along to prayers."

On recovering partially from a severe attack of fever which remained upon me ever since our passing the village of Moremi on the Chobe, we recommenced our ascent. The rains were just beginning; but though showers sufficient to lay the dust had fallen, they had no influence on the amount of water in the river. Yet there was never less than three hundred yards of a deep flowing stream. Our progress was rather slow, in consequence of our waiting opposite different villages for supplies of food. We might have done with much less than we received; but my Makololo man, Pitsan $\epsilon_{1}$
knew of the generous orders of Sekeletu, and was not disposed to allow them to remain a dead letter. The villages of the Banyeti contributed a quantity of mosibe, a bright red bean which grows on a large tree. The pulp enclosing the seed is the portion used, and is not much thicker than a wafer. It requires the addition of honey to render it palatable. Another fruit furnished us in abundance was one resembling a large orauge. The rind is hard, and, with the pips and bark, contains much of that deadly poison strychnine. These have an intensely bitter taste, whereas the pulp, which is the part eaten, is of a juicy nature, and has a pleasant, sweet, acidulous flavour. The people dry the pulp before the fire, the better to separate the noxious seeds, which if swallowed inadvertently cause considerable pain, but not death.

A sweet fruit, called mobola, which was presented to us, has the flavour of strawberries, with a touch of nauseousness. Round a pretty large stone there is about as much fleshy matter as in the common date, which, as with the date, is stripped off and preserved in bags. We carried some of the dried produce more than a hundred miles from this spot. Another fruit, about the size of a walnut, and named mamosho (mother of morning), is the most delicious of all. The fleshy part is juicy, and somewhat like the cashew-apple, with a pleasant acidity added. Fruits similar to those which here grow on trees are herbaceous products on the plains of the Kalahari. There are several other examples of the kind. As our latitude decreases, there is a gradual ascent of the same description of plant, beginning with the herbaceous form, and passing on through the regular series of shrubs, bushes, small trees and large. But it is questionable if, in the cases of mamosho, mabola, and mawa, the tree and shrub are identical, though the fruits so closely resemble each other; for I not only found both the dwarf and the giant in the same latitude, but there was a difference in the leaves and in the season of bearing.

The banks of the river were at this time appearing to greater advantage than before. Notwithstanding the want of rain many trees were putting on their fresh leaves, their lighter green contrasting beautifully with the dark motsouri,
or moyeia, now covered with pink plums as large as cherries. The rapids rendered our passage difficult, for the water, which in the portions of the river only three hundred yards wide is very deep, becomes shallow in these parts from being spread out more than a mile, and flows swiftly over a craggy bottom. It required great address to keep the vessel free from rocks, which lay just beneath the surface. The men leaped into the water without the least hesitation, to save the canoes from being, dashed against obstructions or caught by eddies. The native craft must never be allowed to come broadside on to the stream, for, being flat-bottomed, they would at once be capsized, and everything in them be lost.

The rapids are caused by rocks of dark-brown trap, or of hardened sandstone, stretching across the river. In some places these form miles of flat craggy buttom, with islets covered with trees. At one cataract, where the fall is from four to six feet, we lost many of our biscuits, for in guiding up the canoe the stem goes under the water, and takes in a quantity. These rocks are overgrown with a small aquatic plant, which, when the surface is exposed, becomes crisp, and crackles under the foot, as if it contained much stony matter in its tissue. It probably assists in disintegrating the rocks, for they are covered with a thin black glaze in parts which are so high as not to be much submitted to the action of the water or the influence of the plant.

In passing along under the overhanging trees of the banks we often saw the pretty turtle-doves sitting peacefully on their nests above the roaring torrent. An ibis* had perched on the end of a stump. Her loud, harsh scream of "Wa-wawa," and the piping of the fish-hawk, are sounds which can never be forgotten by those who have heard them. If we step on shore, the Charadrius caruncula, a species of plover, a plaguy sort of "public-spirited individual," follows, flying overhead, and is most persevering in its attempts to give warning to all animals to flee from the approaching danger. Another variety of the same family (Pluvianus armatu of Burchell) is called "setula-tsipi," or hammering-iron, from the metallic ring of its alarm-note, "tinc-tinc-tinc." It has a sharp spur on its shoulder, much like that on the heel of a

[^13]cock, but scarcely half an inch in length. Conscious of power, it may be seen chasing the comparatively large white necked raven with great fury, and making it call out from fear. It is this plover which is famed for its friendship with the crocndile of the Nile, and which Mr. St. John saw performing the part of toothpicker to the reptile. The bird is frequently seen on the same sandbanks with the alligator, and often appears as if perched on the animal itself to a person passing. by. A water-turtle, in trying to ascend a steep bank to lay lier eggs, toppled on her back, and enabled us to capture her.

We observed several new birds among the forest trees which fringe the rocky parts of the Zambesi. Some are musical, and their songs are pleasant in contrast with the harsh voice of the parrots of the country. One of them was a pretty little bird, coloured dark blue, except the wings and tail, which were of a chocolate hue. It has two feathers projecting from the tail six inches. Another was ooloured white and black, and always appeared in companies of six or eight. There were also great numbers of jet-black weavers.

Francolins and guinea-fowl abound; and on every stump and rock the webfooted Plotus, darter, or snake-bird, is perched, either sunning itself over the stream, or standing erect with outstretched wings. Occasionally it may be seen fishing, with its body so much submerged that hardly anything but the neck appears above the water. Its time of feeding is by night, and, as the sun declines, it may be seen flying in flocks to the fishing-grounds. It is a most difficult bird to catch, even when disabled, in consequence of its expertness in diving; it goes down so adroitly and comes up again in such unlikely places, that the most skilful boatmen rarely secure them. The rump of the darter is remarkably prolonged, and serves both as a rudder in swimming, and as a lever to lift the bird out of the water when it wishes to fly.

The fish-hawk, with white head and neck, and reddishchocolate coloured body, may frequently ve seen perched on the trees. It generally kills more. fish than it can devour, eating only a portion of the back, and leaving the rest for the Barotse, who often had a race across the river when they saw an abandoned morsel on the opposite sandbanks. It sometimes plonders the purse of the pelican in the following


ON THE UPPER ZAMbESI
utter loud snorting grunts, which may be heard a mile off. The young ones stand on the necks of their dams, and their small heads appear first above the surface, as they rise to breathe the air. The dam, knowing the more urgent need of her calf, rises more frequently when it is in her care. In the rivers of Londa, where they are in danger of being shot, the hippopotami gain wit by experience; for while those in the '/ambesi expose their heads, the others keep their noses among the water-plants, and breathe so quietly as to elude all observation.

## CHAPTER XIV.

Abcent of the Leeambye continued.-Gonye Falls.-Nafiele. -Libonta.-Anjmal life.

30th November, 1853.-At Gonye Falls. These falls are formed by the passage of the river through a deep fissure in the sandstone rocks, a hundred yards wide and several miles long, through which the strearn rushes and eddies with such violence that not even the most expert swimmer could live in it. In flood-time the river rises between these walls to a perpendicular height of 50 or 60 feet The rocks are perforated by madrepores, and have their surface glazed with an impregnation of iron.

As no rain had fallen here, it was excessively oppressive both in cloud and sunshine, and we all felt great lassitude in travelling. The trees had put on their gayest dress, and many flowers adorned the landscape, yet they all looked languid for want of rain.

The routine of our day's work was as follows:-We rose a little before 5 a.m.. and, having taken a light breakfast of coffee, we loaded the canoes and embarked. The next two hours were the most pleasant part of the day's sail. The men paddled away vigorously, and occasionally reliered the tedium of their work by loud altercations. About 11 we landed and took a light meal.

After an hour's reat, we again embarked, and I sheltered
myself with an umbrella from the intense heat of the stu. The men, being unshaded, perspired profusely, and in the afternoon began to loiter, as if waiting for the canoes whiok were behind. Sometimes we reached a sleeping-place two hours before sunset, and gladly put up for the night. Cotfee again, and a biscuit, or a piece of coarse bread made of maize or else of native corn, made up the bill of fare for the evening, unless we had been fortunate enough to kill something, in which case we boiled a potful of flesh.

Then followed the arrangements for the night: some of the men cut a little grass for my bed, while Mashauana planted the poles of my tent. The bed being made, and boxes ranged on each side of it, the tent was then pitched, and the principal or kotla fire was lighted some four or five feet in front of it. Each person knows the station he is to occupy in reference to the post of honour at the kotla. The two Makololo occupied my right and left, both in eating and sleeping, as long as the journey lasted; but as soon as I retired, Mashauana, my head boatman, made his bed at the door of the tent. The rest, divided into small companies according to their tribes, made sheds all round the fire, leaving a horseshoe-shaped space in front sufficient for the cattle to stand in. As the fire gives confidence to the oxen, the men were careful to keep them in sight of it. The sheds were formed by planting two stout forked poles in an inclined direction, and placing another across them in a horizontal position. A number of branches were then stuck in the ground in the direction to which the poles are inclined, and tied to the horizontal pole with strips of bark. Long grass was then laid over the branches in sufficient quantity to draw off the rain. In less than an hour we were usually all under cover. The varied attitudes of men and beasts as they reposed beneath the clear bright moonlight formed a most picturesque and peaceful scene.

The cooking was usually done in the native style, and was by no means despicable. Sometimes alterations were made ai my suggestion, and then they believed that they could cook in white man's fashion. As the cook always comes in for something leit in the pot, all were eager to obtain the office.

The people at Gunye conveyed our canoes over the space requisite to avoid the falls, by slinging them on poles, and
carrying them on their shoulders. They are a merry set of mortals, and a feeble joke sends them into fits of laughter IIere, as elsewhere, all petitioned for the magic iantern, and, as it is a good means of conveying instruction, I willingly complied. The islands above the falls are covered with the most beautiful foliage, and the view from the rock which overhangs the fall was the loveliest I had yet seen.

Nothing worthy of note occurred on our way up to Nameta There we heard that a party of the Makololo, headed by Lerimo, and supported by Mpololo. the head-man of the Barotse valley, had made a foray to the north against Masiko, the son of a former Barotse chief, who had established himself as an independent chieftain on the banks of the Leeba. They had taken some of Masiko's subjects prisoners, and had destroyed some of the villages of the Balonda, among whom we were going. This was unfortunate, as it was calculated to raise a prejudice against us. In order, therefore, to prove that we had nothing to do with this transaction, we made Mpololo and his people give up some of their captives, and we took them along with us to return to Masiko.
The people of every village treated us most liberally, presenting us with oxen, butter, milk, and meal. The cows in this valley yielded more milk than the people could use, and both men and women presented butter in such quantity that I was able to refresh my men with it as we travelled on. Anointing the skin prevents excessive perspiration, and acts as a substitute for clothing in both sun and shade. The presents were always made gracefully: when an ox was given, the owner would say, "Here is a little bit of bread for yon." This was pleasing to me, who had been accustomed to the Bechuanas' mode of presenting a miserable goat, with the pompous exclamation, "Behold an ox!" The women persisted it giving me copions supplies of shrill praises, or " lullilooing;" but though I frequently tried to dissuade them, I could not helpbeing pleased with the poor creatures'wishes for our success
The rains began while we were at Naliele; the showers were refreshing, but the air felt hot and close, the thermometer standing at $90^{\circ}$ even in the shade, though in a cool hut it was reduced to $84^{\circ}$. A new attack of fever here caused me ex cessive languor; but, as I am already getting tired of quoting
my fevars, I shall henceforth say little about them. We here vent back the canoes of Sekeletu, and borrowed others from Mpololo. Eight riding oxen, and seven for slanghter, were also furnished, some intended for our own use, and othere as presents to the chiefs of the Balónda. Mpololo was particularly liberal in giving all that Sekeletu ordered, though, as he subsisted on the cattle he had in charge, he might have felt it so much abstracted from his own perquisites.

In coming up the river to Naliele we met a party of fugitive Barotse returning to their homes, and, as the circumstance illustrates the social status of these sabjects of the Makololo, I introduce it here. They were the serfs, if we may use the term, of a young man of an irritable temper, named Sekobinyáne, whose treatment of his servants was so bad that most of them had fled; he had even sold one or two of the Barotse children of his village, upon which the rest immediately fled to Masiko, and were gladly received by him as his subjects. Sekobinyane, dreading the vengeance of Sekeletn, made his escape to lake Ngami. He was sont for, however, and the chief at the lake delivered him up, on Sekeletn's assurance that he intended only to panish him by a scolding. He did not even do that, as Sekobinyane was evidently terrified, and became even ill through fear. The fugitive villagers remained only a few weeks with Masiko, and then fled back again, and were received as if they had done nothing wrong. All united in abusing the conduct of Sekobinyane, and in excusing the fugitives; and as their cattle had never been removed from the village, they re-established themselves with apparent satisfaction.

Leaving Naliele amidst abundance of good wishes for the success of our expedition, we recommenced the ascent of the river. It was now beginning to rise, though the rains had but just commenced in the valley. The banks are low, steep, and regular, and at low water the river assumes very much the aspect of a canal. In flood-time it is always wearing away one side or the other, and occasionally forms new channels by cutting across from one bend to another. As we kept close under the bank, overhanging pieces often fell in with a splash like that caused by the plunge of an alligator. and endangered the canoe.

These banks harbour a pretty species of bee-eater,* of gregarious labits. The face of the sandbunk is perforated witb Lundreds of holes leading to their nests, each of which is about a foot apart from the other; as we passed they puured out of their hiding-places, and floated overhead.

A speckled kingfisher builds in similar spots, and attracts the attention of the herdboys, who dig out its nest for the sake of the young. It is seen everywhere along the banks with a most lovely little blue-and-orange kingfisher, darting, like arrows, into the water after their prey. A third species, about the size of a pigeon, and of a slaty colour, is more rare. Another denizen of the banks, the sand-martin, is also of gregarious habits. It never leaves this part of the country even in the depth of winter. 1 have seen them at the Orange river during a-frost; so that they probably do not migrate even from thence.

Fresh-water sponges were occasionally seen encircling the stalks of the reeds which in some parts line the banks. They are hard and brittle, and present numbers of small round grains near their circumference. The river was running at the rate of five miles an hour, and carried butuches of reed and decaying vegetable matter on its surface. This was considered unhealthy, and on one occasion, wheu I felt no inclination to leave my canoe for the land, my head boatman. Mashauana, told me never to remain on board while so much vegetable matter was floating down the stream.

17th December.-At Libonta. We were detained for days together collecting contributions of fat and butter, as presents for the Balonda chiefs. Fever and ophthalmia prevailed, as is generally the case befure the rains begin. Some of my men required my assistance, as well as the people of Libonta. A lion had done much mischief here, and, when the people went to attack it, two men were badly wounded; one of them had his thigh-bone broken, and the other died of the inflammation produced by the teeth-wounds. We here demanded the remainder of the captives, and got our number increased to aineteen. They consisted of women and children, and one young man of twenty.

Libonta is the last town of the Makololo; a few cattle

[^14]stations and outlying hamlets, followed by an uninhabited border country, intervene between it and Londa, or Lunda. Libonta, like the rest of the villages in the Barotse valley, is situated on a mound. It belongs to two of the chief wives of Sebituane, who furnished us with an ox and abundance of other food. The same kindness was manifested by all who could afford to give anything; and as I glance over their deeds of generosity recorded in my journal, my heart glows with gratitude to them, and I hope and pray that God may spare me to make them some return.

When quite beyond the inhabited parts we found the country abounding in animal life of every form. There are upwards of thirty species of birds on the river itself, among which we may notice as most common the Ibis religiosa, which comes down the Zambesi with the rising water, as on the Nile; large white pelicans, appearing in flocks of three hundred at a time, in long waving lines; clouds of a black shell-eating bird, called linongolo (Anastomus lamelligerus); and plovers, snipes, curlews, and herons, without number.

Some of the rarer varieties also deserve notice, such as the pretty white ardetta, which settles on the backs of buffaloes, and follows them on the wing when they run; the kala (Textor erythrorhynchus), which sits on the withers when the animal is at full speed; and those strange birds, the scissorbills, with snow-white breast, jet-black coat, and red beak, which sit on the sandbanks, the very picture of comfort and repose. Their nests are made on the sandbanks without any attempt at concealment ; they watch them closely, and frighten away the marabou and crows by feigned attacks at their heads, but when a man approaches they change their tactics, and, like the lapwing and ostrich, let one wing drop and limp with one leg as if lame. The upper mandible being so much shorter than the lower, the young require to have everything conveyed to their mouths by their parents. The lower mandible, as thin as a paper-knife, is put into the water while the bird skims along the surface and scoops up any little insectsit meets. The wonder is, how this process can de so well performed as to yield a meal, for it is usually done in the dark, the time when insects and fishes rise to the surface. One pretty little wader, an avoset, with very long legs, and its bill bent
upwards, is constantly to be seen wading in the shallows a dad digging up insects, which the peculiar form of its bill enables it to do. It ducks its head under the water to seize the insect at the bottom, then raises it quickly, and makes a rapid gobbling, es if it were swallowing a wriggling worm. The Parra Africana has long thin legs, and extremely long toes, for the purpose of earbling it to stand on the floating plants. When it stands on a lotus-leaf five inches in diameter, its toes covering the surface prevent it from sinking. It thus obtains a livelihood, not by swimming or flying, but by walking on the water.

To these we may add spoonbills, nearly white in plumage; the beautiful, stately flamingo; the Numidian crane, or demoiselle; two other spieces of cranes-one light blue, the other also light blue, but with a white neck; and gulls (Procellaria) of different sizes.

In the Barotse valley numbers of large black geese* may be seen walking slowly about after their food. They have a strong black spur on the shoulder like the armed plover, but they only use it in defence of their young. They chonse anthills for their nests. There are also two varieties of geese, smaller, but better flavoured. One of these, the Egyptian goose or Vulpanser, being unable to rise from the water, is hunted in canoes during the floods. The third is furnished with a peculiar knob on the beak. These, with myriads of ducks of three varieties, alound everywhere on the river. On one occasion, our canoe having neared a bank on which a large flock was sitting, we bagged no less than seventeen ducks and a goose at two shots. No wonder that the Barotse always look back to this fruitful valley as the Israelites did to the flesh-pots of Egypt. The poorest are so well supplied with vegetables from their gardens, with fruits from the forest trees, and with fish from the river, that when their children are taken into the service of the Makololo they become quite emaciated and pine for a return to their parents.

Part of our company marched along the banks with the oxen, and part went in the canoes. The pace was regulated by that of the men on shore, whose course was impeded by the numerous branches of the Zambesi, which they were obliged either to circumvent or to be carried across in the

[^15]boats. The number of alligators is prodigious, and they are more savage here than elsewhere. Children are constantly carried off by them at Sesheke and uther towns; for, notwithstanding the danger, they generally play on the river side when they go down for water. Many calves are also lost, and it is seldom that a herd of cows swims over at Sesheke without some loss. I never could avoid shuddering on seeing my men swimming across these branches, after one of them had been caught by the thigh and taken below. He, however, retained his full presence of mind, and, having a small javelin with him, he gave the alligator a stab behind the shoulder, the pain of which caused the brute to let go, and he came out with the deep marks of the teeth on his thigh. No antipathy is here felt towards one who has met with such an adventure, but, in the Bamangwato and Bakwain tribes, if a man is either bitten by an alligator, or even has had water sulashed over him by its tail, he is expelled his tribe. On the Zouga we saw one of the Bamangwato who had been bitten and was expelled from his tribe in consequence. Fearing that I should regard him with the same disgust as his countrymen, he would not tell me the cause of his exile, but the Bayeiye informed me of it. If the Bakwains happen to approach an alligator they spit on the ground, and indicate its presence by saying "Bolec ki bo"-" There is sin." They imagine that the mere sight of it gives inflammation of the eyes; and, though they eat the zebra without hesitation, yet, if a man be bitten by one, he is obliged to take his family away to the Kalahari.

When we had gone thirty or forty miles above Jibonta we sent some of our captives to the chief called Makoma with an explanatory message. 'This caused some delay; but as we were loaded with presents of food from the Makololo, and game was abundant, we fared sumptuously. The animals were so tame that it was quite grievous to kill them. With little skill in stalking, it was easy to get within fifty or sixty yards of them; and, instead of shooting them at that distance, I often lay admiring the graceful forms and motions of pokus,* leches, and other antel, pes, until my men, wondering what was the matter, came up to sec, and frightened them away.

[^16]I have often been surprised at the widely different effects of injuries of equal intensity on different animals. Antelopes and other animals of that class, formed for a partially amphihious existence, are much more tenacious of life than those which are purely terrestrial. When in distress or pursued, they gencrally make for the water. A leche shot right through the body, but with no limb-bone broken, is almost sure to get away, while a zebra, with a wound of equal severity, will probably drop down dead. I have seen a shinoceros while standing chewing the cud drop down dead from a shot in the stomach, while others shot through one lung and the stomach go off as if little hurt. But if a rhinoceros be hit on a dark spot just behind the shoulder, at a distance of about twenty yards, it will drop stone dead.

To show the fatal effects of a shock to the nervous system, 1 may mention that an eland when hunted can be despatched by a wound which inflicts only a slight injury on its system, inasmuch as that is then absorbing its whole nervous force. Again, a giratfe, when hard pressed by a good horse for only two or three hundred yards, has been known to drop down dead without any wound at all. A full gallop exhausts the powers of these animals, and therefore the hunters try to press them at once to it, knowing that after a short run the animals will be in their power. When the nervous force is intact, terrible wounds may be inflicted without killing. Having once shot a tsessebe through the neck while feeding, we went up to him and cut his throat deep enough to bleed him largely. After this he ran more than a mile, and would have got off, had not a dog brought him to bay.

My men, having never had firearms in their hands before, found it so difficult to hold the musket steady at the flash of fire in the pan, that they naturally expected me to furnish them with "gun-medicine," without which they believed that no one could shoot straight. Great expectations had been formed on this subject when I arrived among the Makololo; but as I had hitherto declined to deceive them, my men supposed that I would now consent, and thus relieve myself of the fatigue of hunting, which I was most willing to do, if I could have done it honestly. Sulphur is the favourite gun-medicine, and I remember Sechele giving a large price
for a very small bit. He also gave some elephant's tusks worth 30l. for another medicine which was to make him invulnerable to musket-balls. As I uniformly recommended that these things should be tested by experiment, a calf was anointed with the charm and tied to a tree. It proved decisive, and Sechele remarked that it was "pleasanter to be deceived thar undeceived."

I tried to teach my men the nature of the gun, but, as I found they would soon have expended all my ammunition, I was obliged to do all the shooting myself. Their inability was rather a misfortune; for, from working too soon after I had been bitten by the lion, the bone of my left arm had not united well. Continued labour, and some falls from ox-back, lengthened the ligament by which the bones were united, and a false joint was the consequence. The limb has never been painful, but 1 could not steady the rifle, and was always obliged to shoot with the piece resting on the left shoulder.

We spent a Sunday on our way up to the confluence of the Leeba and Zambesi. Rain had lately fallen, and the woods had put on their gayest hue. Flowers of great beauty and curious forms, unlike those in the south, grow everywhere. Many of the forest-trees have large palmated leaves and trunks covered with lichens; and the abundance of ferns which appear in the woods indicates a more humid climate than any to the south of the Barotse valley. The ground swarms with insect life; and in the cool mornings the welkin rings with the singing of birds, whose notes, though less agreeable than those of the birds at home, because less familiar, nevertheless strike the mind by their loudness and variety as the wellings forth of praise to Him who fills them with overflowing gladness. We all rose early to enjoy the balmy air of the morning. and assembled for Divine worship; but amidst all the beauty with which we were surrounded, a feeling of want was awakened in my soul at the sight of my poor companions, and at the sound of their bitter impure words, and I longed that their hearts might be brought into harmony with the Great Father of Spirits. I pointed out to them in the simplest words the remedy which God has presented to us in the precious gift of His own Son, on whom the Lord "laid the iniquity of us all." The great difficilty in dealing with these
people is to make the subject plain. The minds of the auditors cannot be understood by one who has not mingled much with them. They readily pray for the forgiveness of sins, and then sin again; confess the evil of $\mathfrak{i t}$, and there the matter ends.

The men went about during the day, and brought back wild fruits of several varieties which I had not hitherto seen One, called mogamétsa, is a bean with a little pulp round it, which tastes like sponge-cake; another, named mawa, grows abundantly on a low bush. Berries and edible bulbs abound. The mamósho or moshomósho, and milo (a medlar), were to be found near our encampment, and were good to our taste. Many kinds are better than our crab-apple or sloe, and with care and culture might take high rank among the fruits of the world. The Africans, however, think nothing of posterity; and when I sometimes deposited date-seeds in the sojl, and told them I had no hope whatever of seeing the fruit, they viewed the act much as we do that of the South-Sea Islanders when they planted in their gardens the iron nails received from Captain Cook.

Many of the fruits and berries in the forests were unknown to my companions. Great numbers of a new kind of palm were seen growing about the confluence of the Loeti and (33) Zambesi, the seed of which probably came down the former river. It is nearly as tall as the palmyra, and yields a larger fruit, with a soft yellow pulp round the kernel : when ripe it is fluid and stringy, like the wild mango, and not very pleasant to eat.

Below the junction of the Leeba and Zambesi the banks of the latter river are twenty feet high and covered with trees. The inundations cover even these lofty banks, but, as the water does not stand long upon them, the trees flourish. The left bank is frequented by the tsetse and elephants, and I suspect that some connection exists between these two, as the Portuguese in the district of Tete imply when they call it the Musca da elephant (the elephant-fly).

On the right bank, or that which the Loeti joins, there is an extensive flat country called Mangr, which, though covered with grass, is destitute in a great measure of trees.

Flocks of green pigeone rose from the trees as we passed
along the banks, and the notes of many birds tuld me that we wers among strangers. The beautiful trogon, with bright scarlet breast and black back, uttered a most peculiar note, similar to that said to have been emitted by Memnon, and compared to the tuning of a lyre. The boatmen answered it by calling "Nama, nama!"-meat, meat-as if they thought that a repetition of the note would be a good omen for our success in hunting. Many more interesting birds were met; but as I wished to avoid exciting the cupidity of those through whose country we intended to pass by having much luggage, I refrained from making any collection.

Vast shoals of fish come down the Zambesi with the rising waters, as in the Zouga. They probably make this migration in consequence of the increased rapidity of the current, by which they are dislodged from their old pasture-grounds higher up the river. Insects constitute but a small portion of the food of many fish. Fine vegetable matter, such as slender mosses, forms another article of their diet, and, when they are dislodged from the main stream by the force of the current, they find abundant pasture on the flooded plains. The mosala (Clarias Capensis and Glanis siluris), the mullet (Mugil Africanus), and other fishes, spread over the Barotse valley in such numbers that, when the waters retire, all the people are employed in cutting them up and drying them. The supply exceeds the demand, and a most offensive smell is generated by the putrefying masses. The Zambesi is everywhere remarkable for the abundance of animal life in and upon its waters, and on the adjacent banks.

## CHAPTER XV.

Ascent of the Lerba.-The Balonda and Ambonda.-Female chiefs.

On the 27th December we reached the confluence of the Leeba and Zambesi (lat. $14^{\circ} 10^{\prime} 52^{\prime \prime} \mathrm{S}$., long. $23^{\circ} 35^{\prime} 40^{\prime \prime}$ E.). Masiko, the Barotse chief, for whom we had some captives, consisting of two boys, a girl, a young man, and two women, lived nearly
due east of this point. As we had been informed that he was in the habit of seizing orphans and friendless persons, and selling them for clothing to the Mambari, we resolved to send a party of our own people to see the captives safely among their relatives. The party consisted of Mosántu, a Batoka man, and his companions; the Barotse being unwilling to go, since they owed allegiance to Masiko as the son of Santuru, and would be considered rebels while continuing with the Makololo. I sent a message by Mosantu to the effect that "I was sorry to find that Santuru had not borne a wiser son. Santuru loved to govern men, but Masiko wanted to govern wild beasts anly, as he sold his people to the Mambari." I also urged him to live in peace, and to prevent his people kidnapping the children and canoes of the Makololo, as such acts would lead to war. We ferried Mosantu over to the left bank of the Leeba. The journey required five days, at the rate of ten or twelve miles a day, which was as much as the children, who were between seven and eight years of age, were able to accomplish.

We were now about to leave the Zambesi, which from this point turns eastwards, while our course was directed to the north-west. Before proceeding, however, we will briefly describe the character of the river. From its confluence with the. Leeba, down to Mosioatunya, there are several long reaches where vessels equal in size to the Thames steamers could freely run ; for even at this bigh point the , iver is frequently as broad as the Thames at London Bridge. There are, however, many and serious obstacles to a continued navigation for hundreds of miles at a stretch. Below the confluence of the Loeti, for instance, there are large sandbanks; and again, between Simah and Katima-molelo there are five or six rapids with cataracts, one of which, Gonye, could not be passed at any time without portage. Beyond Katima-molelo to the confluence of the Chobe, the river might be navigated for nearly a hundred miles, in the same way as in the Barotse valley. This part of the river mey not present a very inviting prospect for extemporaneous European enterprise; but surely, when we remember that this country was pronounced by geo graphers to be a vast sandy desert, and that instead of this we find it remarkably fertile, and furnished with a highway
requiring only the formation of portages to make it equal to our canals for hundreds of miles, we must confess that the future partakes at least of the elements of hope. My deliberate conviction was and is, that the part of the country indicated is as capable of supporting millions of inhabitants as it is of its thousands.
lie now began to ascend the leeba. The water is black as compared with that of the main stream, and flows placidly, receiving numerous rivulets from both sides. It winds slowly through the most charming meadows, each of which is fertilized by a large pond or a trickling rill. The trees were covered with a profusion of the freshest foliage, and were grouped together in the most graceful manner. The grass, which had been burned off and was growing again after the rains, was short and green; and all the scenery was so parkish, that it was difficult to believe it to be the work of nature alone. I suspect that the level meadows are annually inundated, for the trees stand on elevated knolls, the variety in the forms of which contributes to the park-like appearance of the country. Numbers of fresh-water shells are scattered all over these valleys. The elevations, as I have observed elsewhere, consist of a soft sandy soil, and the meadows of a rich alluvial loam. Beautiful flowers abound, and we found plenty of honey in the woods, and saw the stages on which the Balonda dry their meat when they come down to gather the produce of the wild hives. In one spot we came upon groups of trees as straight as masts, with festoons of orchilla-weed hanging from the branches. This plant, which is used as a dye-stuff, is found nowhere in the dry country to the south, but prefers the humid climate near the west coast. We wounded a large buffalo, which ran into the thickest part of the forest, bleeding profusely. The young men went on his trail; but when the animal heard them approaching he shifted his position, and doubled on his course in the most cunning manner. I have sometimes known a buffalo turn back to a point a few yards from his own trail, and then lie down in a hollow, waiting for the hunter to come up. Though a heavy, lumberinglooking animal, his charge is rapid and terrific. All are aware of the mischievous nature of the animal when wounded; still the natives have no dread of him; when he charges they
take refuge behind a tree, and, wheeling round it, stab him as ne passes.

A tree which was in flower brought back to my memory 'he pleasant fragrance of the hawthorn, which it resembled in nost respects, only that the flowers were as large as dog-roses, and the "haws" like boys' marbles. The flowers in this part of the country smell sweetly, while in the south they seldons emit any scent at all, and then only a nauseous one. A botanist would find a rich harvest on the banks of the Leeba. The climbing plants display great vigour, being thick not only in the butt, but at the very summit, like quickly-growing asparagus. The maroro or malolo abounds in many parts between this and Angola. It is a small bush, resembling a dwarf "anona," with a yellow fruit of a sweet taste, and full of seeds, like the custard-apple.

On the 28th we slept at a spot on the right bank from which two broods of alligators had just emerged. We had seen many young ones as we came up sumning themselves on sandbanks in company with the old ones, so that this seems to be their time for coming forth from their nests. We made our fire in one of the nests, which was strewed with the broken shells. At the Zouga we saw sixty eggs taken out of a single nest. They are about the same size as those of a goose, but perfectly round. 'I'he shell is partially elastic, from having a strong internal membrane and but little lime in its composition. The spot was about ten feet above the water, and the broad path leading down to the river-side furnished evidence of its baving been used for a simliar purpose in former years. The dam, after depositing her eggs, covers them up, and returns to assist the young out of their place of confinement. Assistance seems necessary, for, besides the tough membrane of the shell, they have four inches of earth upon them. They do not however require immediate food, because they retain a portion of yolk equal to that of a hen's egg in a membrane in the abdomen, as a stock of nutriment. When this is expended the dam leads them to the water's edge, and lets them catch fish for themselves. This is the principal food of both small and large, and they are much assisted in catching them by their broad scaly tails. Generally speaking, they avoid the sight of man, but occasion-
ally, if they see a man in the water at some short distance, they will rush through the strcam with wonderful agility. They seldom leave the water for food, but often for the pleasure of basking in the sun. In walking along the bank of the Zouga, a small one, about three feet long, made a dash at my feet; but I never heard of a similar case. They will almost certainly seize a wounded leche, when chased into any of the lagoons in the Barotse valley, or a man or dog going in after one. When employed in looking for food they keep out of sight, and fish chiefly by night. In eating they make a loud champing noise, which, once heard, is never forgotten.

The young which had come out of the nests where we spent the night were about ten inches long, with yellow eyes, and all marked with transverse stripes of pale green and brown. When speared, they bit the weapon savagely, uttering at the same time a sharp bark, like that of a young whelp. I could not ascertain whether the ichneumon has the reputation of devouring the alligator's eggs here as in Egypt. Probably the Barotse and Bayeiye would nut look upon it as a benefactor if it were to do so, for they prefer eating the eggs themselves. The yolk of the egg alone coagulates, and is the only part eaten.

When we reached the part of the river opposite to the village of Manenko, the first female chief whom we encountered, two of the people called Balunda, or Balonda, came to us in their little canoe. From them we learned that Kolimbóta, one of our party, was credited with having acted as guide to the marauders under Lerimo, whose captives we were now returning. This they suspected from the facility with which their villages had been found; they had since removed them to some distance from the river, and were unwilling to reveal their places of concealment. We were in bad repute, but, having a captive boy and girl as evidence that Sekeletu and ourselves were not partakers in the outrage, I could freely express my desire that all should live in peace. They evidently felt that I ought to have first taught the Makololo this lesson, for they remarked that what I advanced was very good, but that guilt lay at the door of the Makololo for having disturbed the peace. They then wert away to report us to Manenko.

When the strangers visited us again in the evening, they were accompanied by a number of the people of an Ambŏnda chief named Sekelenke, who had fled from his own country in the N.W., and was now living as a vassal of Masiko. He had gone to hunt elephants on the right bank of the Leeba, and was now on his way back to Masiko. He sent me a dish of boiled zebra's flesh, with a request that I would lend him a canoe to ferry his wives and family across the river to the bank on which we were encamped. Many of his people came to salute the first white man they had ever seen; but Sekelonke himself did not come, and we heard that he was offended with his people for letting me know he was among them. This was the only instance in which I was shunned in this quarter.

As it would have been impolitic to pass Manenko without calling and explaining the objects of our journey, we waited two days for the return of the messengers to her; and as I could not hurry matters, I went into the adjacent country to search for meat.

The country is largely furnished with forest, having occasionally open glades completely covered with grass, and not in tufts as in the south. We came upon a man and his two wives and children, burning coarse rushes and the stalks of tsitla, in order to extract salt from the ashes. Their mode of effecting this was as follows :-they made a funnel of branches of trees which they lined with grass rope, twisted round until it resembled an inverted beehive. The ashes were mixed with water, and were then allowed to percolate through the grass. When the water has evaporated, a residuum of salt is left, sufficient to form a relish with food. The women and children fled, and the man trembled excessively at the apparition before him; but when we explained our object he became calm and called back his wives. We soon afterwards fell in with another party engaged in the same business as ourselves. The man had a bow about six feet long, and ironheaded arrows about thirty inches in length; he had also wooden arrows to use when he was likely to lose them. We soon afterwards got a zebra, and gave our hunting acquaintances such a liberal sbare that we soon became friends. All whom we saw that day then accompanied us to the encamp-
ment to beg a little meat; and I have no doubt they felt grateful for what we gave.

Sekelenke's people, twenty-four in number, defiled past our camp carrying large bundles of dried elephant's meat. Most of them came to say good-bye, and Sekelenke himself sent word that he had gone to visit a wife in the village of Manenko. This was a mere manœuvre to gain information, and not commit himself with respect to our visit. Another zebra came to our camp, and, as we had friends near, it was shot. It was the Equus montanus, and, like all the zebras in these parts, it was finely marked down to the feet.

To our first offer of a visit to Manenko we got an answer, accompanied with a basket of manioc-roots, that we must remain where we were till she should visit me. When I had already waited two days, other messengers arrived with orders for me to go to her. After four days of negotiation I declined going, and proceeded up the river to the Makondo (lat. $13^{\circ} 23^{\prime} 12^{\prime \prime} \mathrm{S}$.), which enters the Leeba from the east, and is between twenty and thirty yards broad.

January 1st, 1854. We had heavy rains almost every day; indeed the rainy season had fairly set in. Baskets of the purple fruit called mawa were frequently presented to us by the villagers, in the belief that their chiefs would be pleased to hear that we had been well treated; we gave them pieces of meat in return.

At the confluence of the Leeba and Makondo a bit of a steel watch-chain of English manufacture was picked up, and we were informed that this was the spot where the Mambari cross in coming to Masiko. Their visits explain why Sekelenke kept his tusks so carefully. These Mambari are very enterprising merchants : when they mean to trade with a town they begin by building huts, as if they knew that little business could be transacted without time for palaver. They bring Manchester goods into the heart of Africa, and the cotton prints look so wonderful that the Makololo cannot believe them to be the work of mortal hands. The Mambari. told them that English manufactures came out of the sea, and that beads were gathered un its shore. To the Africans our cotton-mills are as fairy dreams. "How can the irons spin, weave, and print so beantifully?" Any attempt at
explanation usually elicits the expression, "'Truly! ye are gods!"

When about to leave the Makondo, one of my men dreamed that Mosántu was imprisoned in a stockade; this dream depressed the spirits of the party, and when I appeared in the morning they were sitting the pictures of abject sorrow. I asked if we were to be guided by dreams, and ordered them to load the boats at once; they seem ashamed to confess their fears; but at last they entered the canoes, and got a good scolding for being inclined to put dreams before authority. It rained all the morning; about eleven we reached the village of Sheakóndo, and sent a message to the head-man, who soon appeared with two wives bearing handsome presents of manioc: he could speak the language of the Barotse fluently, and seemed awe-struck when told some of the "words of God." He manifested no fear, but spoke frankly, and, when he made an asseveration, did so by simply pointing up to the sky. The Balonda cultivate the manioc, or cassava, as well as dura, ground-nuts, beans, maize, sweet potatoes, and yams, here called " lekóto."

The people who came with Sheakondo had some of their teeth filed to a point by way of beautifying them; they were generally tattooed in various parts, but chiefly on the abdumen, the skin being raised in small elevated cicatrices, so as to form a star, or some other device. The dark colour of the skin prevents any colouring matter being deposited in these figures, but they love to have the whole of their bodies anointed with a comfortable varnish of oil. They generally depend on supplies of oil from the Palma-Christi, or castor-oil-plant, or from various other oleiferous seeds, but they are all excessively fond of clarified butter, or ox fat, when they can get it. Sheakondo's old wife presented some maniocroots, and then politely requested to be anointed with butter : I gave her as much as would suffice, and in the absence of clothing I can readily believe that her comfort was enhanced thereby. The favourite wife, who was also present, was equally anxious for butter. She had a profusion of iron rings on her ankles, to which were attached little pieces of sheetiron, to enable her to make a tinkling as she walked in her mincing African style.

We had so much rain and cloud that I could not get a single observation for longitude or latitude for a fortnight. Yet the Leeba did not show any great rise, nor was its water in the least discoloured. More rain had fallen in the east, for the Zambesi was rising fast, and working against its sandy banks so vigorously that a slight yellow tinge was perceptible init. The Leeba has remarkably few birds and fish, and the alligators are more shy than in the Zambesi. The Balonda have taught them to keep out of sight by their poisoned arrows, and we did not see one basking in the sun. The Balonda set so many traps for birds that few appear. I heard, however, some new small birds of song on its banks.

One of our men was bitten by a non-venomous serpent, and of course felt no harm. The Barotse concluded that this was owing to many of them seeing it, as if the sight of human eyes could act as a charm against the poison.

On the 6th of January we reached the village of another female chief, named Nyamoana, who is said to be the mother of Manenko, and sister of Shinté, the greatest Balonda chief in this part of the country. Her people had but recently come to the present locality, and had erected only twenty huts. Her husband, Samoána, was clothed in a kilt of green and red baize, and was armed with a spear, and a broad-sword of antique form. The chief and her husband were seated on skins in the centre of a slightly elevated circle, surrounded by a trench, outside which sat about a hundred persons of both sexes, the men well armed with bows, arrows, spears, and broadswords. Beside the husband sat a rather aged woman, having a bad squint in her left eye. We deposited our arms about forty yards off, and I saluted him in the usual way, by clapping my hands. He pointed to his wife, as much as to say, the honour belongs to her. I saluted her in the same way, and, a mat having been brought, I squatted down in front of them.

The talker was then called, and I was asked who was my spokesman. Having pointed to Kolimbota, who knew their dialect best, the palaver began in due form. I explained my real objects, for I have always been satisfied that the truthful way of dealing with the uncivilised is unquestionably the best. Kolimbota repeated what I had said to Nyamoana's
talker, by whom it was transmitted to the husband, and by him again to his wife. It was thus rehearsed four times over, in a tone loud enough to be heard by the whole party of quditors. The response came back by the same roundaלout route, beginning at the lady to her husband, \&c. After ex.planations and re-explanations I perceived that our friends were mixing me up with Makololu affairs; I therefore stated that my message of peace and friendship was delivered on the authority of the great Creator, and that, if the Makololo again broke His laws by attacking the Balonda, the guilt would rest with them and not with me. The palaver then came to a close.

By way of gaining their confidence I showed them my harr, which is considered a curiosity in all this region. They said, " Is that hair? It is the mane of a lion, and not hair at all." I could not return the joke by telling them that theirs was not hair but wool, for they have no sheep in their country, and therefore would not have understood me. So I contented myself with asserting that mine was the real original hair, such as theirs would have been, had it not been scorched and frizzled by the sun. . In proof of what the sun could do, I compared my own bronzed face and hands with the white skin of my chest. They readily believed that, as they are fully exposed to the sun's influence, we might be of common origin after all.

The Balonda are real negroes, having much more wool on their heads and bodies than any of the Bechuana or Caffre tribes. They are generally very dark, but occasionally of a lighter hue. They bear a general similarity to the typical negro, having heads somewhat elongated backwards and upwards, thick lips, flat noses, \&c. \&c.; but there are also many good-looking, well-shaped heads and persons among them. The dress of the men consists of the softened skins of small animals, such as the jackal and wild cat, suspended before and behind from a girdle. The dress of the women is of a nondescript character.

They are more superstitious than any people we had yet encountered; though still only building their village, they had erected two little sheds, in which were placed two pots with chorms in them. When I asked what medicine they
contained, they replied, "Medicine for the Barimo;" but when I looked into them, they said they were medicine for the game. We saw the first evidence of idolatry in the remains of an old idol at a deserted village. It simply consisted of a human head carved out of a block of wood. Certain charms, mixed with red ochre and white pipeclay, are dotted over the idols when they are in use; and a crooked stick is used instead of an idol in the absence of a professional carver.

The trees all along the paths are marked with incisions, and offerings of small pieces of manioc-roots, or ears of maize, are placed on branches. Heaps of sticks may be seen at intervals of a few miles, raised cairn-fashion by every passerby adding a small branch to the heap; or a few sticks are placed on the path, and at these points each passer-by forms a sudden bend in the road to one side. It seems as if their minds were ever in doubt and dread in these gloomy recesses of the forest, and that they were striving to propitiate by their offerings some superior beings residing there.

As the Leeba seemed to come from the direction in which we wished to go, I was desirous of proceeding farther up with the canoes; but Nyamoana interposed numerous objections, and the arrival of Manenko herself settled the point in the negative. She was a tall strapping woman about twenty years of age, and distinguished by a profusion of ornaments and medicines, which latter are supposed to act as charms. Her body was smeared all over with a mixture of fat and red ochre, as a protection against the weather; a necessary precaution, for, like most of the Balonda ladies, she was in a state of frightful nudity, not so much from want of clothing as from her peculiar ideas of elegance in dress. When she arrived with her husband, Sambánza, they listened for some time to the statements I was making to the people of Nyamoana; after which her husband commenced an oration, during the delivery of which he picked up a little sand at intervals of two or three seconds, and rubbed it on the upper part of his arms and chest. This is a common mode of salutation in Londa; and when they wish to be excessively polite they bring a quantity of ashes or pipeclay in a piece of skin, and rub it on the chest and upper front part of each arm; others drum their ribs with their elbows; while others
touch the ground with one cheek after the other, and clap their hands. When Sambanza had finished his oration he rose up, and showed his ankles ornamented with a bundle of copper rings. Had thcy been very heavy, they would have impeded his walk; and some chiefs wear so many as to be forced to keep one foot apart from the other, the weight being a serious inconvenience in walking. Gentlemen like Sambanza, who wish to ape their betters, adopt their gait, strutting along with only a few ounces of ornament on their legs, just as if they had double the number of pounds. When I smiled at Sambanzia's walk, the people remarked, "That is the way in which they show off high bluod in these parts."

Manenko readily adopted our views of alliance with the Makololo, and, by way of cementing the bond, she and her counsellors proposed that Kolimbota should take a wife from their tribe. She thus hoped to secure his friendship, and obtain accurate information as to the future intentions of the Makololo. The proposition was favourably received by Kolimbota, and it afterwards led to his desertion from us.

On the evening of the day in which Manenko arrived we were delighted by the appearance of Mosantu and an imposing embassy from Masiko. It consisted of all his underchiefs, who brought a present of a tine elepbant's tusk, two calabashes of honey, and a large piece of blue haize. Masiko expressed delight at the return of the captives, and at the proposal of peace with the Makololo. He stated that he never sold any of his own people to the Mambari, but only captives whom his people kidnapped from small neighbouring tribes. When the question was put, whether his people had not been in the habit of kidnapping the servants and stealing the canoes of the Makololo, he admitted that, two of his men, when hunting, had gone to the Makololo gardens to see after some of their relatives. As the great object in all native disputes is to get both parties to turn over a new leaf, I set forth the desirableness of forgetting past feuds, and avoiding in future any cause for marauding. I presented Masiko with an ox, furnished by Sekeletu as provision for ourselves. All these people are excessively fond of beef and butter, from having been accustomed to them in their youth, before the Makololo deprived them of their cattle. They bave abundance of game,
but in their opinion, which, I am sure, every Englishman will endorse, there is nothing equal to roast beef. The ox was intended for Masiko, but his men were very anxious to get my sanction for slaughtering it on the spot, in which case not many ounces would have remained in the morning. I should have given permission if I had had anything else to offer in return for Masiko's generosity.

We were now without any provisions except a dole of manioc-roots each evening from Nyamoana, which, when eaten iaw, produce poisonous effects. A small loaf of maize-meal was all my stock, and our friends from Masiko were still more destitute; yet we all rejoiced so much at their arrival that we resolved to spend a day with them. The Barotse of our party, meeting with friends among the Barotse of Masiko, bad many tales to tell; and, after an agreeable chat by day, Fre regaled our friends with the magic lantern by night, having first, in order to make it available for all, removed our camp to the village of Nyamoana.

When erecting our sheds at the village, Manenko fell upon our friends from Masiko in a way that left no doubt as to her powers of scolding. Masiko had once sent to Samoána for a cloth, which is a common way of keeping up intercourse; after receiving it, he returned it, because it had the appearance of having had "witchcraft medicine" on it; this was a grave offence, and Manenku had now a good excuse for retaliation, as his ambassadors had slept in one of the huts of Łer village without asking leave. She set upon them in style, advancing and receding in true oratorical style, belabouring her own servants for allowing the offence, and raking up the faults and failings of the objects of her ire ever since they were born; in conclusion expressing her despair of ever seeing them become better until they were all "killed by alligators." Masiko's people received this torrent of abuse in silence, and, as neither we nor they had anything to eat, we parted next morning. In reference to the sale of slaves, they promised to explain to Masiko the relationship which exists between even the most abject of his people and our common Father, and that no more kidnapping ought to be allowed. We promised to return through his town when we came back from the seacoast.

Manenko gave us some manioc-roots in the morning, and had determined to carry our baggage to her uncle's, Shinte. We bad hoard a sample of what she could do with her tongue; and as neither my men nor myself had much inclination to encounter this black virago, we proceeded to make ready the packages; but she said the men whom she had ordered for the service would not arrive until to-morrow. I felt annoyed at this further delay, and ordered the packages to be put into the canoes at once; but Manenko was not to be circumvented in this way; she came forward with her people, seized the luggage, and declared that she would carry it in spite of me. My men succumbed and left me powerless. I was moving off in high dudgeon to the canoes, when she kindly placed her hand on my shoulder, and, with a motherly look, said, "Now, my little man, just do as the rest have done." My feelings of annoyance of course vanished, and I went out to try for some meat.

The only kinds of game to be found in these parts are, the zebra, the kualata or tahetsi (Aigoceros equina), kama (Bubalus caama), buffaloes, and the small antelope hakiténwe (Phlantomba). They are very shy, and can be seen only by following on their trail for many miles. Urged by hunger, we followed some zebras during the greater part of the day: we got within fifty yards of them in a dense thicket, and I had made sure of one, when to my infinite disgust the gun missed fire, and off they bounded. The climate is so damp that the powder in the gun-nipples cannot be kept dry. It is curious to mark the intelligence of the game; in districts where they are much annoyed by fire-arms they keep out on the most open country they can find, in order to have a widely-extended range of vision; but here, where they are killed by the arrows of the Balonda, they select for safety the densest forest, where the arrow cannot be easily shot. This variation may indeed be partly owing to the greater heat of the sun, which is here particularly overpowering. However it is to be accounted for, the wild animals here certainly frequent the forests by day even when there is no sunshine. whil those farther south generally shun these covers.

## OHAPTER XVI.

Land joubrey to Shinte's town.-Reception by the ohizf.His friendebile.

11th January, 1854.-ON starting this morning Samoana (or rather Nyamoana, for the ladies are the chiefs here) presented a string of beads, and a shell of high value, as an atonement for having assisted Manenko to vex me the day before. They were much pleased when I replied that I never kept up my anger all night. We had to cross a stream which flows past the village of Nyamoana. Manenko's doctor waved some charms over her, and she took some in her hand and on her body before she ventured in the canoe. When one of my men spoke rather loudly near the basket of medicines, the doctor reproved him, and always spoke in a whisper himself, glancing back to the basket as if afraid of being heard by something therein. Such superstition is quite unknown in the south, and is mentioned here to show the difference in the feelings of this new people, as compared with the Caffres and Bechuanas.

Manenko was accompanied by her husband and her drummer, who continued to thump most vigorously until a heary mist compelled him to desist. Her husband used various incantations to drive away the rain, but down it poured incessantly, our Amazon leading the way through it all, in the very lightest marching order, and at a pace that few of the men could rival. Being on ox-back, I kept pretty close to our leader; and on my asking her why she did not clothe herself during the rain, I was informed that a chief ought not to appear effeminate, but must always wear the appearance of robust youth, and bear vicissitudes without wincing. My men, in admiration of her pedestrian powers, kept remarking, "Manenko is a soldier;" and we were all glad when she proposed a halt to prepare our night's lodging on the banks of a stream.


HOOSE BUILDING

The country through which we were passing was the same succession of forest and open lawns as formerly mentioned, the trees for the most part being ever greens, and of good, though not gigantic, size. The lawns were covered with grass, which in point of thickness looked like an ordinary English hay-crop. We passed two small hamlets surrounded by gardens of maize and manioc, near each of which I observed an ugly idol common in Londa-the figure of an animal resembling an alligator, formed of grass, and plastered over with soft clay, with two cowrie-shells inserted as eyes, and numbers of the bristles from an elephant's tail stuck about the neck. It is called a lion, but bears more resemblance to an alligator. It stood in a shed, and the Balonda pray and beat drums before it all night in cases of sickness.

Some of Manenko's followers had quadrangular shields made of reeds, about five feet long and three broad. With these, and short broadswords and sheaves of iron-headed arrows, they appeared rather ferocious; but their constant habit of wearing arms is probably only a substitute for their lack of courage. We always deposited our arms outside a village before entering it, while the Balonda, on visiting us at our encampment, always came fully armed, until we ordered them to lay down their weapons. Next day we passed through a piece of forest so dense that it could not be penetrated without an axe. It was flooded by the heavy rains which poured down every day. I observed in this forest, as I had frequently done elsewhere, a very strong smell of sulphuretted hydrogen. I had repeated attacks of intermittent fever, in consequence of the drenchings I got in these unhealthy spots.

On the 11 th and 12 th we were detained by incersant and violent rains. I had a little tapioca and a small quantity of Libonta meal, which I still reserved for emergencies. The patience of my men under hunger was admirable present want is never so painful as the prospect of future starvation. We thought the people of some large hamlets very niggardly and independent, for, though they had large fields of ripe maize, they gave us nothing. Even when Manenko kindly begged some for me, they gave her only five ears. They were subjects of her uncle; aud, had they been Makololo,
they would have been lavish in their gifts to the niece of their chief.

Kach house in these hamlets is surrounded by a palisade of thick stakes, and when the owner wishes to enter he removes a stake or two, squeezes through, and then replaces them, so that an enemy coming in the night would find it difficult to discover an entrance. These palisades seem to indicate a sense of insecurity in regard to their fellow-men; there are at all . events no wild beasts to disturb them, for these have been nearly as well thinned by bows and arrows here as by guns further south. This was a disappointment to us, for we expected the same abundance of game in the north which we found at the confluence of the Leeba and Zambesi.

A species of the silver-tree of the Cape (Leucodendron argenteum) grows in abundance in the district between this and Samoana's village. The forests became more dense as we went north, and we travelled much more in the deep gloom of the forest than in open sunlight. No passage existed on either side of the narrow path made by the axe. Large climbing plants entwined themselves like boa-constrictors around gigantic trees, and often stood erect by themselves, having choked the trees by which they had been supported. The bark of a fine tree, called " motuia," is used by the Barotse for making fish lines and nets, and the " molompi," so well adapted for paddles by its lightness and flexibility, was abundant. There were other trees quite new to my companions, many of which ran up to an unbroken height of fifty feet of one thickness.

In these forests we first encountered the artificial beehives so common between this and Angola; they are made out of the bark of a tree about four feet in circumference, which is taken off in two pieces and then rejoined, the tops and bottoms being made of coiled grass-rope. These hives are placed on high trees in different parts of the forest, and in this way a.l the wax exported from Benguela and Loanda is coilected. A "piece of medicine" is tied round the trunk of the tree, and proves a sufficient protection against thieves; for they believe that certain medicines can inflict disease and death though these are supposed to be known only to a few.
'I'his being the rainy season, great quantities of mushrocms
were found, and were eagerly devoured by my companions; the edible variety is always found growing out of ant-hills, and attains a diameter of six or eight inches. Scme, not edible, are of a brilliant red, and others of a light blue colour.

I derived considerable pleasure, in spite of rain and fever, from this new scenery. The deep gloom contrasted strongly with the shadeless glare of the Kalahari, which had left an mdelible impression on my memory. Though drenched day by day, I conld hardly bring myself to believe that we were getting too much of a good thing. Nor could I see water thrown away without an impression flitting acruss my mind that we were guilty of wasting it. Occasionally we emerged from the deep gloom into a pretty little valley, with a swampy spot in the middle, which, though now filled with water, at other times supplies only enough moisture for wells.

We crossed, in canoes; a small perennial stream named Lefuje, or "the rapid," proceeding from a goodly mountain, of an oblong shape, and about eight hundred feet high, called Monakadzi (the woman), which rose about twenty or thirty miles to the east of our course. The Lefuje probably derives its name from the rapid descent of its short course from the Monakadzi to the Leeba.

Generally speaking, each valley contained its owu little village. At some we rested, the people becoming more liberal as we advanced. Others we found deserted, a sudden panic having seized the inhabitants, though the drum of Manenko was kept constantly beaten in order to announce the approach of great people. When we had decided to remain for the night at any village, the inhabitants lent us the roofs of their huts, which can be taken off the walls at pleasure. They brought them to the spot selected as our lodging, and, when my men had propped them up with stakes, we were safely housed for the night. Every one who comes to salute either Manenko or ourselves rubs the upper parts of the arms and shest with ashes; those who wish to show profounder reverence put some also on the face.

Every village had its idols near it, so that, when we came (39) to an idol in the woods, we always knew that we were within a mile of human habitations. We passed one very ugly idol
resting on a horizontal beam supported by two uprights. On remarking to my companions that these idols had earf, but that they heard not. \&c., I learned that, though the wood itself could not hear, the owners had medicines by which it could be made to hear and give responses; so that, if an enemy were approaching, they would have full information. Manenke having brought us to a stand, through a desire to send notice of our approach to her uncle, I asked why it was necessary to give information of our movements, if Shinte had idols who could tell him everything? "She did it only," was the reply, implying that she had no reason to give. It is seldom of much use to point out the folly of idolatry, unless an object of adoration be supplied in place of the idols.

Whilst delayed, by Manenko's management, in the neighbourhood of the town of Shinte. we were well supplied by the villagers with sweet potatoes and green maize. I was labouring under fever, and therefore did not find it very difficult to exercise patience; but as it was Saturday, I proposed to go to the town for Sunday (15th). "No," she objected : "her messenger must return from her uncle first." Being sure that the answer of the uncle would be favourable. I suggested that we might proceed at once. "No," she said, "it is not our custom;" and everything else I could urge was answered in the same pertinacious style. She ground some meal for me with her own hands, and told me with a self-satisfied air that she had actually gone to a village and begged corn for the purpose. It was a fine day for a wonder, and the sun shone so as to allow us to dry our clothing and other goods, many of which had become mouldy from the constant rain. The guns were rusted, in spite of being oiled every evening. On Sunday afternoon messengers arrived from Shinte, expressing his approbation of the objects we had in view, and his joy at the prospect of a way being opened by which white men might visit him. Manenko now threatened in sport to go on, and ] soon afterwards perceived that her dilly-dallying way was the proper mode of making acquaintance with the Balonda; and that much of the favour with which I was received was due to my eending forward messengers to state the object of our coming, without which precaution our arrival would have caused alarm to the inhabitants. Shinte sent us two large
baskets of manioc and six dried fishes His men had the skin of a mo_key, called in their tongue " polúma" (Colobus guereza). of a jet black colour, except the long mane, which is pure white. They behaved with reverence at our religious services - a circumstance of some importance when we remember the almost total want of reverence we encountered in the south.

Our friends informed us that Shinte would be highly honoured by the presence of three white men in his town al once. Two others had sent notice of their approach from the west. How pleasant the prospect of meeting with Luropeans in such an out-of-the-way region! The rush of thoughts made me almost forget my fever. "Are they of the same colour as I am ?" I inquired.-_"Yes ; exactly so."-"And have the same hair?" _-" Is that hair?" was the rejoinder; "we thought it was a wig; we never saw the like before; this white man must be of the sort that lives in the sea." Henceforth my men sounded my praises as a true specimen of the variety of white men who live in the sea. "Only look at his hair," they exclaimed; "it is made quite straight by the sea-water!" I repeatedly explained to them that, when it was said we came out of the sea, it did not mean that we came from beneath the water; but the fiction has been widely spread in the interior by the Mambari, that the real white men live in the sea, and I believe that my men always represented themselves to the natives as led by a genuine merman. As the strangers had woolly hair, I gave up the idea of meeting anything more European than two half-caste lortuguese, engaged in trading for slaves, ivory, and bees'-wax.

16th.--After a short march we came to a most lovely valley stretching away eastwards up to a low prolongation of Monakadzi. A small stream meanders down the centre of this pleasant glen; and on a little rill, which flows into it from the western side, stands the town of Shinte. (Lat. $12^{\circ}$ $37^{\prime} 35^{\prime \prime}$ S., long. $22^{\circ} 47^{\prime}$ E.) 11 hen Manenko thought the sun high enough for us to make a lucky entrance, we proceeded. The town was embowered in banana and other tropical trees : the streets were straight, and presented a complete contrast to those of the Bechuanas, which are very tortuous. The native huts had square walls and round roofs, and were enclosed with
fences made of upright poles a few inches apart, with strong grass or leafy bushes neatly woven between. In the courts were small plantations of tobacco, sugar-cane, and bananas. Many of the poles had taken root, and trees of the Ficus indica family, which are regarded with superstitious reverence, were planted around for the sake of shade. When we made our appearance a crowd of negroes ran towards us as if they would eat us up; all were armed and some had guns, but the nanner in which they were leld showed that the owners were more accustomed to bows and arrows. After staring at us for an hour they began to disperse.

The two native Portuguese traders had erected a little encampment opposite the place where ours was about to be made. One of them had that sickly yellow hue which mado him look fairer than myself, but his head was covered with a crop of undeniable wool. They were accompanied by a number of Mambari, and had a gang of young female slaves whom they had recently purchased in Lobale, and who were now clearing the ground in front of their encampment. The establishment was conducted with that military order which pervades all the arrangements of the Portuguese colonists A drum was beaten and trumpet sounded at certain hours, quite in militarv fashion. Fen of my men had ever seen slaves in chains. "They are not men!" they exclaimed (meaning they are beasts), " who treat their children so!"

17th, Tuesday.-We were honoured with a grand reception by Shinte about eleven o'clock. Sambanza claimed the honour of presenting us, Manenko being slightly indisposed. He was gaily attired, and, besides a profusion of beads, had a cloth so long that a boy carried it after him as a train. The kotla, or place of audience, was about a hundred yards square, and contained two graceful specimens of a species of banian, under one of which sat Shinte, on a sort of throne covered with a leopard's skin. He was dressed in a checked jacket, and a kilt of scarlet baize edged with green; strings of large beads hung from his neck, and his limbs were covered with iron and copper armlets and bracelets; on his head he wore a helmet made of beads neatly woven together, and crowned with a great bunch of goose-feathers by way of a crest. Close to him sat three lads with large sheaves of arrows over their
shoulders; in front was his chief wife, with a curious red cap on her head, and behind him about a hundred women clothed in a profusion of red baize.

On entering the kotla Manenko's party saluted Shinte by clapping their hands; and Sambanza did obeisance by rubbing his chest and arms with ashes. The other tree being unoccupied, I and my party retreated to it for the sake of the shade, and could thence see the whole ceremony. The different sections of the tribe came forward in the same way that we did, the head-man of each making obeisance with ashes which he carried with him for the purpose; then the soldiers, all armed to the teeth, with swords drawn, and their faces screwed up so as to appear as savage as possible, came running and shouting towards us; they then wheeled round towards shinte, saluted him, and retired. When all were seated the curious capering usually seen in pichos began. A man starts up and imitates the most approved attitudes observed in actual fight,-such as throwing a javelin, receiving one on his shield, springing aside to avoid another, running backwards or forwards, leaping, \&c. Then Sambanza, and Nyamoana's spukesman, stalked backwards and forwards in front of Shinte, vociferating all that they knew of my history and my connection with the Makololo; explaining at length the cijects of my mission, and winding up with a recommendation to Shinte that he had better receive the white man well, and send him on his way.

During the intervals between the speeches the ladies burst forth into a sort of plaintive ditty; but we could not ascertain whether it was in praise of the speaker, of Shinte, or of themselves. This was the first time I had seen females present in a public assembly. In the south the women are not permitted to enter the kotla; and even when invited to come to a religious service they would not enter until ordered by the chief; but here they expressed approbation by clapping their hands and laughing : and Shinte frequently turned round and spoke to them.

A party of musicians, consisting of three drummers and four performers on the piano, went round the kotla several tiraes, regaling us with their music. The drums are neatly carved from the trunk of a tree. and have a small hole in the
side covered with a bit of spider's web: the ends are covered with the skin of an antelope; and when they wish to tighten it they hold it to the fire: the instruments are beaten with the hands.


The Marimba, or Musical Instrument of the Balonda.
The piano, named "marimba," consists of two parallel bars of wood, either quite straight, or bent into a semicircular form, across which are placed about fifteen wooden keys, two or three inches broad, from fifteen to eighteen long, and of a thickness proportioned to the deepness of the note required: each of the keys has a calabash of corresponding dimension beneath it attached to the parallel bars, and serving as a sounding-board: the keys are struck with small drumsticks. Rapidity of execution seems much admired among them, and the music is pleasant to the ear. In Angola the Portuguese use the marimba in their dances.

When nine orations had been delivered Shinte and the rest of the company stood up. He had maintained true African dignity throughout, but he scarcely ever took his
eyes off me for a moment. I calculated that about a thousand people were present, besides three hundred soldiers.
$18 t h$.-We were awakened during the night by a message from Shinte, requesting a visit at a very unseasonable hour. As I was just in the sweating stage of an intermittent fever, I declined going, in spite of Kolimbota's earnest entreaties. Ilowever, at ten next morning I went, and was led into the courts of Shinte, the walls of which consisted of woven rods, all very neat and high. Numerous trees, some of which had been only recently planted, afforded a grateful shade; while sugar-cane and bananas, growing outside the enclosure, spread their large light leaves over the walls. We took our seat under the broad foliage of a Ficus indica, and Shinte soon made his appearance. He seemed in good humour, and said that he had expected yesterday "that a man who came from the gods would have approached and talked to him." That had been my intention, but when I saw the formidable preparations, and his own men keeping at least forty yards from him, I had remained by the tree opposite to that undes which he sat. II is remark confirmed my previous belief that a frank, open, fearless manner is the most winning with all these Africans. I stated the object of my mission, and the old gentleman clapped his hands in approbation. He replied through a spokesman, and the company joined in the response by also clapping their hands. After business was over I asked if he had ever seen a white man before. He replied, " Never; you are the very first I have seen with a white skin and straight hair; your clothing too is different from any we have ever seen."

On learning that " Shinte's mouth was bitter for want of ox-flesh," I presented him with an ox, to his great delight; and as his country is so well adapted for cattle, I advised him to begin a trade in cattle with the Makololo. He profited by the hint, for when we returned from Loanda we found that he had got three beasts, one of which was more like a prize heifer than any we had seen in Africa. Soon afterwards he sent us baskets of boiled maize and of manioc-meal, and a small fowl. The size of the maize and of the manioc shows the fertility of the black soil of this country. We saw manioc above six feet high, though it requires the very best soil.

Manenko meanwhile had been busy erecting a very pretty hut and court-yard, as her residence whenever white men were brought by her along the same path. On hearing that we had given an ox to her uncle, she came forward with the air of an injured person, and explained that "The white man belonged to her; she had brought him here, and therefore the ox was hers, not Shinte's." Upon this she ordered her men to bring it, had it slaughtered, and presented her uncle with a leg only. Shinte did not seem at all annoyed at the occurrence.

19th.-I was awakened at an early hour by a messenger from Shinte, but, as I was labouring under a profuse perspiration, I declined going for a few hours. My visit turned out fruitless, probably on account of the divination being unfavourable: "They could not find Shinte." When I returned to bed another message was received to the effect that "Shinte wished to say all he had to tell me at once." This was too tempting an offer, and accordingly we went. When we arrived he had a fowl ready in his hand to present, together with a basket of manioc-meal, and a calabash of mead. Referring to the constantly recurring attacks of fever, he remarked that it was the only thing which would prevent a successful issue to my journey On my asking what remedy he would recommend, he answered, "Drink plenty of mead. and it will drive the fever ont." It was rather strong, and 1 suspect he liked the remedy pretty well, even though he had no fever. He had always been a friend to Sebituane, and, now that his son Sekeletu was in his place, Shinte was not merely a friend but a father to him; and if a son asks a favour the father must give it. He was highly pleased with the large calabashes of clarified butter and fat which Sekeletu had sent him, and wished to detain Kolimbota, that he might send a present back to Sekeletu by his hands.

We were particularly struck, in passing through the village, with the punctiliousness of manners shown by the Balonda. Inferiors, on meeting their superiors in the street, at once drop on their knees and rub dust on their arms and chest, and continue the salutation of clapping the hands until the great ones have passed. Sambanza knelt down in this manner till the son of Shinto had passed him. We several times saw
the woman who holds the office of water carrier for Shinte; as she passes along she rings a bell to give warning to all to keep out of her way; for it would be a grave offence for any one to exercise an evil influence by approaching the drink of the chief.

I suspect that offences of the slightest character among the poor are made the pretext for selling them or their children to the Mambari. For instance, a young man of Lobale had located himself in the country of Shinte without showing himself to the chief. This was considered an offence sufficient to warrant his being offered for sale while we were there. Not having reported himself, or explained the reason of his running away from his own chief, they alleged that they might be accused of harbouring a criminal. It is curious to notice how the slave-trade blunts the moral susceptibility. no chief in the south would have treated a fugitive in this way. Another incident which occurred while we were here may be mentioned, as of a character totally unknown in the south. Two children, of seven and eight years old, who had gone out to collect firewood about a quarter of a mile from the village, disappeared. As no beasts of prey are found so close to the town, we suspect that they were kidnapped by some of the high men of Shinte's court, and sold by night. The Mambari erect large square huts for the concealment of these stolen ones. The frequent kidnapping from outlying hamlets explains the stockades we saw around them; the parents have no redress, for even Shinte himself seems fond of working in the dark. One night he sent for me, and, on $m y$ arrival, presented me with a slave-girl of about ten years old ; saying that he had always been in the habit of presenting his visitors with a child. On my declining the present or the ground that I thought it wrong to take away children from their parents, he urged that she was "to be a child" to bring me water, and that a great man ought to have a child for the purpose. As I replied that I had four children, and should be very sorry if my chief were to give away my little girl, and that I would prefer this child to remain and carry water for hel own mother, he thought I was dissatisfied with her size, and sent for one a head taller ; after many explanations of our abhorrence of slavery, and how displeasing it
nust be to God to see his children selling one another. 1 declined her also. If I could have taken her into my family for the purpose of instruction, and then returned her as a free woman, I might have done so ; but to take her away, and probably never be able to secure her return, would have produced a bad effect on the minds of the Balonda.

Shinte was most anxious to see the pictures of the magic lantern, but I was so weakened by fever that I could not go for several days; when I went he had his principal men and the same crowd of court beauties near him as at the reception. The first picture exhibited was Abraham about to slanghter his son Isaac, the knife uplifted to strike the lad; the Balonda men remarked that the picture was much more like a god than the things of wood or clay they worshipped. I explained that this man was the father of a race to whom God had given the Bible, and that our Saviour came of his seed. The ladies listened with silent awe; but, when I moved the slide, the uplifted dagger moving towards them, they thought it was to be sheathed in their bodies .instead of Isaac's. "Mother! mother!" all shouted at once, and off they rushed, tumbling pell-mell over each other, nor could we get one of them back again. Shinte, however, sat bravely through the whole, and afterwards examined the instrument with interest. An explanation was added after each exhibition, so that no one should imagine there was anything supernatural in it. It was the only mode of instruction I was ever pressed to repeat. The people came long distances, for the express purpose of seeing the objects and hearing the explanations.

These chiefs are so proud of the honour of having strangers residing in their villages, that it is difficult to effect a departure. An additional cause of delay arose from the frequent rains-twenty-four hours never elapsing without heavy showers. Here the winds from the north always bring heavy clouds and rain, while in the south the heavy rains come from the north-east or east. The thermometer falls as low as $72^{\circ}$ when there is no sunshine, though when the weather is fair it generally rises as high as $82^{\circ}$ in the shade; even in the mornings and evenings.

24th.-We expected to have started to-day, but Sambanza, who had been sent off early in the morning for guides.
returned at midlay without them, the worse for liquor, having indulged too freely in mead. This was the first case of real intoxication we had seen in this region. The boyaloa, or beer of the country, has rather a stupifying than exciting effect; hence the beer-bibbers are great sleepers, and may frequently be seen lying on their faces sound asleep. As far as we could collect from Sambanza's incoherent sentences, shinte had said that the rain was too heavy for our departure, and that the guides still required time for preparation. Shinte himself was said to be busy getting some meal ready

for my use on the journey, and. as it rained nearly all day, it was no sacrifice to submit to his advice and remain. Sambanza staggered to Manenko, who coolly bundled him into the hut, and put him to bed.

As the last proof of friendship, Shinte came into my tent and examined all the curiosities, the quicksilver, the lookingglass, books, hair-brushes, comb, watch, \&c. \&c., with the greatest interest; then closing the tent, so that none of his own people might see his extravagance, he drew out from his clothing a string of beads, and the end of a conical shell, which is considered, in regions far from the sea, of as great value as the Lord Mayor's badge is in London. He hung it round my neck, and said, "There, now you have a proof of my friendship." My men informed me that these shells are so highly valued, as evidences of distinction, that two of them would purchase a slave, and five would be considered a handsome price for an elephant's tusk worth ten pounds. At our last interview Shinte pointed out our principal guide, Intemése, a man about fifty, who was, he said, ordered to remain by us till we should reach the sea; adding, that I had now left Sekeletu far behind, and must henceforth look to Shinte alone for aid, which would always be most cheerfully rendered. This was only a polite way of expressing his wishes for my success. He gave us a good supply of food, and, after mentioning, as a reason for letting us go even now, that no one could say we had been driven away from the town, since we had been several days with him, he gave a most hearty salutation, and we parted with the wish that God might bless him.

## CHAPTER XVII.

The Lonajg.-Cazembe. - Flooded flans. -The Lokaluese.-
The Lotembwa.-The chief Katema.-Lake Dilolo.
26th.-Leaving Shinte, we passed down the lovely valley on which the town stands, and then through pretty open forest, to a village of Balonda, where we halted for the night. In
the morning we had a fine range of green hills called Saloísho on our right, and were infurmed that they vere inhalited by the people of Shinte, who worked the iron-ore which abounds in these hills. The country through which we passed possessed the same wooded character that we have before noticed. The soil is dark, with a tinge of red, and appeared very fertile. Every valley contained villages of twenty or thirty huts, with gardens of manioc, which is regarded as the staff of life in these parts. Very little labour is required for its cultivation. The earih is thrown up into oblong beds, about three feet broad and one high, in which pieces of the manioc-stalk are planted at intervals of four feet. In from ten to eighteens months the roots are fit for food, but there is no necessity for raising them at once, as the roots do not become bitter and dry for three years. When the roots are taken up a piece or two of the upper stalks is replaced in the hole, and a new crop is thereby begun. The plant grows to a height of six ieet, and every part of it is useful : the leaves may be cooked as a vegetable.
'Ihere are two varieties of the manioc or cassava-one sweet and wholesome, the other bitter and somewhat poisonous, but much more speedy in its growth than the former. The people get rid of the poison by steeping the root four days in water, when it becomes partially decomposed. It is then stripped of its skin, dried in the sun, and pounded into fine white meal closely resembling starch. This meal is mixed with as much boiling water as it will absorb, and in this state forms the ordinary "porridge" of the country. It is both unsatisfying and unsavoury; no matter how much a man may cat, two hours afterwards he is as hungry as ever, while in point of flavour I can only compare it $t$ s starch made of diseased potatoes. We managed to eat a little of it vixed with honey.

Our chief guide, Intemese, sent orders to all the villages ubout our route that Shinte's friends must have abundance of provisions, and these orders were carried out with a liberality far exceeding that which shinte himself had exhibited. In return I gave small bunches of my stock of beads, which were always politely received. We had an opportunity of observing that our guides had much more etiquette than any of the tribes
farther south. They would noither partake of the food which we had cooked, nor would they eat in our presence, but always retired into a thicket for their meals, after which they stood up, clapped their hands, and praised Intemese. When the Makololo, who are very free and easy in their manners, held out handfuls of their meat to any of the Balonda, they refused to taste. They are very punctilious in their manners to each other. Each hut has its own fire, and when it gues out they make it afresh for themselves rather than take it from a neighbour. I believe much of this arises from.superstitious fears.

After crossing the Lonaje we passed some pretty villages, embowered, as they usually are, in bananas, shrubs, and manixe, and we formed our encampment in a nest of serpents near the banks of the Leeba. One village had lately been transferred hither from the country of Matiamvo, who was still acknowledged by the villagers as paramount chief ; this, however, as well as numerous other instances of migration, shows that the great chiefs possess only a limited power. The only peculiarity we observed in these people was the habit of plaiting the beard into a threefold cord.
(42) The town of the Balonda chief, Cazembe, was pointed out to us as lying to the N.E. of the town of Shinte; it had been visited by great numbers of people in this quarter for the purpose of purchasing copper anklets, and was reported to be about five days' journey distant. I made inquiries of the oldest inhabitants of the villages at which we were staying respecting the visit of Pereira and Lacerda to that town. A grey-headed man replied that he had often heard of white men, but never seen one, and added that one had visited Cazembe when he was young, but had not entered this part of the country. The people of Cazembe are Balonda or Baloi, and his country has been termed Londa, Lunda, or Lui, by the Portuguese.

It was always difficult to get our guides to move away from a place. With the countenance of the chief, they felt as comfortable as king's messengers could do, and were not disposed to forego the pleasure of living at free quarters. My Makololo friends, who had never left their own country before, except for purposes of plunder, did not readily adopt the peacefu]
system we now meant to follow. They either spoke to imperiously to strangers, or, when reproved for that, were disposed to follow the dictation of every one we met. On the 31st of January 1 managed, after considerable opposition on the part of Intemese, to get my party under weigh for the Leeba, which we soon reached, and found to be only about a hundred yards wide, and of the same dark mossy hue as I have before described. The villagers lent us canoes to effect our passage, which took about four hours; and having gone to a village about two miles beyond the river, I had the satisfaction of getting observations for both longitude and latitude, and found myself to be in long. $22^{\circ} 57^{\prime} \mathrm{E}$.; lat. $12^{\circ} 6^{\prime} 6^{\prime \prime} \mathrm{S}$.

Februtry 1st. -We had a fine view of two hills called l'iri (l'eeri), meaning "two," on the opposite side of the river, in a district named Mokwánkwa. Intemese informed us that one of Shinte's children was born there, during his progress southwards from the country of Matiamro, whence it would appear that Shinte's people have only recently entered the country they now occupy. Indeed, Intemese informed me he himself had come into his present country by command of Matiamvo.

W'e were surprised to find English cotton cloth much more prized than beads and ornaments by the inhabitants of this district. They are more in need of clothing than the Bechuana tribes living adjacent to the Kalahari Desert, who have plenty of skins for the purpose. Animals of all kinds are rare here, and calico is proportionately valuable.

In the midst of the heavy rain, which continued all the morning, Intemese sent to say he was laid up with pains in the stomach, and must not be disturbed; but when it cleared up, about eleven, I saw our friend walking off to the village, apparently in excellent health, and talking with a very lond voice. On reproaching him for telling an untruth, he tuoned it off with a laugh, saying that he really had a complaint in his stomach, which could only be remedied by a supply of beef. He was evidently revelling in the abundance of good food supplied by the chief's orders, and did not share my feeling of shame when I gave only a few beads in return for large baskels of meal.

One of Intemese's men stole a fowl which the lady of the
village had given me. When charged with the theft, every one of Intemese's party indignantly vociferated his innocence. One of my men, however, went off to the village, brought the lady who had presented the fowl to identify it, and then pointed to the hut in which it was hidden. Upon this Intemese called on me to send one of my people to search the huts, if I suspected his people. The man sent soon found it, and brought it out, to the confusion of Intemese and the laughter of our party. We never met an instance like this, of theft from a white man, among the Makololo, though this people have the reputation of being addicted to pilfering. The honesty of the Bakwains has been already noticed. Irobably the estimation in which I was held as a public benefactor, in which character I was not yet known to the Balonda, may account for the sacredness with which my property was always treated before. But other incidents which happened subsequently showed, as well as this, that idolators are not so virtuous as those who have no idols.

As the people on the lanks of the Leeba were the last oi Shinte's tribe over whom Intemese had power, he was naturally anxious to remain as long as possible. He occupied his leisure in making a large wooden mortar and pestle for his wife, and in carving some wooden spoons and a bowl; but as what he considered good living was anything but agreeable to us, who had been accustomed to milk and maize, we went forward on the 2nd without him. He soon followed, but left our pontoon behind, saying that it would be brought on by the head-man of the village. This, of course, turned out a mere falsehood, and the loss proved a serious one to us.

We entered an extensive plain bejond the Leeba, at least twenty miles broad, and covered with water, which was ankledeep in the shallowest parts. We deviated somewhat from our N.W. course, keeping the liri hills nearly on our right during a great part of the first day, in order to avoid the still (43 more deeply flooded plains of Lobale (Luval?) on the west, which Intemese stated to be quite impassable, being thighdeep. The plains are so perfectly level as to possess no drainage whatever, and consequently the rain-water which ${ }^{\text {allls }}$ upon them in prodigious masses stands upon them for sonths together, until it is gradually absorbed into the soil.


VILLAGE ON THE UPYER ZAMBESI
ifter which they become in turn so dry that travellers are pu: to great straits for water, though it might unduubtedly be nttained by sinking wells. Little islands, on which grow stunted date-bushes and scraggy trees, are dotted about here and there over the surface. The plains themselves are covered with a thick sward of grass, which conceals the water, and makes the flats appear like great pale yellow-coloured prairic-lands. The rain-water must have stood some time anong the grass, for great numbers of lotus-flowers were in full blow; and the runs of water tortoises, crabs, and other animals which prey on fish, were observed. These periodically deluged plains have a most important bearing on the physical geography of a very large portion of this country. Tr e plains of Lobale give rise to a great many streams, which unite to form the deep never-failing Chobe. Similar extensive (44) flats give birth to, the Loeti and Kasai, and. as we shall see further on, all the rivers of an extensive region owe their (45) origin, not to springs, but to oozing bogs. Intemese pointed out the different lucalities as we passed along, and among the rest mentioned a place which he called "Mokála a Máma," his "mama's home." It was interesting to hear this tall grey-headed man recall the memories of boyhood. All the Makulaka children cleave to the mother in cases of separation, or removal from one part of the country to another. The Bechuanas, on the contrary, care nothing for their mothers, but cling to their fathers. Our Bakwain guide to the lake, Rachosi, told me that his mother lived in the country of Sebituane, but he laughed at the idea of going from lake Ngami to the Chobe, merely for the purpose of seeing her. Had he been one of the Makalaka, he never would have parted from her.

We made our beds on one of the islands, and were wretchedly supplied with firewood. The booths constructed by the men were but sorry shelter against the rain, which poured down without intermission till midday. When released by the cessation of the rain, we marched on till we came to a ridge of dry inhabited land in the N.W. The inhabitants, according to custom, lent us the roofs of some huts to save the men the tronble of booth-making. I suspect that the story in Park's 'Travels,' of the men lifting up the
hut to place it on the lion, referred to the roof only. By night it rained so copiously that all our bods were flouded from below ; henceforth; therefore, we made a furrow round each booth, and used the earth to raise our sleeping-places. My men turned out to work in the wet most willingly, and I could not but contrast their conduct with that of Intemese, who was thoroughly imbued with the slave spirit, and lied on all occasions to save himself any trouble. We expected to move on the 4th, but he declared that we were so near Katema's, that, if we did not send forward to apprise that chief of our approach, he would certainly impose a fine. As it rained the whole day, we were reconciled to the delay; but on Sunday, the 5th, he apprised us that we were still two days distant from Katema. Unfortunately we conld not dispense with him, for the country was so deluged that we should have been brought to a halt before we went many miles.

6th.-Soon after starting we crossed, in a canoe, a branch of the Lokalueje, which was described by a term applied to all branches of rivers in this country, viz. nuana Kalueje (child of the Kalueje). In the afternoon we crossed the main stream, which had now about forty yards of deep fast-flowing water, but probably has not more than half that amount in the dry season : it is, however, a perennial stream, as the existence of hippopotami in it proves. It winds from north-east to southwest into the Leeba. The country adjacent to its banks is extremely fine and fertile, with here and there patches of forest or clumps of magnificent trees. The villagers through whose gardens we passed continue to sow and reap all the year round. Cereals, such as maize, lotsa (Pennisetum typhoideum), and lokésh or millet, are to be seen at all stages of their growth. My companions expressed the greatest admiration of the agricultural capabilities of the whole of Londa, and were loud in their praises of the pasturage, lamenting, at the same time, that there were no cows to feed off the rich crops of grass.

Great numbers of the omnivorous fish Glanis siluris, or mosala, spread themselves over the flooded plains, and, as the waters retire, try to find their way back again to the rivers. The Balonda make weirs, either of earth or of mats, across the
oritlets of the retreating waters, and fix in them creels, similar in shape to our own, which the fish can enter, but cannot escape from. They thus secure large quantities of fish, which. when smoke-dried, make a good relish for their otherwise insipid food. In still water they use a fish-trap made of reeds and supple wands, similar in shape to our common wire mouse-trap, with an opening surrounded with wires pointing inwards: Besides these means of catching fish, they use a hook of iron without a barb, the point being bent inwards instead. Nets are not so common as in the Zouga and Leeambye, but they kill large quantities of fishes by means of the bruised leaves of a shrub which may be seen planted leside every village in the country.

On the 7 th we came to the village of Soána Molópo, a halfbrother of Katema, whom we found sitting, surrounded by about one hundred men. He called on Intemese to give some account of us, though no doubt this had already been done in private. He then pronounced the following sen-tences:-" The journey of the white man is very proper, but Shinte has disturbed us by showing the path to the Makololo who accompany him. He ought to have taken them through the country without showing them the towns. We are afraid of the Makololo." He then gave us a handsome present of food, and seemed perplexed by my sitting down familiarly, and giving him a few of our ideas. Intemese raised his expectations of receiving a present of an ox in return for his civility, and, on my refusal, became sulky and refused to move on: we therefore resolved to go on without him.

On the following morning we took leave of Molopo, and having been, as usual, caught ly rains, we halted at the house of Mozínkwa, a most intelligent and friendly man, who possessed a large and well-hedged garden. The walls of his compound, or courtyard, were constructed of branches of the banian, which, taking root, had become a live hedge. Mozinkwa's wife had cotton growing all round her premises, and several plants used as relishes to the insipid porridge of the country. She cultivated also the common castor-oil plant, and a larger shrub (Jutropha curcas), also yielding a purgative oil, wheh is only used however for anointing the person. We also saw in her garden Indian bringalls, yams, an l sweet
potatoes. Several trees were planted in the middle of the yard, beneath the deep shade of which stood the huts of Mozinkwa's family. His children, very black but comely, were the finest negro family I ever saw. We were much pleased with the liberality of this man and his wife. She asked me to bring her a cloth from the white man's country, but when we returned she was in her grave, and he, as is the custom, had abandoned trees, garden, and huts to ruin. They cannot live on a spot where a favourite wife has died, either because they are unable to bear the remembrance of past happiness, or because they are afraid to remain in a spot which death has once visited. This feeling renders any permanent village in the country impossible.

Friday, 10th.-On leaving Mozinkwa's hospitable mansion we crossed in canoes another stream, about forty rards wide, called the Mona-Kalueje, or brother of Kalueje, as it flows into that river. As we were crossing it we were joined by a messenger from Katema, called Shakatwála, who held the post of steward or factotum to that chief. Every chief has one attached to his person, and, though generally poor, they are invariably men of great shrewdness and ability, and possess considerable authority in the chief's household. Shakatwala informed us that Katema had not received precise information about us, but that, if we were peaceably disposed, we were to come to his town. We proceeded forthwith, but were turned aside, by the strategy of our friend Intemese, to the village of Quendénde, the father-in-law of Katema, who was so polite and intelligent that we did not regret being obliged to spend Sunday with him.

Quendende's head was a good specimen of the greater crop of wool with which the negroes of Londa are furnished. The front was parted in the middle, and plaited into two thick rolls, which fell down behind the ears to the shoulders; the rest was collected into a large knot, which lay on the rape of t\}e neck. We had much conversation together; he had just come from attending the funeral of one of his people, and I found that the drum-beating on these occasions originates in
(47) the idea that the Barimo, or spirits, can be drummed to sleep. There is a drum in every village, and we often hear it going from sunset to sunrise. They seem to look upon the departed
as vindictive beings, whom they regard with more fear thar love.

My men on this, as on other occasions, did a little business for themselves in the begging line; they generally commenced every interview with new villagers by saying, "I have come from afar; give me something to eat." I forbade this at first, believing that, as the Makololo had a bad name, the villagers gave food from fear. But, after some time, it was evident that in many cases maize and manioc were given from pure generosity. In return for this liberality my men, who had nothing to offer, tried to appropriate an individual in each village as " Molekane," or comrade, thus placing himself under an obligation to treat his benefactor with equal kindness should the occasion for it arise.

We here met with some people just arrived from the town of Matiamvo (Muata yánvo), who had been sent to announce the death of the chieftain who lately enjoyed that title.* He seems to have been insane, for he sometimes indulged the whim of running a muck in the town and beheading whomsoever he met, on the plea that his people were too many, and that he wanted to diminish them. On inquiring whether human sacrifices were still made, as in the time of Pereira, at Cazembe's, we were informed that they had never been so common as was represented to Pereira, but that they occasionally happened when certain charms were needed by the chief. These men were much astonished at the liberty enjoyed by the Makololo; and when they found that all my people held cattle, they told us that Matiamvo alone had a herd. One very intelligent man among them asked, "If he should make a canoe, and take it down the river to the Makololo, would he get a cow for it?" This question was important, as showing the knowledge of a water communication from the country of Matiamvo to the Makolulo.

We left Quendende's village in company with Quendende himself, and the principal man of the ambassadors of Matiamvo, and, after two or three miles' march to the N.W., came to the ford of the Loternbwa, which flows southwards. A canoe was waiting to itrry us over, but it was very tedious

[^17]work; for though the river itself was only eighty yards wide, the whole valley was flooded, and we were obliged to paddle more than half a mile to get free of the water. A fire was lit to warm old Quendende, and enable him to dry his tobaccoleaves. The freshly gathered leaves are spread close to the fire until they are quite dry and crisp, when they are pounded with a small pestle, and used as snuff. As we sat by the fire the ambassadors communicated their thoughts freely respecting the customs of their race. When a chief dies, a number of his servants are slaughtered to form his company in the other world, a custom which the Barotse also follow. Quendende said that if he were present on these occasions he should hide his people, so that they might not be slaughtered. We were assured that, if the late Matiamvo took a fancy to anything, such, for instance, as my watch-chain, which was of sitver wịre, he would order a whole village to be brought up to buy it. When a slave-trader visited him he took possession of all his goods; he then sent out a party to some considerable village, and, having killed the head-man, paid for the goods by selling the inhabitants. On my asking if Matiamvo did not know himself to be a man, and that he would be judged by a Lord who is no respecter of persuns, the ambassador replied, "We do not go up to God, as ycu do; we are put into the ground." I could not ascertain that these people, even though they believe in the continued existence of the spirit after death, had any notion of heaven; they appear to imagine the souls to be always near the place of sepulture.

After crossing the river Lotembwa we travelled about eight (49) miles, and came to Katema's straggling town, or rather collection of villages (lat. $11^{\circ} 35^{\prime} 49^{\prime \prime} \mathrm{S}$., long. $22^{\circ} 27^{\prime} \mathrm{E}$.). We were led out about half a mile from the houses, to make for ourselves the best lodging we could of the trees and grass, while Intemese was subjected to the usual examination as to our conduct and professions. Katema soon afterwards sent a handsome present of food. Nex ${ }^{+}$morning we had a formal presentation, and found Katema seated on a sort of throne, with about three hundred men on the ground, and thirty women, said to be his wives, close behind him, the main body of the people being seated in a scmicircle at a distance of fifty yards. Each party had its own head-man stationed at a
little distance in front, who, when beckoned by the chief, came near him as councillors. Intemese gave our history, and Katerna placed sixteen large baskets of meal before us, half a dozen fowls, and a dozen eggs, and, expressing regret that we had slept hungry, added, "Go home, and cook and eat, and you will then be in a fit state to speak to me at an audience I will give you to-morrow." Katema was a tall man, about furty years of age, and was dressed in a snuffbrown coat ornamented with a broad band of tinsel down the arms; on his head he wore a helmet of beads and feathers, and in his hand he carried a large fan-made of the caudal extremities of a number of gnus, with charms attached to it, which he continued waving in front of himself all the time we were there. He seemed in good spirits, and laughed heartily several times, which we thought a good sign, for a man who shakes his sides with mirth is seldom difficult to deal with. When we rose to take leave, all rose with us, as at Shinte's.
lieturning next morning, Katewa addressed me thus :-"I am the great Moéne (lord) Katema, the fellow of Matiamvo. There is no one in this country equal to Matiamvo and me. I and my forefathers have always lived here, and there is the house in which my father lived. You found no human skulls near the place where you are encamped. I never killed any of the traders; they all come to me. I am the great Moene Katema, of whom you have heard." He looked as if he had fallen asleep tipsy, and dreamed of his greatness. Un explaining my ubjects, he promptly pointed out three men who would be our guides, and explained that the N... path was the most direct, but that the water at present standing on the plains would reach up to the loins; he would therefore send us by a more northerly route, which no trader had yet traversed. This was mure suited to our wishes, for we never found a path safe that had been trodden by slave-traders.

We presented a few articles, which pleased him highly-a small shawl, a razor, three bunches of beads, some buttons, and a powder-horn. Apologising for the insignificance of the gift, I asked what I could bring him from Loanda, saying that it must be something small. He laughed heartily at the limitation, and replied that "the smallest contribution would be thankfully received; but he should particularly like a coat, as
the one he was wearing was old." I introduced the subject of the Bible, but one of the old councillors broke in, and glided off into other subjects. I now experienced the disadvantage of having to speak through an interpreter; on all ordinary matters it was easy enough to carry on communication, bat when it came to the exposition of religious topics, in which the interpreters themselves took no interest, it was uncommonly slow work. Neither could Katema's attention be arrested, except by compliments, of which they have always plenty to bestow as well as receive. We were strangers, and knew that, as Makololo, we had not the best of characters, yet his treatment of us was wonderfully good and liberal.

I complimented him on the possession of cattle, and pleased him by telling him how to milk the cows, of which he had about thirty, really splendid animals, reared from two which he bought from the Balobale when he was young. They are generally of a white colour and quite wild, running off with graceful ease like a herd of elands on the approach of a stranger. They excited the unbounded admiration of the Makololo, and clearly proved that the country was well adapted for them. When Katema wishes to slaughter one, he is obliged to shoot it as if it were a buffalo. Matiamvo is said to possess a herd of cattle in a similar state.

As Katema did not offer an ox, we slaughtered one of our own, and were delighted to get a meal of meat, after subsisting so long on the light porridge and green maize of Londa. On such occasions some pieces of the meat are in the fire even before the process of skinning is completed. A frying-pan full of these-pieces having been got quickly ready, my men crowded about me, and I handed some all round. I -offered portions to the Balonda, which they declined, though they are excessively fond of a little meat as an adjunct tc their vegetable diet. Their objection was not to the meat, but to its having been cooked by us. My people, when satisfied with a meal like that which they enjoy so often at home, amused themselves by an uproarious dance. Katems sent to ask what I had given them to produce so much excitement. Intemese replied that it was their custom, and that they meant no harm. The companion of the ox we slaughtered rofused food for two days, and repeatedly tried to
escape back to the Makololo country. My men remarked, "He thinks, they will kill me as well as my friend." Katema thought it the result of art, and had fears of my skill in medicine and witchcraft. On this ground he refused to see the magic lantern.

We were visited by an old man who had been a constant companion of the late Matiamvo, and, as I was sitting in front of the little gipsy tent mending my camp-stool, I invited him to take a seat on the grass beside me. This was peremptorily refused: "he had never sat on the ground during the late shief's reign, and he was not groing to degrade himself now." One of my men, handing him a log of wood taken from the fire, helped him out of the difficulty. When I offered him some cooked meat on a plate he would not touch it, but would take it home; I therefore honoured him by sending a servant to bear a few ounces of meat to the town behind him. He mentioned the Lollo (Lulua) as the branch of the Zamberi (50) which flows southwards or S.S.E. ; but the people of Matiamvo had never gone far down it, as their chief had always been afraid of encountering a tribe who, from the description given, I could recognise as the Makololo. He described five rivers as falling into the Lolo, viz. the Lishish, Liss or Lise, Kaliléme, Ishidísh, and Molóng, none of which are large, but, when united in the Lolo, form a considerable stream. The country through which the Lolo flows is said to be flat, with large patches of forest, and well peopled. In this report he agreed perfectly with the people of Matiamvo whom we had met at Quendende's village. But we never could get him, or any one in this quarter, to draw a map on the ground as people do in the south.

Katema promised us some of his people as carriers but his authority does not appear to be very efficient, for they refused to turn out for the work, and persisted in their refisal even though our guide Sbakatwala ran after some of them with a drawn sword. They were Balobals; and he remarked that, though he had received them as fugitives, they did not feel grateful enough to obey, and if they continued rebellious he inust drive them back whence they came: but there is little fear of that, as all the chiefs are excessively anxious to colleot men in great numbers around them.

Un Sunday, the 19th, both I and several of our party were seized with fever, and I did nothing but toss about in my little tent, with tho thermometer above $90^{\circ}$, though this was the beginning of winter, and my men had made as much shade as possible by planting branches of trees all over it. We have had, for the first time in my experience in Africa, a cold wind from the north. The winds from that quarter are generally hot, and those from the south cold, though they seldom blow from either direction.

The people of Katema are fond of singing-bird. One pretty little songster, named "cabazo," a species of canary, is kept in neatly-made cages, having traps on the top to entice its still free companions. It is fed on the lotsa (Pennisetum typhoideum), which is largely cultivated as food for man, and which the wild canaries attack as vigorously as the sparrows do our fruit-trees. I was pleased to hear the long-forgotten cry of the canaries in the woods, and I observed one warbling forth its song, and swaying from side to side, as they do in the cage. We saw also tame pigeons, having the real canary colour on the breast with a tinge of green; the back yellowish green, with darker lomgitudinal bands meeting in the centre; and a narrow dark band passing from the bill over the eye and back to the bill again.

The songsters here set up quite a merry chorus in thè mornings, and abound most near the villages. Some sing as loudly as our thrushes, and the king-hanter (Halcyon Senegalensis) makes a clear whirring sound like that of a railway guard's whistle. During the heat of the day they take their siesta in the shadiest parts of the trees, but in the cool of the evening they renew their pleasant melody. It is remarkable that so many song-birds abound amid a general paucity of other animal life. As we went forward we were struck by the comparative absence of game and the laigem fid of fowls: the rivers contain very few fish: flies are not troublesome: and mosquitoes are seldom so numerous as to disturb the slumbers of a weary man.

But though this region is free from common insect plagues and from tsetse, it is much infested with spiders, some of which inflict severe and, according to report, even fatal stings. I was on one occasion stang by a light-coloured spidel
about half an inch in length, and for two hours I saffered very acute pain. 1 have not met with an instance of a sting followed by fatal results, but I have seen a black hairy spider with a process at the end of its front claws similar to that at the end of the scorpion's tail, from the point of which, when the bulbous portion of it is pressed, the poison may be seen oozing out. A large reddish spider (Mygale), named by the natives "seláli," runs about with great velocity, searching for what it may devour, and, from its size and rapid motions, excites the horror of every stranger. Although I never knew it to do any harm, yet I believe few could look upon it for the first time without feeling himself in danger. Its nest is most ingeniously covered with a hinged cover or door, about the size of a shilling, the inner face of which is of a pure white silky substance, like paper, while the outer one is coated over with earth precisely like that in which the hole is made, so that, when it is closed, it is quite impossible to detect the situation of the nest. Unfortunately, this cavity for breeding is never seen, except when the owner is out and has left the door open behind her. We must again notice a large beautiful yellow-spotted spider, the webs of which are about a yard in diameter. The lines on which these webs are spun are suspended from one tree to another, and are as thick as coarse thread. The fibres radiate from a central point, where the insect waits for its prey. The webs are placed perpendicularly, and hence a person walking frequently gets his face enveloped in them just as in a veil. Another kind of spider is gregarious, and forms so great a collection of webs as to obliterate all traces of the hedge or the trunk about which they are spun. Another, which frequents the inside of the huts among the Makololo in great abundance, is round, spotted, of a brown colour, and half an inch in diameter. It makes a smooth spot for itself on the wall, covered with the above-mentioned white silky substance. There it is seen standing the whole day, and I never could ascertain how it fed. It has no web, but a carpet, and is a harmiess, though an ugly neighbour.

20th.-We were glad to get away, though not: on account of any scarcity of food; for my men, by giving small presents of meat as an earnest of their sincerity, formed many friendships:
with the people of Katema. Having proceeded six miles in a N.W. direction, we reached lake Dilolo, which is about a quarter of a mile broad at its eastern extremity, but attains a maximum width of three miles, and a length of seven or eight. It is well supplied with fish and hippopotami. I was too much exhausted with fever either to explore its shores, or to determine by astronomical observations its exact position.

Immediately beyond Dilolo there is a large flat abont twenty miles in breath. Heavy rains prevented us from crossing this in one day, and the constant wading among the grass hurt the feet of the men. There is a footpath all the way across, but, as this is wern down beneath the level of the rest of the plain, it is necessarily the deepest portion, and is therefore avoided. For this reason our progress was slow and painful.

I was much struck with the sagacity of the ants which frequent these flooded plains. They erect for themselves little houses of black tenacious loam on stalks of grass, at a point above high-water mark, into which they ascend during (51) the period of the inundation. These tenements must have been erected before the inundation commences, for, if they had waited till the water actually invaded their terrestrial habitations, they would not have been able to procure materials for their aërial quarters, unless they dived down to the bottom for every mouthful of clay. Some of these upper chambers are about the size of a bean, and others as large as a man's thumb.

## CHAPTER XVIII.

Tefe Kasai.-Crosifing the ndana Loke.-Troubles in the terri tory of the Chiboque.

24th February.-On reaching unflooded lands beyond the plain, we found the villages under the authority of a chief named Katénde, and we also discovered that the plain forms the watershed between the southern and northern rivers, for wo had now entered a district in which the rivers flowed in a
nurtherly direction, while those hitherto crossed were all running oouthwards. Having met with kind treatment at the first village, we parted with Katema's guides, and, under the direction of the inhabitants, followed a route to the N.N.IV., which led us down into a deep valley, along the bottom of which ran a stream from the plains above. We crossed this by a rustic bridge at present submerged thigh-deep by the rains. The trees growing on the banks of the stream were thickly planted and very high, many of them having sixty or eighty feet of clean straight trunk : beautiful flowers adorned the ground beneath them. Ascending the opposite side, we came in two hours' time to another valley equally beautiful. and also having a stream in it. It may seem at first sight mere trifling to note such an unimportant thing as the occurrence of a valley, but I do so inasmuch as these valleys were found to belong to the water-basin of the Kasai or Loke, and as ] wish to point out the manner in which the waters of this rives are supplied.

At different points on the slopes of these valleys there arc oozing fountains, surrounded by clumps of the same evergeen, straight, large-leaved trees which fringe the streams, and generally covered with a thick mat of grassy vegetation. These groups of foliage give a peculiar character to the landscape, being generally of a rounded form, and the tall, straight tiunks contrasting strongly with the scraggy productions of the upper plains. 'There can be little doubt but that the water, which stands for months on the plains, finds it. way into the rivulets by percolating through the soil, and emerging at these oozing bogs; and the difference in thr growth of the trees may be a proof that the stunied character of those on the plains is owing to the drought to which they are subjected during a portion of the vear.

In the evening we reached the village of Kabinje, who sent us a present of tobacco, Mutokuane or "bang" (Cannabis sativa), and maize, and expressed his satisfaction at the prospect of having trade with the coast. We were now coming among people who are frequently visited by the Mambari, as slave-dealers. This trade entails bloodshed; for it is necessary to get rid of the older members of a family selected as victims. because they are supposed to be able to give annoyance ts
the chief afterwards by means of enchantments. The belief in the power of chamis for good or evil produces not only honesty, but a great amount of gentle dealing. The powerful are often restrained in their despotism, from a fear that the weak and helpless may injure them by their medical knowledge. They have many fears. A man at one of the villages Fie came to showed us the grave of his child, and, with much apparent feeling, told us she had been burned to death in her hut. He had come with all his family, and built huts around it in order to weep for her, in the belief that, if the grave were left unwatched. the witches would injure them by putting medicines on the body They have a more decided belief in the continued existence of departed spirits than any of the more southerly tribes. Even the Barotse possess it in a strong degree, for one of my men of that tribe, on experiencing headache, said, with a sad countenance, "My father is scolding me liecause I do not give him any of the food I eat." I asked where his father was. "Among the Barimo," was the reply.

When we wished to move on, Kabinje refused a guide to the next village, because he was at war with it; but after much persuasion he consented, provided that the guide should return as soon as he came in sight of the enemy's village. This we felt to be a misfortune, as the natives suspect a man who comes telling his own tale; but there being no help for it, we proceeded and found the hear.-man Kangenke very different from what his enemy represented him to be. We found too that here the idea of buying and selling superseded that of giving, and, as I had nothing with which to purchase food except a parcel of beads which were reserved for emergencies, I began to fear that we should soon suffer severely from hunger. The people demanded gunpowder for everything, and, had we possessed a large quantity of that article, we should have got on well. Next to that, Englist. calico was in great demand, and so were beads; but money was of no value whatever, trade being carried on by barter alone. Gold is quite unknown, and is mistaken for brass. Occasionally a large piece of copper, in the shape of a St. Andrew's cross, was offered for sale.

27th February.-Kangenke promptly furnished gnides this


RIVER SCENERY ON THE WEST COAST
taorming, who shortly brought us to the banks of the Kasye, Kasai, or Loke, which is about one hundred yards broad in this part, and runs to the north and north-east. The scenery on its banks is most charming, and reminded me much of my native Clyde: it meanders through the glen, at one time embowered in sylvan vegetation, at another time gleaming amid verdant meadows. The men pointed out its course and said, "'Though you sail along it for months, you will turn without seeing the end of it." We crossed it in canoes in $11^{\circ}$ $15^{\prime} 47^{\prime \prime}$ S. lat.

We were now in want of food, for, to the great surprise of my companions, the people of Kangenke gave nothing, and charged a most exorbitant price for the meal and manioc they brought. As the only article of barter my men had was a little fat saved from the ox slaughtered at Katema's, I was obliged to give them a portion of my stock of beads. We saw moreover that we were in a land where no animal food was to be had, for one of our guides caught a light-blue coloured mole and two mice for his supper, and the care with which he wrapped them up in a leaf and slung them on his spear told us that we could not hope to enjoy any larger game. We saw no trace of any other animals than these; and, on coming to the villages beyond this, we often saw boys and girls engaged in digging up these tiny quadrupeds.

On the 29th we approached the village of Katende, whc sent for me on the next day, and invited me to enter a hut, as it was raining at the time. After a long time spent in giving and recciving messages from the great man, we were told that he wanted either a man, a tusk, beads, copper rings, or a shell, as a toll. No one, we were assured, was allowed to pass through his country, or even to behold him, without something being presented. Having humbly explained our circumstances, and that he could not expect to " catch a humble cow by the horns,"-a proverb similar to our "drawing blood from a stone "-we were told to go home, and he would speak again to us next day. I could not avoid laughing at the impudence of the savage, but, as it was thought advisable to propitiate him by a small present, I turned out my shirts, and, having selected the worst as a sop for him, I invited him to come and choose anything else I had, adding that, when I
should reach my own chief naked, and was asked what I had done with my clothes, I should be obliged to confess that I had left them with Katende. The shirt was despatched. accompanied by some of my people, who soon returned with the news that it had been accepted, and that guides and food would be sent to us next day. The chief moreover expressed a hope to see me on my return. My men were as much astonished as myself at the demands of the chief as well as al his inhospitality: he only gave us a little meal and manioc and a fowl. After a detention of two days by heavy rains, we felt that a good stock of patience was necessary in travelling through this country in the rainy season.

Passing onwards without seeing Katende, we crossed a small rivulet, the Sengko, and after two hours came to another, somewhat larger, the Totélo, which had a bridge. over it. At the further end of this structure stood a negro, who demanded toll on the ground that the bridge was his; and that, if we did not pay, he would prevent our progress. Astounded at such a stretch of civilization, I stood a few seconds confronting our bold toll-keeper, when one of my men took off three copper bracelets, which paid for the whole party. The negro was a better man than he at first seemed to be, for he immediately went to his garden and brought us some leaves of tobacco as a present.

When we had got fairly away from the villages the guides from Kangenke told us that there were three paths in front, and that, if we did not at once present them with a cloth, they would leave us to ourselves. As I had pointed out the direction in which L.canda lay, and had only employed them for the sake of knowing the paths between villages which lay along our route, I wished my men to dispense with them: but Mashauana, fearing lest we might wander, asked leave to give his own cloth, and, when the guides saw that, they came forward shouting, "Averié, Averié!"

In the afternoon of this day we came to a valley about a mile wide, the bottom of which was completely under water. The men on foot were chin-deep in crossing, and we three on oxback got wet to the middle, as the animals' burdens prevented thiom from swimming. A thunder-shower completed the drenching, and gave an uncomfortable "packing in a wet
blanket" for that night. Next day we found anuther flooded valley about half a mile wide, with a small and now deep rivulet in its middle, flowing rapidly towards the Kasai. The mid-stream was su rapid that we crossed by holding on to the oxen, which were carried by the force of the current to the opposite bank; we then jumped off, and pulled them on to the shallower part. The rest of the valley was thighdeep and boggy, but, by holding on by the belt which fastened the blanket to the ox, we floundered through as well as we could. These boggy parts stretched for miles along each bank; but even here, though the rapidity of the current was very considerable, the thick sward of grass was "laid" flat along the sides of the stream, and the soil was not so much ubraded as to discolour the flood. On the opposite side of this valley we met with some pieces of the ferruginous conglomerate which forms the capping of all the rocks in the surrounding district: the oxen bit at them as if surprised at the appearance of stone, or perhaps because it contained some mineral of which they stood in need. The country is covered with deep alluvial soil of a dark colour and very fertile.

In the afternoon we caine to another stream, named nuana Luke (or child of Loke), with a bridge over it, which, however, was so deeply flooded that the men had to swim of to it, and when on it were breast-deep. Some preferred holding on by the tails of the oxen the whole way across, and I intended to do this, but, before I could dismount, the os dashed off with his companions, and soon sank so deep that I failed even to catch the blanket belt, and was obliged to strike out for the opposite bank alone. My puor fellows were dreadfully alarmed when they saw me parted from the cattle; about twenty of them made a simultaneous rush into the water for my rescue, and just as I reached the opposite bank one seized my arm, and another clasped me round the body. Wheu I stood up it was most gratifying to see them all struggling towards me. Some had leaped off the bridge, and allowed their cloaks to float down the stream. Part of my goods, abandoned in the hurry, were brought up from 'he bottom after I was safe. Great was the pleasure expressed when they found that I could swim like themselves, and I felt most gratefnl to these poor heathens for the promptitude
with which they dashed in to my rescue. In the evening we crossed the small rivulet Lozéze, and came to some villages of the Kasábi, from whom we got some manioc in exchange for beads. They tried to frighten us by telling of the deep rivers we should have to cross, but my men laughed at the idea: "We can all swim," said they; "who carried the white man across the river but himself?" I felt proud of their praise.

Saturday, 4th March.-We reached the outskirts of the terri(52)tory of the Chiboque. We crossed the Konde and Kalúze, the former a deep small stream with a bridge, the latter an insignificant rivulet, each flowing through a valley of remarkable fertility. My companions are continually lamenting over these uncultivated vales in such words as these,"What a fine country for cattle! My heart is sore to see such fruitful valleys for corn lying waste!" At first I conceived that the reason why the inhabitants of this fine country possessed no herds of cattle was owing to the despotic sway of their chiefs, but I have since conjectured that the country must formerly have been infested by the tsetse, which has now disappeared along with the wild animals on which it. subsists. This was probably the case in the country of the Balonda, who, by the possession of guns, had cleared most of the country of the large game, and had thus fitted it for the reception of cattle. Hence the success of Katema, Shinte, and Matiamvo with their herds. It would not be surprising if they knew nothing of this explanation; for I once met with a tribe on the Zambesi whose country was swarming with tsetse, but who believed that they could not keep any cattlo because " no one loved them well enough to give them the medicine of oxen ;" and even the Portuguese at Loanda attributed the death of the cattle brought from the interior to the sea-coast to the projudicial influence of the sea air! One ox which I took down to the sea from the interior died at Loanda with all the symptoms of the poison injected by tsetse, which I myself saw in a district within a hundred miles of the coast. While at the villages of the Kasabi we saw no evidence of want of food. Our beads were very valuable, but cotton cloth would have been still more so ; as we travelled along, men, womon, and children came running
after us with meal and fowls for sale, which we might readily have obtained in exchange for English manufactures. When they heard that we had no cloth they turned back much disippointed.

The amount of population in the central parts of the cointry may be called large, as compared with the Cape Colony or the Bechuana country. The cultivated land is as nothing compared with what might be brought under the plough. There are flowing streams in abundance, which might, with little labour, be turned to the purpose of irrigation. Miles of fruitful country are now lying absolutely waste, for there is not even game to eat off the fine pasturage, and to recline under the evergreen shady groves which present themselves along our path. The people who inhabit the central region are not all quite black : many incline to a bronze hue, and others are as light as the Bushmen; who, it may be remembered, were cited as a proof that a black complexion is due not to heat alone, but to the combination of heat and moisture. 'Io this general law there are exceptions, caused by the migrations of both tribes and individuals; the Makololo for instance, who have a sickly sallow hue when compared with the aboriginal inhabitants ; and the Batoka, who, when seen in company with the Batoka of the rivers, are so much lighter in colour that they might be taken for another tribe.

Having reached the village of Njambi, one of the chiefs of the Chiboque, on the day above specified, we intended to pass a quiet Sunday; and as our provisions were quite spent, I ordered an ox to be slaughtered. We sent the hump and ribs to Njambi, with the explanation that this was the customary tribute to chiefs in the part whence we had come, and that we always honoured men in his position. He returned thanks, and promised to send food. Next morning he sent an impudent message demanding either a man, an ox, a gun, powder, cloth, or a shell ; and in the event of refusal, he intimated his intention of preventing our further progress. We replied, that, even supposing we possessed the articles demanded, he ought not to impose a tribute on any but a slave-trading party. The servants who brought the message said that, when sent to the Mambari, they had always got a quantity of cloth for
their master, and that they now expected the same, or an equivalent, from me.

About mid-day Njambi collected his people, and surrounded our encampment, with the evident object of plundering un of everything. My men seized their javelins, and stood on the defensive, while the young Chiboque brandished their swords with. great fury, and some even levelled their guns at me. I sat on my camp-stool, with my double-barrelled gun across my knees, and invited the chief to be seated also. When he and his counsellors had sat down on the gromnd in front of me, I asked what crime we had commited that he had come armed in that way. He replied that one of my men, Pitsane, while sitting at the fire that morning, had, in spitting. allowed a small quantity of the saliva to fall on the leg of one of his men. Pitsane admitted the fact, and, in proof of its being a pure accident, mentioned that he had wiped it off with his hand as soon as it fell. This explanation, however, was not received, and compensation was demanded to the extent of a man, an ox, or a gun. I refused, of course, such an unreasonable demand, and after a considerable parley I gave him one of my shirts. The young Chiboque were dissatisfied, and began shouting and brandishing their swords for a greater fine. At the request of Pitsane I added a bunch of beads, and again, when the counsellors objected, a large handkerchief. The more I yielded, however, the more unreasonable they became, and at every fresh demand a shout was raised, and a rush made around us with brandished weapons. One young man even made a charge at my head from behind, but I quickly brought round the muzzle of my gun to his mouth, and he retreated. I felt anxious to avoid the effusion of blood, and therefore, though sure of being able with my Makololo to drive off twice the number of our assailants, I strove to avoid actual collision. My men were quite unprepared for this exhibition, but behaved with admirable coolness. The chief and his counsellors, by accepting my invitation to be seated, had placed themselves in a trap; for my men had quietly surrounded them, and made them feel that there was no chance of escaping their spears. I then suid, that, as everything had failed to satisfy them, it was evident that thes


GROUP OF CHIBOQUE NATIVES
wanted to fight, and, if so, they must begin first and bear thed. gnilt before God. I then sat silent for some tine. If ens, certainly rather trying, because I knew that the Chiboque would aim at the white man first; but I was careful not to. appear flurried, and, having four barrels ready for instant action, looked quietly at the savage scene around. The chief and his counsellors, seeing themselves in greater danger than I was, and influenced perhaps by the air of cool preparation which my men displayed, at last put the matter before us in this way: "You say you are quite friendly: but how can we know it. unless you give us some of your food, and you take some of ours? If you give us an ox we will give you whatever you may wish, and then we shall be friends." In accordance with the entreaties of my men I gave an ox; and being asked what I should like in return, I mentioned food, as the thing which we most needed. In the evening Njambi sent a very small basket of meal, and two or three pounds of the flewh of our own ox! with the apology that he had no fowls, and very little food of other kinds. It was impossible to avoid laughing at the coolness of these generous creatures. I was truly thankful nevertheless that we had so far gained our point as to be allowed to pass on without having shed human blood.

March 6th.-We were informed that the people living to the west of the Chiboque of Njambi were familiar with the visits of slave-traders; and as it was the opinion of our guides from Kangenke that so many of my companions would be exacted of me that I should reach the coast without a single attendant, I resolved to strike away to the N.N.E., in the hope that at some point farther north I might find an exit to the Portuguese settlement of Cassange. We proceeded at first due north, with the Kasabi villages on our right, and the Kasau on our left. During the first twenty miles we crossed many swollen streams, having the same boggy banks as I Luave already described, and wherever the water had stood for any length of time it was discoloured with rust of iron. We saw a "nakong" antelope one day, a rare sight in this quarter; and many pretty flowers adorned the valleys. We could observe the difference in the seasons as we advanced northwards in company with the sun. Summer wan now
nearly over at Kuruman, and far advanced at Linyanti, but here we were in the middle of it; fruits which we had eaten ripe on the Zambesi were here quite green; but we were coming into the region where the inhabitants are favoured with two rainy seasons and two crops, viz., when the sun is going south, and when it returns to the north.

On the 8th one, of my men, having left an ounce or two of powder at our sleeping-place, went back several miles for it. I was compelled to wait for him, and, as my clothes were wet at the time, I caught a violent fit of fever. 'This was a source of much regret, for the next day was, for a wonder, fine, but I was so prostrated by the fever that I could scarcely manage, after some hours' trial, to get a lunar observation in which I could repose confidence. Those who know the difficulties of making observations, and commiting all of them to paper, will sympathise with me in this and many similar instances. We crossed a rivulet named the Chihune, which flows into the Longe, and ultimately into the Kasai. Some villagers brought us wax for sale, and, finding that we wished for honey, they soon returned with a hive. All the bees in this country are private property, for the natives place hives sufficient to house them all. We therefore paid no attention to the call of the honey-guide, for we were sure it would only lead us to a hive which we had no right to touch. The bird continues its habit of inviting attention to the honey, though its services in this district are never actually needed.

As we traversed a succession of open lawns and deep forests, it was interesting to observe the manner in which trees adapt themselves, almost as if by instinct, to different circumstances. I noticed one, for instance, which on open ground grows as an ordinary umbrageous tree, but, when it gets into the forest, where it is overshadowed by loftier trees, secures for itself a fair share of light and air, either by sending out an arm, which climbs to the top of a neighbouring tree, or by converting itself wholly into a climber. In the former case it retains its original form and has a double head, below and above; in. the latter case it has but a single head.

In passing through the narrow paths I had an opportunity of observing the peculiarities of my ox "Sickad," who was blessed with a most intractable temper Being unahle to d.
any damage with his horns, which were bent downwards and hung loosely, he adopted another mode of venting his spleen. As we wended our way slowly along the path, he would suddenly dart aside, and, in spite of all my endeavours, would persist in his course until I was unseated by some climber that crossed the path, when he availed himself of the opportunity to try to kick me. The ordinary method of guiding an ox is by a string tied to a stick put through the cartilage of the nose ; but Sinbad was utterly indifferent to the hints he received through this contrivance whenever he determined on taking his own course.

A remarkable peculiarity in the forests of this country is the absence of thorns; there are but two exceptions-one bearing a species of nux vomica; another, a small shrub very like the sarsaparilla, bearing in addition to its hooked thorns bunches of yellow berries. This absence of thorns is especially noticeable to those who have been in the south, where we have thorns of every size and shape; straight and curved, thin and long, short and thick, and so strong as to be able to cut even leather like a knife. Seed-vessels are scattered everywhere by these appendages. One lies flat as a shilling, with two thorns in its centre, ready to run into the foot of any animal that treads upon it, and stick there for days together. Another (the Uncaria procumbens, or grapple-plant)


Seed-vessel of the "grapple-plant."
has so many hooked thorns as to cling most tenaciously to any animal to which it may become attached; when an ox gets one on his mouth, the animal stands roaring with pain and a sense of helplessness.

Wherever a part of the forest which has once been cleared for a garden is afterwards abandoned, a plant with leaves like those of ginger springs up, and contends with a crop of ferns for the possession of the soil. This is the case all the way down to Angola, and shows the great difference of climate between this and the lechuana country, where ferns, except one or two hardy species, are never seen. The plants above mentioned bear a pretty pink flower close to the ground, which is succeeded by a scarlet fruit full of seeds, yielding a pleasant acid juice. The prevalence of such acids is one of the characteristics of the fruits of this country, and is probably intended as a corrective to the fluids of the system in the hot climate.

On leaving the Chihune we crossed the Loange, and, as the day was cloudy, our guides, who depended on the sun for guidance, wandered away to the west till we came to the river Chilombo, flowing to the E.N.E. They then thought that they had wandered back to the Chiboque, and began to dispute as to the point where the sun should rise next morning. It would have been better to have travelled by compass alone, for the guides took advantage of any fears expressed by my people, and threatened to return if presents were not at once made to them.

Saturday, 11th.-As soon as the rains would allow us we went off to the N.E., and reached a small village on the banks of a narrow stream. I was too ill to leave my shelter, except to quell a mutiny which began to show itself among some of the Batoka and Ambonda of our party. They grumbled because they supposed that I had shown partiality in the distribution of the beads; but I explained to them that the beads I had given to my principal men were only sufficient to purchase a scanty meal, and that I had hastened on to this village in order to slaughter a tired ox, and give them all a feast on Sunday. Having thus, as I thought, silerced their murmurs, I soon sank into a state of stupor, which the ever sometimes produced, and was obliviuns to all their noise in.
slaughtering. On Sunday the mutineers were makirg a terrible din in preparing a skin they had procured. I requested them twice to be more quiet, as the noise pained me: but as they paid no attention to this civil request, I put out my head, and, repeating it myself, was answered by an impudent laugh. Knowing that discipline would be at an end if this mutiny were not quelled, and that our lives depended on vigorously upholding authority, I seized a double-barrelled pistol, and darted forth with such a savage aspect as to put them to a precipitate flight. They immediately became very obedient, and never afterwards gave me any trouble, or imagined that they had any right to my property.

13 th. - We went forward some miles, but were brought to a stand by the severity of my fever on the banks of a branch of the Loajima, another tributary of the Kasai. I was in a state of partial coma until late at night, when it became necessary for me to go out; and I was surprised to find that my men had built a little stockade, and had taken to their weapons. We were surrounded by a party of Chiboque, who lay near the gateway, preferring the demand of "a man, an ox, a gun, or a tusk." My men had prepared for defence in case of a night attack, and, when the Chiboque inquired about my position in the camp, they very properly refused to point me out. In the morning I went out to the Chiboque, who answered me civilly regarding my intentions in opening the country, and said that they only wished to exchange tokens of goodwill with me, and had brought three pigs, which they hoped I would accept. I accepted the present in the hope that the blame of unfriendliness might not rest with me, and in return I presented a razor and two bunches of beads, together with twelve copper rings, which my men contributed from their arms. They went off to report to their chief; and as I was quite unable to move from excessive giddiness. we continued in the same spot all Tuesday. On the evening of that day they returned with a message couched in very plain terms, that a man, a tusk, a gun, or even an ox, woilid be acceptable to the chief, and that whatever I should please to demand from him he would gladly give. As this was all said civilly, and as there was no alternative but bloodshed if we refused, I gave a tired riding-ox. My late chief mutineer
an Ambonda man, was now uver-loyal, for he armed himself and stood at the gateway, asserting that he would rather die than see his father imposed on; but I ordered Mosantu to take him out of the way, and the Chiboque marched off well pleased with their booty. I told my men that I esteemed one of their lives more valuable than all the oxen, and that I would only fight to save the lives and liberties of the majority. In this they all agreed, and said that, if the Chiboque molested us, the guilt would be on their heads. It is a favourite mode of concluding any explanation of an act to say, "I have no guilt or blame " (" molatu"), or "They have the guilt." I never could be positive whether the idea in their minds is guilt in the sight of the Deity, or of mankind only.

Next morning the Chiboque returned with about thirty yards of strong striped English calico, an axe, and two hoes for our acceptance. I divided the cloth among my men, and pleased them a little by thus compensating them for the loss of the ox. I advised the chief to get cattle for his own use, and expressed sorrow that I had none wherewith to enable him to make a commencement. Rains prevented our proceeding till Thursday morning, when messengers appeared to tell us that the chief had learned that some of the cloth sent by him had been stolen by the persons ordered to present it to us, and that he had stripped them of their property as a punishment. Our guides thought these to be only spies of a larger party concealed in the forest through which we were now about to pass. We prepared therefore for defence by marching in a compact body, and allowing none to straggle. Nothing however disturbed us, and, for my own part, I was too ill to care much whether we were attacked or not. A pouring rain came on, but, as we were all anxious to get away out of so bad a neighbourhood, we proceeded. The thick atmosphere prevented my seeing the creeping plants in time to avoid them ; so Pitsane, Mohorisi, and I, who alone were mounted, were often caught; and as there is no stopping the oxen when they have the prospect of unseating their riders, we came frequently to the ground. In addition to these mishaps, Sinbad went off at a plunging gallop, the bridle broke, and down I came backwards on the crown of my head, receiving, as I fell, a kick on the thigh. I felt none the
worse for this rough treatment, but I would hardly recommend it to others as a palliative in cases of fever. This last attack of fever reduced me almost to a skeleton. The blanket which I used as a saddle, being pretty constantly wet, caused extensive abrasion of the skin, which was continually healing and getting sore again. To this inconvenience was now added the chafing of my projecting bones on the hard bed.

On Friday we came to a village of civil people on the banks of the Loajima. The bridges over it, and over another stream which we crossed at midday, were submerged by a flood of perfectly clear water, and we consequently got a soaking in crossing them. At the second ford we were met $; ;$ a hostile party who refused us further passage. I ordered my men to proceed, but our enemies spread themselves out in front of us with loud cries. As our numbers were about equal to theirs, I moved on at the head $c^{f}$ my men. Some of the enemy ran oft to other villages, or back to their own, on pretence of getting ammunition; others called out that all traders came to them, and that we must do the same. As they had plenty of iron-headed arrows and some guns, I ordered my men to cut down some young trees and make a screen as quickly as possible, but to do nothing further except in case of actual attack. I then dismounted, and, advancing a little towards our prin cipal opponent, showed him how easily I could kill him, and then, pointing upwards, said, "I fear God." He did the same, placing his band on his heart, pointing upwards, and saying, " I fear to kill; but come to our village; come-do come." At this juncture the old head-man, Ionga Panza, a venerable negro, came up, and I invited him to be seated, and talk the matter over. Ionga Yanza soon let us know that he thought himself very ill-treated in being passed by. As most skirmishes arise from misunderstanding, this might have been a serious one; for, like all the tribes near the Portuguese settlements, they imagine that they have a right to demand payment from every one who passes through the country; and now, though Ionga Panza was certainly no match for my men, yet they were determined not to forego that right without a struggle. I removed with my men to the vicinity of the village, which was pleasantly embowered ir lofty evergreen trees hung rourd with festoons of creepers. He sent us
food immediately, and soon afterwards a goat, which was considered a handsome gift, as domestic animals were scarce in this district, owing probably to this former prevalence of the tsetse. The position of the village was $10^{\circ} 25^{\prime} \mathrm{S}$. lat., $20^{\circ} 15^{\prime}$ E. long.

On the 20th the same demand of payment for leave to pass was made by old.Ionga Panza as by the other Chiboque. I offered the shell presented by Shinte, but Ionga Panza said he was too old for ornaments. We might have succeeded very well with him, had not our two guides from Kangenke complicated our difficulties by sending for a body of Bangala traders, with a view to force us to sell the tusks of Sekeletu and pay them with the price. We offered to pay them handsomely if they would perform their promise of guiding us to Cassange, but they knew no more of the paths than we did; and my men had paid them repeatedly, and tried to get rid of them, but could not. They now joined our enemies, as did also the traders. Two guns and some beads, belonging to the latter, were standing in our encampment, and the guides seized them and ran off. As my men knew that we should have to replace them, they gave chase, upon which the guides threw down the guns, and, directing their flight to the village, rushed into a hut. The doorway of a native hut is not much higher than that of a dog's kennel. One of the guides was in the act of stooping to get in, when he received a cut on the projecting part of his body from one of my men, which must have made him wince. The guns were recovered, but the beads were lost in the flight. All my stock could not replace those lost; and though we explained that we had no part in the theft, the traders replied that we had brought the thieves into the country.

As we were anxious to effect a peaceful passage through the country, my men offered all their ornaments, and I all my beads and shirts; but matters could not be arranged without our giving an ox and one of the tusks, and to these terms I was at length compelled to accede. We were all becoming disheartened, and could not wonder that native expeditions from the interior to the coast had generally failed to reach
(53) their destinations. Some of my people proposed to return home ; and the prospect of being obliged to return when just
on the threshold of the Portuguese settlements distressed me exceedingly. After using all my powers of persuasion I declared to them that if they returned I should go on alone, und, retiring into my little tent, I lifted up my heart to Him who hears the sighing of the soul. Thither I was soon followed by the head of the Mohorisi, saying, "We will never leave you. Do not be disheartened. Wherever you lead we will follow. Our remarks were made only on account of the injustice of these people." Others followed, and with the most artless simplicity of manner told me to be comforted -" they were all my children; they knew no one but Sekeletu and me, and they would die for me; they had just spoken in the bitterness of their spirit, and when feeling that they could do nothing." One of the oxen offered to the Chiboque had been rejected because he had lost part of his tail, as they thought that it had been cut off and witchcraft medicine inserted; and some mirth was excited by my proposing to raise a similar prejudice against all the oxen we still had in our possession. The remaining four soon presented a singular shortness of their caudal extremities; and though no one ever asked whether they had medicine in the stumps, certain it is that we were no more troubled by the demand for an ox! We now slaughtered another ox, that the owners of the cattle might not be seen fasting while the Chiboque were feasting.

## CHAPTER XIX.

'I'hrough Bashinje terbitory to Cassange, and thence by 'Tala Mungongo, the Basongo territory, and the districts of ambaca and Golungo Alto, to Loanda

24th.-Ionga Panza's sons agreed to act as guides into the territory of the Portuguese if I would at once give them Shinte's shell. I was strongly averse to this, but I yielded to the entreaties of my people, and delivered up the precious shell. We went west-by-north to the river Chikápa, which is here (lat. $10^{\circ} 22^{\prime} \mathrm{S}$.) forty or fifty yards wide ; we crossed in a canoe made out of a single piece of bark sewed tngether at
the ends, and having sticks placed in it to acts as ribs. The word Chikapa means bark or skin; and as this is the only river in which we saw this kind of canoe used, it probably derives its name from the use made of them. We now felt the loss of our pontoon, for the people to whom the canoe belonged made us pay thrice over for our passage, viz. when we began to cross, when half of us were over, and when all were over but my principal man Pitsane and myself. Loyánke took off his cloth and paid my passage with it.

Next morning our guides went only about a mile, and then told us they should return home. This was just what I expected when paying them beforehand, in accordance with the entreaties of the Makololo. Very energetic remonstrances were addressed to them, but they slipped off one by one in the thick forest through which we were passing, and I was glad to hear my companions coming to the conclusion, that, as we were now in parts visited by traders, we did not require them. The country was somewhat more undulating than it had been, and several fine streams flowed in deep woody dells. The trees were tall and straight, and the forests gloomy and damp, the ground being quite covered with mosses, and the trees with light-coloured lichens. The soil was extremely fertile, being generally a black loam covered with a thick crop of tall grasses. We passed several villages, the head-man of one of which scolded us well for passing, when he intended to give us food. Where slave-traders have been in the habit of coming, they present food, and then demand three or four times its value in return. We were therefore glad to get past villages without intercourse with the inhabitants. We were now travelling W.N.W., and all the rivulets we here crossed had a northerly course, and were reported to fall into the Kasai or Loke; most of them bad the peculiar boggy banks of the country.

We spent Sunday (the 26th) on the banks of the Quilo, or Kweelo, a stream about ten yards wide, running in a deep glen, the rocky sides of which consist of hardened calcareous tufa lying on clay shale and sandstone below, with a capping of ferruginous conglomerate. The scenery would have been very pleasing if the fever would have allowod me to enjoy it.
The inhabitants of this district live in a state of glorioua
ease. Food abounds, and very little labour is required for its cultivation, the soil is so rich that no manure is required; and when a garden becomes worn out the owner removes a little farther into the forest, kills the larger trees by fire, cuts down the smaller ones, and has at once a new rich garden ready for the seed. Hence the gardens usually present the appearance of a great number of tall dead trees standing without bark, and maize growing between them. The old gardens continue to yield manioc for years after the owners have removed to other spots for the sake of millet and maize. But while vegetable aliment is abundant, there is a want of salt, and also of animal food, so much so that numberless mouse-traps are seen in all the forests of Londa.

The villages differed considerably in character: some were models of neatness: others were buried in a wilderness of weeds so high that, when sitting on ox-back in the middle of the village, we could only see the tops of the huts. If we entered such a one at midday, the owners would come lazily forth, pipe in hand, and leisurcly puff away in dreamy indifference. In some villages weeds are not allowed to grow ; cotton, tobacco, and different plants used as relishes, surround the huts; fowls are kept in cages; and the gardens present the pleasant spectacle of different kinds of grain and pulse at various stages of growth. Every village swarms with children, who turned out to see the white man pass, and sometimes scampered alongside our party for miles at a time, with strange cries and antics. We usually made a little hedge around our sheds; crowds of women came to the entrance of it, with children on their baoks and long pipes in their mouths, gazing at us for hours, and it was common to hear a man in running off say to them, "I am going to tell my mama to come and see the white man's oxen."

In continuing our W.N.W. course we met many parties of native traders, each carrying pieces of cloth and salt, with a few beads to barter for bees'-wax. They were all armed with Portuguese guns, and had cartridges with iron balls. When we met we usually halted for a few minutes, exchanged trifling presents, and then parted with mutual good wishes. The hide of the oxen we slaughtered had been a valuable addition to our resources, for we found it in such request for
girdles all through Londa, that we cut up every skin into strips about two inches broad, and sold them for meal and manioc as we went along. As we came nearer Angola we found them of less value, as the people there possessed cattle themselves.

The village on the Kweelo, at which we spent Sunday, was that of a civil, lively old man, called Sakandála, who offered no objections to our progress. We found we should soon enter on the territory of the Bashinje (the Chinge of the Portuguese), who are mixed with another tribe named Bangala. Rains and fever, as usual, helped to impede our progress until we struck the path leading from Cassange and Bihe to Matiamvo. This was a well-beaten track, and soon after entering upon it we met a party of half-caste traders from Bihe, who confirmed the information we had already got of its leading straight to Cassange. They kindly presented my men with some tobacco, and marvelled greatly when they found that I had never learnt to smoke. On parting with them we came to a half-caste trader's grave, marked by a huge cone of sticks arranged like the roof of a hut, with a palisade around it. At an opening on the western side an ugly idol was placed; and several strings of beads and bits of cloth were hung around.
'The Bashinje, in whose country we now were, seem to possess more of the low negro physiognomy than either the Balonda or Basongo; they have generally dirty black complexions. low foreheads, flat noses, and thick lips. They enlarge the nostrils by inserting bits of stick or reed; and they have the custom, to which we have previously adverted, of filing the teeth to a point. They cultivate the ground extensively, and rely upon their agricultural products for their supplies of salt, flesh, tobacco, \&c., which they get from the Bangalas. Their clothing consists of pieces of skin, hung loosely from the girdle in front and behind. They plait their hair fastastically: some women had their hair woven into the form of a hat, and it was only by a closer inspection that its nature was detected. Others had it arranged in tufts, with a threefold cord along the ridge of each tuft; while others, again, following the ancient Egyptian fashion, had the whole mass plaited intc cords which hung $\mathrm{l}^{\mathrm{c}} \mathrm{wn}$ to the shoulders.

This mode, with the somewhat Egyptian cast of ccuntenance in other parts of Londa, reminded me strongly of the paintings of that nation in the British Museum.

As we were now sure of being on the way to the abodes of civilisation, we went on briskly, and on the 30 th arrived at the edge of the high land over which we had lately been travelling. The descent is so steep that it can only be effected at particular points, and even there I was obliged to dismount, though so weak that I had to be supported by my companions. Below us, at a depth of from a thousand to twelve hundred feet, lay the magnificent valley of the Quángo. The view of the vale of Clyde from the spot whence Mary Queen of Scots witnessed the battle of Langside resembles in miniature the glorious sight which was here presented to our view. The valley is about a hundred miles broad, and is clothed with dark forest everywhere except along the banks of the Quango, which flows amid green meadows, and here and there glances out in the sun as it wends its way to the north. Emerging from the gloomy forests of Londa, this magnificent prospect made us all feel as if a weight had been lifted off our eyelids. When we reached the bottom of the valley, which from above seemed quite smooth, we discovered it to be furrowed by great numbers of deep-cut streams. The side of the valley, when viewed from below, appears as the edge of a table-land, with numerous indented dells and spurs jutting out all along, giving it a serrated appearance. Both the top and sides are generally covered with trees, but some bare patches in the more perpendicular parts exhibit the red soil which prevails in the region we have now entered.

The hollow affords a section of this part of the country; and we found that the uppermost stratum is the ferruginous conglomerate already mentioned. The strata under the conglomerate are all of red clay shale of different degrees of hardness, the most indurated being at the bottom. This red clay proved to be remarkably slippery, so much so that Mashauana, who prided himself on being so sure of foot that he could afford to express contempt for any one less gifted, came down in a very sudden and undignified manner, to this delight of all whom he had previocsly scolded for falling. We met with bamboos as thick as a man's arm, and with many
trees which we had not seen before, while others, which we had lost sight of since leaving Shinte, reappeared. Nothing struck us more than the scragginess of the trees in this hollow, as compared with the tall, straight trees on the high lands; nor were they by any means so closely planted together.

Sunday, 2nd April.-We rested beside a small stream, and, our hunger being now very severe from having lived so long on manioc alone, we slaughtered one of our four remaining oxen. The natives of this district seem to feel the craving for animal food just as much as we did, for they expend much energy in digging large white larræ out of the damp soil adjacent to the streams, to serve as a relish for their vegetable diet. The Bashinje refused to sell any food for the poor old ornaments my men had now to offer. We could get neither meal nor manioc; still we should have been comfortable, had not the Bashinje chief Sansáwé pestered us for the customary present. We told his messengers that we had nothing to offer: the tusks were Sekeletu's : everything was gone, except my instruments, which could be of no use to them whatever. One of them begged some meat, and, when it was refused, said to my men, "You may as well give it, for we shall take it all after we have killed you to-morrow." The more humbly we spoke, the more insolent the Bashinje became, till at last we all felt savage and sulky. They are fond of argument, and, when I denied their right to demand tribute from a white man who did not trade in slaves, an old white-headed negro put rather a posing question: "You know that God has placed chiefs among us whom we ought to support. How is it that you, who have a hook that tells you about Him, do not come forward at once to pay this chief tribute, like every one else ?" I replied by asking, "How could I know that this was a chief, who had allowed me to remain a day and a half near him without giving me anything to eat?" This, which may seem sophistry to the uninitiated, was quite a rational question to the central African, for he at once admitted that food ought to have been sent, and added, that probably his chief was preparing it, and it would come scon.

After being wearied by talking all day to different parties, we were honoured by a visit from Sansawe himself, who turned out to be quite a young man, and of rather a pleasing
countenance. There cannot have been much intercourse between real Portuguese and these people, though they live so close to the Quango, for Sansawe asked me to show him my hair, on the ground that he had never seen straight hair. The difference between their wool and our hair caused him to burst into a laugh, and the contrast between the exposed and unexposed parts of my skin seemed to strike him with wonder. I then showed him my watch, and wished to win my way into his confidence by conversation; but when I proceeded to exhibit my pocket compass he desired me to desist, as he was afraid of my wonderful things. As it was getting dark, he asked leave to go, and, when his party moved off a little way, he sent for my spokesman, and told him that, "if we did not add a red jacket and a man to our gift of a few copper rings and a few pounds of meat, we must return by the way we had come." I said in reply, " that we should certainly go forward next day, and if he commenced hostilities the blame before God would lie on Sansawe;" to which my man added of his own accord, "How many white men have you killed in this path?" implying that he had never killed one, and that he was not likely to do so this time.
$3 r d$ April.-At daybreak we were astir, and, setting off in a drizzling rain, passed close to the village. This rain probably damped the ardour of the robbers; for, though we expected to be fired upon from every clump of trees, or from some of the rocky hillocks among which we were passing, we were not molested. After two hours' march we began to breathe freely, and my men remarked, in thankfulness, " We are children of Jesus." We continued our course, notwithstanding the rain, across the bottom of the Quango valley, which we found broken by clay-shale rocks cropping out from a nearly horizontal stratum. The grass in the hollows was about two feet bigher than my head while sitting on ox-back, and, being saturated with rain, it acted as a shower-bath upon us. We passed several villages, one of which possessed a lock of sheep; and after six hours we balted near the river Quango (lat. $9^{\circ} 53^{\prime}$ S., long. $18^{\circ} 37^{\prime} \mathrm{E}$.), which may be regarded as the eastern boundary of the Portuguese coast territory. As I had now no change of clothing, I was glad to cower under the shelter of my blanket, trankful to God for His
goodness in bringing us thus far without the loss of one of the party.

4th April.-We were now on the banks of the Quango, here one hundred and fifty yards wide, very deep, and flowing among extensive meadows clothed with gigantic glass and reeds. It is said by the natives to contain many venomous water-snakes, which may account for the villages being situated far from its banks. We were advised not to sleep near it; but, as we were anxious to cross to the western side, we tried to induce some of the Bashinje to lend us canoes for the purpose. The chief of these parts, however, informed us that all the canoe-men were his children, and that nothing could be done without his authority. He then made the usual demand for a man, an ox, or a gun, adding that utherwise we must return to the country from which we had cume. As I suspected that, if I gave him my blanket-the only thing I now had in reserve-he might leave us in the lurch after all, I tried to persuade my men to go at once to the bank, about two miles off, and obtain possession of the canoes before


Basbinje chief's head-dress.
we gave up the blanket; but they thought that this might lead to an attack upon us while crossing. The chief carat
himself to our encampment and renewed his demand. My men stripped off the last of their copper rings and gave them; but he was still intent on a man, imagining, as others did, that my men were slaves. He was a young man, with his woolly hair gathered up at the back of his head into a cone about eight inches in diameter at the base, and elaborately swathed round with red and black thread. As I declined giving up my blanket until we were placed on the western bank, he continued to worry us with his demands till I was tired. My little tent was now in tatters, and, having a wider hole behind than the door in front, I tried in vain to evade my persecutors. As we were on a reedy flat, we could not follow our usual plan of a small stockade, in which we might concoct our plans. I was trying to persuade my men to move on to the bank in spite of these people, when a young half-caste P'ortuguese sergeant of militia, Cypriano di Abreu, who had come across the Quango in search of bees'-wax, made his appearance, and gave the same advice. When we moved off, the chief's people opened a fire from our sheds, and continued to blaze away sume time in the direction we were going, without effecting any damage. 'They probably expected that this evidence of abundant ammunition would make us run; but when we continued a steady advance to the ford, they proceeded no farther than our sleeping-place. Cypriano assisted us in making satisfactory arrangements with the ferrymen; and as soon as we reached the opposite bank we were in the territory of the Bangala, who are subjects of the Portuguese, and are otherwise known as the Cassanges or Cassantse; and happily all our difficulties with the border tribes were at an end.

Passing briskly through the high grass for about three miles west of the river, we arrived at some neat houses, guarded by cleanly-looking half-caste Portuguese, forming a detachment of militia, who were stationed here under the command of our friend Cypriano. The Bangala were very troublesome to the Portuguese traders, and at last proceeded so far as to kill one of them; upon which the government of Angola sent an expedition against them, and reduced them to a state of vassalage. The militia are quartered amongst them, and support themselves by trade and agriculture, no
pay being given to this branch of the service of the govern ment.
I pitched my little tent in front of the dwelling of Cypriano for the night. We here had the company of mosquitoes, with which we had never been troubled on the banks of the pure streams of Londa. On the morning of the 5th Cypriano generously supplied my men with pumpkins and maize, and then invited me to a magnificent breakfast, consisting of ground-nuts and roasted maize, followed by ground-nuts and boiled manioc-roots, and concluded with guavas and honey by way of dessert. At dinner he was equally bountiful, and several of his friends joined us in doing justice to his hospitality. Before eating, water was poured on the hands of each by a female slave. This proceeding was necessary, as forks and spoons were used only for carving, not for eating. The repast was conducted with decency and good manners, and was concluded by washing the hands as at first.

All of them could read and write with ease. The only books they possessed viere a small work on medicine, a small cyclopædia, and a Portuguese dictionary, besides a few tracts containing the Lives of the Saints. Cypriano had three small wax images of saints in his room, and both he and his companions had relics in German-silver cases hung round their necks, to act as charms and save them from dauger by land or by water, in the same way as the heathen have medicines. They were entirely ignorant not only of the contents, but even of the very name, of the Bible.

Much of the civility shown to us here was, no doubt, owing to the letters of recommendation I carried from the Chevalies Du Prat, of Cape Town; but I am inclined to believe that my friend Cypriano was influenced by feelings of genuine kind ness, excited partly by my wretched appearance, for he quite bared his garden in feeding us during the few days which 1 remained. He slaughtered an ox for us, and furnished his mother and her maids with maniuc-roots to prepare farina for the four or fiye days of our journey to Cassange, and never even hinted at payment. The farina is prepared by washing the roots well, then rasping them down to a pulp, which is roasted slightly on a metal plate, and is used as a vegetable with meat. It closely resembles wood-sawings and on that
account is named "wood-meal." Though insipid, it is relishod by those who have become accustomed to it, even after they have returned to Europe.

The manioc cultivated here is of the sweet variety: the bitter species, to which we were accustomed in Londa, is not often found in this fertile valley. Many of the inhabitants were busy planting maize, though it was now the beginning of winter; what we were now eating was planted in the beginning of February. The soil is exceedingly fertile, of a dark red colour, and covered with a dense crop of coarse grass, the stalks of which are generally as thick as goosequills. I was told by the Portuguese that, when a marauding party of Ambonda once came for plunder while it was in a dry state, the Bangala encircled them with a fire which completely destroyed them. I can easily believe this, for on one uccasion I nearly lost my waggon by fire, in a valley where the grass was only about three feet high. We were roused by the roar, as of a torrent, made by the fire coming from the windward. I immediately set fire to that on our leeward, and had just time to drag the waggon on to the bare space there, before the windward flames reached the place where it had stood.

We were detained by rains, and by my desire to ascertain our geographical position, until Monday the 10th, when I succeeded in getting the latitude ( $9^{\circ} 50^{\prime} \mathrm{S}$.). Wo thon started, and, after three days' hard travelling through the long grass, reached Cassange, the farthest inland station of the Portuguese in Western Africa, in lat. $9^{\circ} 37^{\prime} 30^{\prime \prime} \mathrm{S}$., and long. $17^{\circ} 49^{\prime} \mathrm{E}$. We crossed several streams running into the Quango ; but as the grass continued to tower about two feet over our heads, it generally obstructed our view of the adjacent country. I made my entrance among our l'ortuguese allies in a somewhat forlorn state as to clothing. The first gentleman I met in the village asked if I had a passport, and said that I must appear before the authorities. I gladly accompanied him to the house of the Commandant, Senhor Rego, who, having inspected my passport, politely asked me to supper. As I had eaten nothing except the farina of Cypriano from the Quango to this, I might have appeared particularly ravenous to the other gentlemen around the table; but they seemed to under
stand my position pretty well, from having all travelled extensively themselves. Indeed, had they not been present, I should have pocketed some to eat by night, for, after fever, the appetite is excessively keen, and manioc is one of the most unsatisfying kinds of food. Captain Neves then invited me to take up my abode in his house, and next morning generously arrayed me in decent clothing. During the whole period of my stay he treated me as if I had been his brother, and I feel deeply grateful to him for his disinterested kindness both to myself and my party.

The village of Cassange (pronounced Kassanjé) is composed of thirty or forty traders' houses, built of wattle and daub, irregularly scattered about on an elevated spot in the great Quango valley. They are surrounded by plantations of manioc, maize, \&c., and generally possess kitchen gardens, stocked with the common European vegetables, as potatoes, peas, cabbages, onions, tomatoes, \&c. \&c. Guavas and bananas appear, from the size and abundance of the trees, to have been introduced many years ago, but pine-apples, orange, fig, and cashew-trees have but lately been tried. There are about forty Portuguese traders in this district, all of them officers in the militia, many of whom have become rich from adopting the plan of sending out Pombeiros, or native traders, with large quantities of goods, to trade in the more remote parts of the country. The extent to which these native traders carry their expeditions appears from the fact that two of them, called in the history of Angola "the trading blacks" (os feirantes pretos), having been sent by the first Portuguese trader that lived at Cassange, actually returned from some of the Portuguese possessions in the East, with letters from the governor of Mozambique, in the year 1815, proving, as is remarked, " the possibility of so important a communication between Mozambique and Loanda." This is the only instance of native Portuguese subjects crossing the continent. No European ever accomplished it, though this fact has lately been quoted as if the men had been "Portuguese." Some of the governors of Loanda, the capital of Angola, in which Cassange lies, have enforeed the law which forbids the Purtuguese themselves from passing the boundary. They seem to have taken it for granted, that, when a white trader was killed, he had
himself commenced the aggression, and they wishec to aroid the necessity of punishing those who had shed Portuguese blood against their own will. This indicates a much greater impartiality than we have shown in our own dealings with the Caffres, for we have engaged in most expensive wars with them without once inquiring whether the fault may not have lain with our frontier colonists. The Cassange traders seem inclined to spread along the Quango, in spite of the desire of their government to concentrate them for purposes of mutual protection. If I might judge from the week of feasting I passed among them, they are generally prosperous.

As I always preferred to appear in my own proper character, as missionary, I was an object of curiosity to these hospitable Portuguese. They evidently looked upon me as an agent of the English Government, engaged in some new movement for the suppression of slavery. They could not divine what a " missionario" had to do with observations of latitude and longitude, and the questions put were rather amusing: "Is it common for missionaries to be doctors?" "Are you a doctor of medicine and a 'doutor mathematico' too? You must be more than a missionary to know how to calculate the longitude! Come; tell us at once what rank you hold in the English army." They may bave given credit to my reason for wearing the moustache, but they were sorely puzzled at the anomaly of my being a "sacerdote," with a wife and four children!

On the 16 th I witnessed the celebration of the anniversary of our Lord's Resurrection. The coloured population dressed up a figure representing Judas Iscariot, and paraded it on a riding-ox about the village, amidst the sneers and maledictions of the spectators. The natives, whether slaves or free, dressed in their gayest clothing, made visits to the principal merchants to wish them " a good feast," and to get a present in return. At ten A.m. we went to the residence of the Commandant, and at a given signal two brass guns commenced firing, to the great admiration of my men, whose ideas of the power of a cannon are very exalted. The Portuguese flag was hoisted and trumpets sounded, as an expression of joy at the resurrection of our Lord. Captain Neves invited all the principal inhabitants of the place, and feasted them in princely
style. All manner of foreign preserved fruits and wine from Yortugal, American biscuits, Cork butter, and English beer were displayed, and no expense was spared in the entertainment. After the feast card-playing commenced and continued till eleven o'clock at night.

As far as a mere traveller could judge, the Portuguese seemed to be sociable and willing to aid each other. They have neither doctor, apothecary, school, nor priest. Fevers are prevalent, and, when taken ill, they trust to each other and to Providence : they have however a good idea of what ought to be done in such cases, and they freely impart to each other whatever medicinal skill they possess. None of these gentlemen had Portuguese wives. They come out here in order to make a little money, and then return to Lisbon. They frequently have families by native women, and it was particularly gratifying to me to view the liberality with which people of colour were treated by the Portnguese. Instances of half-caste children being abandoned, so common in the south, are here extremely rare. They are acknowledged at table, and provided for by their fathers, as if they were European. The coloured clerks of the merchants sit at the same table with their employers, $n$ : thout any embarrassment. This consideration is probably the result of the position the whites occupy-being only a handful among thousands of blacks; but however this may be, nowhere else in Africa is there so much goodwill between Earopeans and natives as here.

From the village of Cassange we had a good view of the surrounding country, which consists of a gently undulating plain covered with grass and patches of forest. The western limit of the Quango valley, twenty miles distant, looks like a range of lofty mountains, and passes by the name of Tala Mungongo, "Behold the range." The valley, as I have before remarked, is fertile in the extreme. My men could never cease admiring its capability for raising their corn (Holcus sorghum), and despising the comparatively limited cultivation of the inhabitants. The Portuguese informed me that manure is never needed, and that the more the ground is tilled the better it yields, and, judging from the size of the maize and manioc in the old gardens, $l$ can readily believe the statement.

Cattle also thrive, so that the capabilities of the county may be regarded as very great. They are not however turned to ácount, for the Portuguese devote themselves almost exclusively to trading in wax and ivory, and, though the country would yield any amount of corn and dairy produce, they prefer to purchase their flour, bread, butter, and cheese from the Americans.

As the traders of Cassange were the first white men we reached, we sold the tusks belonging to Sekeletu, which had been brought to test the difference of prices in the Makololo and white men's country. The result was highly satifactory to my companions, as the Portuguese give much larger prices for ivory than the traders from the Cape, who labour under the double disadvantage of overland expenses and ruinous restrictions. Two muskets, three small barrels of gunpowder, and English calico and baize sufficient to clothe my whole party, with large bunches of beads, were given in exchange for one tusk, to the great delight of those who had been accustomed to get only one gun for two tusks. With another tusk we procured calico, which is the chief currency here, to pay our way down to the coast. The remaining two were sold for money, in urder to purchase a horse for Sekeletu at Luanda.

The superiority of this new market astounded the Makololo, and they began to abuse the traders by whom they had been visited in their own country, and who bad, as they now declared, "cheated them." They had no idea of the value of time and carriage, and it was somewhat difficult for me to convince them that the difference of prices arose from their having come hither; but that, if the Portuguese had to carry goods to their country, they would not be so liberal in their prices. I believe I gave them at last a clear idea of the manner in which prices were regulated by the expenses incurred; and when we went to Loanda, and saw goods delivered at a still cheaper rate, they concluded that it would be better for them to come to that city than to trade at Cassange.

The Commandant very handsomely offered me a soldier as 3 guard to Ambaca. My men told me that they had been thinking it would be better to turn back here, as they had been informed by the people of colour at Cassange that $I$ was
leading them down to the sea-coast only to sell the: and that they would be taken on board ship, fattened, and eaten by the white men, who were cannibals. I told them that, if they doubted my intentions, they had better not go to the coast; but that I was determined to proceed. They replied that they only thought it right to tell me what had been told to them, but that they had no intention of leaving me, and would follow wherever I led the way. This affair being disposed of for the time, the Commandant gave them an ox, and entertained me at a friendly dinner before parting. All the merchants of Cassange accompanied us to the edge of the plateau on which the village stands, and I parted from them with the feeling in my mind that I should never forget their disinterested kindness. They not only did everything they could to make myself and my men comfortable during our stay, but they furnished me with letters of recommendation to their friends in Loanda, where there are no hotels, requesting them to receive me into their houses. May God remember them in their day of need!

From Cassange we had still about 300 miles to traverse before we reached the coast. We had a black militia corporal as a guide, a native of Ambaca, who, like most of the inhabitants of that district, was able to read and write. He hac three slaves to carry him in a "tipoia," or hammock, slung to a pole: but as they were young, and unable to convey him far at a time, he was considerate enough to walk except when we came near to a village, when he mounted his tipoia and entered in state, his departure being made in the same manner. Two slaves were always employed in carrying his tipoia, and the third carried a wooden box about three feet long, containing his writing materials, dishes, and clothing. He was cleanly in all his ways, and, though quite black himself, abused others of his own colour as "negroes." When he wanted to purchase any article from a village, he would sit down, mix a little gunpowder as ink, and write a note in a neat hand to ask the price, addressing it to the shopkeeper with the rather pompous title "Illustrissimo Senhor" (Most Illustrious Sir), which is the invariable mode of address throughout Angola. The answer would be in the same style, and, if satisfactory, another note followed to conclude the

[From a Sketch by Captain Henry Need, H.M. Brig Linnet
SCENE IN ANGOLA. -THE MASHEELA, OR ANGOLESE PALANQUIN, COMING TO REST UNDER A BAOBAB AND RUPHORBIAS
bargain. There is so mach of this note correspondence carried on in Angola, that a very large quantity of paper is consumed in it. Some other peculiarities of our guide were not so pleasing. We were often cheated through his connivance with the sellers of food, and could perceive that he got a share of the plunder from them. Food, though very cheap, was generally made dear enough for us, until I refused to allow him to come near the place where we were bargaining. IIowever, he took us safely down to Ambaca, and I was glad to see, on my return to Cassange, that he was promoted to be sergeant-major of a company of militia.

Having left Cassange on the 21st, we traversed the remaining portion of the valley to the foot of Tala Mungongo. We crossed a fine little stream called the Lui on the 22nd, and another named the Luare on the 24th, then slept at the bottom of the western range, which, on my return, I estimated to be from twelve to fifteen hundred feet high. The clouds which came floating along the valley broke against the sides of the ascent, and the dripping rain rendered the tall grass anything but agreeable as it flapped against the face of the rider. This edge of the valley is exactly like the other; jutting spurs and defiles give it the same serrated appearance as that on the side of the highlands of Londa. The whole of this vast valley has been removed by denudation, for pieces of the plateau which once filled the vacant space stand in it, and present the same structure of red horizontal strata of equal altitudes with those of the acclivity which we are now about to ascend. One of these insulated masses, named Kasala, bore E.S.E. from the place where we made our exit from the valley, and about ten miles W.S.W. from the village of Cassange. It is remarkable for its perpendicular sides; even the natives find it extremely djfficult to reach its summit.

The ascent of Tala Mungongo was not so arduous as I was led to suppose. We accomplished it in the course of an hour by a steep, slippery path, bordered on each side by a deep gorge, and at the summit found a table-land similar to that on the other side of the valley, and similarly clothed with trees. We found the village of Tala Mungongo, situated a few miles from the edge of the descent, and were kindly
accommodated witn` a house to sleep in, which was very welcome, as we wer, all both wet and cold. We found the temperature so much lowered by the greater altitude, and the approach of winter, that many of my men suffered severely from colds. At this, as at several other Portuguese stations, travellers' houses, on the same principle as the khans or caravanserais of the East, have been erected, and are furnished with benches for the wayfarer to make his bed on, chairs and a table, and a large jar of water. These benches, though far from luxurious couches, were preferable to the wet ground under the rotten fragments of my gipsy-tent, and I continued to use them until I found that they were tenanted by certain inconvenient bedfellows.

27th.-Five hours' ride through a pleasant country of forest and meadow brought us to a village of the Basongo, a tribe living in subjection to the Portuguese. We crossed several little streams, flowing in a westerly direction, which unite to form the Quize, a feeder of the Coanza. The Basongo were very civil, as indeed is the case with all the tribes subject to the Portuguese. The-subjection is indeed little more than nominal in this part of the country; but the governors of Angola wisely accept the limited allegiance rendered by these distant tribes as better than none.

The inhabitants of this region possess the characteristics of the true negroes, such as dark colour, thick lips, heads elongated backwards and upwards and covered with wool, flat noses, with other negro peculiarities : but it must not be supposed that all these features are necessarily, or even frequently, combined in one individual. All, for instance, have a certain thickness and prominence of lip, but in many instances these characteristics are hardly more marked than in Europeans. All are dark, but the degree of darkness varies from deep black to light jellow. As we go westward the light colour predominates over the dark, until we approach the coast, where, under the influence of damp from the sea air, the shade deepens into the general blackness of the coast population. The shape of the head, again, with its woolly crop, though general, is not universal.

We passed through a fertile and well-peopled country to Sanza on the river Quize, and here we had the pleasure of
seeing a field of wheat growing luxuriantly without irrigation, the ears being upwards of four inches long. This small field was cultivated by a Portuguese merchant, whose garden also was interesting, as showing the capabilities of the land at this elevation, for we saw in it European vegetables in a flourishing condition. The coffee-plant grows wild in certain parts of this same district, and may be seen on the heights of Tala Mungongo, where it was first introduced by the Jesuit missionaries.

We spent Sunday the 30 th of April at Ngio, on the banks of the Quize. The country here becomes more open, but is still well wooded and abundantly fertile, with a thick crop of grass between two and three feet high. The villages of the Basongo are dotted over the landscape, and frequently a square house of wattle and daub, belonging to a native Portuguese, is erected among them for purposes of trade. The people possess both cattle and pigs. The different stations on our path, from eight to ten miles apart, are marked by a cluster of sheds made of sticks and grass. There is a sonstant stream of people either going to or returning from the coast The goods are carried on the head, or on one shoulder, in a basket attached to the extremities of two poles between five and six feet long, and called Motete. When the basket is placed on the head, the poles project forwards horizontally; and when the carrier wishes to rest, he either props up the burden against a tree, or simply plants the poles on the ground, and holds the burden until he has taken breata, thus in either case avoiding the trouble of placing the burden on the ground and lifting it up again. When a party of travellers arrives at a station, immediate possession is taken of the sheds, and any subsequent comers must then erect others for themselves, which is easily done with the long grass. No sooner do any strangers appear at the spot than women may be seen emerging from the villages bearing baskets of manioc-meal, roots, ground-nuts, yams, bird's-eye pepper, and garlic, which they exchange for calico. They were civil, and, judging from the amount of talking and laughing in bargaining, they enjoyed their cccupation.

Pitsane and another of the men had violent attacks of fever, from the excessive humidity both of the ground and of the
air; and I also suffered so much from exposure to the night dews, that I was obliged to give up observations altogether. It would have afforded me pleasure to have cultivated a more intimate acquaintance with the inhabitants of this part of the country, but the dizziness produced by frequent fevers made it as much as I could do to stick on the ox and crawl along in misery. In crossing the Lombe, my ox Sinbad, in the indulgence of his propensity to strike out a new path for himself, plunged out of his depth into a deep hole, and so soused me, that I was obliged to move on to dry my clothing, without calling on the Europeans who live on the bank. This 1 regretted, for the Portuguese, like the Boers, feel it a slight to be passed without a word of salutation.

On entering the district of Ambaca we found the landscape enlivened by the appearance of lofty mountains in the distance, the grass comparatively short, and the whole country looking gay aud verdant. On our left we saw certain rocks of the same nature with those of Pungo Andongo, and closely resembling the Stonehenge group on Salisbury Plain, only that the stone pillars here are of gigantic size. This region is wonderfully fertile, and yields all kinds of agricultural produce at a cheap rate. The soil contains sufficient ferruginous matter to impart a red tinge to most of it. It is watered by numerous small tributaries of the Lucalla, which, after draining Ambaca, falls into the Coanza to the south-west at Masangano. We crossed the Lucalla by means of a large canoe kept there by a man who farms the ferry from the government, and charges about a penny per head. A few miles beyond the Lucalla we came to Ambaca, once an important place, but now a mere paltry village, beautifully situated on a slight elevation in a plain surrounded by lofty mountains. We were most kindly received by the Commandant, Arsenio de Carpo, who spuke a little English. He recommended wine for my debility, and gave me the first glass of that beverage I had ever taken in Africa. The weakening effects of the fever were most extraordinary : for instance, in attempting to take lunar observations, I could not avoid confusion of time and distance, neither could I hold the instrument steady, nor perform a simple calculation. I had in vain tried to learn words of the Bunda, or dialect spoken in Angola: I forgot even the days
of the week and the names of my companions, and, had 1 been asked my own, I probably could not have told it.

The district of Ambaca is said to contain upwards of 40,000 souls, of whom a large number are able to read and write. 'I'his is the fruit of the labours of the Jesuits, who had in former times a missionary station at Cahenda, about ten miles north of Ambaca, and since whose expulsion by the Marquis of Pombal the natives have continued to teach each other. Ihose devoted men are held in high estimation throughout the country to this day; and I could only regret that they had not felt it their duty to give the people the Bible, to be a light to their feet when they themselves were gone.

When sleeping in the house of the Commandant I was bitten on the foot by a kind of tick, known in the southern country by the name Tampan, and common in all the native huts in this country. It varies in size from that of a pin'shead to that of a pea, and its skin is so tough and yielding that it is impossible to burst it by any amount of squeezing with the fingers. The effects of its bite are, a tingling sensation of mingled pain and itching, which gradually ascends the limb until it reaches the abdomen, where it soon causes violent vomiting and purging. Where these effects do not follow, as we found afterwards at Tete, fever sets in; and I was assured by intelligent Portuguese there that death has sometimes resulted from this fever. The anxiety manifested by my friends at Tete to keep my men out of the reach of tho tampans proved that they had good cause to dread this insignificant insect. The only inconvenience I afterwards suffered from this bite was the continuance of the tingling sensation for about a week.

May 12 th.-As we were about to start this morning, the Commandant provided a most bountiful supply of bread and meat for my use on the way to the next station, and sent two militia soldiers as guides. About midday we sought shelter from the sun in the house of Senhor Mellot, at Zangu; and though I was unable to sit up and engage in conversation, I found on rising from his couch that he had cooked a fowl for my usc ; and at parting he gave me a glass of wine, which prevented the violent fit of shivering I expected that afternoon. We spent Sunday, the 14th, at Cabinda, one of the stations of
the sub-commandants, situated in a beautiful glen, and surrounded by plantations of bananas and manioc. The country was gradually becoming more picturesque the farther we proceeded west. The lofty blue mountain-ranges of Libollo, which we had seen in coming to Ambaca thirty or forty miles to the south, were now shut out from view by others nearer at hand, and the grey ranges of Cahenda and Kiwe were now close upon our right. As we looked back towards Ambaca the undulating plains seemed surrounded on adl sides by rugged mountains, and as we went westward we were entering upon a wild-looking mountainous district called Golungo Alto.

We met numbers of Mambari on their way back to Bihe, some of whom had penetrated as far as Linyanti, and now showed a foolish displeasure at the prospect of the Makololo trading to the coast markets themselves, instead of intrusting them with their ivory. The Mambari repeated the tale of the mode in which the white men are said to trade. "The ivory is left on the shore in the evening, and next morning the seller finds a quantity of goods placed there in its stead by the white men who live in the sea." "Now," added they to my men, "how. can you Makololo trade with these 'Mermen'? Can you enter into the sea, and tell them to come ashore?" My men replied that they only wanted to see for themselves; and as they were now getting some idea of the nature of the trade, they were highly amused on perceiving the reasons why the Mambari would rather have met them on the Zambesi than so near the sea-coast.

There is something so exhilarating to one of Highland blood in the proximity of high mountains, that I forgot my fever as we wended our way among the lofty masses of mica schist which form the highlands around the romantic residence of the Commandant of Golungo Alto. (Lat. $9^{\circ} 8^{\prime} 30^{\prime \prime} \mathrm{S}$., long. $15^{\circ} 2^{\prime} \mathrm{E}$.) The whole district is extremely beautiful and of unrivalled fertility. The hills are bedecked with trees of various hues, among which towers the graceful palm, whence are obtained the oil of commerce for making our soaps, and the intoxicating toddy. Some clusters of hills look like crested waves, driven into a narrow open bay, and there suddenly congealed. The cottages of the natives, perched on
the tops of many of the hillocks, looked as if the owners possessed an eye for the romantic, but they were probably more influenced by the desire to overlook their gardens, and keep their families out of the reach of the malaria, which is supposed to prevail most on the banks of the numerous little streams which run among the hills.

We were most kindly received by the Commandant, Lieutenant Antonio Canto e Castro. Like every other person of intelligence whom I had met, he lamented deeply the neglect with which this fine country has been treated. The district contained, by the last census, 26,000 hearths, or fires; and if we reckon four souls to a hearth, we have a population of 104,000. There are no roads adapted for vehicles, and since the difficulties placed in the way of the slave-trade by the English. Government a system of compulsory carriage has been established by means of porters or carriers, of whom there are no less than b000 liable to serve in this district alone. Formerly the goods were conveyed by slaves, who on reaching the coast were sold for exportation. The system is worked in the following manner. A trader who requires two or three hundred carriers to convey his merchandise to the coast applies to the general Government, and an order is sent to the commandant of a district to furnish the required number. This order is transmitted to the head-men of the villages, who then furnish from five to twenty or thirty men, according to the proportion that their people bear to the entire population of the district. For this accommodation the trader pays to the Government a tax of 1000 reis, or about three shillings, per load carried, and to each carrier the sum of 50 reis, or about twopence, a day, for his sustenance. As a day's journey is never more than eight or ten miles, the expense which must be incurred for this compulsory labour is very neavy, and yet no effort has been made to form a great line of road for wheel-carriages.

A few days' rest enabled me to regain much of my strength, and I could look with pleasure on the luxuriant scenery around me. We were quite shut in by green hills, many of which were cultivated up to their tops with manioc, coffee, cotton, ground-nuts, bananas, pine-apples, guavas, papaws, custard-arples, pitangas, and jambos-fruits brought from

South America by the former wissionaries. The high hills, dotted with towering palms, reminded me strongly of the bay of Rio de Janeiro, the scenery of which is allowed by all who know it to be quite unrivalled.

We left Golungo Alto on the 24th of May, which falls in the winter in these parts. Every evening, clouds came rolling in great masses over the western mountains, and descended in heavy showers, accompanied by constant peals of thunder, during the night or early morning. The clouds hung over the hills till the morning was well spent, so that we became familiar with morning mists, which we never saw at Kolobeng. The thermometer stood at $80^{\circ}$ by day, but sank as low as $76^{\circ}$ by night. In going westward we crossed several fine gushing streams which unite in the Luinha (pronounced Lueenya) and Lucalla. As they frequently furm cascades, they might easily be turned to good account. We passed through forests of gigantic timber, and at an open space named Cambondo found numbers of carpenters converting the trees into planks in the manner adopted by the illustrious Robinson Crusoe. A tree of three or four feet in diameter, and forty or fifty feet up to the nearest branches, having been felled, was cut into lengths of a few feet, and split into thick junks, which again were reduced to planks an inch thick by a persevering use of the axe. The object of the carpenters was to make little chests to sell at Cambondo. When finished with hinges, lock, and key, all of their own manufacture, they cost twenty pence a-piece. My men were so delighted with them that they carried several on their heads all the way to Linyanti.

At Trombeta we were pleased at the taste displayed by the Sub-Commandant in laying out his grounds and adorning his house with flowers. This was the more pleasing as it was the first attempt at neatness I had seen since leaving the establishment of Mozinkwa in Londa. Rows of trees, with pine-apples and flowers interspersed, had been planted along each side of the road. This gentleman had now a fine estate, which but a few years ago was a forest, and cost him only $16 l$. He had planted about 900 coffee-trees upon it; and as these begin to bear in three years, and attain perfection in six, I have no doubt that ere this his 16l. yields him sixty-fold.

Fruit-tress and vines yield twice in the year, without any labour or irrigation being bestowed on them. Grains and vegetables do the same; and if advantage is taken of the mists of winter, even three crops of pulse may be raised. Cotton was now standing in the pods in his fields, but he did not seem to value it : I understood him to say that the wet of one of the two rainy seasons with which this country is favoured, sometimes proves unfavourable to the growth of this plant. I am not aware whether wheat has ever been tried, but I saw both figs and grapes bearing well. The great complaint of all cultivators is the want of a good road to carry their produce to market.

Farther on we left the mountainous country, and descended towards the west coast through a district of a more sterile aspect. On our right ran the river Senza (or Bengo, as it is called nearer the sea), here about fifty yards broad, and navigable for canoes. The low plains adjacent to its banks are protected from inundation by embankments, and the populstion is entirely occupied in raising food and fruits for exportation to Loanda. The banks are infested by myriads of the most ferocious mosquitoes I ever met with, and not one of our party could get a snatch of sleep. I had taken up my quarters in the house of a Portuguese, but was soon glad to make my escape and lie across the path on the lee side of the fire, with the smoke blowing over my body. My host wondered at my want of taste, and I at his want of feeling, for to my astonishment he had actually become used to the infliction of a pain equal to that of a nail through the heel of one's boot, or of the toothache.

As we were now drawing near to the sea, the anxiety of my companions increased. One of them asked me if we should have an opportunity of watching each other at Loanda. "If, for instance, one went for water, would the others see if he were kidnapped?" "I see what you are driving at," I replied; "and, if you suspect me, you may return, for I am as ignorant of Loanda as you are: but nothing will happen to you but what happens to myself. We have stood by each other bitherto, and will do so to the last," The plains adjacent to Loanda are somewhat elevated and comparatively sterile. In crossing these we first beheld the sea, the appear-
ance of which impressed my companions with awe. They had always supposed the world to be an unlimited plain, and in describing their feelings afterwards they remarked, "We were marching along with our father, believing that what the ancients had always told us was true, that the world has no end; but all at once the world said to us, 'I am finished; there is no more of me!'"

They were now somewhat apprehensive of suffering want, and in my depressed state I was unable to allay their fears. The fever had induced a state of chronic dysentery so troublesome that I could not remain on the ox more than ten minutes at a time; and as we came down the declivity above the city of Loanda on the 31st of May, I was affected with melancholy at the thought that, in a population of twelve thousand souls, there was but one genuine English gentleman, and I felt most anxious to know whether this one would give me a hearty welcome or no. My anxiety was soon dispelled : Mr. Gabriel, the gentleman in question, our commissioner for the suppression of the slave-trade, received me most kindly, and, seeing the state in which I was, benevolently offered me his bed. Never shall I forget the luxuriant pleasure I enjoyed in feeling myself again on a good English couch, after six months' sleeping on the ground. I was soon asleep; and Mr. Gabriel, coming in almost immediately after, rejoiced at the soundness of my repose.

## GHAPTER XX.

The Marololo at Loanda.-The oity and district.-Icollo i Bengo.-District of Cazengo.-The Lucaila.-Distriot and town of Massangano.-Retubn to Golungo alto.

In the hope that a short enjoyment of Mr. Gabriel's generous hospitality would restore me to my wonted vigour, I continued under his roof; butinstead of experiencing any improvement, I became much more reduced than ever. Several Portuguese gentlemen called on me shortly after my arrival; and the Bishop of Angola, the Right Reverend Joaquim

Moreira Reis, the then acting governor of the province, sent his secretary to offer the services of the government physician. Some of her Majesty's cruisers soon came into port, and offered to convey me to St. Helena or homewards; but I could not allow my Makololo friends to attempt a return to their country without my assistance, now that I knew the difficulties of the journey and the hostility of the tribes living on the Portuguese frontier. I therefore resolved to decline the tempting offers $c_{-}^{s}$ my naval friends, and take back my companions to their chief, with a view of trying to make a path from his country to the east coast by means of the great river Zambesi. I however gladly availed myself of the medical assistance of Mr. Cockin, the surgeon of the "Poly. phemus," whose treatment, aided Mr. Gabriel's unwearied hospitality, soon brought me round again. On the 14th I was so far well as to be able to call on the bishop, in company with my party, who were arrayed in new robes of striped cotton cloth and red caps, presented by Mr. Gabriel. He received us, as head of the provisional government, in the grand hall of the palace. He put many intelligent questions respecting the Makololo, and gave them permission to visit Loanda as often as they pleased.

Every one remarked the serious deportment of the Makololo. The large stone houses and churches in the vicinity of the ocean struck them with awe, as things quite beyond their comprehension. Their own huts being only one story high, they regarded each story as a separate hut, and they never could comprehend how the poles of one hut could be founded upon the roof of another, or how men could live in the upper story, with the roof of the lower one in the middle. Some Makololo, who had visited my little house at Kolobeng, in trying to describe it to their countrymen at Linyanti, said, " It is not a hut; it is a mountain with several caves in it."

Commander Bedingfeld and Captain Skene invited them to visit their vessels, the "Pluto" and "Philomel." Knowing their fears, I told them that no one need go if he entertained the least suspicion of foul play. Most of them, however, went; and when on deck I pointed to the sailors, and said, "Now these are all mv countrymen, sent by our Queen for the
purpose of putting down the trade of those that buy and sell black men." They replied, "Truly! they are just like you !" and all their fears seemed to vanish at once, for they went forward amongst the men, and the jolly tars handed them a share of the bread and beef which they had for dinner. The commander allowed them to fire off a cannon; and having the most exalted ideas of its power, they were greatly pleased when I told them, "That is what they put down the slave-trade with." The size of the brig-of-war amazed them. "It is not a canoe at all," they remarked, "it is a town!" The sailors' deck they named "the Kotla;" and then, as a climax to their description of this great ark, added, "and what sort of a town is it that you must climb up into with a rope ?"

In the beginning of August I suffered a severe relapse, which reduced me to a mere skeleton. I was then unable to attend to my men for a considerable time; but when I recovered from this last attack I was thankful to find that I was free from that lassitude which, after my first recovery, showed the continuance of the malaria in the system. I found that my men had, on their own motion, established a brisk trade in firewood. They sallied forth early in the mornings for the uncultivated parts of the adjacent country, and, having collected a bundle of firewood, brought it back to the city, and sold it to the inhabitants; and as they gave larger quantities than the regular wood-carriers, they found no difficulty in meeting with purchasers. A ship freighted with coal for the cruisers having arrived from England, they were engaged to unload her at sixpence a-day. They continued at this work for upwards of a month, and nothing could exceed their astonishment at the vast amount of cargo contained in a single ship. With the money so obtained they purchased clothing, beads, and other articles to take back to their own country. Their ideas of the value of different kinds of goods differed materially from those of the natives on the coast. The latter preferred the thinnest fabrics, provided they had gaudy colours and a large extent of surface, probably from the circumstance of calico being the chief circulating medium among them. The Makololo, on the other hand, when offered a choice of different fabrics, at once selected the strongest
pieces of English calico and other cloths, showing that they paid more regard to strength than to colour.

St. Paul de Loanda has been a very considerable city, but is (54) now in a state of decay. It contains about twelve thousand inhabitants, most of whom are people of colour.* Various evidences of its former magnificence survive, especially two cathedrals, one of which is now converted into a workshop, while the other is in a state of ruin. Three forts continue in a good state of repair. The palace of the governor and the government offices are commodious structures, and many large stone houses are to be found; but nearly all the houses of the native inhabitants are of wattle and daub. Trees are planted all over the town for the sake of shade; and the city presents an imposing appearance from the sea. The harbour is formed by the low sandy island of Loanda, which is inhabited by about 1300 souls, upwards of 600 of whom are industrious fishermen. The roadstead lies between the island and the mainland, on which the city is built. In a south-west gale the waves dash over part of the island, and carry large quantities of sand before them. Great quantities of soil are also washed in the rainy season from the heights above the city, so that the port, which once contained water sufficient to float the largest ships close to the custom-house, is now dry at low water, and the ships are compelled to anchor about a mile north of their old station. Nearly all the water consumed in Loanda is brought from the river Bengo by means of launches, the only supply that the city affords being from some deep wells of slightly brackish water; unsuccessful attempts have been made by different governors to bring water from the river Coanza by means of a canal which the Dutch had begun during the seven years they held the place before 1648. There is not a single English and only two American merchants at Loanda. This is the more remarkable, as nearly all the commerce is carried on by means of English calico brought hither viâ Lisbon. Several English houses attempted

[^18]to establisl a trade about 1845, and accepted bills on Rio de Janeiro in payment for their goods, but in consequence of the increased activity of our cruisers most of the mercantile houses of that city failed, and the English merchants lost all.

Loanda is regarded somewhat in the light of a penal settloment, to which Europeans resort with the hope of getting rich in a few years, and then returning home. They have thus no motive for seeking the permanent welfare of the country, while the law which forbids the subjects of any other nation from holding landed property excludes all foreign enterprise; hence the country remains very much in the same state as our allies found it in $\mathbf{1 5 7 5}$. Most of the European soldiers sent out are convicts, who on the whole behave very well, and it is a remarkable fact that the whole of the arms of Loanda are every night in the hands of convicts. Various unsatisfactory reasons are assigned by the officers for this mild behaviour. Perhaps the climate may have some influence in subduing their turbulent disposition; for it certainly appears to have its influence on the natives, who are all a timid race, and even on animals, bulls being mach tamer than with us and being commonly used for riding. If we must have convict settlements, attention to the climate might be of advantage in the selection.

The objects which I had in view in opening up the country so commended themselves to the government and merchants of Loanda, that, at the instance of his Excellency the Bishop, the Board of Public Works granted a handsome present to Sekeletu, consisting of a colonel's uniform and a horse for the chief, and suits of clothing for all the men who acompanied me. The merchants also made a present of hardsome specimens of all their articles of trade, and two donkeys, for the purpose of introducing the breed into his country, as tsetse cannot kill this beast of burden. These presents were accompanied by letters from the bishop and merchants; and I was kindly favoured with letters of recommendation to the Portuguese authorities in Eastern Africa. I took with me a good stock of cotton-cloth, and fresh supplies of ammunition and beads. As my companions were unable to carry mine as well as their own goods, the lishop furnished me with twenty carriers, and vent forward orders to all the commandants of the districts
through which we were to pass to render me every assistance in their power.

We left Loanda on the 20th September, 1854, and passed round by sea to the mouth of the river Bengo. Ascending this river, we went through the district in which stand the ruins of the convent of St. Antonio ; thence into Icollo i Bengo, so nared from having been the residence of a former native king. We here visited a large sugar manufactory worked by a vast number of slaves; but somehow or other, although the flat alluvial lands on the banks of the Senza or Bengo are well adapted for raising sugar-cane, the establishment was far from being in a flourishing condition. The water of the river is muddy, and it is observed that such rivers have many more mosquitoes than those which have clear water. We were told that these insects are much more numerous at the period of new moon than at other times; however this may be, we were thankful to get away from the Senza and its insect plagues.

The whole of this part of the country is composed of marly tufa, containing the same kind of shells as those at present found in the sea. As we advanced eastward and ascended the higher lands, we found eruptive trap, which had tilted up immense masses of mica and sandstone schists. The mica schist almost always dipped towards the interior of the country, forming the mountain-ranges of Golungo Alto. The trap has frequently run through the gorges made in the upheared rocks, and at the points of junction between the igneous and older rocks there are large quantities of strongly magnetic iron-ore. The clayey soil formed by the disintegration of the mica schist and trap is admirably adapted for the coffee, and it is on these mountain sides, and on others possessing a similar red clay soil, that this plant has propagated itself so widely. The meadow-lands adjacent to the Senza and Coanza being underlaid by the same marly tufa which abounds towards the coast, and containing the same shells, shows that previous to the elevation of this side of the country it possessed some deeply indented bays.

28th September, Kalungwembo.-We were still on the same path by which we kad come, and, having escaped from the mosquitoes, we could enjoy the scenery. Ranges of hil's
skirted both sides of our path, and the fine level road was adormed with a beautiful red flower named Bolcamaria. The markets or sleeping-places were well supplied with provisions by great numbers of women, every one of whom came spinning cotton with a spindle and distaff, exactly like those used by the ancient Egyptians. A woman is seldom seen going to the fields without being engaged in this employment at the same time that she carries a pot on her head, a child on her back, and a hoe over her shoulder. The cotton was brought to market for sale, and I bought a pound for a penny, which was probably double the price they ask from each other. We saw the cotton growing luxuriantly all around the marketplaces and the native huts, from seeds dropped accidentally; so far as I could learn, it was the American cotton rendered perennial by the influence of the climate. We met in the ruad mstives passing with bundles of cops, or spindles full of cotton-

dncient Spinning and Weaving. From Wilkinson's 'Ancient Egyptians,'ii. \&5, 86.
thread, which they were carifing to other places to be woven into cloth. The women spin and the men weave. Each web is about 5 feet long, and 15 or 18 inches wide. The loom is of the simplest construction, being only two beams placed one over the other, the web standing perpendicularly. The threads of the web are separated by means of a thin wooden lath, and the woof passed through by means of the spindle on which it has been wound in spinning. The mode of spinning and weaving in Angola, and indeed throughout South Central Africa, so closely resembles that practised by the ancient Egyptians, that I introduce a woodcut from the interesting work of Sir Gardner Wilkinson. The lower figures are engaged in spinning in the real African method, and the weavers in the left-hand corner have their web in the Angolese fashion.

Numerous other articles are brought for sale to these sleeping-places. The native smiths carry on their trade there, and I bought ton very good table-knives made of country iron for two pence each. Labour is extremely cheap; I was assured that even carpenters, masons, smiths, \&c., might be hired for fourpence a day, and that agriculturists would gladly work for half that sum.

Being anxious to become better acquainted with this interesting country and its ancient missionary establishments, I resolved to visit the town of Massangano, situated south of Golungo Alto, at the confluence of the rivers Lucalla and Coanza. This led me to pass through Cazengo, a district famous for the abundance and excellence of its coffee, extensive plantations of which exist on the sides of several lofty mountains. They were not planted by the Portuguese, but by the Jesuits and other missionaries, who brought some of the fine old Mocha seed, and thus established the excellence of the Angola coffee. Some have indeed supposed the coffeetree to be indigenous; but the presence of pine-apples, bananas, yams, orange-trees, custard-apple trees, pitangas, guavas, and other South American trees, in the same localities as the coffee, seems to indicate that this like the others must have been introduced from abroad. The propagation of the coffee-plant is forwarded by the circumstance that the seed requires simply to be laid on the surface of the soil, with no
other covering than the shade of trees. The seeds are conveyed to different spots by the birds, which eat the outer rind, and throw the kernel on the ground. As the plant cannot bear the direct rays of the sun, all that is necessary, when a number of trees are discovered in a forest, is to clear away the brushwood, and leave as many of the tall trees as will afford good shade to the coffee-plants below.

The wealth of this district is such, that with only a population of 13,822 it yields an annual tribute to the Government of thirteen hundred cotton cloths, each 5 feet by 18 or 20 inches.

Accompanied by the Commandant of Cazengo, I proceeded in a canoe down the Lucalla to Massangano. The river is about 85 yards wide, and navigable for canoes up to about six miles above the confluence of the Luinha. Near this latter point stand the massive ruins of an iron-foundry, erected in 1768 by the famous Marquis of Pombal. The effort of the Marquis to improve the mode of manufacturing iron was rendered abortive by the death of the European labourers whom he introduced in order to instruct the natives. At the present time a certain quantity of malleable iron (about 500 bars a month) is produced by native workmen in the employ of Government. The pay of these men consists of a certain number of a fish called "cacusu," which is much esteemed in this country: what they do not want to consume they can readily sell.

Large plantations of maize, manioc, and tobacco are seen along both banks of the Lucalla, and the scenery is enlivened by the frequent appearance of native houses embosomed in shady groves of orange-trees, bananas, and the palm (Elois Guineensis) which yields the oil of commerce. The banks are steep, the water having cut out its bed in a dark red alluvial soil. Before every cottage a small stage is erected, by which the inhabitants descend to draw water without danger from tise alligators. Some have a little palisade made in the river to protect them from these reptiles, while others use the shell of the fruit of the baobab-tree attached to a pole about ten foet long, with which they may draw water from the top of the high bank. Many climbing plants ran up the lofty trees, and hang their beautiful flowers in gay festoons on the
branches. Near Massangano the land becomes very level, and large portions are left marshy after the annual floods; but all is very fertile. As an illustration of the strength of the soil, I may state that we saw tobacco-plants eight feet high, and furnished with thirty-six leaves, each of which was eighteen inches long by six or eight inches broad. In our descent we observed the tsetse, and consequently the people had no domestic animals, save goats.

Wo found the town of Massangano placed on an elevated tongue of land, composed of calcareous tufa, between the sucalla and the Coanza, the latter of which is here a noble streain, about a hundred and fifty yards wide, and navigable for carces to Cambambe, some thirty miles higher up.

Thers are two churches and an hospital in ruins at Massangrao; and the remains of two convents are pointed out, one of which is said to have been an establishment of black Benedictines. The cultivated lands attached to all these conventual estahlishments in Angola are now rented by the Goverx:inent of $\ddot{L}$ Janda. The fort, which stands on the south side of the town, on a high perpendicular bank overlooking the Coanza, is small, but in good repair: it contains some very ancient guns, which were loaded from the breech, and must have been formidable weapons in their time. The native: entertain a remarkable dread of a great gun, though the carriage may be so rotten that it would fall to pieces at the first shot; the fort of Pungo Andongo is kept securely by cannon perched on cross sticks alone!

Massangano was a very important town under the Dutch, but (55) after their expulsion by the Portuguese in 1648 the place fell into a state of decay, and now contains little more than a thousand inhabitants. Fires are very frequent, and several occurred during the four days we remained there, apparently through the ignition of the dry thatch by the sun's rays. Each event of the sort excited terror in the minds of the inhabitants, as the slightest spark carried by the wind would have set the whole town in a blaze. There is not a singie inscription on stone visible in Massangano, so that, if it were destroyed to-morrow, no one could tell where it had stood.

The Massangano district is well adapted for sugar and rice, while Cambambe is a very superior field for cotton; but it is
unfortunately inaccessible to steam-navigation in consequence of the bar at the mouth of the Coanza. It is probable that the canal from Calumbo to Loanda was designed not merely to supply that city with fresh water, but to afford facilities for transportation. At all events, the remains of it show it to have been made on a scale suited for the Coanza canoes. The Portuguese began another on a smaller scale in 1811, and, after three years' labour, had finished only 6000 yards. The country between Massangano and Loanda being comparatively flat, a railroad might be constructed at small expense, and might then be prolonged inland along the north bank of the Coanza to the edge of the Cassange basin, thus forming a cheap means of transit for the products of the rich districts of Cassange, Pungo Andongo, Ambaca, Cambambe, Golungo Alto, Cazengo, Muchima, and Calumbo,-in short, for the whole of Angola and the adjacent tribes.

The lands on the north side of the Coanza belong to the Quisamas (Kisamas), an independent tribe, which the Portuguese have not been able to subdue, in consequence of the scarcity of water in the district, the supply, which is usually kept in reservoirs formed in the trunks of baobab-trees, having been purposely exhausted before the invading army. The few members of this tribe who came under my observation possessed much of the Bushman or Hottentot feature, and were dressed in strips of soft bark hanging from the waist to the knee. They deal largely in salt, which their country produces in great abundance. Is is brought in crystals of about 12 inches long and 12 $\frac{1}{2}$ in diameter, and is hawked about everywhere in Angola, forming, next to calico, the most common medium of barter. The country lying near to Mas sangano is low and marshy, but becomes more elevated in the distance, and is backed by the lofty mountain-ranges of the Libollo, another powerful and independent people. Near Massangano I observed what seemed to be an effort of nature to furnish a variety of domestic fowls capable of bearing with comfort the intense heat of the sun. Their feathers were curled upwards; thus giving shade to the body without increasing the heat. They are here named "kisafu" by the natives, and "arripiada," or shivering, by the Portuguese. There seems to be a tendency in nature tu afford.
varieties adapted to the convenience of man. For instance, a very short-legged species of fowl was obtained by the Boers, who required one that could be easily caught in their frequent removals. A similar instance of securing a variety occurred in the short-limbed sheep in America.

Returning into Cazengo by the Lucalla, we had an oppor tunity of visiting several flourishing coffee-plantations, and cbserved that several industrious men, who had begun without capital, had in the course of a few years acquired a comfortable subsistence. One of these, Mr. Pinto, generously furnished me with a goid supply of his excellent coffee, and my men with a breed of rabbits to carry to their own country. Their lands yielded, with but little labour, coffee sufficient to furnish them with all the necessaries of life. The fact of this and other avenues of wealth opening up so readily seems like a providential invitation to forsake the slave-trade and engage in lawful commerce. We saw the female pupulation occupied as usual, in spinning cotton and cultivating the land with a double-handlgd hoe, which is worked with a


Double-handled Angola boe.
sort of dragging motion. Many of the men were employed in weaving, but they appear to be less industrions than the women, for they require a month to finish a single web. There is, however, not much inducement to industry, for, notwithstanding the time consumed in its maufacture, each web fetches only two shillings.

On returning to Golungo Alto I found several of my men laid up with fever. One of my motives for leaving them there was, that they might recover from the fatigue of the journey from Loanda, which had had much more effect upon their feet than hundreds of miles on our way westwards. They had always been accustomed to moisture in their own well-watered land, but the roads from Loanda to Golungo Alto were both hard and dry, and they suffered severely in consequence; they were, nevertheless, eheerful, and were composing songs to be sung when they should reach home. Their "pluck" was certainly extraordinary; and they remarked very impressively to me, "It was well you came with Makololo, for no tribe could have done what we have accomplished in coming to the white man's country: we are the true ancients who can tell wonderful things." Two of them now had fever in the continued form, and bad become jaundiced; a third was suffering from deliriuu He came to his companions one day, and said, "Remain well. I am called away by the gods!" and set off at the top of his speed The young men caught him before he had gone a mile, and bound him. By gentle treatment and watching for \% few days he recovered. I have observed several instances of this kind in the country, but I believe that confirmed insanity is rars.

## CHAPTER XXI.

Remence at Golungo Alto.-Ambaca.-Pungo Andongo.-The Coanza.

Whme waiting for the recovery of my men I visited the deserted convent of St. Hilarion, at Bango, a few miles northwest of Golungo Alto. It is situated in a magnificent velley, which contains a population numbering 4000 hearths, and is the abode of the Sova, or chief Bango, who still holds a place of authority under the Portuguese. The garden of the convent, the cemetery, the church, and dormitories of the brethren, are still kept in a good state of repair. I lcoked
at the furniture, couches, and large chests for holding the provisions of the brotherhood with interest, and would fain Lave learned something of the former occupants; but the books and sacred vessels had lately been removed to Loanda. All speak well of the Jesuits and other missionaries, as the Capuchins, \&ic., for having attended diligently to the instruction of the children. They were supposed to share the political sentiments of the people against the Government, and were therefore supplanted by priests, who have been allowed to die out without being regretted by any. In viewing the results of former missions it is impossible not to feel assured that, if the Jesuit teaching has been so permanent, that of Protestants, who leave the Bible in the hands of their converts, will not be less so. The chief Bango has built a large two-story house close by the convent, but he is prevented from sleeping in it by superstitious fears. The Portuguese take advantage of all the gradations into which native society has divided itself. This man, for instance, is still a sova or chief, has his councillors, and maintains the same state as when the country was independent. When any of his people are guilty of theft he at once pays down the value of the stolen goods, and reimburses himself out of the property of the thief so effectually as to be benefited by the transaction. The people under him are divided into a number of classes, from the councillors, as the highest, to the carriers, as the lowest among the free men. One class obtains the privilege of wearing shoes from the chief, by paying for it; another, that of serving as soldiers or militia, by which they become exempt from the liability of serving as carriers. They are also divided into gentlemen and little gentlemen, and, thongh quite black, speak of themselves as white men, and of others, who may not wear shoes, as " blacks." There is also a sort of fraternity of freemasons, into which no one is admitted unless he is an expert hunter, and can shoot well with the gun. They are named Empacasseiros, and are distinguished by a fillet of buffalo-hide around their heads. They are very trustworthy and active, and are hence employed as messengers in all cases requiring express, and, when on active service, they form the best native troops the Portuguese possess. The militia are of no value as soldiers, but cost the
country nothing, being supported by their wives. Their duties are chiefly to guard the residences of commandants, and to act as police. The men of all these classes spend most of their time in drinking " malova" or the juice of the palmoil tree (Elois Guineensis), which becomes intoxicating when it has been allowed to stand for a few hours. This palm-toddy is the bane of the country, and culprits are continually brought before the commandants for assaults and other crimes committed under its influence.

The chief recreations of the natives of Angola are marriages and funerals. When a young woman is about to be married, she is placed in a hut alone, anointed with various unguents, and subjected to various incantations, in order to secure good fortune and fruitfulness. Here, as almost everywhere in the south, the height of good fortune is to bear sons, and a woman often leaves her husband altogether if they have only daughters. In their dances, when one woman wishes to deride another a line is introduced into the accompanying song to the following effect, "So-and-so has no children, and never will get any," and the insult is so keenly felt as to lead not unfrequently to suicide. Aftor some days the bride elect is taken to another hut, and adorned with the richest clothing and ornaments that the relatives can either lend or borrow. She is then placed in a public situation, saluted as a lady, and surrounded with presents by her acquaintances. After this she is taken to the residence of her husband, and the dancing, feasting, and drinking on such occasions are prolonged for several days. Polygamy is general, and each wife has a hut for herself. A man generally gives the parents a price for his wife, and, for a mulatto, as much as $60 l$. is often given. In case of separation the woman returns to her father's family, and the husband receives bac.. what he gave for her.

In cases of death the body is kept several days, amid a grand concourse of both sexes, who celebrate the event with beating of drums, dances, and debauchery. The great ambition of many of the blacks of Angola is to give their friends an expensive funeral. When a man is asked to sell a pig, he often replies, "I am keeping it in case of the death of any of my friends." A pig is usually eaten on the last day of the
ceremonies, and its head thrown into the nearest stream. A native sometimes gets intoxicated on these occasions, and will justify his misconduct by pleading, "Why! my mother is dead!" The expenses of funerals are so heavy that jears often elapse before they are defrayed.

The people are said to be very litigious, and constant disputes take place respecting their lands. A case came before the weekly court of the Commandant, involving property in a palm-tree worth two pence. The judge advised the pursuer to withdraw the case, as the expenses would much exceed the value of the tree. "O no," said he; "I have a piece of calico with me for the clerk, and money for yourself. It's my right, I will not forego it." The calico itself cost three or four shillings. It is quite a triumph to be able to say of an enemy, "I took him before the court."

My host Mr. Canto, the Commandant, having been seized with fever in a severe form, I had an opportunity of observing some of the workings of slavery. When a master is ill the slaves run riot among the eatables. I did not know this until I observed that every time the sugar-basin came to the table it was emptied. On visiting my patient by night 1 unexpectedly came upon the washerwoman eating pine-apples and sugar. All the sweetmeats were devoured, and it was dificult for me to get even bread and butter until I took the precaution of locking the pantry door. Upon this they took to killing the fowls and goats, and, when the animal was dead, brought it to me, saying, "We found this thing lying out there," and then enjoyed a good feast of meat. A feeling of insecurity prevails throughout this country: it is quite common to furnish visitors with the keys of their rooms, and on going down to breakfast or dinner each locks his door and puts the key in his pocket. At Kolobeng, where slavery is unknown, we never locked our doors night or day for months together. The Portuguese do not seem at all bigoted in their attachment to slavery, nor yet in their prejudices against colour. Mr. Canto gave an entertainment in order to draw all classes together and promote general good will. Two sovas were present, and took their places without the least appearance of embarrassment. One of them appeared in the dress of a general, the other in a red coat profusely ornamented with
tinsel, and accompanied by a band of musicians who performed very well. At this meeting Mr. Canto communicated to the company some ideas which I had penned on the dignity of labour, and the superiority of free over slave labour. The Portuguese gentlemen are now in a transition state from unlawful to lawful trade, and, having been compelled to abandon the slave-trade, are turning their attention to cotton, coffee, and sugar, as new sources of wealth. There is already much more cotton in the country than can be consumed; much larger quantities would be produced if only there was a market for it, but now it is common to cut down cotton-trees as a nuisance, and cultivate beans, potatoes, and manioc in their stead. I have the impression that cotton, which is deciduous in America, is perennial here; for the plants I saw in winter were not dead, though going by the name Algodão Americana, or American cotton. The rents paid for gardens belonging to the old convents are here merely nominal, varying from one shilling to three pounds per annum, but in the immediate vicinity of Loanda higher rents are realized which none but Portuguese or half-castes can pay.

We were delayed some time longer by the illness of Sekeletu's horse, which was seized with inflammation, and died under it. The change of diet may have had some influence in producing the disease ; for I was informed by Dr. Welweitsch, an able German naturalist, whom we found pursuing his labours here, that, out of fifty-eight kinds of grasses found at Loanda, only three or four exist here, and these of the most diminutive kinds. The species of grasses of Golungo Alto, twenty-four in number, are nearly all gigantic. Indeed, gigantic grasses, climbers, shrubs, and trees constitute the chief vegetation of this region.

November 20th.—An eclipse of the sun, which I had anxiously looked for with a view of determining the longitude, happened this morning, but the cloudy state of the sky precluded the possibility of making any observations. The greatest patience and perseverance are required in order to effect this object during the rainy season. Before leaving I had an opportunity of observing a curious insect which inhabits trees of the fig family (Ficus), upwards of twenty species of which are found here. Seven or eight of them cluster round a spot on
one of the smaller branches, and there keep up a constant distillation of a clear fluid, which forms a little puddle on the ground below. If a vessel is placed under them, it will receive three or four pints of it in the course of a single night The natives say that if a drop falls into the eyes it causes inflammation. It is stated that the insects suck this fuid out of the tree; but I have never seen an orifice, and it is scarcely possible that the tree can yield so much Our own "froghopper" (Aphrophora spumaria) or "cuckoo-spit," as it is called when in the pupa state, from the mass of froth in which it envelops itself, is an insect of similar powers, and, though very much smaller, belongs I believe to the same family. From observation I came to the conclusion that in each caso the chief part of the moisture is derived from the atmosphers. Finding a colony of these insects busily distilling on a brancin of the Ricinus communis, or castor-oil plant, I denuded about 20 inches of the bark on the upper part of the branch, and scraped away the inner bark, so as to destroy all the ascending vessels. I also cut a hole into the heart of the branch, and removed the pith and internal vessels. The distillation was then going on at the rate of a drop in 67 seconds, or about 2 ounces $5 \frac{1}{2}$ drams in 24 hours. Next morning the distillation, so far from being affected by the attempt to stop the supplies, was increased to a drop every 5 seconds. I then cut the brauch so much that during the day it broke; but they still went on at the rate of a drop every 5 seconds, while anothar colony on a branch of the same tree gave only a drop every 17 seconds. I finally cut off the branch; but this was too much for their patience, fur they immediately decamped, $: \overline{\mathrm{B}}$ insects will do from either a dead branch or a dead animgl. The presence of greater moisture in the air increased tie power of distillation, and the period of greatest activity was in tho morning, when the air and everything else was charged with dew. Having but one day left for experiment, I found that another colony on a branch, denuded in the same way, yielded a drop every 2 seconds, while a colony on a branch untouched yielded a drop every 11 seconds. I regretted that I had no time to institute another experiment, namely, to cut off a branch and place it in water, so as to keep it in life, and then observe whether there was any diminution
of the quantity of water in the vessel. This alone was wanting to make it certain that they draw water from the atmosphere.

December 14th.-Both myself and my men having recovered from severe attacks of fever, we left the hospitable residence of Mr. Canto with a deep sense of his kindness to us all, and proceeded on our way to Ambaca. Frequent rains, accompanied with thunder, had fallen in October and November. Occasionally the humidity of the atmosphere is increased without any visible cause; and a sensation of considerable cold follows from the circumstance of the increased humidity affording a better conducting medium for the radiation of heat from the body. These sudden changes of temperature cause considerable disease among the natives, and this seasou, though the most healthy for Europeans, is quite the reverse for the natives, and is denominated "carneirado," as if they were slaughtered like sheep in it.

Owing to the weakness of the late invalids we were unable to march long distances. Three hours and a half brought us to the banks of the Caloi, a small stream which flows into the Senza. This part of the country is reputed to yield petroleum, but the geological formation, mica schist dipping towards the eastward, is not favourable for it. We crossed another little river, called the Quango, and then passed on to Aunbaca in bright sunlight, the whole country looking beauti fully fresh and green after the rains.

On crossing the Lucalla we made a détour to the south, in order to visit the famous rocks of Pungo Andongo. As coon as we crossed the rivulet Lotete a change- in the vegetation of the country was apparent: the trees were identical with those to the south of the Chobe; and the grass was adapted for cattle. Two species of grape-bearing vines prevail in this listrict, and the influence of the good pasturage is seen in the plump condition of the cattle. In all my previous incuiries respecting the vegetable products of Angola I was invariably directed to Pungo Andongo. Do you grow wheat? "O yes, in Pungo Andongo."-Grapes, figs, or peaches? "O yes, in Pungo Andongo,"-Do you make butter, cheese, \&c.? The aniform answer was; " $O$ zes there is abundance of all these in Pungo Andongo." But when we arrived here we found
that these productions were confined to the estate of one man, Colonel Pires-a man who originally came out to this country as a cabin-boy, and who has raised himself, by a long course of persevering labour, to be the richest merchant in Angola. The presence of the wild grape shows that vineyards might be cultivated with success; the wheat grows well without irrigation : and any one who tasted the butter and cheese at the table of Colonel Pires would prefer them to the stale produce of the Irish dairy, generally used throughout this province. The cattle are seldom milked here, on account of the strong prejudice entertained by the Portuguse against the use of milk, which they think causes fever if taken after midday. It struck me as an absurdity for them to avoid a few drops in their coffee, after having devoured ten times the amount in the shape of cheese at dinner.

The fort of Pungo Andongo (lat. $9^{\circ} 42^{\prime} 14^{\prime \prime}$ S., long. $15^{\circ}$ $30^{\prime}$ E.) is situated in the midst of a curious group of colurnnar rocks, each of them upwards of three hundred feet in height. They are composed of conglomerate, made up of a great variety of rounded masses in a matrix of dark red sandstone, on a thick stratum of which they rest. Several little streams run amongst these rocks, and in the centre of the pillars stands the village, completely environed by well-nigh inaccessible rocks. The pathways into the village might be defended by a small body of troops against an army ; and this place was long the stronghold of the Jinga tribe, the original possessors of the country.

A foot-print carved on one of these rocks is spoken of as that of the famous Queen Donna Anna de Souza, who came, in 1621, from this vicinity, as ambassadress from her brother Gola Bandy, king of the Jinga, to Loanda, to sue for peace, and astonished the governor by the readiness of her answers. The governor proposed, as a condition of peace, the payment by the Jinga of an annual tribute. "People talk of tribute after they have conquered, and not before it: we come to talk of peace, not of subjection," was the ready answer. She remained some time in Loanda, gained all she sought, and, after being taught by the missionaries, was baptized, and returned to her own country with honour. She succeeded to the kingdom on the death of her brother, whom it was
supposed she poisoned, but she lost nearly all her army in a great battle fought with the Portuguese in 1627. She returned to the church after a long period of apostacy, and died in extreme old age; and the Jinga still live as an independent people to the north of this their ancient country.

In former times the Portuguese imagined this place to be particularly unhealthy, and banishment to the black rocks of I'ungo Andongo was thought by their judges to be a much severer sentence than transportation to any part of the coast; it turns out, howeyer, to be the most healthy part of Angola. The water is remarkably pure, the soil light, and the country spen and undulating, with a general slope down towards the river Coanza, a few miles distant. That river is the southern
(57) boundary of the Portuguese, and beyond it, to the S. and S.W., we see the high mountains of the Libollo, while on the S.E. we have a mountainous country, inhabited by the Kimbonda or Ambonda, a brave and independent people, but hospitable and fair in their dealings. They are rich in cattle, and their country produces much bees'-wax, which is carefully collected, and brought to the Portuguese, with whom they have always been on good terms. The Ako (Haco), a branch of this family, who inhabit the left bank of the Coanza above this village, instead of selling slaves as formerly, occasionally purchase them from the Portuguese. The Libollo on the S . have not so good a character, but the Coanza is always deep enough to form a line of defence.

I remained with Colonel Pires for about a fortnight. occupied in rewriting my journal, which had unfortunately been lost along with my despatches and maps in the mail packet, "Forerunner." Colonel Pires having another establishment on the banks of the Coanza, about six miles distant, I occasionally visited it with him for the purpose of recreation. The difference of temperature caused by the lower altitude was seen in the cashew-trees, which were ripening their fruit at the lower station, while near the rocks they were but just coming into flower. Cocoa-nut trees and bananas bear well at the lower station, but yield little or no fruit at the upper. The difference indicated by the thermometer was $7^{\circ}$. The general range near the rocks was $67^{\circ}$ at 7 A.m., $74^{\circ}$ at midday, and $72^{\circ}$ in the evening.

A slave-boy belonging to Culonel l'ires, having stolen and eaten some lemons in the evening, went to the river to wash his mouth, so as not to be detected by the flavour. An alligator seized and carried him to an island in the middle of the stream; there the boy grasped hold of the reeds, and baffled all the efforts of the reptile to dislodge him, till his companions came in a canoe to his assistance, when the alligator at once let go his hold. The boy had marks of the teeth in his abdomen and thigh, and of the claws on his legs and arms.

In the neighbourhood of this station were a large number of the ancient burial-places of the Jinga, consisting of large mounds of stones, arranged in a circular form, two or three yards in diameter, and shaped like a haycock, with drinking and cooking vessels of rude pottery on them. The natives of Angola generally have a strange predilection for burying their dead by the sides of the most frequented paths, or at the junction of cross roads. On and around the graves are planted euphorbias of various kinds, and on the grave itself are placed water-bottles, broken pipes, cooking vessels, and sometimes a little bow and arrow. The Portuguese Government, wishing to prevent this custom, imposed a penalty on any one burying by the roadside, and appointed places of public sepulture in every district. The people persist, however, in their ancient custom, in spite of the most stringent enforcement of the law.

The country between the Coanza and Pungo Andongo is covered with low trees, bushes, and fine pasturage. In the latter we were pleased to see our old acquaintances the gaudy gladiolus, Amaryllis toxicaria, hymanthus, and other bulls in as flourishing a condition as at the Cape.

It is surprising that so little has been done in the way of agriculture in Angola. Raising wheat by means of irrigation has never been tried; no plough is ever used; and the only instrument is the native hoe. The chief object of agriculture is the manioc, which does not contain nutriment sufficient to give proper stamina to the people. The half-caste Portuguese have not so much energy as their fathers. They subsist chiefly on the manioc, and, as that can be eaten in a variety of ways, it does not so soon pall upon the palate as one right
imagne. The leaves boiled make an excellent vegetable for the table; and, when eaten by goats, their milk is much increased. The wood is a good fuel, and yields a large quantity of potash. In a dry soil it takes two years to come to perfection, requiring, during that time, one weeding only. It bears drought well, and never shrivels up under it as other plants do. When planted in low alluvial soils, and well watered, it will come to maturity in twelve, or even ten months. The well-known substance tapioca is extracted from the plant by pouring water over the grated root, and thus disengaging the starch from it, which subsides and is then dried over a slow fire, the mass being kept in motion during the process, and thus forming itself into the globules with which we are familiar. Throughout the interior of Angola fine manioc-meal; which could with ease have been converted either into superior starch or tapioca, is commonly sold at the rate of about ten pounds for a penny. This region possesses, however, no means of transport to Loanda other than the shoulders of the carriers and slaves, and no road better than a footpath.
Cambambe, to which the navigation of the Coanza reaches, is reported to be thirty leagues below Pungo Andongo. A large waterfall is the limit on that side; and another exists higher up, at the confluence of the Lombe (lat. $9^{\circ} 41^{\prime} 26^{\prime \prime} \mathrm{S}$., and about long. $16^{\circ} \mathrm{E}$.), over which hippopotami and elephants are sometimes drawn and killed. Between these points the current is rapid and the bed generally rocky. The course of the Coanza turns southwards from the point of its confluence with the Lombe: its source is stated to be near Bihe, about eight days' journey south of Sanza.

The prospects of Christianity are at present anything but bright in these parts. There are only three or four priests in Loanda, all men of colour, but educated for the office. I was visited by one of these, who was on a tour of visitation in the different interior districts, for the purpose of baptizing and marrying. He had lately visited Lisbon, in company with the Prince of Congo, and had been invested with an order of honour by the King of Portugal as an acknowledgment of his services. He had all the appearance of a true negro, but commanded the respect of the people. I was informed that
the Prince of Congo is professedly a Christian, and that there are no fewer than twelve churches in that kingdom, the fruits of the mission established in former times at San Salvador, the sapital. These churches are kept in partial repair by the people, and the ceremonies of the Church are observed at funerals, though in a very imperfect and unmeaning manner. When a King of Congo dies, the body is wrapped up in a great many folds of cloth, until a priest can come from Lcanda to consecrate his successor. The King of Congo still retains the title of Lord of Angola, which he had when the Jinga owed him allegiance ; and in writing to the Governor of Angola he still places his own name first, as if addressing a vassal. The Jinga paid him an annual tribute in cowries, which were found on the island that shelters Loanda harbour, and, on their refusing to continue it, the king gave over the island to the Portuguese, whose dominion thus commenced in this quarter.

## CHAPTER XXII.

Tala Mungongo.-Cassange.-Ordeal.-Trade of Loanda.-The Quantio.-Bashinje.-More difficulties with the Chiboque.Feeders of the Congo.-The Loajima.

January 1, 1855.-Having, through the kindness of Colonel Pires, reproduced some of my lost papers, I left Pungo Andongo on the first day of the year ; and, at C'andumba, slept in one of the dairy establishments of my friend, who had sent forward orders for an ample supply of butter, cheese, and milk. Our path lay along the right bank of the Coanza, through a champaign district well adapted for pasturage. On reaching the confluence of the Lombe we left the river, and proceeded in a north-easterly direction, through a fine open country, to the village of Malange, where we struck into our former path. A few miles to the west of this a path branches off across the Lucalla to a new district named the Duke Braganza, the whole of which is described as extremely fertile. The territory west of Braganza is reported to he mountainc us, well wooded and watered, with wild coffee in
such abundance that the people even make their huts of coffeetrees. Numerous independent tribes inhabit the country to the north. The Portuguese power may be said to be firmly seated only between the rivers Dande and Coanza, and to extend inland about three hundred miles to the river Quango, containing a population amounting to about 600,000 souls.

Leaving Malange, we passed quickly along the path by which we had come to Sanza and Tala Mungongo. At the latter place we met a native of Bihe who had visited the country of Shinte three times for the purposes of trade. He gave us some of the news of that distant part, but not a word about the Makololo, who have always been represented in the countries to the north as a desperately savage race whom no trader could visit with safety. The half-caste traders whom we met at Shinte's had returned to Angola with sixty-six slaves and upwards of fifty tusks of ivory. As we came along the path we daily met long lines of carriers bearing large square masses of bees'-wax, each about a hundred pounds' weight, and numbers of elephants' tusks, the property of Angolese merchants. Many natives were proceeding to the coast also on their own account, carrying bees'-wax, ivory, and sweet oil. They appeared to travel in perfect security; and at different parts of the road we purchased fowls from them at a penny apiece.

During our stay at Tala Mungongo our attention was attracted to a species of red ant, which infests different parts of this country, and is remarkable for its love of animal food. The commandant of the village having slaughtered a cow, slaves were obliged to sit up the whole night, burning fires of straw around it to keep them off. 'lhese ants travel across the country in vast numbers like a small army. At-a little distance they appear as a brownish-red band, two or three inches wide, stretched across the path, all eagerly pressing on in one direction. If a person happens to tread upon them, they rush up his legs and bite with surprising vigour. I first encountered this by no means contemptible enemy near Cassange, where I accidently stepped upon one of their nests. Not an instant seemed to elapse before a simultaneous attack was made on various unprotected parts, up the trowsers from below, and on my neck and breast above. Their bites wers
like sparks of fire, and there was no escape from them. 1 jumped about for a second or two, then in desperation tore off all my clothing, and picked them off one by one as quickly as possible. Fortunately no one observed this proceeding, or they might have pronounced me to be mad. I was once assaulted in a similar way when sound asleep in my tent, and it was only by holding my blanket over the fire that I could get rid of them. It is really astonishing how such small bodies can contain so large an amount of venom. They not only bite, but twist themselves round after the mandibles are inserted, thus producing a larger amount of laceration and pain than would be effected by the simple wound. Frequently while sitting on oxback they rush up the animal's legs to the rider, and soon let him know that he has disturbed their march. They possess no fear, attacking with equal ferocity the largest as well as the smallest animals. Even if a person leap over the band, numbers of them leave the ranks and rush along the path, as if anxious for a fight. They are very useful as scavengers; when they visit a himan habitation they clear it entirely of the destructive white ants and other vermin: while out of doors rats, mice, lizards, and even the Python natalensis, when in a state of surfeit from recent feeding, fall victims to their fierce onslaught. These ants make their (58) nests a short distance beneath, and not above the soil, as the white ants. Occasionally during their marauding expeditions they construct galleries over their path to the cells of the white ant. in order to secure themselves from the heat of the sun.

January 15th, 1855.-We descended in an hour from the heights of Tala Mungongo to the valley of Cassange. The rivulets which cut up the valley were now dry; but the Lui and Luare contained abundance of rather brackish water. The banks are lined with palm, wild date-trees, and guavas, the fruit of which was now becoming ripe. A tree much like the mango abounds, but yields no fruit. These rivers contain a kind of edible muscle, sustained probably by the brackish quality of the water, the shells of which exist in all the alluvial beds of the ancient rivers as far as the Kuruman. On the open grassy lawns great numbers of a species of lark are seen, black, but with yellow shoulders. Another black bird,
with a long tail (Centropus Senegalensis), floats awkwardly over the long grass, with its tail in a perpendicular position. It always chooses the highest points, and is caught on them with bird-lime for the sake of its long black tail-feathers, which are highly esteemed by the natives for plumes. We saw here also the " Lehututu" (Tragopan Leadbeaterii), a large bird strongly resembling a turkey, and deriving its native name from the noise it makes; when stationary it appears quite black, but when it flies the outer half of the wings are white. It kills serpents, striking them dexterously behind the head. Another species like it is called the Abyssinian hornbill.

Before we reached Cassange we were overtaken by Senhor Carvalho (who had superseded Senhor Rego as commandant since I was here), returning, with a detachment of fifty men and a field-piece, from an unsuccessful search after some rebels. The rebels had fled, and all he could do was to burn their huts. I was most kindly welcomed by my friend Captain Neves, whom I found labourirg under a viclent inflammation and abscess of the hand. Thinking that this affection was simply an effort of nature to get rid of malarious matter from the system, I recommended the use of quinine. He himself applied the leaves of a plant called cathory, famed among the natives as an excellent remedy for ulcers: these when boiled exude a gummy juice, which effectually shats out the external air Each remedy of course claimed the merit of the cure.

In spite of the apparent healthiness of this place, fevers abound and prove particularly fatal to children. A fine bcy of Captain Neves' had been cut off since my passage westward. Another died during the period of my visit: During his sickness his mother, a woman of colour, sent for a diviner in order to ascertain what ought to be done. The diviner, after throwing his dice, worked himself into a state of ecstacy, in which he pretended to be in communication with the Barimo. He then gave the oracular response, that the child was being killed by the spirit of a Portuguese trader who once lived at Cassange. The case was this :-On the death of the trader the Portuguese merchants held a sale among themselves of the goods of the deceased, and accounted for them to the creditors at Loanda. The natives, not understanding the nature of mercantile trans
actions, concluded that the merchants of Cassange had stolen the dead man's goods, and that now the spirit was killing the child of Captain Neves for the part he had taken in the affair Upon this the mother of the child came and told the father that he ought to give a slave to the diviner, as his fee, if he would appease the spirit and save the life of the child. Instead of this, the father quietly sent for a neighbour, and by a brisk application of a couple of sticks to his back suddenly reduced the diviner to a most undignified flight. The child was soon in a dying state, and, as the father wished it to be baptized, I commended its soul to the care and compassion of Him who said, "Of such is the kingdom of heaven." The mother-at once rushed away, and commenced that doleful wail which is so affecting, inasmuch as it expresses sorrow without hope. In the evening her temale companions used a small musical instrument constructed of caoutchouc, which produced a kind of screeching sound, as an accompaniment to the death-wail.

The intercourse which the natives have had with white men does not seem to have ameliorated their condition to any great extent. Very many lives are annually sacrificed to their cruel superstitions without the knowledge, or at all events without the interference, of the Portuguese authorities. The use of the ordeal prevails, and proves very fatal : persons accused of witchcraft, in order to assert their innocency, will often travel from distant districts to a river on the Cassange called Dua, and there drink the infusion of a poisonous tree, and perish. While we were at Cassange a woman who was accused by a brother-in-law of being the cause of his sickness offered to take the ordeal, under the idea that it would prove her conscious innocence. Captain Neves refused his consent to her going, and thus saved her life, which would have been sacrificed to the virulence of the poison. Shortly after, when we were at the Quango, we heard of a chief named Gando, who was accused of witchcraft, being killed by the ordeal, and his body thrown into the river. When a strong stomach rejects it, the accuser reiterates his charge; the dose is repeated, and the person dies. Hundreds perish thus every year in the valley of Cassange.

The prevalence of the same superstitious ideas through the whole of the country north of the Zambesi seems to indicate
a community of race among the tribes. All believe that the souls of the departed still mingle among the living, and partake in some way of the food they consume. In sickness sacrifices of fowls and goats are made to appease the spirits, who wish, as they imagine, to take the living away from earth and all its enjoyments. In cases of murder or manslaughter a sacrifice is made to lay the spirit of the victim. A sect is reported to exist who kill men in order to take their hearts and offer them to the Barimo. The prejudices in favour of these practices are very deeply rooted in the native mind. Even at Loanda they retire out of the city in order to perform their heathenish rites in secrecy. Their religion, if such it may be called, is one of dread. Numbers of charms are employed to avert the evils with which they feel themselves to be encompassed. Occasionally you meet a man, more cautious or more timid than the rest, with twenty or thirty charms hung round his neck, on the principle that among so many he surely must havie the right one. How painful is the contrast between this inward gloom and the brightness of the outer world-between the undefined terrors of the spirit, and the peace and beauty that pervade the scenes around us! I have often thought, in travelling through this land, that it presents pictures of beauty which angels might enjoy. How often have I beheld, in still mornings, scenes the very essence of beanty, and all bathed in an atmosphere of delicious warmth to which the soft breeze imparts a pleasing sensation of coolness as if from a fan! Green grassy meadows, the cattle feeding, the goats browsing, the kids skipping, the groups of herdboys with miniature bows, arrows, and spears; the women wending their way to 'he river with watering-pots poised jauntily on their head ; men sewing under the shady banians; and old grey-headed fathers sitting on the ground, with staff in hand, listening to the morning gossip, while others carry branches to repair their hedges. Such scenes, flooded with the bright African sunshine, and enlivened by the songs of the birds before the heat of the day has become intense, form pictures which can never be forgotten.

Captain Neves was now actively engaged in preparing a present, worth about fifty pounds, to be sent by Pombeiros os
native traders to Matiamvo. It consisted of great quantities of cotton cloth, a large carpet, an arm-chair with a canopy and curtains of crimson calico, an iron bedstead, mosquito curtains, beads, \&c., and a number of pictures rudely painted in oil by an embryo black painter at Cassange. Matiamvo, like most of the natives in the interior of the country, had a strong desire to possess a cannon, and had sent ten large tusks to purchase one; this, being government property, could not be sold, but he was furnished with a blunderbuss, mounted as a cannon, which would probably please him as well.

Feb. 20th.-On the day of starting from Cassange the westerly wind blew strongly, and on the day following we were brought to a stand by several of our party being laid up with fever. Captain Neves, who possesses an observing turn of mind, had noticed that whenever the west wind blows fever immediately follows. The only explanation to be offered for this phenomenon is that the malaria is carried down by this wind from the elevated land of Tala Mungongo into the valley of Cassange. The banks of the Quango, though much more marshy, and covered with ranker vegetation, are comparatively healthy; but the westerly wind does not seem to convey the noxious agent so far. Unhealthiness is the only serious drawback Angola possesses: in every other respect it is an agreeable country, and admirably adapted for yielding a rich abundance of tropical produce. Indeed I have no hesitation in asserting that, had it been in the possession of England, it would now have beer yieiding as much of the raw material for her maniufactures as an equal extent of territory in the cotton-growing States of America. A railway from Loanda to this valley would secure the trade of most of the interior of South Central Africa.

As soon as we could move towards the Quango we did so, meeting in our course several trading parties, both native and Portuguese. Two of the latter were carrying a tusk weighing 126 lbs., and the owner afterwards informed us that its fellow weighed 130 lbs. , though the elephant was rather a small one. Some idea may be formed of the strength of his neck when it is recollected that he bore a weight of 256 lbs. The ivory which comes from the east and north-east of Cassange is very much larger than any to be found further sonth. A
weight of 120 lbs . is by no means uncommon; and occasionally they reach even 158 lbs .

Before reaching the Quango we were again brought to a stand by fever in two of my companions, close to the residence of a Portuguese who rejoiced in the name of William Tell, and who lived here, in spite of the prohibition of the government. This gentleman, having come to invite me to dinner, lrank a little of the water of a pond close by, and caught fever in consequence. If malarious matter existed in water itself, it would have been a wonder had we escaped; for, travelling in the sun, with the thermometer from $96^{\circ}$ to $98^{\circ}$ in the shade, we generally partook of every water we came to. My men were busy collecting a better breed of fowls and pigeons than those in their own country, and Mr. Tell presented them with some large specimens from Rio Janeiro. Of these they were wonderfully proud, and bore the cock in triumph through the country of the Balonda, as evidence of having been to the sea. At the village of Shinte, however, a hyæna came into our camp when we were all sound asleep, and carried off the giant, to the great grief of my men. The anxiety these people have always shown to improve the breed of their domestic animals is, I think, a favourable point in their character. Observing the common breed of cattle in the possession of the Portuguese, and their practice of slaughtering both heifer-calves and cows, and of abstaining from any use of the milk, they concluded that the Portuguese must be an inferior race of white men. They never ceased remarking on the fine soil over which we were passing: and when I happened to mention that most of the flour which the Portuguese consumed came from another country, they exclaimed, "Are they ignorant of tillage?". "They know nothing but buying and selling: they are not men!"

On reaching Cypriano's village on the 28th we found that his step-father had died after we had passed, and that he had spent more than his patrimony in funeral orgies. He informed us that the source of the Quangis is one hundred miles to the south of this, in a range called Mosamba, in the country of the Basongo. We could see from where we were a break in the high land to the south, through which the river comes. In crossing the Quango the ferrymen demanded thirty yards
of calico, but thankfully accepted six. The tanoes 0 (A) W wretched, carrying only two persuns at a time; burnyy men being well acquainted with the water, we all got over in about two hours and a half. The admiration of the inhabitants was excited by the manner in which they managed the cattle and donkeys in crossing. Five or six, seizing hold of one, bundled it into the stream, and thus forced it to swim for its own preservation. Sometimes they swam along with the cattle, and forced them to go on by dashing water at their heads. The servants of the native traders behaved in a very different manner, being rather glad than otherwise when the oxen refused to cross, for, as they were obliged to slaughter them on such occasions, the loss to their masters was a welcome feast to themselves.

On the eastern side of the Quango we passed on, without visiting our friend of the conical head-dress, to the residence of some Ambakistas who had crossed the river in order to secure the first chances of trade in wax. I have before remarked on the knowledge of reading and writing that these Ambakistas possess; they are employed as clerks and writers, their feminine delicacy of constitution enabling them to write a fine lady's hand, which is much esteemed amongst the Portuguese. They are also famed for their love of learning, and have acquired a knowledge of the history of Portugal, of Portuguese law; \&c. \&c. They are remarkably keen in trade, and are sometimes called the Jews of Angola. The black population of Angola has become much deteriorated, chiefly through the consumption of an inferior kind of spirit named aguardente, which is imported into the country, and is most injurious in its effects. We saw many parties carrying casks of this baneful liquor to the independent chiefs beyond; and were informed that it is difficult for any trader to convey it far, as the carriers are in the habit of helping themselves by means of a straw, and filling up the vacuum with water. To prevent this, it is common to see large demijohns with padlocks on the corks, but these are liable to be stolen bodily-an event of common occurrence.

We had now rain every day, and the sky seldom presented that aspect of clear blue expanse so common in the dry lands of the south. The heavens are often overcast by stationary
masses of fleecy clouds, the intervening spaces being filled up with a milk-and-water looking haze. Notwithstanding these unfavourable circumstances, I obtained good observations for the longitude of this important point on both sides of the Quango, and found the river running in $9^{\circ} 50^{\prime} \mathrm{S}$. lat., $18^{\circ} 33^{\prime}$ E. long. On proceeding to our former station near Sansawe's village, he ran to meet us with wonderful urbanity, asking if we had seen Moene Put, king of the white men (or Portuguese), and concluding with an intimation that he would come to receive his dues in the evening. I replied that, if he did not bring a fowl and some eggs, as part of his duty as a chief, he should receive no present from me. He arrived in due course mounted on the shoulders of his spokesman, by way of showing the exalted position he occupied, after the fashion of the Southern Islanders when Captain Cook visited them. My companions, amused at his idea of dignity, greeted him with a hearty laugh. He visited the native traders first, and then came to me with two cocks as a present. I spoke to him zbout the impolicy of the treatment we had received at his hands, and quoted the example of the Bangalas, who had been conquered by the Portuguese for their extortionate demands of payment for firewood, grass, water, \&c. ; and concluded by denying his right to any payment for simply passing through uncultivated land. To all this he agreed; and then I gave him, as a token of friendship, a pannikin of coarse powder, two iron spoons, and two yards of coarse printed calico. He looked rather superciliously at these articles, for he had just received from Senhor Pascoal the Pombeiro a barrel containing 18 lbs. of powder, 24 yards of calico, and two bottles of brandy. Other presents were added the next day by the Pombeiros, who informed me that it was necessary to give largely, because their slaves and carriers are no great friends to them; and if they did not secure the friendship of these petty chiefs, many slaves might be stolen with their loads while passing through the forests. It is thus a sort of blackmail that these insignificant chiefs levy; and the native traders pay simply as a bribe to keep them honest. Most of the carriers of my travelling companions were hired Basongo, who required to be constantly watched in order to prevent them from stealing the goods they carried. Salt, which is
one of the chief articles conveyed into the country, became considerably lighter as we went along, but the carriers shielded themselves by saying that it had been melted by the rain. Their burdens were taken from them every evening and placed in security under the guardianship of Senhor Pascoal's own slaves.

Finding the progress of Senhor Pascoal and the other Pombeiros excessively slow, I resolved to forego his company after I had delivered to him some letters to be sent back to Cassange. We ascended the eastern acclivity that bounds the Cassange valley, and we found that, though apparently lower than that at Tala Mungongo, in consequence of the ascent being more gradual, it is actually much higher. From the summit of the ridge we began to descend towards the central country, hoping soon to get out of the Chibcque territory, which we had entered when we left the Cassange valley. On the 19th of April, however, I was laid up with an extremely severe attack of rheumatic fever, brought on by being obliged to sleep on a plain covered with water. The rain poured down incessantly, but we formed our beds by heaping up the earth into oblong mounds: somewhat like graves in a country churchyard, and then placing grass upon them. We were weather-bound for two days, but as soon as it became fair we attempted to continue our march. My illness, however, aggravated by the cold damp of the heavy dews, would not allow me to proceed, and I was forced to lie by for eight days, tossing and groaning with a violent headache, which made me quite unfit to move, or even to inquire what was passing outside my little tent. Senhor Pascoal, who had been detained by the severe rain at a better spot, at last came up, and applied some dozens of leeches to the nape of the neck and the loins, by which I was partially relieved. After about twenty days I began to recover, and wished to move on, but my men objected to the attempt on account of my weakness.

It happened that the head-man of the village where I had lain had been struck on the mouth by one of my men while bargaining in my camp for a piece of meat. My principal men paid five pieces of cloth and a gun as an atonement; but the more they yielded the more exorbitant he became, and he
sent word to all the surrounding villages to aid him in avenging the affront of a blow on the beard. As their courage usually rises with success, I resolved to yield no more, and departed. In passing through a forest in the country beyond we were startled.by a body of men rushing after us. They began by knocking down the burdens of the hindermost of my men, and several shots were fired, each party spreading out on both sides of the path. I fortunately had a six-barrelled revolver, and with this in my hand I staggered along the path with two or three of my men, and fortunately encountered the chief. The sight of the six barrels gaping into his stomach, with my own ghastly visage looking daggers at his face, seemed to produce an instant revolution in his martial feelings, for he cried out, "Oh! I have only come to speak to you, and wish peace only." Mashauana had hold of him by the hand, and found him shaking. We examined his gun, and found that it had been discharged. Both parties crowded up to their chiefs. The enemy protested their amicable intentions, and my men alleged the fact of the goods having been knocked down as evidence of the contrary. I requested all to sit down, and then said to the chief. "If you have come with peaceable intentions, we have no other; go away home to your village." He replied, "I am afraid lest you should shoot me in the back." I rejoined, "If I wanted to kill you, I could shoot you in the face as well." Mosantu called out to me, "That's only a Makalaka trick; don't give him your back." But I said, "Tell him to observe that I am not afraid of him ;" and, turning, mounted my ox and took my departure. I mention this little skirmish with the object of showing that the negro character in these parts is essentially cowardly, except when influenced by success. Individually these tribes have but little power, but a partial triumph over any body of men would induce the whole country to rise in arms, and this is the chief danger to be feared.

In the evening we came to Moena Kikanje, and found him a sensible man. He is the last of the Chiboque chiefs in this direction, and is in alliance with Matiamvo, whose territory commences a short distance beyond. His village is placed on tbe east bank of the Quilo, which is here twenty yards wide.
and breast deep. The country was generally covered with forest, and we slept every night at some village. I was so weak, and had become so deaf from the effects of the fever, that I was glad to avail myself of the company of Senhor lascoal and the other native traders. Our rate of travelling was only seven geographical miles a day, and two-thirds of the month was spent in stoppages caused by sickness, and the necessity of remaining in different parts to purchase food.

One of the Pombeiros had eight good-looking women in a chain, whom he was taking to the country of Matiamvo to sell for ivory. They always louked ashamed when I happened to come near them, aud felt keenly their degraded position. The terms applied to slaves must sound strangely even to the ears of their owners when they first come from Europe. In Angola the common appellation is "o diabo," or " brutu;" and it is quite usual to hear gentlemen call out " 0 diabo! bring fire." In eastern Africa, un the contrary, they apply the term "bicho" (an animal), and you hear the phrase, "Call the animal to do this or that." In fact, slave-owners come to regard their slaves as not human, and will curse then as the " race of a dog."

We crossed the Loange, a deep but narrow stream, forming the boundary of Londa on the west. Thence we reached the banks of the l'ezo, now flooded, and could not but admire the capabilities for easy irrigation afforded by it. On the 25 th of April we were at the river Chikapa, in lat. $10^{\circ} 10^{\prime} \mathrm{S}$., long. $19^{\circ} 42^{\prime}$ E., which we found to be here fifty or sixty yards wide, and flowing E.N.E. into the Kasai. The adjacent country is of the same level nature as that part of Londa formerly described; but having come further northward than in our previous journey, we found that all the rivers flowed in much deeper valleys than at the points we had formerly crossed them. Beyond the Chikapa we crossed one of its tributaries, named the Kamáue, a small deep stream proceeding from the S.S.IV.; and on the ©0th of April we reached the Loajima, where we had to form a bridge to effect our passage. This was not so difficult an operation as might be imagined; a tree happened to be growing in a horizontal position across part of the stream, and the tough climbing
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 ornsment 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 figureṣ by inserting some black substance beneath the skin. which leares an elevated cicatrix about half an inch long.


No 4. A youns man's ine yoos.

## CHAPTER XXIII.

> Détour southward.-Cabango.-the Kabai and Quango.-The seasons.-Vadley of the Loembwe.-Crossing the Kabai.

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 luts for the hens to lay in, and, on the arrival of strangers, men, womeu, 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 tagging 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. $9^{\circ} 38^{\prime}$ S., long. $20^{\circ} 13^{\prime} 34^{\prime \prime}$ 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 Sylviada and Drymoica, and a black bird (Dicrurus Ludwigii, 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 olanda.

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 vege table 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. $9^{\circ} 31^{\prime} \mathrm{S}$., long. $20^{\circ} 31^{\prime}$ or $32^{\prime} \mathrm{E}$.) is the dwell-ing-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 $58^{\circ}$ to $60^{\circ}$ at 6 A.M., and rising to $80^{\circ}$ 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 purs 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 recoiving the Quango about thirty-five or forty miles to the westward of Mai, after which it assumes the name of Zairé or Zerézeré. 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.F. 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. $5^{\circ} 45^{\prime}$. The town of Luba, another independent chief, is eight days farther in the same direction, or lat. S. $4^{\circ} 50^{\prime}$. 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 1 vory 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 J 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 agreeablelooking 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 riters

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. Retarning 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 hen 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 hanteur 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 28 th we reached the village of the chief Bango (lat. $12^{\circ} 22^{\prime} 53^{\prime \prime} \mathrm{S}$., long. $20^{\circ} 58^{\prime} \mathrm{E}$.), 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 brunght 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 kiling 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 swall 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 yelluwish 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 Kuruman 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 nortbwards, it is questionable if it
ever freezes; but during the prevalence of the south wind the thermometer sinks as low as $42^{\circ}$, 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 womas with a little child, and a girl, wending their way home with loads of manioc without appearing to suffes 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 1 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 opeu 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 quarre]
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 trifing 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 flouncer; 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. Nany 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 courthouse, 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 Chiboque 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 Chiboque, and therefore he claimed the same, together with a gun, ganpowder, 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 mads 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 movedin to 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 refur us passage. The
canues 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. l'itsane 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 snng 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 roces.-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 goatsucker, 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 ns 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 anotber 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 culours 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 formd 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.

Daring 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 heneath the surface. We had thus an opportunity of observing the state of these remarizable piains at different seasons of the year. Next day
we pursued n:ur way, and on the 8th of June we forded the I.otembwa to the N.W. of Dilolo, and regained our former path. The Lutcmbwa 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; bat 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 hav: no doubt that his assertion was correct, and that the Dilo.o 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 :nformation 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 C'ongo, 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 orer the central plateau, they had boine angular fragments of the older rocks in their substance. This latter feature was always a puzzle to me, till favoured with Sir Ru derick Murchison's explanation* of the original form of the continent, for then

[^19]I conld 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 Jannary. 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 sacustrine country, in which the Dicgnodon 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 enormons. 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 Kamhesi, 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 Kangenke, 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 14 th -We reached the collection of straggling villages over which Katema rules, and were thankful to see old familiär 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 15 th Katema came home, having heard of our qrival. 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 fool, 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 sporin, and a tin pannikin containing a quarter of a pound of powder. He seemed greatly pleased with the liherality 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 fect 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-gromnd, 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 Leeba.

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 fout 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 pontonn 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 Leeba, 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 Leeba 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 estallishment 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 $47^{\circ}$, and that of the air $50^{\circ}$, 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 $88^{\circ}$ to $90^{\circ}$, and in the evenings from $76^{\circ}$ to $78^{\circ}$.

Before reaching the town of Shinte we passed through many large villages of the Balobale, who had fled from their chief, Kangenke. 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, araças (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 ke taken of my little uursery. They know the value of fruits, but at present have unly 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 N yamoana, 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 dows 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 Massangino, 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 nuinber 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 Leeba 1 was struck by the sight of a light-green toad about an inch long, which possessed the faculty of leaping on a blade of giass 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-fusiatus (Smith),* which I saw only once in the Bakwain country. 'I'hough 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 $13^{\circ} 23^{\prime} 12^{\prime \prime}$ 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 Leeba to Golungo Alto, and hack again, without losing any of his peculiarities, or ever becoming recouciled to his hard fate in

[^20]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 balted 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 pulitical 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 bluod 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 perfurmance 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 versâ. 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 bloodrelation; 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, whe had accompanied us all the way to Loanda and back. His father was living with Masika, 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 iun away, and that, if he wished to come to Sekeletu again, he would be welcomo. 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 Leeba 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 rasise 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 flesk 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 ramifioations 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 uear 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 therefure 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 27 th. -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 lulliloos. 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 unwortiny motive ; for we received equal liberality now, though our own


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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.-Linyanti.-The chief Sekeletu.-Notices oh 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 longlegged bird of gregarious habits, somewhat larger than a crow, which lives on shellish (Anupulluria), 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 seventr-five unfledged birds. Double this muount 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 banian-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 Mpolclo in great affliction on account of the death of his daughter, who had been murdered br 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 telt 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 nave 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 loctrine, but none to himself.

I left Naliele on the 13th of August, and while procedinge down the river a female hippopotamus struck the canoe witio 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 baving presented me with a tusk, I gave it to l'itsane, 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 furmerly 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 unablo 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 sandbauks appeared whitened during the day with flocks of pelicans, while others were brown with ducks (Anas histrionica) ; and the surface of the stream was cuvered with great numbers of gulls (Procellaria turtur, Smith). The vast quantity of small birds, which feed on insects, show that the rives teems with the more minute torms of organic life. In walk
ing amung 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 Makulolo imagined that the parcels were directed to me as a mere trick, whereby to place witchcraftmedicine 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 $b$ cilt a hut over them to protect them from the weather; and here 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 hy 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 fourd 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, $\mathrm{AlOCO} C$ eagerness to enter into commercial relations with the akololo. 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.)?" 'Ihey 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 1 feltinclined 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 learut that they were in the city, went to them, and pronounced the names I Pitsane, Mashauana, when all started up and crowded round him. He behaved to them in the same liberal mannes as he had done to my companions, and they departed for their distant home after bidding him a formal and affectionate adien.

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, " 1 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 :o dwell."
'Ihe 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. l 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 $96^{\circ}$ 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 l'resbyterian, 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 thon 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 M:kololo 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 17 th 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 shside of my waggon, and protected from the wind, stood at $100^{\circ}$ through the day. It rose to $110^{\circ}$ when exposed to the wind: after sunset it showed $89^{\circ}$, at 10 o'clock p.m. $80^{\circ}$, and then gradually sank to $70^{\circ}$ 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 boyaloa, 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 come 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 ky 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 $138^{\circ}$, and in the shade to $108^{\circ}$. 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 flocds, which had risen so much higher than usual, that canoes were able to pass from one place to another, for a distance of upwands of 120 miles, in nearly a straight line. Many pools of stagnant water, when disturbed, emitted a strong effluvium 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, 1 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 bide 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 beer 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 hyænas, 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-lookin, 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 1 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 feed. his servants very well. Having thus far noticed the dark side of the native character, I must not omit to add chat I have witnessed frequent acts of kindness and liberality. 1 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 cises 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, Stkeletu favoured me with his company at meals : hut it soon came to an end. The

Makololo were well acquainted with the sugar-cane, but uever knew that sugar could be got from it. When I explainod 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 be and his councillors replied, "'Ihe 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 wate ${ }^{-}$ they were obliged subsequently to cross exhausted theì 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 ir their music they startled the inhabitants more than if the, had been lions. As they were not affected by the bite of the tsetse, there was every probability of the experiment of theis 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 Kolubeng 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 Zaubesi 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.

Degcent 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. I'he 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 numkers 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 kixdly 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 Nampene, at the beginning of the rapids, where we were obliged to leave the canoes and proceed along the banks on
foct. 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 Sekote, called Kalai, 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 seeu; 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 ${ }^{\text {'visit }}$ 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 enougb to examine them, but, viewing them with awe at a distance, said, in reference to the vapour and noise, "Mosi oa tonya," (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 ary 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 bill, 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 un 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 bither 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 odge 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 conner, 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 throwi 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 atter 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 1 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 1 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 thom to
the idea that this was the abode of Deity. Some of the Makololo who went with me near to Gonye lnoked 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 supremealone 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 folluwing 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.
$20 t h$ November.-Sekeletu and his large party having conveyed me thus far, and furnished me with a company of 114 men (04) to carry the tusks to the coast, we bade adieu to the Makololo, and wroceeded northwarda to the river Lekone. The country

village near victoria falls
around is very beautiful, and was once well peopled with Batoka, who possessed enormous herds of cattle. They had been, huwever, 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 rinable to detect ihe 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 purtion 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 $17^{\circ}$ and $21^{\circ} \mathrm{S}$. 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 cunsequence 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 rivercourses themselves bear testimony to the original lacustrine condition of this resion, 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 thusgh the interlacing may not be quite to the extent believed by the natives, the country is so leve] 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 unablo to ascend the Zambesi, employed the natives to draw a map embodying their ideas of that river. My own subsequent explorations of the river pruved the general correctness of this map, and therefore I think that their views of the courses of other rivers are not unwortliy 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 i.; more to the N.E. 'The country is rougn 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. Wheu luoking at these skulls I remarked to Moyara that many of them were those of mere hoys, and I asked why his father had killed boys. "'Io 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 25 th 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 boyaloa, 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 ton 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 ocuasionally, when the Batoka borrowed my looking-glass, the disparaging remark would be made respecting boys or girls who still retained their teetn, "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 permicious 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 d sgusting 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 tasks, and we also had a small party of Bashuhia 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 26 th.-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

Lekone, runs westward, and falls into the Zambesi a littlo above the commencement of the rapids. We passed the remains of a very large town, which must have been inhabited for a long period; for the millstones of gneiss, trap, and quartz were worn down two and a half inches perpendicularly. The region around is pretty well covered with forest: but there is abundance of open pasturage, and as we are ascending in altitude we find the grass short, and altogether unlike the tangled herbage of the Barotse valley.

It is remarkable that we now meet with the same trees we saw in descending towards the west coast. A kind of sterculia, which is the most common tree at Loanda, and the baobab, flourish here; as well as the tree called moshuka, which we found near Tala Mungongo, yielding a fruit resembling small apples, but tasting like a pear. We found prodigious quantities of this fruit as we went along, and my men almost lived upon it for many days: the tree attains the height of 15 or 20 feet, and has hard, glossy leaves as large as a man's hand. We also obtained baskets of manéko, a curious fruit about the size of a walnut, with a horny rind, splitinto five pieces: it contains a fine glutinous matter, sweet as sugar. The seeds are covered with a yellow silky down, and are not eaten. We got also abundance of the motsouri and mamosho. We saw the Batoka eating the beans called nju, which are contained in a large square pod; also the pulp between the seeds of nux vomica, and the motsintséla. Other fruits become ripe at other seasons, as the motsikiri, which yields an oil-a magnificent tree, bearing masses of dark evergreen leaves. We saw trees allowed to stand in gardens, and some of the Batoka even plant them-a practice seen nowhere else among natives. A species of leucodendron abounds, the young leaves of which were observed to twist themselves round during the heat of the day, so as to expose only the edge to the rays of the sun. The acacias in the same circumstances, and also the mopane (Bauhinia), fold their leaves together, presenting the smallest possible surface to the sun, after the manner of the eucalypti of Australia. In the adjacent country palms abound, but none of the species which yield the oil; there are numbers of flowers and bulbs just shooting up from the soil, and, thougb
the country is parched, it has not that appearance, as many trees have put forth their fresh green leaves. Among the rest stands the mola, with its dark brownish-green colour and spreading nak-like form.

## CHAPTER XXVII.

Natural History and Geology.-The Mozuma.-The Batoka, and their Chief Monze.

November 27th.-Still at Marimba's. The surface of the country is rough and broken into gullies, and in the distance there are ranges of low hills, of which we may notice one on the north called Kanjele, and one on the east named Kaonka. We have made a considerable detour to the north, from the double wish of avoiding the tsetse and visiting the people. As I was walking down to the forest to-day I observed many regiments of black soldier-ants returning from a marauding expedition. I have often noticed these in different parts of the country ; and as we had even at Kolobeng an opportunity of observing their habits, I may give a short account of them here. They are black, with a slight tinge of grey, about half an inch in length, and march three or four abreast; when disturbed, they utter a distinct hissing or chirping sound. They follow a few ceaders who never carry anything, and they seem to be guided by a scent left on the path by these leaders; for happening once to throw some water on the ground, it lighted on the path by which a regiment had recently passed, and when they returned they were totally at fault, and, after hunting about for nearly half an hour, only rediscovered the path by one of them making a long circuit round the wetted spot. If a handful of earth is thrown on the path as a regiment is in the act of passing either on its way home or abroad, those behind will not cross it, though it be not a quarter of an inch high. They wheel round and regain their path again, but never think of retreating to the nest, or to the place where they have been stealing. After a quarter of an hour's confusion and hissing, one at length makes a
circuit round the earth, and then all follow in that roundabout way. When they approach the abode of the white ants, the latter may be observed rushing about in a state of the greatest perturbation. The black leaders, distinguished from the rest by their greater size, especially in the region of the sting, seize the white ants one by one, and inflict a sting which renders them insensible but not dead. As the leaders toss them on one side, the rank and file seize them and carry them off.

One morning I saw a party going forth on what has been supposed to be a slave-hunting expedition. 'They came to a stick, which, being enclosed in a white-ant gallery, contained numbers of this insect; but I was surprised to see the black soldiers passing without touching it. I lifted up the stick and laid it across the path in the middle of the black regiment, to the consternation of the white ants, who scampered about with great celerity, hiding themselves under the leaves. The black marauders at first paid little attention to them, untii one of the leaders caught them, and, applying his sting, laid them in an instant on one side in a state of coma; the others then promptly carried them off. On first observing these marauding insects at Kolobeng, I had the idea, imbibed from a work of no less authority than Brougham's Paley, that they seized the white ants in order to make them slaves; but the result of my own observation is that these black ruffians are a - grade lower than slave-masters, being actual cannibals. For, in the first place, I have watched black ants hard at work removing their eggs to a place of safety, and, though every ant in the colony, to the number of 1260 , seemed to be employed in this laborious occupation, yet there was not a white slave-ant among them. And, in the second place, I have observed the cannibal propensities of the black ant; for, on one occasion, I met with a band of them returning each with his captive, minus a leg which had been already devoured. In addition to this, if any one examine the orifice by which the black ant enters his barracks, he will always find a little heap of.hard heads and legs of the white ants. Were it not for the black ant, the white ants would soon overrun the country, so prolific are they. The fluid in the stings of this species has an intensely acid tasta.

I had iften before noticed the stupefaction produced by the injection of a fluid from the sting of certain insects. It is particularly observable in a hymenopterous insect called the " plasterer" (Pelopœus Eckloni), which in its habits resembles somewhat the mason-bee. It is about an inch and a quarter in length, jet-black in colour, and may be observed coming into houses, carrying in its fore-legs a pellet of soft plaster about the size of a pea. When it has fixed upon a convenient spot it forms a cell about the same length as its body, plastering the walls so as to be quite thin and smooth inside. When this is finished it brings seven or eight caterpillars or spiders, each of which is rendered insensible by the fluid from its sting. These it deposits in the cell, together with one of its own larvæ, which, as it grows, finds fresh food ready for its use. The insects are in a state of coma, but the presence of vitality prevents putridity, or desiccation. By the time the young insect is full grown and its wings completely developed, the food is done. It then pierces the wall of its cell at the place last filled up by its parent, and begins life for itself. The plasterer is a most useful insect, as it checks the inordinate increase of caterpillars and spiders. It may often be seen dragging along a caterpillar or even a cricket much larger that itself, but lying perfectly still after the injection of the poison. The fluid in each case is, I suppose, designed to cause insensibility and likewise act as an antiseptic, the death of the victims being without pain.

The white ants perform a most important part in the economy of nature, by burying decaying vegetable matter quickly beneath the soil, just as the ferocious red ant dues dead animal substances. The white ant keeps generally out of sight, and works under galleries constructed by night, to screen them from the observation of birds. At some given signal, however, though I never could ascertain what, they rush out by hundreds, and the sound of their mandibles cutting grass into lengths may be heard like a gentle wind murmuring through the leaves of the trees. They drag these pieces to the doors of their abodes, and after some hours' toil leave off work, leaving many of the bits of grass collected around the orifice. They continue out of sight for perhaps a month, but are never idle. On one occasion a good buidle of
grass was laid down for my bed un a spot which was quite smooth and destitute of plants. The ants at once sounded the call to a good supply of grass. I heard them incessantly nibbling and carrying away all that night; and they continued all next day and night with unabated energy, and yet, after thirty-six hours of incessant toil, they seemed as fresh as ever. In some situations, if we remained a day, they devoured the grass beneath my mat, and would have eaten the mat tou, had we not laid down more grass. At some of their operations they beat time in a curiuus manner. Hundreds of them are engaged in building a large tube, and at a signal they all give three or four energetic beats on the plaster in unison, in order to beat it smooth, producing a sound like the pattering of drops of rain off a bush when it is shaken. These insects are the chief agents employed in forming a fertile soil, and, were it not for their labours, the tropical forests, bad as they now are with fallen trees, would be a thousand times worse. They would be impassable on account of the heaps of dead vegetation lying on the surface, and emitting worse effluvia than the comparatively small unburied collections now do. When one looks at the wonderful adaptations throughout creation, and the varied operations carried on with such wisdom and skill, the idea of second causes looks clumsy. We feel that we are viewing the direct handiwork of Him who is the one and only Power in the universe; wonderful in counsel; in whom we all live and move and have our being.

November 28th.-We proceeded to Kaonka's village, situated on the hill of the same name already referred to. According to Sekeletu's order, Kaonka gave us the tribute of maize-corn and ground-nuts, which would otherwise have gone to Linyanti. This had been done at every village, and we thereby saved the people the trouble of a journey to the capital. After leaving Kaonka we travelled over a gently undulating and beautiful district, forming the border territory between those who accept, and those who reject, the sway of the Makololo. Chere are no rivers, though water stands in pools in the hollows. The soil is dry, and suited both for cattle and corn; there are few trees, but fine large shady ones stand dotted here and there about the former sites of towns. One of the
fig family I found to be forty feet in circumference; the heart had been burned out, and some one had made a lodging in it. The sight of the open country, with the increased altitude we were attaining, was most refreshing to the spirits. The country is now uninhabited, and hence game abounded. We saw in the distance buffaloes, elands, hartebeest, gnus, and elephants, all very $\operatorname{tame}$, because undisturbed. Lions, which always accompany other large animals, roared about us in the moonlight, and one began to roar at me, even while it was still light. The temperature was pleasant, as the rains, though not universal, had fallen in many places. The thermometer stood at $70^{\circ}$ in the morning, at $90^{\circ}$ at noon, and at $84^{\circ}$ in the evening. The different rocks to the westward of Kaonka's, talcose gneiss, and white mica schist, generally dip towards the west, but at Kaonka's large rounded masses of granite, containing black mica, began to appear. The outer rind of it inclines to peel off, and large crystals project from the exposed surface.

After a good shower of rain the piercing notes of the cicadæ are perfectly deafening; a drab-coloured cricket joins the chorus with a sharp sound which seems to make the ground over it thrill, and which has as little modulation as the drone of a Scottish bagpipe. When cicadæ, crickets, and frog, unite, their music may be heard at the distance of a quarter of a mile. A tree attracted my attention as new, the leaves being like those of an acacia, but the ends of the branches from which they grew closely resembled oblong fir-cones. The corn poppy was abundant, and many of the trees, flowering bulbs, and plants, were identical with those in Pungo Andongo. A flower, as white as the snowdrop, named by the natives, from its shape, " Tlaku ea pitse" (hoof of zebra), spots the sward with its beautiful pure white. A fresh crop appears every morning, and if the day is cloudy they do not expand till the afternoon, and in an hour or so droop and die. 1 carried several of the somewhat bulbous roots of this pretty flower to the Mauritius.

On the 30th we crossed the river Kalomo, here about 50 yards broad, and the only stream that never dries up on this ridge. The current is rapid, and its course is towards the south, as it joins the Zambesi at some distance below the falls. The change in the direction of the streams, the Unguesi and

Lekone flowing westward, proved to us that we were now standing on the apex of the ridge, the height of which above the sea we found to be above 5000 feet. Here the granite crops out again in great rounded masses which change the dip of the gneiss and mica schist rocks from the westward to the eastward. Both eastern and western ridges are known to be comparatively salubrious, and in this respect, as well as in the general aspect of the country, they resemble that most healthy of climates, the interior of South Africa arljacent to the Desert. This ridge has neither fountain nor marsh upon it, and east of the Kalomo we look upon treeless undulating plains covered with short grass. It is continued in a S.E. direction across the Zambesi to a point about four days east of Matlokotloko, the present residence of Mosilikatse, where it assumes the name of the Mashona tribe.

The ridge on which we were now standing, and which forms the eastern limit of the great central basin of Africa, is distant from the western one about 600 geographical miles. I cannot hear of a hill on either ridge, and there are scarcely any in the space enclosed by them. The Monakadze is the highest, but that is not more than a thousand feet above the flat valley. On account of this want of hills I have adopted the term ridges to describe the gradual elevations which $\mathbf{I}$ have been noticing. We shall yet see that the mountains which are met with outside these ridges are only a low fringe, many of which are not of much greater altitude than even the bottom of the great central valley. Leaving out of view the greater breadth of the central basin at other parts, we might say that its form in this region resembles a broad furrow in the middle, with an elevated ridge about 200 miles broad on either side, whence the land slopes on both sides to the sea. If I am right in believing the granite to be the cause of the elevation of this ridge, the direction in which the strike of the rocks trends to the N.N.E. may indicate that the same geological structure prevails farther north, and in this case the lakes which exist in that direction may be of exäctly the same nature with lake Ngami, having been diminished to their present size by the same kind of agency as that which formed the falls of Victoria.

On the Kalomo we met an elephant which had no tusks, as
rare a sight in Africa as one with tusks is in Ceylon. Buffaloes abound, and we see large berds of them freding in all directions by day. When much disturbed they retire into the densest parts of the forest, and come out to feed only by night. We secured a fine large bull by crawling close to a herd; when shot, he fell down, and the rest, not seeing their enemy, gazed about, wondering where the danger lay. Most wild animals gore a wounded companion and expel him from the herd; even zebras bite and kick a diseased one. It is intended by this instinct that none but the perfect and healthy ones should propagate the species. In this case they manifested their usual propensity to gore the wounded, but our appearance at that moment caused them to take flight. The goring gave my men the impression that they were helping away their wounded companion with brotherly affection. He was shot through both lungs; but though the ball was two ounces in weight, and had penetrated right through his body, he ran off some distance, and was secured only by the people driving him into a pool of water and there despatching him with their spears. The herd ran away in the direction of our camp, and then came bouwding past us again. We took refuge on a large anthill ; and as they rushed by us at full gallop I observed that the leader of the herd was an old cow, carrying on her withers about twenty buffalobirds ( $T_{\text {extor erythrorhynchus, Smith). This singular bird acts }}$ the part of guardian spirit to the buffalo: when the animal is quietly feeding, it may be seen hopping on the ground picking up food, or sitting on the buffalo's back ridding it of the insects with which its skin is sometimes infested. When danger approaches, the bird, having a much more acute sight than the buffalo, is soon alarmed, and flies off, upon which the buffalo instantly raises his head to discover the cause which has led to the sudden flight of his guardian. It sometimes accompanies the buffalo in its flight on the wing, and at other times sits as above described. Another African bird, called "kala" by the Bechuanas, the Buphaga Africana of the naturalists, attends the rhinoceros for a similar purpose. It cannot be said to depend entirely on the iusects on that animal, for its hard hairless skin is a protection against all except a few spotted ticks; but it seems to be atiached to it,
somewhat as the domestic dog is to man; and while the buffalo is alarmed by the sudden flying up of its sentinel, the rhinoceros, having an acute ear, is warned by the cry of its associate. The rhinoceros feeds by night, and its sentinel is frequently heard in the morning uttering its well-known call as it searches for its bulky companion. One species of this bird possesses a bill of a peculiar forceps form, as if intended to tear off insects from the skin, and has claws as sharp as needles, enabling it to bang on to an animal's ear while performing a useful service within it. Both the birds, however, that we have just described, partake of other food than the parasitical insects of the animals they are attached to, for we observed flocks of them roosting on reeds in spots where neither tame nor wild animals were to be found.

The "leader" is generally the most wary animal in a herd. On one occasion I happened to shoot a young zebra mare, the leader of a herd, and it turned out that it had been at some previous time bitten on the hind leg by a carnivorous animal, and thereby made unusually wary. If wild animals see either one of their own herd or any other animal taking to flight, they invariably flee, and hence the most timid naturally leads the rest. It is not any other peculiarity, but simply this provision, which is given them for the preservation of the race. The great increase of wariness which attends the season of parturition causes all the leaders at that time to be females; and perhaps the separation of sexes into distinct herds, which is annually observed in many antelopes, arises from the simple fact that the greater caution of the females is felt only by the young males, and that the old males get left behind in their frequent flights. I am inclined to believe this, because the antelopes, as the pallahs, \&c., are never seen in the act of expelling the males. There may be some other reason in the case of elephants; but the males and females are never seen in one herd, the young males remaining with their dams only until they are full grown. So constantly is the separation maintained, that any one familiar with them, on seeing a picture with the sexes mixed, would immediately conclude that the artist had drawn it from imagination, and not from sight.

December 2, 1855.—We remained near a small hill, called

Maundo, where we were frequently invited by the honeyguide (Cuculus indicator). Wishing to ascertain the truth of the native assertion that this bird'is a deceiver, and sometimes leads to a wild beast, I inquired of my men the result of their experience. Only one of the 114 could say that he had been led to an elephant instead of a hive, and I am quite convinced that the report was a libel on the bird, and that the majority of people who commit themselves to its guidance are led to honey alone.

On the 3rd we crossed the Mozuma, or river of Dila, having travelled through an undulating pastoral country. To the south, and a little east of this, stands the hill named Taba Cheu, or "White Mountain," from a mass of white rock, probably dolomite, on its top. When I heard the height of this mountain described at Linyanti, I thought the glistening substance might be snow; but I had quite forgotten that I was speaking with men who had been accustomed to plains, and knew nothing of high mountains. When I inquired what the white substance was, they at once replied it was a kind of rock. The distant views which we obtained from the high ground we were now traversing, and which ranged over some thirty miles, were especially refreshing to me after travelling for months together amid the confined views of the flat forest; nor was the change from the tangled rank herbage of the great valley to the short grass of this district less agreeable.

The Mozuma, or river of Dila, was the first watercourse which indicated that we were now on the slopes inclined towards the eastern coast. It contained no flowing water, but revealed in its banks, to my great satisfaction, pieces of lignite, possibly indicating the existence of coal, the want of which in the central country I had always deplored. Again and again we came to the ruins of large towns, containing the only indications of antiquity to be seen in this country, viz. worn millstones, with the round ball of quartz with which the grinding was effected. Great numbers of these balls were lying about, showing that the depopulation had been the result of war, for in time of peace they would have taken the balls with them. At the river of Dila we saw the spot where Sebituane lived, and Sekwebu pr,inted out the heaps of bones of cattle which the Makololo had been obliged to slaughter,
after performing a march with great herds captured from the Batoka, through a patch of the fatal tsetse. The country was at that time exceedingly rich in cattle, and, being well watered from its position on the eastern side of the range, it is adapted for the cultivation of native produce. Sekwebu had been instructed to point out to me the advantages of this position for a settlement; I admired it myself, and the enjoyment of good health in fine open scenery had an exhilarating effect on my spirits. The great want was population, the Batoka having all taken refuge in the hills.

As we were now in the vicinity of those whom the Makololo deem rebels, we felt some anxiety as to the style of our reception. On the 4th we reached their first village. Remaining at a distance of a quarter of a mile, we sent two men to inform them who we were, and that our purposes were peaceful. The head-man came and spoke civilly, but in the evening the people of another village behaved very differently. They began by trying to spear a young man who had gone for water. They then approached us, and one came forward howling at the top of his voice in the most hideous manner; his eyes protruding, his lips covered with foam, and every muscle of his frame quivering. He came close up to me, brandishing a small battle-axe in his hand, much to the alarm of my men; but they dared not disobey my orders by knocking him on the head. I also felt some alarm, but disguised it from the spectators, and kept a sharp look-out on the little battle-axe. It seemed to me a case of extacy or prophetic frenzy voluntarily produced. After my courage had been sufficiently tested I beckoned to the civil head-man to remove him, and he drew him aside. This man pretended not to know what he was doing. I should like to have felt his pulse, to ascertain whether the violent trembling were not feigned, but I had little inclination to approach the battle-axe again. There was however a flow of perspiration, and the excitement, after continuing fully half an hour, gradually subsided. This second batch of visitors took no pains to conceal their contempt for our small party, saying to each other in a tone of triumph, "They are quite a God-send!" "They are lost among the tribes!" "They have wandered in order to be destroyed, and what can they do without shields among so
many ?" As Sekeletu bad ordered my men not to take their shields, as in the case of my first company, we were regarded as unarmed, and consequently as an easy prey. We prepared against a night attack by discharging and reloading our guns which were exactly the same in number (five) as on the former occasion : we were not molested however. Some of the enemy tried to lead us towards the Bashukulompo, who are considered the fiercest race in this quarter; but as we knew our direction to the confluence of the Kafue and Zambesi, we declined their guidance. When we resumed our march the civil head-man accompanied us, and did good service by explaining to the crowds of natives that hovered round us our character and intentions; we thus escaped molestation. That night we slept by a little village under a low range of hills which are called Chizamena. The country here was more woody than on the high lands we had left, but the trees were in general of only muderate size. Great numbers of them have been broken off by elephants a foot or two from the ground, in order that they may feed on the tender shoots at the tops : the trees thus seem pollarded from that point. In spite of this practice, the elephant never seriously lessens the number of trees; indeed I have often been struck by the very little damage he does in a forest. His food consists for the most part of bulbs, tubers, roots, and branches : the natives in the interior believe that he never touches grass, and the only instance I saw of his having grazed was near Tete, when the grass was in seed, and when be might have been attracted by the farinaceous matter, which exists in such quantities in the seed that the natives collect it for their own food. The country abounded in ant-hills, which in the open parts are studded over the surface like haycocks, while in the woods they attain the size of haystacks, 40 or 50 feet in diameter at the base, and at least 20 feet high. These spots are more fertile than the rest of the land, and are the chief gardenground for maize, pumpkins, and tobacco.

When we had passed the outskirting villages, which alone consider themselves in a state of war with the Makololo, we found the Batoka, or Batonga, as they call themselves, quite friendly. Great numbers of them came from all the surrounding villages with presents of maize and masuka, ex-
pressing great joy at the first appearance of a white man. The women clothe themselves better than the Balonda, but the men walk about in puris naturalibus without the smallest sense of shame. They have even lost the tradition of the "figleaf." The further we advanced, the more the country swarmed with inhabitants. Great numbers came to see the novel spectacle of a white man, and brought presents of maize and masuka. Their mode of salutation is singular ; they throw themselves on their bacis on the ground, and, rolling from side to side, slap their thighs, uttering the words, "Kina bomba." This was to me a very disagreeable sight, and I used to call out "Stop, stop! I don't want that;" but, imagining me to be dissatisfied, they only tumbled about more furiously and slapped their thighs with greater vigour.

A large amount of ground in this quarter was covered with masuka-trees, and my men kept constantly eating the pleasant fruit as we marched along. We saw a smaller kind of the same tree named Molondo, the fruit of which is about the size of marbles, having a tender skin, and a slight acidity mingled with its sweetness. Another tree which is said to yield good fruit is named Sombo, but it was not ripe at this season.

December 6th.-We passed the night near a series of villages. The villagers supplied us abundantly with ground-nuts, maize, and corn, and expressed great satisfaction on hearing me speak of Him whose word is "Peace on earth and good will to men." They called out, "We are tired of flight; give us rest and sleep." They did not of course understand the full import of the message, but they eagerly seized the idea of peace. And no wonder; for their country has been visited by successive scourges during the last half-century, and they are now "a nation scattered and peeled." When Sebituane came the cattle were innumerable, and yet these were only the remnants which had been left by a chief called I'ingola, who came from the north-east, and, actuated by a simple love of conquest, swept across the whole territory, devouring oxen, cows, and calves, without retaining a single head. After Pingola came Sebituane, and after him the Matebele of Mosilikatse; and these successive inroads have reduced the Batoka to a state in which they naturally rejoice at the prospect of deliverance and peace

We spent Sunday the 10th at Monze's village, who is considered the chief of all the Batoka we have seen. He lives near the hill Kisekise, whence we had a view of at least thirty. miles of copen undulating country, covered with short grass, and having but few trees. These open lawns would in any other land be. turned to good account as pasture, but the people have now only a few goats and fowls. They are located all over the country in small villages, and are said to have adopted this wide-spread mode of habitation in order to give alarm should any enemy appear. In former times they lived in large towns. In the distance (S.E.) we see ranges of dark mountains along the banks of the Zambesi, and are told of the existence there of a rapid named Kansala, which is said to impede the navigation. The river is reported to be placid between that and the Victoria Falls up stream, and between that and Kebrabasa, twenty or thirty miles above Tete, down stream. On the north we have a distant range of mountains, said to be on the banks of the Kafue.

The chief Monze came to us on Sunday morning, wrapped in a large cloth, and rolled himself about in the dust, screaming "Kina bomba." One of his wives accompanied him, and was much excited at her first sight of a white man; she would have been comely if her teeth had been spared; she carried a little battle-axe in her hand, and helped her husband to scream. We rather liked Monze, for he soon became sociable, and kept up conversation during the greater part of the day. One head-man of a village after another arrived, each with a liberal supply of maize, ground-nuts, and corn. Monze gave us a goat and a fowl, and appeared highly satisfied with a present of some handkerchiefs of printed cotton : when I put a gaudycoloured one as a shawl about his child, he said that he would send for all his people to make a dance about it. When I tuld them that my object was to open up a path, whereby they might avoid the guilt of selling their children, and asked Monze and his men if they would like a white man to live amongst them, they all expressed high satisfaction, and promised to protect both the white man and his property. It would be of great importance to have stations in this healthy region, to serve as part of a chain of communication between the interior and the coast. Monze had never been visited bv
any white man, but had seen black native traders, who came for ivory, not for slaves. He had heard of white men passing far to the east of him to Cazembe, referring, no duubt, to Pereira, Lacerda, and others, who have visited that chief.

The streams in this part are not perennial; I did not observe one suitable for the purpose of irrigation. With the exception of large single trees, or small clumps of evergreens, there is little wood; but the abundance of maize and ground-nuts shows that more rain falls here than in the Bechuana country, where they never attempt to raise maize except in damp hollows on the banks of rivers. My own men, who know the land thoroughly, declare that it is all adapted for garden-ground, and that the more tender grains, which require richer soil than the native corn, thrive here. The pasturage is also very fine both for cattle and sheep.

- We were visited by a party of men who dressed their hair after the fashion of the Bashukulompo. A circle of hair at the top of the head, eight inches or more in diameter, is woven into a cone eight or ten inches high, bent in some cases a little forward, so as to bear the appearance of a helmet. In some cases the cone is only four or five inches in diameter at the base. The hair of animals is said to be added, and the sides of the cone are woven like basket-work. The head-man of the party, instead of having his brought to a point, had it prolonged into a wand, which extended a full yard from the crown of his head. The operation of weaving is painful, as the scalp is drawn tightly up; but they become used to it. Monze presented us on parting with a piece of a buffalo which had been killed the day before by lions. We crossed the rivulet Makoe, which runs westward into the Kafue, and went northwards in order to visit Semalembue, an influential chief there. We slept at the village of Monze's sister, who also passes by the same name. Both he and his sister have a feminine appearance, but are disfigured by the foolish custom of knocking out the upper front teeth.

December 12th.-The morning presented the appearance of a continuous rain from the north, the first time we had seen it set in from that quarter in such a southern latitude. It cleared up, however, about midday, and Monze's sister conlucted u- a mile or two upon the road. On parting she

said that she had forwarded orders to a distant village to send food to the point where we should sleep. In expressing her joy at the prospect of living in peace, she remarked, "How pleasant it would be to sleep without dreaming of any one pursuing them with a spear!"

In our fiont we had ranges of hills called Chamai, covered with trees. We crossed the rivulet Nakachinta, flowing eastwards into the Zambesi, and then traversed some ridges of rocks of the same mica schist which we found so abundant in Golungo Alto: The dip, however, of these is not towards the centre of the continent as in Angola, but in an easterly direction. The hills which flank the Zambesi now appeared on our right as a high dark range, while those near the Kafue had the aspect of a low broken range. We crossed two perennial rivulets flowing into the Kafue. The country is very fertile, but vegetation is nowhere rank. We had now descended to a comparatively low elevation, and had left behind us the masuka-trees, and many others with which we had become familiar. We occasionally noticed a feature common in the forests of Angola and Benguela, namely the presence of orchilla-weed and lichens on the trees, with mosses on the ground; but we never, on any part of the eastern slope, saw the abundant crops of ferns.which are so universal in Angola.

As we passed along, the people continued to supply us with food in great abundance. They had somehow learnt that I carried medicine, and, much to the disgust of my men, who wished to keep it all to themselves, they brought their sick children, some of whom had hooping-cough, to be cured. In passing through the woods I heard for the first time the cry of the bird called Mokwa reza, or "Son-in-law of God" (Micropogon sulphuratus?), which is supposed by the natives to say "Pula, pula" (rain, rain), predictive of heavy falls of rain. It may be a cuckoo, for it is said to throw out the eggs of the white-backed Senegal crow, and lay its own instead, and this, combined with the cry for rain, renders the bird a favourite. The crow, on the other hand, has a bad repute, end, when rain is withheld, its nests are destroyed, in order to dissolve the charm by which it is supposed to seal up the windows of heaven.

## CHAPTER XXVIII.

## Notices of the Elephant.-Ter Chief Semalembuf.-Tite Rafre -Albinos.-The Chief Mburuma.

13th.-The country is becoming very beautiful, and furrowed by deep valleys; the underlying rocks, being igneous, yield a fertile soil. There is abundance of large game: the buffaloes select open spots, and often eminences, as their haunts throughout the day We crossed the Mbai, and found in its bed, as well as on the adjacent hills, rocks of fine marble. Violent showers occur frequently on the hills, and cause such sudden floods in the rivulets, that five of our men who had crossed some for firewood were obliged to swim back. The temperature of the air is considerably lowered by the daily rains, the thermometer having been as low as $68^{\circ}$ at sunrise, and $74^{\circ}$ at sunset. Generally, however, it stood at from $72^{\circ}$ to $74^{\circ}$ at sunrise, $90^{\circ}$ to $96^{\circ}$ at midday, and $80^{\circ}$ to $84^{\circ}$ at suruset.

14th.-We entered a most beautiful valley, abounding in large game. I went to secure a buffalo which I saw lying down. Three balls failed to kill him, and, as he turned round as if for a charge, we sought the shelter of some rocks, but, before gaining them, three elephants, probably attracted by the strange noise, threatened to cut off our retreat: they, however, turned short off, and allowed us to gain the rocks. We then saw that th, buffalu was moving off quite briskly, and in despair I tried a long shot at the last of the elephants, and broke his foreleg. The young men soon brought him to a stand, and one shot in the brain despatched him. I was right glad to see the joy manifested at such an abundant supply of meat.

On the following day, while my men were cutting up the elephant, great numbers of the villagers came to enjoy the feast. We were on the side of a fine green valley, studded here and there with trees, and furrowed with numerous rivulets. Having retired from the noise to take an observation, I beheld an elephant and her calf at the end of the valley. about two miles distant. The calf was rolling in the
mud, and the dam was standing fanning herself with her great ears. As I watched them through my glass I saw a long string of my men circumventing them, who, according to Sekwebu, had gone off, saying, "Our father will see to-day what sort of men he has got." I then went higher up the side of the valley, in order to have a distinct view of their mode of hunting. The goodly beast, totally unconscious of the approach of an enemy, stood for some time suckling her young one, which seemed about two years old; they then went into a pond of mud, and smeared themselves all over with it, the little one frisking about his dam in elephantine fashion, while she kept flapping her ears and wagging her tail, as if in the height of enjoyment. Then began the piping of her enemies, which was performed by blowing into a tube, or between the closed hands. They call out to attract the animal's atten-tion-

> "O chief! chief! we have come to kill you. O chief! chief! many more will die beside you, \&c. The gods have said it," \&c. \&c.

Both animals expanded their ears and listened, then left their bath as the crowd rushed towards them. The little one ran forward towards the end of the valley, but, seeing the men there, returned to his dam, who then placed herself on the danger side of her calf, and passed her proboscis over it again and again, as if to assure it of safety. The men, still shouting, singing, and piping, kept about a hundred yards in her rear and on her flanks, until she was obliged to cross a rivulet. The time spent in descending and getting up the opposite bank allowed of their coming up to the edge, and discharging their spears at about twenty yards' distance. After the first discharge she appeared with her sides red with blood, and, beginning to flee for her own life, seemed to think no more of her calf, which soon took refuge in the water, and was killed. The pace of the dam gradnally became slower, and at length, turning with a shriek of rage, she made a furious charge back among the men. They vanished sideways, while snran straight on through the whole party, without coming near any one except a man who wore a piece of cloth on his shoulders. She charged three or four times. and, except in


FEMALE ELEPHANT PURSUED WITH JAVELINS, PROTECTING HER YOUNG
the first instance, never went farther than 100 yards. She often stood after she had crossed a rivulet, and faced the men, though she received fresh spears. It was by this process of spearing and loss of blood that she was killed, for at last, making a short charge, she reeled and sank down dead in a kneeling posture. I did not see the whole hunt, having been tempted away by both sun and moon appearing unclouded. I turned from the spectacle of the destruction of these noble animals, which might be made so useful in Africa, with a feeling of sickness, unrelieved by the recollection that the ivory was mine.

The furious charges of this elephant remind me of an adventure of one who has had more narrow escapes than any man living, but whose modesty has always prevented him from publishing anything about himself. When we were on the banks of the Zouga in 1850 Mr . Oswell pursued one of these animals into the dense thorny bushes on the margin of the river; as he followed through a narrow pathway, he saw the elephant, whose tail he had but got glimpses of before, now rushing towards him. There was then no time to effect a passage; the hunter therefore tried to dismount, but in doing this he was thrown on the ground with his face upwards to the elephant, which, being in full chase, still went on. Mr. Oswell, seeing the huge fore foot of the animal about to descend on his legs, parted them, and drew in his breath as if to resist the pressure of the other foot, which he expected would next descend on his body. He saw the whole length of the enormous brute pass over him, and escaped unhurt.

The first elephant killed by my men was a male, not full grown; his height at the withers was 8 feet 4 inches, and the circumference of his fore foot 44 inches. The female, which was full grown, measured in height 8 feet 8 inches, the circumference of the fore foot being 48 inches. These details are given with the view of showing that the general rule, that twice the circumference of the fore foot equals the height of the animal, is not of universal application; for, in the first instance, double the circumference falls short of the height by twelve inches, and in the second instance by eight inches Subsequent observations, however, proved the general correct-
nese of the rule with regard to full-grown animals. 'the greater size of the African elephant in the soath would at once distinguish it from the Indian one; but here they approach more nearly to each other in bulk, a female being about as large as a common Indian male. But the ear of the Africau is an external mark which no one will mistake even in a picture. That of the female now killed was 4 feet ; inches in depth. and 4 feet in horizontal breadth, and I havo seen a native creep nuder one so as to be quite covered by it. The ear of the Indian variety is not more than a third of this size. The representation of elephants on ancient coins shows that this important characteristic was distinctly recognised ; indeed, Cuvier remarked that it was more familiar to Aristotle than to Buffon.

Having been anxious to learn whether the African elephant had ever been tamed. I am enabled to give the reader conclusive eridence on this point. For in two medals represented in Admiral Smyth's 'Descriptive Catalugue of his Cabinet of Roman and Imperial large Brass Medals,' tame elephants are

introduced, the ears of which mark them out as belonging to the true African varicty. One of the coins is of Faustina senior, the other of Septimins Severus. struck A.r. 197. The attempt to tame this most useful animal has never been made at the Cape, nor has a specimen ever been exhibited in England.

The abundance of food in this country, as couqured with the sonth. would lead one to suppose that animals here must attain a much greater sizu: but actual measurement now eonfirms the imoression made on my mind by the mere sight
of the animals, that thuse in the districts north of $20^{\circ}$ are smaller than the same races existing southward of that latitude. The full-grown male elephants on the river Zouga seemed no larger than the females on the Limpopo, while here they are even smaller than on the Zouga. There is, however, an increase in the size of the tusks as we approach the equator. The koodoos again were so much smaller than those we had been accustomed to in the south, that we doubted whether they were not a new kind of antelope; and the leche is succeeded to the north of $20^{\circ}$ by the poku, a smaller species of the same antelope. A similar difference in size prevails also among dumestic animals; but the influence of locality on them is not so well marked. The cattle of the Batoka, fur instance, are much smaller than the aboriginal cattle in the south ; but it must be added that those of the Barorse valley, in the same latitude as the Batoka, are large. . The breed may have come from the west, as the cattle within the influence of the sea air, and along that coast, are very large. Those found at lake Ngami, with large horns and standing 6 feet high, probably come from the same quarter. 'The goats are also small, and dumestic fowls very small, and so also are the native dogs. with the exception of the Barotse breed, which are large savage-looking animals. It is a little remarkable that a decrease in size should occur where food is the most abundant: but tropical climates seem unfavourable for the full development of either animals or man. In estimating the amount of food necessary for large animals, sufficient attention has not been paid to the kinds chosen. The elephant, for instance, is a most dainty feeder, and particularly fond of certain sweet-tasted trees and fruits, such as the mohonono, the mimosa, and other trees which contain much saccharing matter, mucilage, and gum. He may be seen putting his head to a lofty palmyra, and swaying it to and fro to shake off the seeds; he then picks them up singly and eats them. Or he may be seen standing by the masuka and other fruit trees, patiently picking off the sweet fruits one by one. The selection of these kinds of food accounts for the fact that herds of elephants produce but small effect upon the vegetation of a country-quality being more requisite to them "har quantity.

After leaving the elephant valley we passed through a very beautiful but thinly inhabited country. The underlying rock is trap, which is often seen tilted on its edge, or dipping a little either to the north or south. The strike is generally to the N.E., the direction we are going. About Losito we found the trap had given place to hornblende schist, mica schist, and various schorly rocks. We had now come into the region in which the appearance of the rocks conveys the impression of great furce having acted along the bed of the Zambesi. Indeed, from the manner in which the rocks Lave been thrust away on both sides from its bed, I was led to the belief that the power which formed the crack of the falls had opened a bed for the river all the way from the falls to beyond the gorge of Lupata.

Passing the rivulet Losito, we reached, on the 18th, the residence of Semalembue, situated at the bottom of the ranges through which the Kafue finds a passage, and close to the bank of that river. The Kafue is here upwards of 200 yards wide, and full of hippopotami, the young of which may be seen perched on the necks of their dams. At this point we had reached about the same level as Linyanti.

Semalembue paid us a visit soon after our arrival, and said that he had often heard of me, and now that he had the pleasure of seeing me he feared that I should sieep the first night at his village hungry. This was considered the handsome way of introducing a present, for he then handed five or six baskets of meal and maize, and an enormons one of groundnuts. Next morning he gave about twenty baskets more of meal. I could make but a poor return for his kindness, but he accepted my apologies politely, saying that he knew there were no goods in the country from which I had come. 1 heard that Semalembue got a good deal of ivory from the surrounding tribes, which he transmitted to other chiefs on the Zambesi, receiving in return English cotton goods which came from Mozanbique by Babisa traders. My men here began to sell their beads and other ornaments for cotton cloth. Semalembue was accompanied by about forty people, all large men, with a fine crop of wool on their heads, which is either drawr. all together up to the crown, and tied there in a large tapering bunch, or else is twisted into little strings on one side, the
hair on the other side being allowed to hang above the ear. thus giving the appearance of a cap cocked jauntily on the side of the head.

Their mode of salutation is by clapping the hands. Various parties of women came from the surrounding villages to see the white man, but all seemed much afraid, and, when addressed, clapped their hands with increasing viguur. Sekwebu was the only one of the Makololo who knew this part of the country; and he pronounced it to be admirably adapted for the residence of a tribe. The natives generally have a good idea of the nature of the soil and pasturage, and there is certainly abundance of room at present in the country for thousands and thousands more of population. There is a large flat district of country to the north, said to be peopled by the Bashukulompo and other tribes, who raise vast quantities of grain, ground-nuts, sweet potatoes, \&c., and also grow sugarcane. If they were certain of a market, 1 believe they would gladly cultivate cotton. They are all fond of trade, but hitherto have had no opportunities of prosecuting it in any articles beyond ivory and slaves.

The Kafue enters a narrow gorge close by the village of (65) Semalembue; as the hill on the north is called Bolengwe, 1 apply that name to the gorge (lat. $15^{\circ} 48^{\prime} 19^{\prime \prime}$ S., long. $28^{\circ} 22$ E.). Semalembue accompanied us to a pass about a mile south of his village, and on parting I put on him a shirt, with which he went away apparently much delighted. When we entered among the hills, we found the ford of the Kafue, which was at least 250 yards broad, but rocky and shallow. After crossing it in a canoe we went along the left bank, and were completely shut in by high hills. Every available spot between the river and the hills is under cultivation; the locality having been selected as a residence simply from its capabilities of defence, and not on general grounds of eligibility. Hippopotami abound, and the inhabitants are obliged to make pitfalls to protect the grain against them. As these animals had not been disturbed by guns, they were remarkably tame, and took no notice of us. We saw numbers of young ones, not much larger than terrier dogs, sitting on the neoks of their dams, this little saucy-looking heads cocking up between the old one's ears; as they become a little older they sit on
the withers. As we were in want of meat, we shot a fullgrown cow, and found the flesh very much like pork. While detained cutting up the hippopotamus I ascended one of the highest hills, called Mabue asula (stones smell badly), which I found to be about 900 feet above the river. These hills seemed of prodigious altitude to my men, who had been accustomed only to ant-hills. The mention of mountains that pierced the clouds made them draw in their breath and hold their hands to their mouths. The mountains certainly look high, from having abrupt sides. But I ascertained by experiment that they are of a considerably lower altitude than the top of the ridge we had left. They constitute in fact a sort of low fringe on the outside of the eastern ridge, exactly as the apparently high mountains of Golungo Alto form an outer fringe to the western ridge.

Semalembue intended that we should go a little to the north-east, and pass through the people called Bapimpe, some of whom had invited us to come that way on account of its being smoother; but feeling anxious to get back to the Zambesi again, we decided to cross the hills towards its confluence with the Kafue. The distance, which in a straight line is but small, occupied three days, in consequence of the precipitous character if the hills. When we came to the top of the outer range of the hills we had a glorious view. At a short distance below us we saw the Kafue, wending its way over a forest-clad plain to the confluence, while in the hackground, on the other side of the Zambesi, lay a long range of dark hills, with a line of fleecy clouds overhanging the course of the river at their base. The plain below us, at the left of the Kafue, had more large game on it than anywhere else I had seen in Africa. Hundreds of buffaloes and zebras grazed on the open spaces, and beneath the trees stood lordly elephants feeding majestically. The number of animals was quite astonishing, and made me think that I could here realize an image of that time when Megatheria fed undisturbed in the primeval forests. I wished that I could have photographed a scene so seldom beheld, and which is destinel, as guns increase, to pass away from earth. When we descended we found all the animals remarkably tame, being seldom disturbed by the natives, who live in the hills and have no guns.

The elephants stood fanning themselves with their large ears, as if they did not see us, at 200 or 300 yards distance. Great numbers of red-coloured pigs (Potamochoerus), gazed at us in wonder.

Continuous rains kept us for some time on the banks of the ('hiponga, where we were unfortunate enough to fall among the tsetse. We tried to leave one morning, but the rain came on afresh, and after waiting an hour wet to the skin we were fain to retrace our steps to our sheds. These rains were from the east, and the clonds might be seen on the hills like the "Table-cloth" on Table Mountain. This was the first wetting we had got since we left Sesheke, for I had gained some experience in travelling. In Londa I braved the rain, and was pretty constantly drenched; but now, when a storm came, we invariably halted and lighted fires. The effect of this care was that we had mnch less sickness than on the journey to Loanda. I also learnt from experience to avoid an entire change of diet. In going to Loanda I took little or no European food, but trusted entirely to what might be got by the gun, or by the liberality of the Balonda; but on this journey I took flour and always baked my own bread in an oven extemporized out of an inverted pot. With these precautions, aided, no doubt, by the greater healthiness of the district over which we passed, I enjoyed perfect health.

When we left the Chiponga, on the 30th, we skirted a range of hills, composed of mica and clay-slate, on our left. At the bottom we found a forest of large petrified trees of the araucarian type, ail lying as if the elevation of the range had made them fall away from it in the direction of the river. An ordinary-sized tree, standing on end, measured 22 inches in diameter, and contained 12 laminæ to the inch.

As we approached nearer the Zambesi the country became covered with broad-leaved bushes,.pretty thickly planted, and we had several times to shout to elephants to get out of our way. At an open space a herd of buffaloes came trotting up to look at our oxen, and it was only by shooting one that I made them retreat. The only danger we encountered was from a female elephant, with three young ones of different sizes, who charged through the centre of our extended line, and caused the men to throw down their burdens in a great
hurry. I never saw an elephant with more than one calf before. We knew that we were approaching the Zambesi by the numbers of water-fowl we met. I killed four geese at two shots, and, had I followed the wishes of my men, could have secured a meal of water-fowl for the whole party. I never saw a river with so much animal life around and in it, and, as the Barotse say, "Its fish and fowl are always fat." When our eyes were gladdened by a view of its goodly waters, we found it very much larger than above the falls. Its flow was more rapid than near Sesheke, being often four and a half miles an hour, and the water was of a deep brownish red. In the great valley, where the adjacent country is all level, and the soil, being generally covered with dense herbage, is not abraded, the river never becomes of this colour : but on the eastern ridge, where the grass is short, and the soil is washed down by the streams, the discoloration which we now view ensues. The same thing occurs on the western ridge: no discoloration was observed till we reached the Quango; and this obtains its matter from the western slope of the western ridge, just as the Zambesi here receives its soil from the eastern slope of the eastern ridge. We struck upon the river about eight miles east of the confluence with the Kafue, and. pursuing our course down the left bank, came opposite to an island, Menye makaba, about a mile and a half long. and upwards of a quarter of a mile broad. This island sustains, in addition to its inhabitants, a herd of about sixty buffaloes, who are always prepared to show fight whenever an attempt is made to punish them for depredations committed on the gardens. The only time at which they can be attacked with success is when the island is partly flooded and the pursuers can assail them out of canoes. The comparatively small space to which they are confined shows the luxuriance of the vegetation; for were they in want of more pasture, they could easily swim across to the northern bank, which is not much more than 200 yards distant.

Ranges of hills now run parallel with the Zambesi, at a distance from each other of about fifteen miles, those on the north approaching nearest to the river. The inhabitants on that side are the Batonga, those on the south bank are the Banyai. The hills abound in buffaloes and elephants, and


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many of the latter are killed by the people in the following manner. They erect stages on high trees overhanging the paths by which the elephants ccme, and then strike the animal, as it passes beneath, with a large spear, four or five feet long, with a handle nearly as thick as a man's wrist, and a blade at least twenty inches long by two broad, which, sinking deeply into the animal's back, and being worked backwards and forwards by knocking against the trees, makes frightful gashes within, and soon causes death. They kill them also by means of a spear inserted in a beam of wood, which is suspended by a cord passing over the branch of a tree and attached at its other extremity to a latch fastened in the path; the latch being struck by the animal's foot in passing leads to the fall of the beam, and the spear, being poisoned, causes death in a few hours.

We were detained at this island by continuous rains for several days. We were struck by the fact that the rains felt warm, the thermometer at sunrise standing at from $82^{\circ}$, to $86^{\circ}$; at midday, in the coolest shade, at $96^{\circ}$ to $98^{\circ}$; and at sunset at $86^{\circ}$. This is different from anything we experienced in the interior, for there rain always brings down the mercury to $72^{\circ}$ or even $68^{\circ}$. Considerable cloudiness prevailed, but the sun often burst through with scorching intensity. All exclaimed against it, " 0 the sun! that is as bad as the rain." It was worth noticing that my companions never complained of the beat while on the highlands, but here, and also when we descended into the lowlands of Angola, they began to fret on account of it. I myself felt an oppressive steaminess in the atmosphere, which I had not experienced on the higher lands.

As soon as we could move, Tomba Nyama, the head-man of the island, volunteered the loan of a canoe to cross a small river called the Chongwe, which we found to be about fifty or sixty yards broad and flooded. Not many years since the inhabitants of this district possessed abundance of cattle, and there were no tsetse. The existence of the insect now shows that it may return in company with the larger game. The vegetation along the bank was exceedingly rank, and the bushes so tangled that it was difficult to get on. We usually followed the footpaths of the wild animals, for the river is
here the highway of the people. Buffaloes, zebras, pallahs, and waterbucks abounded, and there was also a great abundance of wild pigs, koodoos, and the black antelope.

January 6 th, 1856. - Each village that we passed furnished us with a couple of men to conduct us to the next, through the parts least covered with jungle. Near the villages we saw men, women, and children employed in weeding thei gardens. Their colour is the same admixture, from very dark to light olive, that we saw in Londa. Though all have thick lips and flat noses, only the mure degraded possess the ugly negro physiognomy. They mark themselves by a line of little raised cicatrices, extending from the tip of the nose to the root of the hair on the forehead. The women are in the habit of piercing the upper lip, and gradually enlarging the orifice until they can insert a shell The lip then appears drawn out beyond the perpendicular of the nose, and gives them a most ungainly aspect. The same custom prevails throughout the country of the Maravi, and no one could see it without confessing that fashion had never led women to a madder freak.

As the game was abundant and my party very large, I had still to supply their wants with my gun. We slaughtered the oxen only when unsuccessful in hunting. We always entered into friendly relations with the head-men of the different villages, who presented grain and other food freely. The last of these friendly bead-men was named Mobala: having passed him in peace, we reached, after a few hours. the village of Selole, and found that he not only considered us as enemies, but had actually sent an express to raise the tribe of Mburúma against us. All the women had fled, and the few people we met exhibited symptoms of terror. An armed party had come from Mburuma in obedience to the call, but the head-man of the company, suspecting that it was a hoax, came to our encampment, and, when we explained our objects, told us that Mburuma would, without doubt, receive us well. The reason why Selole acted in this foolish manner we afterwards found to be this : an Italian, named Simoens, who had married the daughter of a chief called Sekokole, living north of Tete, had ascended the river in canoes, with in armed party of fifty slaves, and had attacked several
inhabited islands bcyond Meya makaba, securing a large number of prisoners and much ivory. On his return the different chiefs united in an attack upon the party and killed Simoens while trying to escape on foot. Selole imagined that I was another Italian. or, as he expressed it, "Siriatomba risen from the dead."

Before we reached Mburuma my men, being much in need of meat, went to attack a troop of elephants, one of which fell into a hole, and before he could extricate himself an opportunity was afforded for the men, seventy or eighty in number, to discharge their spears at him. When he rose he was like a buge porcupine; and as they bad no more spears, they sent for me to finish him. I went within twenty yards of him, and, resting my gun upon an anthill, so as to take a steady aim, fired twelve 2-ounce bullets into different parts of his body without killing him. As it was becoming dark, I advised my men to let him stand, being sure of finding him dead in the morning; but though we searched all the next day, we never saw him again. As I had now expended all my bullets, I received a hint from some of my men that I had better melt down my plate. I had two pewter plates and a piece of zinc, which I accordingly turned into bullets. 1 also spent the remainder of my handkerchicfs in buying spears for them. My men frequently surrounded herds of buffaloes and killed numbers of the calves. I, too, exerted myself greatly; but as I was now obliged to shoot with the left arm, I was very unsuccessful.

On reaching Mburuma's village his brother came to meet us, and said, in reference to our ill success in hunting the day before, "The man at whose village you remained was in fault in allowing you to want meat, for had he only run across to Mburuma he would have given him a little meal, and, having sprinkled that on the ground as an offering to the gods, you would have found your elephant." The chiefs in these parts take upon themselves an office somewhat like the priesthood, and the people imagine that they can propitiate the Deity through them. In illustration of their ideas it may be mentioned that, when we were among the tribes west of Semalembue, several of the people introduced themselvesone as a hunter of elephants, another as a hunter of hiopopo-
tami, a third as a digger of pitfalls-apparently wishing me to give them medicine for success in their avocations. I thought they attributed supernatural power to my drugs; but I took pains to let them know that they must trust to a higher power than mine for aid. We never saw Mburuma himself, though he gave us presents of meal, maize, and native corm. The conduct of his people indicated very strong suspicions, for they never came near us except in large bodies and fully armed. We had to order them to place their bows, arrows, and spears at a distance before entering our encampment. We did not, however, care much for a little trouble, in the hope that, if we passed this time, we might be able to return without meeting sour, suspicious looks.

The soil, glancing everywhere with mica, is very fertile, and all the valleys are cultivated, the maize being now in ear and eatable. The ranges of hills, which run parallel to the banks of the river above this, here come close up to it, and form a narrow gorge, which, like all others of the same nature, is called Mpata. There is a narrow pathway by the side of the river, but we preferred a more open one in a pass among the hills to the east, which rise to a height of 800 or 1000 feet, and are covered with trees. The rocks were of various coloured mica schist; and parallel with the Zambesi lay a broad band of gneiss with garnets in it.

The proceedings of Mburuma and his people were decidedly suspicious. They first of all tried to separate our party by volunteering the loan of a canoe to convey Sekwebu and me, together with our luggage, by way of the river. They next attempted to detain us in the pass, the guides first alleging the chief's orders to make a halt there, and. this ruse having failed, next stating that we were to wait for food ; we civilly declined, however. to place ourselves in their power in an unfavourable position. We afterwards heard that a party of Babisa traders, who came from the north-east, bringing English goods from Mozambique, had been plundered by this same people. Elephants were still abundant, but very shy. The country between Mburuma's and his mother's village, being hilly and difficult, prevented us from travelling more than ten miles a day. At the village of Ma Mburuma (mother of Mburuma) the guides who had conducted us gave a
tavourable report, and the women and children did not flee. Here we found that traders, called Bazunga, whom I supposed to be half-caste Portuguese, had been in tho habit of coming in canoes, and that I was supposed to belong to them. That - we were looked upon with suspicion was evident from our guides. remarking to men in the gardens through which we passed, "I'hey have words of peace-all very fine; but lies only, as the Bazunga are great liars." They thought we did not understand them, but Sekwebu knew every word perfectly, and, without paying any ostensible attention to these complimentary remarks, we ever afterwards took care to explain that we were not Bazunga, but Makōa (English). Ma Mburuma promised us canoes to cross the Loangwa in our front. It was pleasant to see great numbers of men, women, and boys come to look at the books, watch, looking-glass, revolver, \&c. They are a strong, muscular race, and both men and women cultivate the ground. The deformed lips of the women make them look very ugly; I never saw one smile. They generally eat their corn only after it has begun to sprout from steeping it in water. The village of Mburuma's mother was picturesquely situated among high, steep bills; and the valleys were occupied by gardens of native corn and maize, growing luxuriantly. We were obliged to hurry along on account of the tsetse, which had returned to this district after the destruction of the cattle by marauders.

## CHAPTER XXIX.

Cbcbsing the Loangwa.-Zumbo.-Difficulties with Mpende.Cbobsing the Zambesi.-Game-tans.-District of Chicofa.

14th.-We reached the confluence of the Loangwa and the Zambesi, most thankful to God for His great mercies in helping us thus far. Mburuma's people had behaved so sus. piciously that we were by no means sure that we should not be aitacked in crossing the Loangwa. We saw them collecting in large numbers, and, though professing friendship, they kept at a distance from our camp. They have no intercourse
with Europeans, except through the Babisa. They told us that this was formerly the residence of the Bazunga, who had fled from it on the approach of a marauding tribe. As I walked about I discovered the remains of a stone church, and a broken bell with the letters I. H. S. and a cross, but no date.

15th.-In the morning we proceeded to cross the river in the presence of a large concourse of armed natives. Only one canoe was lent to us, though we saw two others tied to the bank. The part we crossed was abont a mile from the confluence, and, as it was now flooded, it seemed upwards of half a mile in breadth. We first passed all our goods on to an island in the middle, then the cattle and men. While thir was proceeding I amused the natives by showing them my watch, lens, and other things, and so kept them engaged until those only remained who were to enter the canoe with me; I then thanked them for their kindness, and wished them peace. After all, they may have been influenced only by the intention to he ready, in case I should play them some false trick. The guides came over to bid us adieu, and we sat under a mango-tree fifteen feet in circumference, and had a friendly conversation. I gave them some little presents for themselves, a handkerchief and a few beads, and a cloth of red baize for Mburuma, with which they were highly pleased. We were thankful to part good friends.

Next morning we passed along the bottom of the range called Mazanzwe, and found the ruins of eight or ten houses rudely built of soft sandstone cemented together with mud They all faced the river, and were high enough up the flanks of the hill Mazanzwe to command a pleasant view of the broad Zambesi. These establishments had all been built on one plan- the house being placed on one side of a large court, surrounded by a wall. Some of the rafters and beams had fallen in, but were entire, and there were some trees in the middle of the houses as large as a man's body. On a height on the opposite or south bank of the Zambesi we saw the remains of a wall belonging probably to a fort, and the church stood at a central point, formed by the right bank of the Loangwa and the left of the Zambesi. The situation of Zumbo, as the place was called by the Bazunga, was admir-
ably chosen as the site of a commercial settlement. The merchants, as they sat beneath the verandahs in frunt of their houses, had a magnificent view of the two rivers at their confluence, the church at the angle, and the gardens which they had on both sides of the rivers. Towards the north and west the view is bounded by lofty and picturesque mountains, while towards the south-east the eye ranges over an open country. Water communication exists in three directions beyond-namely, by the Loangwa to the N.W., by the Kafue to the W., and by the Zambesi to the S.W. The attention of the merchants, however, was chiefly attracted to the N. or Londa; and the principal articles of trade were ivoly and slaves. Private enterprise was always restrained, for the colonies of the Portuguese being strictly military, and the pay of the commandants very small, the officers have always been obliged to engage in trade; and had they not kept the private traders under their control, they would have had no trade themselves, as they were obliged always to remain at their posts.

Several expeditions went northwards as far as Cazembe; Dr. Lacerda himself, Commandant of Tete, was unfortunately cut off while there, and his papers were lost to the world. He had a strong desire to open up communication with Angola, which would have been of importance then, as affording a speedier mode of communication with Portugal than by the way of the Cape; but since the opening of the overland passage to India a quicker transit is effected from Eastern Africa to Lisbon by way of the Red Sea. Peirara, who subsequently visited Cazembe, gave a glowing account of that chief's power, which none of my inquiries have confirmed. The people of Matiamvo stated to me that Cazembe was a vassal of their chief; and, from all the native visitors whom I have seen, he appears to be exactly like Shinte and Katema, only a little more powerful. The term "Emperor," which has been applied to him, seems totally inappropriate. The statement of Peirara that twenty negroes were slaughtered in a day was not confirmed by any one else, though numbers may have been killed on some particular occasion during the time of his visit, for we find throughout all the country north of $20^{\circ}$ the custom of slaughtering victims to accompany the departed
soul of a chief, and for other superstitious purposes. The last expedition.to Cazembe was somewhat of the same nature as the others, but it failed in establishing a commerce, because the people of Cazembe, who had come to Tete to invite the Portuguese to visit them, had not been allowed to trade freely with whom they liked. Cazembe reciprocated this policy, and proliibited his people from furnishing the party with food except at his own price ; and the expedition, being half-starved in consequence, returned in a state of high dudgeon.

When we left the Loangwa we thought we had got rid of the hills; but there are some behind Mazanzwe, though five or six miles off from the river. Tsetse and the hills had destroyed two riding oxen, and when the little one that I now rode knocked up I was forced to march on foot. The bush being very dense and high, we were going along among the trees, when three buffaloes suddenly dashed through our line. My ox set off at a gallop, and when I glanced back I saw one of the men up in the air about five feet above a buffalo which was tearing along with a stream of blood running down his flank. When I got back to the poor fellow I found that he had lighted on his face, and, thongh he had been carried on the horns of the buffalo about twenty yards before getting the final toss, the skin was not pierced nor was a bone broken. When the beasts appeared he had thrown down his load and stabbed one in the side. It turned suddenly upon him, and, before he could use a tree for defence, carried him off. We shampooed him well, and in about a week he was able to engage in the hunt again.

At Zumbo we had entered upon old grey sandstone, with shingle in it, dipping generally towards the south, and forming the bed of the river. The Zambesi is very broad here, and contains many inhabited islands. We slept opposite one on the 16 th, called Shibanga. The nights are warm, the temperature never falling below $80^{\circ}$; it was $91^{\circ}$ even at sunset. On the morning of the 17th we were pleased to see a person coming from the island of Shibanga, with jacket and hat on, butquite black. He had come from the Portuguese settlement at Tete, and he informed us that that town was situated on the other bank of the river, and that the Portuguese had been fighting with the natives for the last two years. He


THE TRAVELLING PROCESSION INTERRUPTED
advised us to cross the river at once, as Mpendeflived $\mathcal{S}$ oniol side. Wishing to follow his advice, we pruposer to burgro his canoes ; but being afraid to offend the lords of the tivel, he declined, and we were consequently obliged to remation-ou the enemy's side. The next island belonged to a man named Zungo, a fine frank fellow, wh. brought us at once a present of corn, bound in a peculiar way in grass. He freely accepted our apology for having no present to give in return, and sent forward a recommendation to his brother-in-law P'angola. The country adjacent to the river is oovered with dense bush, thorny and tangled, and there is muen rank grass, though not so high or rank as that of Angola. The maize, however, which is grown here is equal in size to that which the Amerivaus sell for seed at the C'ape. There is usually a low beach adjacent to the river, studded with villages and gardens, and else where covered with rank and reedy grass. A second terrace follows, on which trees and bushes abound; I also thought I could detect a third and higher steppe; but I never could discover terraces on the adjacent country, such as in other countries show ancient sea-beaches. The path runs sometimes on the one and sometimes on the other of these river terraces. Canoes are essential; but I find that they here cost too much for my means, and higher up, where my hoes might have secured one, 1 was unwilling to be parted from my men while there was danger of their being attacked.

18th.- Yesterday we rested under a broad-spreading figtree. Large numbers of buffaloes and water-antelopes were feeding quietly in the meadows, a sure indication that the people have either no guns or no ammunition. Pangola visited us, and presented us with food. My men got pretty well supplied individually, for they went into the villages and commenced dancing. The young women were especially pleased with the steps they exhibited, though I suspect many of them were invented for the occasion, and would say, "Dance for me, and I will grind corn for you." At every fresh instance of liberality Sekwebu said, "Did not I tell you that these people had hearts?" All agreed that the character he had given was true, and some remarked, "Look! although we have been so long away from home, not one of us has bonome lean." It was a fact that we had been all well sup-
plied either with meat by my gun and their own spears, or with other food from the generosity of the inhabitants. Pangula promised to ferry us across the Zambesi, but failed to fulfil his promise, probably from a fear of offending his neighbour Mpende by aiding our escape. Although we were in doubt as to our reception by Mpende, I could not help admiring the beautiful country as we passed along. There is, indeed, only a small part under cultivation in this fertile valley, but my mind naturally turned to the comparison of it with Kolobeng, where we waited anxiously during months for rain, and then only got a mere thunder-shower. I shall never forget tine dry, hot east winds of that region; the yellowish, sultry, cloudless sky; the grass and all the plants drooping from drought, the cattle lean, the people dispirited, and our own hearts sick from hope deferred. There we often heard in the dead of the night the shrill whistle of the rain-doctor calling for rain that would not come, while here we listened to the rolling thunder by night and beheld the swelling valleys adorned with plenty by day. Rain falls almost daily, and everything is beautifully fresh and green. I felt somewhat as people do on coming ashore after a long voyage-inclined to look upon the landscape in the most favourable light. The hills are covered with forests, and often a long line of fleecy cloud floats about midway up their sides. Finding no one willing to aid us in crossing the river, we proceeded to the village of the chief Mpende. A fine conical, or rather double conical hill now appeared to the N.E.; and on the same side, but more to the E., another, which, from its similarity in shape to an axe, is called Motemwa. Beyond it, eastward, lies the country of Kaimbwa, a chief who has been engaged in actual, and, according to the version of things here, successful conflict with the Bazunga. When we came to Mpende's village he immediately sent to inquire who we were, and then, without sending us any message, ordered the guides who had come with us from the last village to go back for their masters. We had travelled very slowly up to this point, the tsetse-stricken jxen being now unable to go two miles an hour. We were also delayed by being obliged to stop at every village; for if we had passed without taking any notice of them, they would have considered it rude, and we should have appeared moro
as enemies than friends. I consoled myself for the loss o tume by the thought that these conversations tended to ehe opening of our future path.

23 rd .-This morning at sunrise a party of Mpende's people came close to our encampment, uttering strange cries and waving some bright red substance towards us. They then lighted a fire with charms in it, and departed, uttering the same hideous screams as before. This was intended to render us powerless, and probably also to frighten us. Ever since dawn parties of armed men had been seen collecting from all quarters, and numbers passed us while it was yet dark. They evidently intended to attack uas, for no friendly message was sent; I therefore ordered an ox to be slaughtered, as a means of inspiring courage. I have no doubt that we should have been victorious; indeed, my men were rejoicing in the prospect of securing captives to carry the tusks for them, and broadly hinted to me that I ought to allow them to keep Mpende's wives. The roasting of meat went on fast and furious, and some of the young men said to me, "You have seen us with elephants, but you don't know yet what we can do with men." Mpende's whole tribe was assembled at about the distance of half a mile. As the country is covered with trees, we did not see them; but every now and then a few came about us as spies. Handing a leg of the ox to two of these, I desired them to take it to Mpende, who in due course of time sent two old men to inquire who I was. I replied, "I am a Lekoa" (an Englishman). They said, "We don't know that tribe. We suppose you are a Mozunga, the tribe with which we have been fighting." As I was not yet aware that the term Mozunga was applied to a Portuguese, and thought they meant half-castes, I showed them my hair and the skin of my bosom, and asked if the Bazunga had hair and skin like mine. As the Portuguese have the custom of cutting the hair close, and are also somewhat darker than we are. hey answered, "No; we never saw skin so white as that;" and added. "Ah! you must be one of that tribe that loves the black men." I, of course, gladly responded in the affirmative. They returned to the village, and we afterwards heard that there had been a long discussion between Mpende and his councillors, in which one of the men, named Sindese Oaléa,
with whom os had conversed the day before, acted as our advocate, and persuaded Mpende to allow us a passage. When we knew the favourable decision of the council I sent Sekwebu to purchase a canoe for the use of one of my men who had become very ill, upon which Mpende remarked, "That white man is truly one of our friends. See, how he lets me know his afflictions!" Sekwebu adroitly took advantage of this turn in the conversation, and said, "Ah! if you only knew him as well as we do, you would understand that he highly values your friendship and that of Mburuma, and that he trusts in you to direct him." He replied, "Well, he ought to cross to the other side of the river, for this bank is hilly and rough, and the way to Tete is longer on this than on the opposite bank." He did everything he could afterwards to aid us on our course, and our departure was widely different from our approach to his village. It gratified me to find the English name respected so far from the coast, and most thankful was 1 that no collision occurred to damage its influence.

24th.-M pende sent two of his principal men to order the people of a large island below to ferry us across. The river is 1200 yards from bank to bank, and contains between 700 and 800 of deep water, flowing at the rate of $3 \frac{3}{4}$ miles per hour Though my men were well acquainted with the management of canoes, we could not get over before dark; we therefore first landed on an island, and next morning reached the opposite bank in safety. We observed as we came alung the Zambesi that it had fallen two feet, and that the water, though still muddy, was not nearly so red as it had been higher up. It was therefore not yet the period of the central Zambesi inundation, and the present height of the water was due to rains outside the eastern ridge. The people here seem abundantly supplied with English cotton goods. The Babisa are the medium of trade, for we were informed that the Bazunga, who formerly visited these parts, had been kept away by the war for the last two years. The region to the north of the ranges of rills on our left is called Senga, from being the country of the Basenga, who are said to be great workers in iron, and to possess abundance of fine iron ore. Beyond Senga lies a range of mountains called Mashinga, to which the Portuguese in
former times went to wash for gold, and beyond that are great numbers of tribes which pass under the general name of Maravi. To the N.E. there are extensive plains destitute of trees, but covered with grass, and in some places with marshes. The whole of the country to the north of the Zambesi is asserted to surpass in fertility that to the south. The Maravi, for instance, raise sweet potatoes of immense size, but on the sonthern bank these plants soon degenerate. Unfortunately, all the tribes on the north side of the country are at enmity with the Portuguese, and their practice of making night attacks renders travelling dangerous among them.

29th.-I was most sincerely thankful to find myself on the south bank of the Zambesi, and, having nothing else, I sent back one of my two spoons and a shirt as a thank-offering to Mpende. The different head-men along this river act very much in concert, and if one refuses passage they all do, uttering the sage remark, "If so-and-so did not lend his canoes, he must have had some good reason." At the next island, which lelonged to a man named Mozinkwa, we were detained so long that my tent again became quite rotten. One of the Batoka died here after a long sickness, the nature of which I did not understand; when he became unable to walk I had some difficulty in making his companions carry him; and when his case became hopeless they wished to leave him to die. We met with persons who had visited Tele, which was reported to be ten days distant hence. One of these, a Mashona man, who had some knowledge of the English, and of their hatred to the slave-trade, told Sekwebu that the " English were men," and I found that from these and similar oncomiums I rose higher every day in the estimation of my people. Even the slaves gave a high character to the English; and when I was first reported at Tete, the servants of ny friend the Commandant said to him in joke, "Ah! this is our brother who is coming; we shall all leave you and go with him."

The women here have only a small puncture in the upper lip, in which they insert a little button of tin. The perforation is made by degrees, a ring with an opening in it being attached to the lip, and the ends squeezed gradually together Children may be seen with the ring on the lip, Ir $t$ not yet
punctured. The tin is purchased from the Portuguese; and although silver is reported to have been formerly found in this district, no one could distinguish it from tin. Gold however was known, and I heard for the first time the word "dalama" (gold) in the native language. In conversing with different people I found the idea prevalent that those who had purchased slaves from them had done them an injury. "All the slaves of Tete," said one, " are our children; the Bazunga have made a town at our expense." When I asked if they had not taken the prices offered them they at once admitted it, but still thought tnat they had been injured by being so far tempted.

February 1st.-We met some native traders, of whom I bought some American calico marked " Lawrence Mills, Lowell," and distributed it amongst the most needy of my men many of whom were now utterly destitute of clothes. After leaving Mozinkwa's we came to the Zingesi, a sand-rivalet in flood (lat. $15^{\circ} 38^{\prime} 34^{\prime \prime} \mathrm{S}$., long. $31^{\circ} 1^{\prime} \mathrm{E}$.), which was now sixty or seventy yards wide, and waist-deep. Like all these sand-rivers it is for the most part dry; but by digging down a few feet, water is found flowing along a bed formed by a stratum of clay, a phenomenon which is dignified by the name of "a river flowing underground." In attempting to ford this, the water, which percolates through the sand at a very rapid pace, dug out the sand beneath our feet in a second or two, and we soon sank so deep that we were glad to relinquish the attempt before we got halfway over; the man who preceded me was only thigh-deep, but the disturbance caused by his feet made it breast-deep for me. These sand-rivers remove vast masses of disintegrated rock before it is fine enough to form soil. The particles which struck against my legs as 1 was fording impressed me with an idea of the amount of matter removed by every freshet. In rivers where much attrition is going on, as for instance in the Vaal river when that is slightly in flood, a person diving to the bottom may hear thousands of stones knocking against each other. This process, being carried on for hundreds of miles in different rivers, must have an effect greater than if all the pestles and mortars and mills of the world were grinding and wearing away the rocks.

While opposite the village of a head-man called Mosusa two male elephants, and a third not full grown, took refuge on an island in the river. This was the first instance I had ever seen of a comparatively young one with the males, for they usually remain with the female herd till they are as large as their dams. The inhabitants were anxious that my men should attack them, as they do much damage in the gardens on the islands. The men went, but the elephants ran to the opposite end of the island, and escaped to the mainland by swimming with their probosces erect in the air. I was not very desirous to have one of these animals killed, for we understood that, when we passed Mpende, we came into a country where the gamelaws are strictly enforced. The lands of each chief are well defined, generally by rivulets, and, if an elephant is wounded on one man's land and dies on that of another, the under halt of the carcase is claimed by the lord of the soil; and so stringent is the law, that the hunter may not cut up his own elephant without sending notice to the lord of the soil, and waiting until that personage sends his representative to see a fair partition made. The hind leg of a buffalo must also be giren to the man on whose land the animal was grazing, and a still larger quantity of the eland, which here and everywhere else in the country is esteemed right royal food. The only game-laws in the interior are, that the man who first wounds an animal, though he has inflicted but a mere scratch, is considered the killer of it, while the second is entitled to a hind-quarter, the third to a fore-leg, and the chief to a royalty, consisting in some parts of the breast, in other parts of the ribs and one fore-leg. The knowledge that he who succeeds in reaching the wounded beast first is entitled to a share stimulates the whole party to greater exertions in despatching it.

When near Mosusa's village we passed a rivulet called Chowé, now running with rain-water. The inhabitants extract a little salt from the sand when it is dry, and all the people of the adjacent country come to purchase it from them This was the first salt we had seen since leaving Angola, none being found in the countries of the Balonda or Barotse. We heard of salt-pans about a fortnight west of Naliele, and I got a small supply at that town. but this had long sinco been
finished, and I had now lived two months without suffering any inconvenience from the want of it except an occasional longing for animal food or milk.

In marching along, the rich reddish-brown soil was so dammy that it was difficult to walk. It is however extremely fertile, and yields amazing quantities of corn, maize, millet, ground nuts, pumpkins, and cucumbers. The people build their huts on high stages as a protection against the spotted hyæna, and also against lions and elephants. The hyæna, though a very cowardly animal, frequently appruaches persons lying asleep, and makes an ugly gash on the face. Mozinkwa had lost his upper lip in this way, and I have heard of men being killed, and children being carried off by them; for though the sound of the human voice will scare him, yet, when his teeth are once in the flesh, he holds on. This animal shows an amazing power of jaw : he crunches up with the greatest ease the leg-bones of oxen, from which the natives have extracted everything eatable.

February 4th.-We were much detained by rains, which prevented us from advancing above a few miles each day. The wind up to this point had been always from the east, but now both rain and wind came so generally from the west, that we were obliged to make our encampment face the east in order to have them in our backs. The country adjacent to the river abounds in large trees; but the population is so numerous that it is difficult to get dry firewood. There are numbers of tamarind-trees, and of another very similar tree, called Motondo, yielding a fruit as large as a small walnut, of which the elephants are very fond; its timber is excellent for building boats, as it does not soon rot. On the 6th we came to the village of Boroma, which is situated among a number of others, each surrounded by an extensive patch of cultivated ground. $\mathrm{O}_{\mathrm{n}}$ the opposite side of the river rises a cluster of conical hills called Chorichori. Boroma did not make his appearance, but sent a substitute who acted civilly. In the morning we announced our intention of moving on; Boroma again did not present himself, and his mother stated by way of apology that he had been seized that morning by the Barimo, which probably meant that his lordship was drunk : st the same time she sent a present of some corn and a fowl.

We marched along the river to a point opposite the hill Pinkwe (lat. $15^{\circ} 39^{\prime} 11^{\prime \prime} \mathrm{S}$., long $31^{\circ} 48^{\prime} \mathrm{E}$.). The late abundant rains had again flooded the Zambesi, and great quantities of wreck appeared upon the stream. It is probable that the frequent freshets caused by the rains on the eastern side of the ridge have prevented the Portuguese from recognising the one peculiar flood of inundation observed in the interior. The Nile, not receiving these subsidiary waters, has its inundation clearly defined throughout its whole course. If the Zambesi were diverted in its mid course southwards into the Cape Colony, its flood would be identical with that of the Nile; for it would be uninfluenced by any streams in the Kalahari.

This flood having filled the river, we found the numerous rivulets which flow into it filled also, and we lost so much time in the search fur fords that I resolved to leave the river altogether and strike away to the S.E. We did so when upposite the hill Pinkwe, and came into a hard Mopane country. In a hole of one of the mopane-trees I noticed that a squirrel (Sciurus cepapi) had covered it. store of seed under a heap of fresh leaves. It is not against the cold of winter that they thus lay up food, but as a provision against the hot season, when the trees have generally no seed A great many fossil trees occur in this part of the country, some of them broken off horizontally and standing upright, others lying prone and shattered into a number of pieces. These trees lie upon soft grey sandstone containing banks of shingle, which forms the underlying rock of the country all the way from Zumbo to near Lupata.

As we were now in the district of Chicova, I examined the geological structure of the country with interest, because it has been stated that silver-mines once existed here. The general rock is the grey soft sandstone I have mentioned, but at the rivulet Bangue occurs a dyke of basalt six yards wide, running north and south, and beyond this several others, some of which run more to the eastward. The sandstone is then fuund to have been disturbed, and at the rivulet called Nake we found it tilted up and exhibiting a section which was coarse sandstone above, sandstone-flag, shale, and lastly a thin seam of coal. I was much pleased in discovering this small specimen of such a precious mineral as coal. I saw nc
indication of silver, and, if it ever was worked by the natives, they have entirely lost the knowledge of it. and cannot distinguish between silver and tin.

In leaving the river I was partly influenced by a wish to avoid several chiefs, who levy a heavy tribute on all passengers. Our path lay along the bed of the Nake for some distance. the banks of which were covered with impenetrable thickets, and the surrounding country was hilly. I'he villages were not numerous, but we were treated kindly by the people, who here call themselves Bambiri, though the general name of the nation is Banyai. They have reclaimed their gardens from the forest, and the soil is extremely fertile. The Nake is 50 or 60 yards wide, but during most of the year is dry, affording water only by digging in the sand. It was now ankle-deep, and its water more than lukewarm from the heat of the sun. We found in its bed masses of volcanic rock, identical with those which I subsequently saw at Aden.

13th.-I sent my last fragment of cloth as a present to Nyampungo, the head-man of these parts, with a request that we should be furnished with a guide to the next chief. After a lung conference with his council the cloth was returned with a promise of compliance, and a request for some beads only. This man is supposed to possess the charm for rain, and other tribes send to him to beg it, whence we may infer that less rain falls in this country than in Londa. Nyarspungo behaved in quite a gentlemanly manner, presenting me with some rice, and telling my people to go amongst the villages and beg for themselves. An old man, father-in-law of the chief, told me that he had seen books before, but never knew what they meant. 'Ihey pray to departed chiefs and relatives, but the idea of praying to God seemed new, and they heard it with reverence. Nyampungo is afflicted with a kind of disease called Sesenda, which I imagine to be a species of leprosy common in this quarter, though they are a cleanly people. He never had any cattle; and when I asked him why he did not possess these useful animals, he said, "Who would give us the medicine to enable us to keep them?" I afterwards found out the reason to be the prevalence of tsetse, but of this he was ignorant, having supposed that he could not keep cattle because he had no medicine.

## CHAPTER XXX.

Animals.-The Ue.-The Banyal.-Ordead Muati.-Arrival at Tere.

14th.-We left Nyampungo this morning by a path which wound up the Molinge, another sand-river which flows into the Nake. When we got clear of the tangled jungle which covered the banks of this rivulet we entered the Mopane country, where we could walk with comfort. When we had gone on a few hours my men espied an elephant, and, as they were in want of meat, having tasted nothing but grain for several days, they soon killed him. The perple of Nyampungo had never seen such desperadoes before. One rushed up, and with an axe hamstrung the beast while still standing. Some Banyai elephant-hunters happened to be present when my men were fighting with him. One of them took out his snuffbox, and poured out all its contents at the root of a tree, as an offering to the Barimo for success. As soon as the animal fell the whole of my party engaged in a savage dance round the body, which quite frightened the Banyai, and he who made the offering said to me, "I see you are travelling with people who don't know how to pray: I therefore offered the only thing I had in their behalf, and the elephant soon fell." Another man ran a little forward, when an opening in the trees gave us a view of the chase, and uttered loud prayers for success in the combat. I admired the devout belief they all possessed in the existence of unseen beings, and prayed that they might yet know that benignant One who views us all as His own. My own people, who are rather a degraded lot, remarked to me as I came up, "God gave it to us. He said to the old beast, 'Go up there; men are come who will kill and eat you.'" These remarks are quoted to give the reader an idea of the native mode of expression.

In accordance with the custom of the country we sent back to Nyampungo to give information of the slaughter of the beast to the agent of the lord of the soil, who was himselt
living near the Zambesi. The side upon which the elephant fell had a short broken tusk; the upper one, which was ours, was large and thick. The messengers returned with a basket of corn, a fowl, and a few strings of handsome beads, as a sort of thank-offering, and said that they had thanked the Barimo for our success, concluding with the permission, "There it is; eat it and be glad." Had we begun to cut it up before we got this permission, we should have lost the whole. They had brought a large party to eat their half, which they divided with us in a friendly way. My men were delighted with the feast, though the carcase was pretty far gone in consequence of the delay. An astonishing number of hyænas collected round, and kept up a loud laughter for two whole nights. I asked my men what they were laughing at; they replied that it was because we could not take the whole, and there would be plenty left for them.

On coming to the part where the elephant was slain we passed through grass so tall that it reminded me of that in the valley of Cassange. Insects are very numerous after the rains commence; while waiting by the elephant I observed a great number of them like grains of fine sand moving on my boxes. On examining them with a glass four species were apparent; one of green and gold preening its wings, which glanced in the sun with metallic lustre, another clear as crystal, a third of a vermilion colour, and a fourth black. These insects consume the seeds of probably every plant that grows, each plant having its own peculiar insect. The rankest poisons, as the Kongwhane and Euphorbia, are soon devoured-the former by a scarlet insect ; even the fiery bird's-eye pepper is devoured by a maggot. I observed here great numbers of centipedes with light-reddish bodies and blue legs; great myriapedes are seen crawling everywhere, and excite a feeling of loathing. In the quietest parts of the forest there is heard a faint but distinct hum, which tells of insect joy. One may see many whiskirg about in the clear sunshine among the green glancing leaves; but there are invisible myriads, all brimful of enjoyment, working with never-tiring mandibles on leaves, and ritalks, and beneath the soil. Indeed the universality of crganic life seems like a mantle of happy existence encircling the world, and betokening the presence
of our benignant. Father's smile on all the works of His hands.

The birds of the tropics have been described as generally wanting in power of song; but this was certainly not applicable to many parts in Londa, though there birds are remarkably scarce, while here the chorus, or body of song though not so harmonious, was not much smaller in volume than it is in England. Some of the notes resemble those of the lart, and indeed there are several of that family; two others are not unlike those of the thrush. One brought the chaffinch to my mind, and another the robin; but their songs are intermixed with several curious abrupt notes unlike anything English. One utters deliberately " peek, pak, pok;" another has a single note like a stroke on a violin-string. The mokwa reza gives forth a screaming set of notes like our blackbird when disturbed, then concludes with what the natives say is " pula, pula" (rain, rain), but more like " weep, weep, weep." Then there is the loud cry of francolins, the "pumpuru, pumpuru" of turtle-doves, and the "chiken, chiken, chik, churr, churr" of the honey-guide. Occasionally near villages we hear a kind of mocking bird imitating the calls of domestic fowls. These African birds have not been wanting in song so much as in poets to sing their praises. In hot dry weather, or at midday when the sun is fierce, all are still : but with the first good shower all burst forth at once into merry lays and loving courtship. The early mornings and the cool evenings are their favourite times for singing. The majority have decidedly a sober plumage, though collectors, having generally selected the gaudiest as the most valuable, have conveyed the idea that the birds of the tropics for the most part possess gorgeous plumage.

15th.-Several of my men have been bitten by spiders and other insects without any worse result than pain. I particularly noticed a large caterpillar, called lezuntabuea, having a dark body covered with long grey hairs, resembling a porcupine in miniature. If it is touched the hairs run into the pores of the skin, inflicting sharp pricks. Some others have a similar means of defence; and when the hand comes in contact with them, as in passing a bush on which they happen to be, the effect resembles the stinging of nettles. From the
great number of caterpillars a considerable variety of butter flies is produced, none of them, however, being remarkable for the gaudiness of their colours.

In passing along we crossed the hill Vungue or Mrangwe, which forms the watershed between those sand-rivalets which run to the N.E. and others which flow southward, as the Kapopo, Ue, and Due, which run into the Luia. We found that many elephants had been feeding on a black-coloured plum called Mokoronga, having purple juice and a delicicus flavour. It grows most abundantly throughout this part of the country, and the natives eagerly devour it, as it is said to be perfectly wholesome, or, as they express it, "pure fat." Though hardly larger than a cherry, we found that the elephants had stood picking them off patiently by the hour. We observed the foot-prints of a black rhinoceros (Rhinoceros bicornis, Linn.) and her calf, an animal which is remarkably scarce in all the country north of the Kambesi. The white rhinoceros (Rhinoceros simus of Burchell), or Mohóhu of the Bechuanas, is quite extinct here, and will soon become unknown in the country to the south. It feeds almost entirely on grasses, and, being of a timid unsuspecting disposition, falls an easy prey on the introduction of fire-arms. The black possesses a more savage nature, and from its greater wariness keeps its ground better than its more timid neighbour. Four varieties of the rhinoceros are enumerated by naturalists, but my observation led me to conclude that there are but two; and that the other supposed species consist simply of differences in size, age, and the direction of the horns, just as if we were to reckon the short-horned cattle a different species from the Alderneys or the Highland breed. I find, however, that Dr. Smith, the best judge in these matters, is quite decided as to the propriety of the subdivision into three or four species. The absence of $b u t h$ these $r$ hinoceroses among the reticulated rivers in the central valley may be accounted for by the circumstance that they would be such an easy pres to the natives in their canoes at the periods of inundation; but we cannot so readily explain the absence of the giraffe and the ostrich on the high open lands of the Batoka, north of the Zambesi, unless we give credence to the native report that another network of waters exists still further north neas

Lake Shuia, which has prevented their progress southwards. The Batoka have no name for the giraffe or the ostrich in their language; yet, as the former exists in considerable numbers in the angle formed by the Zambesi and Chobe, ther may have come from the north along the western ridge. The Chobe would seem to have been too narrow to act as an obstacle to the giratfe, supposing it to have come into that district from the south; but the broad river into which tha: stream flows seems always to have presented an impassakle barrier to both the giraffe and the ostrich, though they r.oound on its southern border, both in the Kalahari Descrt and the country of Mashona.

We passed through large tracts of Mopane country, and my men caught a great many of the birds called Korwe (Tockus erythrorhynchus) in their breeding-places in holes in the mo-pane-trees. On the 19th we passed the nest of a korwe, just ready for the female to enter: the orifice was plastered on both sides, but a space was left exactly the size of the bird's body. The hole in the tree was in every case found to be prolonged some distance upwards above the opening, and thither the korwe always fled to escape being caught. The first time that I saw this bird was at Kolobeng; as I was standing by a tree, a native exclaimed, "There is the nest of a korwe." I saw only a slit, about half an inch wide and three or four inches long, in a slight hollow of the tree. Thinking the word korwe denoted some small animal, I waited with interest to see what he would extract; he broke the clay which surrounded the slit, put his arm into the hole, and brought out a Tockus, or red-beaked hornbill, which he killed. He informed me that when the female enters her nest the male plasters up the entrance, leaving only a narrow slit by which to feed his mate, exactly suiting the form of his beak. The female makes a nest of hor own feathers, lays her eggs, hatches them, and remains with the young till they are fully fledged; during all whinh time, stated to be two or three months, the male continues to feed her and the young family. The prisoner generally becomes quite fat, while the poor slave of a husband gets so lean that on any sudden lowering of the temperature he is benumbed, falls down, and dies. This is the month in which the female enters tho nest; shi
comes forth about the end of April, at the period when the corn is ripe; indeed, her appearance abroad with her young is one of the signs for knowing when harvest ought to commence. She is said sometimes to hatch her eggs at inter vals, the second couple of young ones making their appearance just when the first are ready to leave the nest; in this case the female comes out with the first couple, the orifice is again plastered up, and both male and female attend to the wants of the young which are left.

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

We crossed the rivulets Kapopo and Ue, now running, but usually dry. The latter flows between banks 12 feet high, sonsisting of a crumbling alluvial sandstone. Great numbers
of wild vines grow in this quarter, and indeed everywhere along the banks of the Zambesi. One species, a black grape with large rough leaves yields a fruit of very good flavour; but the common kinds-one with a round leaf and a greenish grape, and another with a leaf closely resembling that of the cultivated varieties, and with dark or purple fruit-have large seeds, which are strongly astringent and render it disagreeable. The natives eat all the varieties; and I tasted vinegar made from these grapes. Probably a country whioh yields the wild vines so very abundantly might be a fit one for the cultivated spscies. At this part of the journey so many of the vines had crossed the footpath that we had to be constantly on the watch to avoid being tripped up. Although the rains were not quite over, great numbers of pools were drying up, and the ground was in many parts covered with small, green, cryptogamous plants, which gave it a mouldy appearance and a strong smell. As we sometimes pushed aside the masses of rank vegetation which hung over our path, we felt a sort of hot blast on our faces. In this region, too, we met with potholes, six feet deep and three or four in diameter. In some cases they form convenient wells; in others they are full of earth; and in others still, the people have made them into graves for their chiefs.

On the 20th we came to Monina's village (close to the sandriver Tangwe, lat. $16^{\circ} 13^{\prime} 38^{\prime \prime}$ S., long. $32^{\circ} 32^{\prime}$ E.). This man is very popular among the tribes on account of his liberality. The local chiefs in this part of the country have formed a confederacy, similar to what we observed in Londa and elsewhere, under the supremacy of one called Nyatéwe, whose office it is to decide all disputes concerning land. The government of the Banyai is a sort of feudal republicanism. The chief is not hereditary but elective, and they choose the nephew of the deceased chief in preference to his own son; and sometimes even go to a distant tribe for a successor. As soon as the person selected has accepted the office, all the wives, goods, and children of his predecessor belong to him, and he takes care to keep them in a dependent position. If any one o: them, becoming tired of this state of vassalage, sets op his own village, it is not unusual for the elected chief to send a number of his young men to visit the seceder, and, if he does
not receive them with the usual amount of clapping of hands and humility, they at once burn his village. The children of the chicf have fewer privileges than common free men; for though they may not be sold, yet they are less eligible to the chieftainship than even the most distant relations of the chief. These free men form a distinct class who can never be sold; and under them there is a class of slaves whose appearance as well as position is very degraded. The sons of free men leave their parents about the age of puberty, and live for a few years with such men as Monina for the sake of instruction. While in this state they are kept under stringent regulations; they must salute a superior carefully, and, when any cooked food is brought, the young men may not approach the dish, but an elder divides a portion to each. They remain unmarried until a fresh set of youths is ready to occupy their place under the same instruction. The parents send servants with their sons to cultivate gardens for them, and also tusks to Monina to purchase their clothing. When the lads return to their native village, a case is submitted to them for adjudi cation, and, if they speak well on the point, the parents are highly gratified.

When we told Monina that we had nothing to present but some hoes, he replied that he was not in need of those articles, and that, as he had absolute power over the country in front, he could, if he chose, prevent us from proceeding. Monina himself seemed to credit our assertion, but his councillors evidently thought that we had goods concealed about us, and at their suggestion a war-dance was got up in the evening, about a hundred yards from our encampment, as if to frighten us out of preseuts. Some of Monina's young men had guns, but most were armed with large bows, arrows, and spears. They beat their drums furiously, and occasionally fired off a gron. As this sort of dance is always the prelude to an attack, mis men quietly prepared themselves to give them a warm reception. But an hour or two after dark the dance ceased, and, as we then saw no one approaching us, we went to sleep. During the night one of my head-men. Monahin, left the encampment, probably in a fit of temoorary insanity, brought on by illness. Next morning not a trace of him could be found, and he may have fallen a prey to a lion. I sent in the
morning to inform Monina of this sad event, and he at once urdered the gardens to be searched, and the wanderer, if found, to be restored. He evidently sympathised with us in our sorrow, and assured us that it was not the custom of his tribe to kidnap. I gave him credit for truthfulness, and he allowed us to move on without further molestation.

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

After leaving his village we marched in the bed of a sandriver a quarter of a mile broad, called 'langwe, through a flai country covered with low trees, and with high hills in the distance. This region is very much infested by lions, and men never go any distance into the woods alone. Having on one uccasion turned aside at midday into grass a little taller than myself, an animal sprang away from me which was certainly not an antelope, but I could not distinguish whether it was a lion or a hyæna. We saw footprints of many black rhinoceroses, buffaloes, and zebras. After a few hours we reached the village of Nyakóba. 'T'wo men, who accompanied us from Monina to Nyakuba's, would not believe us when we said that we had no beads It is very trying to have one's veracity lonbted, but, on opening the boxes, and showing them that all I had was perfectly useless to them, they consented to
receive some beads off Sekwebu's waist, and 1 promised to send four yards of calico from Tete.

The person whom Nyakoba appointed to be our gaide introduced himself to us and bargained that his services should be rewarded with a hoe. Having no objection to this proposal, I handed him the article, which he carried off in high delight to show to his wife. He soon afterwards returned, and said that, though he was perfectly willing to go, his wife would not let him. I said, "Then bring back the hoe;" but he replied, "I want it." "Well, go with us, and you shall have it." "But my wife won't let me." I remarked to my men, "Did you ever hear such a fool?" They answered, "Oh, that is the custom of these parts; the wives are the masters." Sekwebu informed me that he had gone to this man's house, and heard him saying to his wife, "Do you think that I would ever leave you ?" then, turning to Sekwebu, he asked, "Do you think I would leave this pretty woman? Is she not pretty?" We questioned the guide whom we finally got from Nyakoba, an intelligent young man, who had much of the Arab features, and we found the statement confirmed. When a young man takes a liking to a girl of another village, and the parents have no objection to the match, he is obliged to live at their village, and to perform certain services for the mother-in-law, such as keeping her well supplied with firewood. If he wishes to return to his own family he is obliged to leave all his children behind-they belong to the wife. This is only a more stringent enforcement of the law from which emanates the practice so prevalent in Africa, known to Europeans as " buying wives," though it does not appear in that light to the actors. So many head of cattle or goats are given to the parents of the girl, "to give her up," as it is termed, i. e. to forego all claim on her offspring, and allow an entire transference of her and her seed into another family. If nothing is given, the family from which she has come can claim the children, and I have no doubt that some prefer to have their daughters married in that way, as it leads to the increase of their own village. My men excited the admiration of the Bambiri, who took them for a superior breed on account of their bravery in elephant-hunting, and tried, though
unsuccessfully, to get them as sons-in-law on the conditions named. I saw several things to confirm the impression of the higher position which women hold here; and, being anxious for a corroboration of my opinion, I afterwards inquired of the Portuguese, and was told that they had noticed the same thing; and that, if they wished a man to perform any service for them, he would reply, "Well, I shall go and ask my wife." If she consented, he would go ; but no amount of couxing or bribery wo Id induce him to do it if she refused. The l'ortuguese praised the appearance of the Banyai, and they certainly are a fine race. A great many of them are of a light coffee-and-milk colour, which is considered handsome throughout the whole country,-a fair complexion being as much a test of beauty with them as with us. They draw out 'heir hair ıato small cords a foot in length, around each of which they twine the inner bark of a certain tree, dyed a reddish colour. Generally they allow the mass of dressed hair to fall down to the shoulders, but, when they travel, they draw it up to a bunch, and tie it on the top of the head. They are cleanly in their habits.

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

We continued a very winding course, in order to avoid the chief Katolósa, who is said to levy large sums upon those who fall into his hands, and we passed several villages by going soundabout ways through the forest. The drums beating all night in one village near which we slept showed that some person in it had finished his course. On the occasion of the death of a chief, a trader is liable to be robbed, for the people consider themselves not amenable to law until a new
one is electol. Our guides were carrying dried buffalo's meat to the market at Tete as a private speculation.

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

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

## CHAPTER XXXI.

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

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

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

Rebellion followed closely on the decrease of the Portuguese establishments. A man of Asiatic and Portuguese extraction, called Nyaude, built a stockade at the confluence of the Luenya and Zambesi ; the Commandant of Tete armed the whole body of slaves and marched against this stockade, but, when they approached, Nyaude despatched a strong party under his son up the left bank of the Zambesi, which attacked Tete, and plundered and burned the whole town except the house of the Commandant and a few others, with the church and fort. Having rendered Tete a ruin, Bonga carried off all the cattle and plunder to his father. News of this having been brought to the army before the stockade, a sudden panic dispersed the whole; and as the fugitives took roundabout ways in their flight, Katolosa, who had hitherto pretended to be friendly with the Portuguese, sent out his men to capture as many of them as they could. Anuther half-caste, called Kisaka, on the
upposite bank of the river, likewise rebelled. He imagined that his father had been bewitched by the Portuguese, and he therefore plundered all the plantations of the rich merchants of Tete on the north bank, which is the most fertile, and on which the Portuguese had their villas. When these were destruyed, the Tete people were completely impoverished. An altempt to punish this rebel proved unsuccessful, and he has lately been pardoned by the home Government. The Portuguese were thus placed between two enemies, Nyaude on the right bank and Kisaka on the left, the former of whom, having placed his stockade on the point of land on the right banks of both the Luenya and Zambesi, could prevent intercourse with the sea. The Luenya rushes with great force into the Zambesi when it is low, and in ascending the Zambesi boats must even go a little way up the former river, so as not to be carried away by its current, and dashed on the ${ }^{-}$ rock which stands on the opposite shore of the Zambesi. In coming up to the Luenya for this purpose all boats and canoes that came close to the stockade were rubbed. Nyaude kept the Portuguese shut up in their fort at Tete during two years, and they could only get goods sufficient to buy food by sending to Kilimane by an overland route along the north bank of the Zambesi. Commerce, which the slave-trade had rendered stagnant, was now completely obstructed. The present Commandant of Tete, Major Sicard, having great influence among the natives, put a stop to the war more than once by his mere presence on the spot. Had I attempted to reach this coast instead of going to Loanda in 1853, I should probably have been cut off, as the war was still raging. My present approach was just at the conclusion of the peace ; and when the Portuguese authorities here were informed that I was expected to come this way, they all declared that no European could nossibly pass through the tribes. Some natives at last came down the river to Tete, and, in allusion to the sextant and artificial horizon, said that " the Son of God had come," and that he was "able to take the sun down from the heavens and place it under his arm!" Major Sicard then felt sure that this was the man whom he expected.

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

The gold-field, whence Tete draws its supply of the precious metal, lies outside the coal-field, extending in a segment of a circle from the N.E. to the S.E. In the former direction there are six well-known washing-places: proceeding to the N.W. we meet with the Mushinga range: then crossing to the S. of the Zambesi near Zumbo, we hear of a station, formerly worked by the Portuguese, on the river Panyame, called Dambarári. Then follows the now unknown kingdom of Abútua, once famous for its gold. To the S.E. of this lie the gold-washings of the Mashóna, and still further E. those of Manica, where gold is found much more abundantly than in
any other part, and which has been supposed by some to be the Ophir of King Solomon. I saw the gold from this quarter as large as grains of wheat; while that found in the rivers which run into the coal-field was in very minute scales. The inhabitants are not unfavourable to washings, but at present they only wash when they are in want of a little calico. They know the value of gold perfectly well, for they bring it for sale in goose-quills, and demand twenty-four yards of calico for one penful. When the rivers in the district of Manica and other gold-washing places have been flooded, they leave a coating of mud on the banks. The natives observe the spots which dry soonest, and commence digging there, in firm belief that gold lies beneath. They are said not to dig deeper than their chins, fearing lest if they did so the ground should fall in and bury them. When they find a piece or flake of gold they bury it again, from the superstitious idea that this is the seed of the gold, and, though they know the value of it well, they prefer losing it rather than the whole future crop.

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

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

The indigo (Indigofera argentea, the common wild indigo of Africa) is found growing everywhere, and large quantities of the senna-plant (Cassia acutifolia, the true senna of commerce) grow in the village of T'ete and other parts; but neither indigo nor senna is collected. Calumbir-rot, which is found in abundance in parts further down the river, is bought by the Americans, it is said, to use as a dye-stuff. A kind of sarsaparilla, or a plant which is believed by the Portuguese to be such, is found from Londa to Senna, but has never beer exported. All the cultivation is carried on with hoes in the native manuer, and considerable quantities of Holcus sorghum, or maize, Pennisetum typhoideum, or lotsa, millet, rice, and wheat, are raised, as also several kinds of beans, cucumbers, pumpkins, and melons. The wheat is sown in low-lying places, which are annually flooded by the Zambesi. When the waters retire, the women drop a few grains in a hole made with a hoe, and push back the soil with the foot. One weeding alone is required before the grain comes to maturity. This simple process has all the effect of our subsoil-ploughing, liming, manuring, and harrowing, for in four months a good crop is ready for the sickle, and has been known to yield a hundredfold. No irrigation is required, because gentle rains, almost like mist, known by the name of "wheat-showers," fall in winter. The rains at Tete come from the east, though the prevailing winds are from the S.S.E. The "seconds" make the whitest bread, and the boyaloa, or native beer, is used instead of yeast, just as the toddy called "sura" is used at Kilimane, where the cocoa-nut palm abounds.

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


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

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

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

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

On the 2nd the Zambesi suddenly rose several feet in height. Three such floods are expected annually, but this year there were four. This last was accompanied by discoloration, and must have been caused by another great fall of rain east of the ridge. We had observed a flood of discoloured water when we reache: the river at the Kafue; it then fell
two feei aud from subsequent rains again rose so high, that we were obliged to leave it when opoosite the hill Pinkwe. About the 10 th of March the river rose several feet with comparatively clear water, and it continued to rise until the 21st, with but a very slight discoloration. This gradual rise was the greatest, and was probably cansed by the water of inundation in the interior.

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


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

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

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

## CHAPTER XXXII.

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

On the 24th we sailed only about three hours and reached a small island at the western entrance of the gorge of Lupata. Respecting the range, to which the gorge has given a name, Portuguese writers have erroneously stated it to be so high that snow lies on it during the whole year. The western side, which is the most abrupt and gives the idea of the greatest height, rises up perpendicularly from the water six or seven hundred feet. The eastern side is much more sloping and is covered with trees. It extends a considerable way into the Maganja country in the north, and then bends round towardk the river again, terminating in the lofty mountain Morumbali, pposite Senna. On the other or southern side it is straigbter,
and is said to end in Gorongozo, a mountain west of the same point. We passed through the gorge in two hours, and found it rather tortuous, between 200 and 300 yards wide, and excessively deep; a steamer could apparently pass through it at full speed. At the eastern entrance of Lupata stand two conical hills, composed of porphyry, having large square crystals therein; they are called Moenda en Goma, which means a footprint of a wild beast. Another conical hill on the opposite bank is named Kasisi (priest), from having a bald top. We descended swiftly with the current, and found the river spreading out to more than two miles in breadth and full of islands, the breadth of water between the islands being quite sufficient for a sailing-vessel to tack and work her sails in. The Portuguese state that there is high water during five months of the year, and that during the season of low water there is always a channel of deep water, which is, however, very tortuous and shifting. The right bank below Lupata is low and flat: on the north the ranges of hills and dark lines below them are seen, but the shore itself is invisible from the boat, and I could only guess the breadth of the river to be two miles. Next day we landed at Shiramba, once the residence of a Portnguese brigadier, who spent large sums of money in embellishing his house and gardens: these we found in entire ruin, having been destroyed by his half-caste son, who häd rebelled against the Portuguese. The southern shore has been ravaged by the Caffres, here named Landeens, and the inhabitants generally acknowledge the authority of Bonga, and not of the Portuguese. While we were breakfasting the people of Shiramba commenced beating the drum of war, upon which Lieutenant Miranda immediately got all the soldiers of our party under arms, and demanded of the natives why the drum was beaten. They gave an evasive reply; and as they employ this means of collecting their neighbours when they intend to rob canoes, our watchfulness may have prevented further proceedings.

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

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

I thought the state of Tete quite lamentable, but that of Senna was ten times worse. At Tete there is some life; but here everything is in a state of stagnation and ruin. The village stands on the right bank of the Zambesi, with many reedy islands in front of it, and much bush in the adjacent country. The soil is fertile; but the village, having several pools of stagnant water, is very unhealthy. The fort, built of sun-dried bricks, has the grass growing over the walls, which have been patched in some places by paling. The Landeens visit the village periodically, and levy fines upon the inhabitants, as they consider the Portuguese a conquered tribe. The half-castes appear to be in league with them, for, when any attempt is made by the l'ortuguese to coerce the enemy or defend themselves, information is conveyed at once to the Landeen camp, and, though the Commandant prohibits the payment of tribute to the landeens, on their approach the half-castes eagerly pay it. Senhor Isidore, the Commandant, a man of considerable energy, had proposed to surround the whole village with palisades as a protection against them, and the villagers were to begin this work the day after 1 left. The most pleasant sight I witnessed at Senna was the bcatbuilding carried on by the negroes of Senhor Isidore, without any one to superintend their operations. They had been instructed by a European master, and now they can lay down the keel, fit in the ribs, and turn out very neat boats and launches, valued at from 20l. to 100l. Senhor Isidore had some of them instructed also in carpentry at Rio Janeiro. and they constructed for him the handsomest house in Kilinane.
the woodwork being all of country trees, some of which take a fine polish and are very durable.

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

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

A few miles beyond the Shire we left the hills entirely, and sailed between extensive flats covered with trees. We slept on a large inhabited island, and then came to the entrance of the river Mutu. The people who live on the north are called Baróro, and their country Bororo. The whole of the right bank is in subjection to the Landeens, who generally levy a tribute upon passengers. I regret that we did not meet them,
as I should like to have ascertained whether they are of the Zulu family of Caffres or of the Mashona, and also to learn what they really think of white men. I understood from Sekwebu that they consider the whites as a conquered tribe.

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

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

[^21]affects the river of Kilimane. At Interra we met Senhor Asevedo, who, perceiving that I was suffering from a very severe attack of fever, immediately placed at my disposal his large sailing launch, which had a house in the stern. This was greatly in my favour, for it anchored in the middle of the stream, and gave me scme rest from the mosquitoes, which in the whole of the delta are something frightful. Sailing comfortably in this commodious launch along the river of Kilimane, we reached that village on the 20th of May, 1856, being very nearly four years since I started from Cape Town. Here I was received into the house of Colonel Nunes, one of the best men in the country. I had been three years without hearing from my family, the letters sent having, with one exception, all failed to reach me. 1 received, however, a letter from Admiral Trotter, conveying information of thei welfare, and some newspapers, which were a treat indeed. Her Majesty's brig "Frolic" had called to inquire for me in the November previous, and Captain Nolloth of that ship had most considerately left a case of wine, and his surgeon, Dr. Jas. Walsh, an ounce of quinine-both of them most acceptable presents. But my joy on reaching the east coast was sadly embittered by the news that Commander MacLune, of H. M. brigantine "Dart," on coming in to Kilimane to pick me up, had, with Lieutenant Woodruffe and five men, been lost on the bar. I never felt more poignant sorrow. It seemed as if it would have been easier for me to have died for them, than that they should all be cut off from the joys of life in generously attempting to render me a service.

Eight of my men begged to be allowed to come as far as Kilimane, and, thinking that they would there see the ocean, I consented to their coming, though food was so scarce that they were compelled to suffer some hunger. They would fain have come further; fur when Sekeletu parted with them, his orders were that nene of them should turn until they had brought Ma Robert back with them. On my explaining the difficulty of crossing the sea, he said, "Wherever you lead, they must follow." As I did not well know how I should get home myself, I advised them to go back to Tete, where food was abundant, and there await my return. I bought a quantity of calico and brass wire with ten of the smaller tusks which
we had in our charge, and sent the former back as clothing to those who remained at Tete. As there were still twenty tusks left, I deposited them with Colonel Nunes, that, in the event of anything happening to prevent my return, the impression might not be produced in the couniry that $I$ had miade away with Sekeletu's ivory, and I instructed him, in the event of my death, to sell the tusks and deliver the proceeds to my men. I explained this to the men, and they replied, " Nay, father, you will not die; you will return to take us back to Sekeletu." They promised to wait till I came back, ind, on my part, I assured them that nothing but death would prevent my return.

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

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

When we parted from our friends at Kilimane the sea on the bar was frightful even to the seamen. The waves were so high that, when the cutter was in one trough, and the pinnace in another (for Captain Peyton had sent two boats in case of accident), even the mast of the one could not be seen from the other. Three breakers swept over us, giving the impression that the boat was going down. Poor Sekwebu, who had never before seen the sea, looked at me when these terrible seas broke over, and said, "ls this the way you go? Is this the way you go?" I smiled, and said, "Yes; don't you see it is?" and tried to encourage him. He was well acquainted with canoes, but never had seen aught like this. When we reached the ship-a fine large brig of sixteen guns and a crew of one hundred and thirty-she was rolling so that we could see a part of her bottom. It was quite impossible for landsmen to catch the ropes and climb up, so a chair was sent down, and we were hoisted in as ladies usually are. As soon as I reached the deck I received so hearty an English welcome from Captain Peyton and all on board, that 1 at once felt myself at home.

We left Kilimane on the 12th of July, and reached the Mauritius on the 12th of Angust, 1856. Sekwebu was picking up English, and becoming a favourite with both men and officers. He seemed a little bewildered by the novelty of everything on board a man-of-war; and he remarked to me several times, "What a strange country this is!-all water together." When we reached the Mauritius a steamer came out to tow us into the harbour. The constant strain on his antutored mind seemed now to reach a climax, for during the
night he became insane. I thought at first that he was intoxicated. He had descended into a bcat, and, when I attempted to go down and bring him into the ship, he ran to the stern, and said, "No! no! it is enough that I die alone. You must not perish; if you come I shall throw myself into the water." Perceiving that his mind was affected, I said, "Now, Sekwebu, we are going to Ma Robert." This struck a chord in his bosom, and he said, " 0 yes; where is she, and where is Robert?" and he became more composed. In the evening, however, a fresh accession of insanity occurred-he tried to spear one of the crew, then leaped overboard, and, though he could swim well, pulled himself down hand under hand, by the chain cable. We never found the body of poor Sekwebu.

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

## APPENDIX.

Extracts from the Journal of the late Capt. Hyde Parker, R.N., H.M. Brig " Pantaloon."

"The Lúabo is the main outlet of the Great Zambesi. In the rainy season-January and F'ebruary principally-the whole country is overdowed, and the water escapes by the different rivers as far up as Quilimane; but in the dry season neither Quilimane nor Olinda communicates with it. The entrance to the Luabo river is about two miles broad, and is easily distinguishable, when abreast of it, by a bluff (if I may so term it) of high straight trees, very close together, on the western side of the entrance. The bar may be said to be formed by two series of sandbanks,-that running from the eastern point runs diagonally across (opposite?) the entrance and nearly across it. Its western extremity is about two miles outside the west point.
" Within the points the river widens at first and then contracts again. The rise and fall of the tide at the entrance of the river being at springs twenty feet, any vessel can get in at that time, but, with all these conveniences for traffic, there is none here at present. The water in the river is fresh down to the bar with the ebb-tide, and in the rainy season it is fresh at the surface quite outside. In the rainy season, at the full and change of the moon, the Zambesi frequently overflows its banks, making the country for an immense distance one great lake, with only a few small eminences above the water. On the banks of the river the huts are built on piles, and at these times the communication is only in canoes; but the waters do not remain up more than three or four days at a time. The first village is about eight miles up the river, on the western bank, and is opposite to another branch of the river called 'Musélo,' which discharges itself into the sea about five miles to the eastward.
"The village is extensive, and aboit it there is a very large quantity of land in cultivation ; calavances, or beans, of different sorts, rice, and pumpkins, are the principal things. I saw also about here some wild cotton, apparently of very good quality, but none is cultivated. The land is so fertile as to produce almost any (thing?) without much trouble.
"At this village is a very large house, mud-built, with a courtyard. I believe it to have been used as a barracoon for slaves, several large cargoes having been exported from this river. I proceeded up the river
as far as its junction with the Quilimane river, called ' Boca do Rio,' by my compatation between 70 and 80 miles from the entrance. The influence of the tides is felt about 25 or 30 miles up the river. Above that, the stream, in the dry season, runs fron $1 \frac{1}{2}$ to $2 \frac{1}{3}$ miles an hour, but in the rains much stronger. The banks of the river, for the first 30 miles, are generally thickly clothed with trees, with occasional open glades. There are many huts and villages on both sides, and a great deal of cultivation. At one village, about 17 miles up on the eastern bank, and distinguished by being surrounded by an immense number of bananas and plantain-trees, a great.quantity of excellent peas are cultivated, also cabbages, tomatos, onions, \&c. Above this there are not many inhabitants on the left or west bank, although it is much the finest suuntry, being higher, and abounding in cocoa-nat palms; the eastern bank being sandy and barren. The reason is, that some years back the Landeens, or Caffres, ravaged all this country, killing the men and taking the women as slaves, but they have never crossed the river; hence the natives are afraid to settle on the west bank, and the Portuguese owners of the different ' prasos' have virtually lost them. The banks of the river continue mostly sandy, with few trees, except some cocoa-nut palms, until the southern end of the large plantation of Nyangué, formed by the river about 20 miles from Maruru. Here the country is more populous and better cultivated, the natives a finer race, and the huts larger and better constructed. Maruru belongs to Senior Asevédo, of Quilimane, well known to all English officers on the east coast for his hospitality.
"The elimate here is much cooler than nearer the sea, and Asevedי has successfully cultivated most European as well as tropical vegetables. The sugar-cane thrives, as also coffee and cotton, and indigo is a weed. Cattle here are beautiful, and some of them might show with credit in England. The natives are intelligent, and under a good government this fine country might become very valuable. Three miles from Maruru is Mesan, a very pretty village among palm and mango trees. There is here a good house belonging to a Señor Ferrão; close by is the canal (Mútu) of communication between the Quilimane and Zambesi rivers, which in the rainy season is navigable (?). I visited it in the month of October, which is about the dryest time of the year; it was then a dry canal, about 30 or 40 yards wide, overgrown with trees and grass, and, at the bottom, at least 16 or 17 feet above the level of the Zambesi, which was running beneath. In the rains, by the marks 1 saw, the entrance rise of the river must be very nearly 30 feet, and the volume of water discharged by it (the Zambesi) enormous.
" Above Maruru the country begins to become more hilly, and the nigh mountains of Boruru are in sight ; the first view of these is obtained below Nyangue, and they must be of considerable height, as from this they are distant above 40 miles. They are reported to contain great
mineral wealth; gold and copper being found in the range, as alsu coal (?). The natives (Landeens) are a bold, independent race, who do not acknowledge the Portugucse anthority, and even make them pay for leave to pass unmolested. Thronghout the whole course of the river, hippopotami were very abundant, and at one village a chase by the natives was witnessed. They harpoon the animal with a barbed lance, to which is attached, by a cord 3 or 4 fathoms long, an inflated bladder. The natives follow in their canoes, and look out to fix more harpoons as the animal rises to blow, and, when exhausted, despatch him with their lances. It is, in fact, nearly similar to a whale-hunt. Elephants and lions are also abundant on the western side ; the latter destroy many of the blacks annually, and are much feared by them. Alligators are said to be numerous, but I did not see any.
"The voyage up to Maruru occupied seven days, as I did not work the men at the oar, but it might be done in four; we returned to the bar in two and a half days.
"There is another mouth of the Zambesi, seven miles to the westward of Luabo, which was visited by the 'Castor's' pinnace; and I was assured by Lieutenant Iloskins :hat the bar was ketter than the one 1 risited."

## NOTES

## BY FREDERICK STANLEY ARNOT.

## CHAPTER I.

r. Page 9, 2. r2.-Dr. Livingstone, following the example of Dr. Moffat, used the Dutch alphabet in writing down Sechuana words, so that Banoga is pronounced Banoha.
2. Page 10, l. 20.-Dr. Livingstone follows the custom here of calling the Zulus "Caffres." When the Arabs first sailed down the East Coast of Africa they sought to impose their Mohammedan beliefs upon the natives. The Swahili tribes along the Zanzibar coast seemed to have been more amenable, but the Zulus resisted, so the Arabs called them "Caffres" (infidels). We must not suppose that the Bechuanas, among whom Livingstone laboured, belonged to a different race. It is recognised now by all competent authorities that the negroes of Central and South Africa belong to one great family, which, by common consent, has been called the Bantu family. It is interesting to observe how these tribes lie pretty much north and south, suggesting that they all filtered down from the north in a natural sort of a way. The original mass would be divided in the migration southward by the great lakes and the upper tributaries of the Congo, and wars and jealousies as to the occupation of the country would keep these sections apart.
3. Page $15,1.23$.-Polygamy is the most perplexing question the missionary in Africa has to deal with. It ought not to be considered in a harsh and unsympathetic spirit. The more the native customs and ways are understood, the more difficult does the matter appear. (1) After the birth of a child, for instance, husband and wife are temporally divorced for three years. (2) In some tribes complimentary marriages between young men and old women are usual ; of course, in time the husband is supposed to marry his second and proper wife. (3) Chiefs depend upon their many wives, and the relationships thus formed, for protection against intrigue and the breakings out of revolt in distant parts of the country.

## CHAPTER II.

4- Page 31, l. 1.-This custom may have come from the command (Leviticus vii. 31) to give the breast of the peace-offering to the high priest and his sons, as an African chief is also priest. The practice of circumcision, common in Africa, may also be accounted for in the same
way. Seeing we have no difficulty in tracing religious practices found in Abyssinia to a Christian source, it is not unnatural to suppose that many African religious customs are Jewish.
5. Page 35, l. 23.-The Bushmen, or Basaroa of the South African deserts, are not related to the negroes. They may be the descendants of runaway Hottentots of long years ago, as the Bakalahali are runaway Bechuana of to-day. The Hottentot and Bushmen belong to the redskinned races, and their language is said to have something in common with the language of the Laplanders.
6. Page 37, l. 28.-The Christian chief Khama has done much for these poor inhabitants of the desert, persuading them to dig the ground and build villages by offering presents of goats and cattle.

## CHAPTER III.

7. Page 41, l. 10.-Sekomi was chief of the Bamangwato, and father of the present chief Khama. He was bitterly opposed to his son becoming a Christian, and in order to prevent his ever coming into power Sekomi abdicated in favour of a distant relative, Machang ; but the tribe revolted, and in August, 1872, Khama was declared chief of the Bamangwato.
8. Page 48, l. 1.-Lechelatebe was succeeded by his son Moremi, the present chief of the Batauana. The late Mr. Hepburn was the first missionary to follow up Dr. Livingstone's discovery of Lake Ngami. His success was remarkable, and in a short time the whole tribe seemed to be affected. They gave up their Bushman slaves; Dr. Moffat's translation of the Bible was carried into the country by the waggon-load. Repeated attacks from marauding bands of Matabele, however, soon tested the value of Moremi's conversion, and when Mr. Hepburn visited the country in 1886 he was met with shouts of "Beat him ! Kill him !" Still some stood fast.

## CHAPTER IV.

9. Page 58, l. 16.-This is so ; the Tsetse fly quickly disappears with the buffalo. The rinderpest that has wrought such havoc in South Africa has swept off hundreds of thousands of buffalo in the far interior, leaving the plains white with their bones; but in a remarkably short time it was found that the "fly" had disappeared from large areas, and that cattle could be brought into the country.
10. Page 58, l. 35--Mahale was alive in 1883, and continued to take to himself a large share of the credit of bringing both the missionary and the trader into the country.
II. Page 61, l. 31.-The Barotse account of their conquest, however, differs slightly. Upon the death of their chief Malunda, they say, two rivals to the chieftainship appeared; the wiser of the two appealed for help to Sebituane, the other fled with his followers up the Kabombo.
11. Page 64, l. 27.-The name "Mambari" is given by the free natives
of Benguella to the slaves of the Portuguese. The natives of the Upper Zambesi have somehow got hold of this name, and apply it to all native traders from Bihé and Bailundu as well as to the slaves of the Portuguese.
12. Page 64, l. 37.-When pressed by hunger, or because of debt, parents have been known to sell their children. The law of " mother right" so prevails among some of the interior tribes that the children are at the disposal of their maternal uncles, unless redeemed by their fathers from them. The uncle readily parts with the children when the trader comes along with his guns and calico, and in this way, more than in any other, the slave markets are fed.

## CHAPTER V.

14. Page 70, l. 7 -The old waggon route from Cape Town to Kuruman lay a little to the west of the railway track from Cape Town to Kimberley.
15. Paye 74, last line.-The Bantu tribes in the interior are better mechanics than those living in South Africa, who have not only wandered further away from their original home and starting-point, but have thrown away any little knowledge they may have had of the arts as so much unnecessary burden.

## CHAPTER VI.

16. Page 85, last line. - In 1892 a missionary, Mr. Joseph Lynn, of London, died of hydrophobia in Bihé, West Central Africa. He and Dr. W. Fisher were bitten by the same dog; Dr. Fisher recovered, and Mr. Lynn died within two months. M. Coillard also writes about a regular epidemic of hydrophobia breaking out in the Barotse Valley about the same time.

## CHAPTER VII.

17. Page 94, l. 15.-A few years ago a traveller near Lake Mweru came upon a cow elephant that had just been pulled down by six lions, all attacking together. The elephant's teeth were small for her size, and on this account she was not so well able to defend herself.
18. Page 100, l. 2.-Leina means "name." The names of African chiefs are usually sentences, the first word of which is used "for short." Mushide, the Garenganze chief, was known by the following names :-

MuShide wa vantu vonso $=$ The soul of all men.
SOKONTWE wa lamata vagene $=$ The sticking weed that clings to the traveller.
Kangunguala kasala mitenge $=$ The whirlwind that unroofs the house.
Kashika vomi $\quad=$ The burier of the living.
Kapuya sava manso
$=$ The eye destroyer.
Muenda pa vantu
$=$ He goeth among the people.
Komesia wa vilolo $\quad=$ The strengthener of his dependencies.
Citavatava wa mena pe sanga $=$ The sycamore tree that sprouted in the Sanga country (to give bark for the clothing of the people).
19. Page 100, l. 28. -Natives of the same tribe can very quickly determine their relative ages, although they cannot tell how many years they each have lived. They associate the year of their birth with the event of that year, be it the death of the chief or the appearance of some plague, or an eclipse of the sun, or large comet seen. Missionaries going into a new district are often amused at the interest taken in their relative ages, and cannot quite understand it at first, seeing that the African does not keep any record of the number of years he may have lived.

## CHAPTER VIII.

20. Page 107, l. 27.-It is well known that people living in open savannahs and prairies, as the Bechuana and Zulu tribes do, are less superstitious than the inhabitants of forest-clad countries.
21. Page 110, l. 16. - The bark of the Mowana or Baobab tree is an important article of export from Ambriz and Ambrizette on the West Coast of Africa. It is used chiefly in the manufacture of paper.
22. Page ini, l. 16.-Some of these edible caterpillars respond in a curious way to a half-whistling, half-cooing sound, by wagging their heads and setting every leaf of the tree infested by them in motion.

## CHAPTER IX.

23. Page 123, l. 9.-The white man that Dr. Livingstone met at Linyanti was the well-known Portuguese trader Senhor Silva Porto, who began trading from Loanda in the year 1837. Slaves were then in great demand, and could be bought on the Kuanza river for four yards of calico a head. Little by little Serhor Porto worked his way inland; he employed his own slaves, as well as Bihé headmen, to do most of his trading; these native agents are called "Pumbeiros" by the Portuguese. A Pumbeiro of the name of Jăo was the first to reach the Zambesi; returning, he informed Senhor Porto, who decided to visit the Makololo chief. Senhor Porto traded for ivory, rubber, and beeswax all over West Central Africa; his regular habits and just treatment of all free-natives gave him great influence in the country. The Portuguese Government made him Capitâo Mor for Bihé, where during a sudden native revolt (1890) the old hero lost heart and blew himself up with gunpowder. His budy was carried to Lisbon and buried with public honours. The Portuguese call him "The Livingstone of Portugal."
24. Page 127, l. 25.--The African bead trade is divided into what might be called "currency bead" and "fashion bead" trades. Missionaries and explorers would do well to keep to currency beads. Traders can of course make more money out of the fashion bead, but it is much more risky.
25. Page 128, l. 3.-In the year 1883-nearly thirty years after Dr. Livingstone's visit-I, when on my first missionary journey, met with old blind minstrel in the Barotse Valley, who, failing to interest
me with his songs and antics, changed his tune and began giving off a long discourse on the Last Judgment. When asked where he had heard these things, he explained that when a young man, and before losing his sight, he had travelled with Dr. Livingstone as cook, and that this was a sermon that he had often heard his old master preach.
26. Page 130, l. 10.-Mr. George Westbeech was the pioneer of the Upper Zambesi ivory trade. He cut the first waggon road through the forest from Buluwayo to the Victoria Falls, and built the trading stations of Panda-ma-tenka and Leshuma.

## CHAPTER X.

27. Page 135, l. 3.-One of the young Barotse princes that Sebituane brought up at his court-Sepopo by name-led the revolt that ended in the massacre of all the Makololo men ; the women were spared to be the head wives and queens of the country under the Barotse.
28. Ia $a_{5}$ 137, l. 23.-The nore ambitious tribes in Africa have the habit of calling all neighbouring and inferior tribes by a name equal to "barbarian," so all interior tribes were called "Makalaka" by the Bechuana.

29 Page 138, l. 18.-Mosilikatse was the father of the chief Lobengula who fought against the South African Chartered Company. His name means "bloody path," and the name he gave to his chief kraal-Bulu-wayo-means "killing-place."
30. Page 138, l. 25.-Moshesh, the reputed half-brother of Sebituane, pulled the Basuto tribe together with great ability, and the two brothers must have been remarkable men. The story is told of Moshesh, how that after enforcing with great severity the death penalty on all found guilty of cannibalism he decided to relax the law somewhat, believing that the evil had been checked and would die out, when a man was brought to him whom his accusers declared guilty of having eaten the body of Moshesh's own grandfather, "Ought he not to die?" "No," replied the king naively, "let him live. Why should I disturb my grandfather's grave?"

## CHAPTER XI.

31. Page 141, l. 5.-The nakong is known in many Bantu dialects by the name Eshove, and this may account for the name "Chobe" that Dr. Livingstone gave to the river that is better known by that of Linyanti in its lower reach, Mashe higher up, and Kuando nearer to its source.

## CHAPTER XII.

32. ${ }^{-}$Page 150, 2. 23.-"Monare" is the name usually given to missionaries in Bechuanaland, and is a corruption of the Dutch Myn Heer. The Makololo, not understanding the use of titles, called Dr. Livingstone "Monare" instead of Monare Livingstone.
33. Page 151, 2. 10.-There can be no possible doubt that this I'ortuguese trader was Senhor Silva Porto. (See note, page 123.) An Arab trader from Zanzibar appeared on the scene at the same time (page 153). who was also a famous man in his way. That these three travellers should not only be the first to penetrate Africa, the one from the South, the other from the East, and the third from the West Coasts, but that they should all meet at such a remote part of the continent, is a remarkable coincidence. Dr. Livingstone continued his journey, crossing the continent to Loanda, travelling in a north-westerly direction. Senhor Silva Porto returned to Benguella after sending his two "Pumbeiros" across to the East Coast with letters to the l'ortuguese governor of Mozambique ; and the Arab trader, accompanied Silva Porto to Bihé and Benguella, crossing Africa from east to west. The Arab, we know, was after no good; his journey led to a great general advance among the Arab traders and raiders of Zanzibar into Central Africa; but the bright and encouraging thought must suggest itself to us that Livingstone was raised up at the right time "to confound their knavish tricks" by bringing to the light of day-as he did so successfully years after-a faithful account of their doings.
34. Page 152, l. 32.-To-day, however, the natives call the Leeba the Zambesi along its whole course. M. Coillard, in 1895, ascended the Zambesi for some distance beyond the junction of the two rivers. He says: "We saw the confluence with the Zambesi of the Loeti, . . . which comes from the west, . . . then, a little further on, that of the Kabombo on the left bank." (Threshold of Central Africa, page 602.)

## CHAPTER XIII.

35. Page 158, l. 38. -The natives of the Upper Zambesi repeatedly told me that I could not do the things the "Great Monare" had done. "He raised his dead relatives to life. We saw them," they insisted, " walking across the shadow of the sun "
36. Page 161, l. 39.-The Makololo thought also that if the moon appeared perpendicular, thus (, they would have abundance of rain that month; but if the moon appeared lying on her back, thus $\smile$, it bespoke drought, for how could the water spill over?

## CHAPTER XIV.

37. Page 175, l. 29. - One day a reed bock shot in the side by me fell down seemingly dead, and after having his tail hacked off and throat partly cut, sprang up and bounded off. The country was open all around and the grass had been burned off, only one clump remained; into this the wounded animal ran. My men surrounded the spot, and set fire to the grass; a hyæna ran out. Upon searching the ground the charred remains of a python were found, but no
signs of the antelope. The men looked at one another, not a word was spoken ; but all immediately, and with one consent, fled to the camp, packed their bundles, and set off for the nearest village, in spite of rain and the moonless night that was just upon them. All believed that they had been met by a former chief come back to the world again, with power to change himself into a hyæna or antelope, and that had they slept there that night they would have been dead men in the morning.
38. Page 1.77, l. 23.-The Loeti of Livingstone is known as the Lungebungo river, and rises in the Chibokwe country, at an interesting spot where, within a distance of four miles, water is seen flowing west to the Kuanza river, north to the Congo, and east to the Zambesi.

## CHAPTER XVI.

39. Page 195, l. 38.-Like children's toys these idols bave their interest for ethnologists. Mr. Ciawford, a missionary in Lubaland, has takin a photograph of one which is a good example of the general run of forest idols that Dr. Livingstone met with in the Lunda country. This, which might be described as a lion-faced sphinx, falls into line with Dr. Livingstone's remarks on page 133 as to the Africans' connection with ancient Esypt.
40. Page 206, l. 29.-The great Lunda empire, that at one time extended from the Luapula to the Zambesi, had begun to dry up in Livingstone's day, and shortly after Shinte came under tribute to the Barotse; but in 1887 the Lubale chief Kañgombe took advantage of troubles in the Barotse to raid Shinte and to practically destroy his country; many Balunda were carried off into slavery. One day, when travelling, I overtook the Lubale army with gangs of Shinte's people all tied together-a pitiable sight.

## CHAPTER XVII.

41. Page 207, l. 33.-During the years 1895-96-97 a dreadful plague of locusts swept over the whole of Central Africa, and had it not been for the often despised Manioc root, the death-rate from starvation must have been very heavy. As soon as the natives found that the locust did not touch the Manioc plant, they cultivated larger quantities of it. The plant would be still more valuable to Africa were South American methods of cultivating and preparing the root introduced.
42. Page 208, l. 22.-Muate-Yamvo, however, had several Kazembes or generals. The full name is "KAZEMBE ka suma vantu," which means the stinging bush-fly that bites people. The Portuguese travellers, Pereira and Lacerda, visited the Kazenbe of the eastern bank of the Luapula river, whose descendants still reign as independent monarchs. The town, the direction of which was pointed out to Livingstone, was
undoubtedly that of the Kazembe of the Western Lualabe, the branch that Livingstone afterwards called "Young's Lualala, "
43. Page 210, l. 35. -The Baluvale who live in these plains are fish catchers and curers on a large scale. They are now the predominating tribe a'ong the far Upper Zambesi. Kakenge, who has his capital at the junction of the Luena with the Zambesi, is their official and ceremonial head, but Kañgombe, who lives further west, is their leader in war. In 1891 I assisted in planting a mission station among them a little to the north-east of Livingstone's route. Mr. Schindler, a Swiss, and Dr. Fisher, of London, assisted by seven other missionaries, are at work among both the Baluvale and Balunda.
44. Page 211, l. 15.-Subsequent explorations have shown, however, that the Chobe does not rise in the Lubale Plains, but in a country of great sand hills south-east of Bihé ; those sand hills are very porous, and rest on a layer of clay. The heavy rains are all absorbed by them as if by so many great sponges, and given out to the streams, months after when the water reaches the level of the clay. The Chobe and all her feeders begin to rise at the end of the rainy season, and keep increasing in volume as the rainy season advances.
45. Page 21I, l. 17.-The Loeti or Dunge-ungo and the Kassia rivers rise in a beautiful mountainous country well wooded and well drained
46. Page 211 , l. 31.-The law of "mother right" prevails so in the interior, however, and is hardly known among the South African tribes; this accounts for the attachment of the Balunda to their mothers; legally the "Makalaka" boy is the property of his mother's elder brother, and the village that his mother came from is his home or "hai."
47. Puge 214, l. 38. -They have also the idea that drumming frightens the spirits away as birds are scared from the corn, but the noise has to be kept up night and day until the proper measures have been taken to lay the troubled spirits. This helps us to understand how the Africans insist on coming in bands and drumming all night around the traveller's tent; their action is prompted by the same kind thought that would lead one to fan a friend asleep or to dust the flies from another on a hot summer's day.
48. Pa, 215, l. 14.-A child was sacrificed as late as 1883 by the Barotse in order to sanctify some war drums with the blood sprinkled from the stumps of ten little bleeding fingers newly chopped off. The body was then thrown alive to the crocodiles to appease the great serpent that lies along the bed of the Zambesi. Stories are told of the Balunda and Buluvale selecting an annual victim as a sacrifice to the spirits of the chief's ancestors. In 1888 the Balunda had advanced as far as to abhor the killing of the victim, but in order to satisfy the spirits, and to procure the right parts of the human body for the king's medicine, a dead body was dug up from some new-made grave.
49. Page 216, l. 29.-Katema lived on in the same plistrict for thirty years after Livingstone visited him. From being ruler over the Ralubale, he was reduced to being tributary to them. Then purely for the sake of carrying off his Lunda subjects as slaves, the Balubale drove out Kazembe and, it is reported, killed him as he fled to the Barotse for protection. I knew him well, and had many talks with him about Dr. Livingstone, "the first white man."
50. Page 219, l. 17.-Commander Cameron discovered the Lulua, and found that it flowed north to the Kassai and Congo, and not south to the Zambesi as was reported to Dr. Livingstone.
51. Page 222, l. 20 -The ant builds up the stalk of grass as the flood rises, which of course washes away the lower stories of the little towers of Babel, leaving the ant with a sort of a bird-nest house to live in.

## CHAPTER XVIII.

52. Pagz 228, 1. 10. -The Bachibokwe, or Ba-chioko, are perhaps the most remarkable and most interesting tribe to be met with in the whole of West Central Africa. They work cleverly in iron and wood, farm the bee, and procure large quantities of beeswax; they have discovered a root yielding rubber that now commands a higher price than the tree rubber. At the same time, their capacity for giving trouble to passing traders and travellers is so well known that their name is a proverb.
53. Page 238, l. 39. - This year (1899) Mr. F. Schindler made a prolonged excursion among the Bachibokwe, hoping to find an opening among them for mission work. Were his diary to be put alongside of Dr. Livingstone's, written forty years before, it would be seen that these troublesome people have not altered one iota in their methods of worry and extortion. At last, however, Mr. Schindler seemed to find a friend among them; a chief came forward to assist in tracking and punishing a thief who had stolen a few beads. The man was brought to book, and the beads restored after endless litigation more annoying than the theft itself; then, to crown all, Mr. Schindler had to pay his good friend the chief in cloth two or three times the value of the beads as his well-earned fees!

## CHAPTER XX.

54. Page 267, 2. 3.-The description here given of Loanda is of course only of value in so far as it is a description of how things were forty years ago. To-day Portuguese, English, French, and German steamers call nearly every week at Loanda; the town, too. has been largely rebuilt, the streets cleared of sand, and a water supply is abundant. The Portuguese fail as farmers and employers of free labour, but Loanda compares favourably with any other town between Gibraltar and Cape Town.
55. Fage 273, l. 28. -The Dutch occupied Loanda for a very short time.

The natives of Angola, seeing so many strange white men and not knowing their name, called them "Vafulu," meaning "they are many," and to-day all Dutch, English, and Germans are called "Vafulu" to distinguish them from the Portuguese.

## CHAPTER XXI.

56. Page 280, l. 8.-To-day, however, the distilling of rum or "aguardente," as the Portuguese call it, is the chief source of income in all these districts; thousands of natives labour on the rum factories, cultivating the cane, etc. ; they are brought from the interior by traders, who sell them to the planters, who take them to the district magistrate and register them as free labourers under a seven years' contract, which is generally renewed.
57. Page 284, l. 14.-It is more properly, however, the line of demarcation between the provinces of Loanda and Benguella, both being in the Portuguese colony of Angola.

## CHAPTER XXII.

58. Page 289, l. 23.-Elephants too have been killed by these fiery little creatures ; they have been known to run up the animal's trunk when asleep, and so to irritate it that in desperation the elephant will beat his trunk against a tree, causing it to swell, and the inflammation following kills the animal.
59. Page 299, l. 21.-This, however, is about the worst language the Portuguese indulges in, and it is not to be compared to that of the many Britishers in other parts of Africa. Nothing is more revolting than to hear from the raw native an unclean English oath, probably the only words he may have been able to pick up from his master, the miner, or trader.

## CHAPTER XXIII.

60 Page 313, l. 19. -The West Coast trader is essentially a landsman ; all the trading tribes are entirely at the mercy of the natives living along the large rivers; as a rule they prefer making a long detour to hiring canoes. A glance at the map of this part of the African continent shows that between the bend of the Kassai, flowing east then north, and the bend of the Leeba, or Zambesi, flowing west then south, there lies a neck of land of great value to the native traders, who carry the produce of the far interior to the Loanda and Benguella markets.

## CHAPTER XXIV.

61. Page 315, l. 11.-Shakatwala was wrong, however. The Lutembwe is one river, and, rising in the plains near to the Kassai, it flows south to the Zambesi.
62. Page 327, l. 5.-This was Dr. Livingstone's last visit to the Barotse Valley. The second European to penetrate these parts from the south was

Westbeech, the trader, in 1873; and the missionaries, travellers, and hunters who visited the Zambesi in the years following owed much of whatever footing they may have secured in the country to the late Mr. George Westbeech. M. François Coillard has been the true successor of Livingstone in these parts from a missionary's point of view. His work began with his second visit to the Zambesi, in 1884.

## CHAPTER XXVI.

63. Page 343, l. 27.-Dr. Livingstone, on his second visit to the falls, fastened a stone and a piece of paper to a long line, with which to measure the depth of the chasm. The Batoka have improved upon this, and now say that Livingstone himself flew down to the bottom like a bird!
64. Page 344, l. 39.-Dr. Livingstone returned to Linyanti in 1860, and found Sekeletu a leper and his empire rapidly going to pieces. The sick chief died shortly after Livingstone's visit, and his son and heir being too young to rule, two uncles fought over the regentship. While the Makololo were fighting the Barotse were arming, and led by Sepopo, one of the family of their former chiefs, they killed off all the Makololo men, even to the little boys, leaving only the women and girls. The women, however, still received a great deal of the honour and respect formerly paid to the Makololo men, and as they were all married to the chiefs and headmen among the. Barotse they ruled in all domestic matters. The Sekololo language has prevailed, and has become more truly the language of the country since the massacre of the Makololo men than ever before. Sepopo was killed by his own men, and his nephew Nguanawina succeeded him for one short year; he also was disposed of in the same way. Then Loboshe or Liwanika was called to the kingship, and he, after many ups and downs, has become at last fairly well established. His capital has always been at Lea-luyi, in the Barotse Valley. Here it is interesting to observe that luyi, or lui, means river. The proper name for the Barotse is $\boldsymbol{A}$-ruyi (literally, the river people); sing. : Mo-ruyi. Se-ruyi is the name of their language; Bo-ruyi, the abstract term used when their customs and laws are referred to; and Lea-luyi, as I have already said, is the name of their "place" by the river, or capital.

## CHAPTER XXVIII.

65. Page 373, 2. 21.-The full name for the Kafue is Kafaukue. The word means the digger or borer. Higher up it is called the Liengue.

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[^0]:    * The reader will pardon my mentioning the names of two of these most worthy men-David Hogg, who addressed me on his death-bed with the words, " Now, lad! make religion the every-day business of your life, and not a thing of fits and starts; for if you do not, temptation and other things will get the better of you;" and Thomas Burke, an old Forty-second Peninsula soldier, who has been incessant and never weary in good works for abont forty years Men like thege are an honour to their country and profession.

[^1]:    * When we come to Angola I shall describe an inseet there which distila spveral pints of water every night.
    $\dagger$ By the action of the sun it becomes a black pitchy substance

[^2]:    * The Dutch clergy, also, are not wanting in worldly wisdom. A fountian in bought, and the lands which it can irrigate parcelled ont and let to villagers. As ther increase in numbers the rents rise and the Church becomes rich. The govern ment adds 200l. per annum, and the total salary amounts to 400l. or 500l. a-year

[^3]:    * The Pyxicephalus adspersus of Dr. Smith. Length of head and brdy, 51 inches; fore legs, 3 inches; hind legs, 6 inches. Width oi head pos er-uly, ? inches; of body, $4 \frac{1}{2}$ inches.

[^4]:    * Several words in the African languages imgin with the ringing sound heard in the end of the word "coming." If the rader puts an $i$ to the beginning of the name of the lake, as Ingami, and then sorads the $i$ as little as possible, he wilb have the correct pronunciation. Exery $v, w-1$ is sounded in all nutive words, and the emphasic in pronunciation in fut uno the penultimate.

[^5]:    * There is no term in their language to express the idea of sport.

[^6]:    * This is an instrument which, when fastened on the waggon-wheel, records the oumber of revolutions made. By multiplying this number by the circumference of the wheel the actual distance travelled over is at once ascertained

[^7]:    * Glossina morsitans; the first specmens of which were brought to England in 1848 by my friend Major Vardon, fiom the banks of the Limpopo

[^8]:    * We found the Batauána in possession of this breed when we discovered Lake Ngami. One of these horns, brought to England by Major Vardon, will hold no less than twenty-one imperial pints of water; and a pair, brought by Mr. Oswell, and now in the possession of Colonel Steele, measures from tip to tip eight and a half feet.

[^9]:    * Bitches have been known to eat their pups. This may arise from that samt raving for animal food which is felt by man in these parts.

[^10]:    * Euryotis unisulcatus (F. Cuvier), Mus punelio (Spar.), and Mus lehocla Smith), all possess this habit in a greater or less degree. The first of these may be seen running from danger with its young hanging to the after-part cf its body.

[^11]:    * "The Bucephalus Capensis is generally found upon trees, to which it resorts for the purpose of catching birds, upon which it delights to feed. The birds of the neighbourhood collect around it and fly to and fro, uttering the most piercing cries, until some one, more terror-struck than the rest, actually scans its lips, and, almost without resistance, becomes a meal for its enemy. During such a proceeding the snake is generally ohserved with its head raised about ten or twelve inches above the branch round which its body and tail are entwined, with its mouth open and its neck inflated, as if anxiously endeavouring to increase the terror. Whatever may be said in ridicule of fascination, it is nevertheless true that birds, and even quadrupeds, are. under certain circumstances, unable to retire from the presence of certain of their enemies; and, what is even more extraordinary, unable to resist the propensity to advance from a situation of actual safety into one of the most imminent danger. This I have often seen exemplified in the case of birds and snakes; and I have heard of instances equally curious, in which antelopes and other quadrupeds have been so bewildered by the sudden appearance of crocodiles, and by the grimaces and contortions they practised, as to be unable to fly or even move from the spot towards which they were approaching to seize them." (Dr, Andrew Smith's 'Reptilia.')

    In addition to the statements of this most able naturalist, it may be added that fire exercises a fascinating effect on some kinds of toads. They may be seen rushing into it in the evenings without once starting back on feeling pain. Contact with the hot embers rather increases the energ' with which they strive to reach the hottest parts, and they never cease struggling to get to the centre even when their juices are coagulating and their limbs stiffening in the roasting heat. Scorpions tunn from the fire in fierce disgust, and inflict at that time, from irritation, their most painful stinge.

[^12]:    - The Makololo have conquered the country as far as $14^{\circ}$ south, but ${ }^{\text {t } t}$ is still penpled chiefly by the black tribes named Makalaka

[^13]:    - The Hagidash, Latham; or Tantalus capensis of Lich.

[^14]:    * Merops apiaster and M. bullockoules (Smith).

[^15]:    * Anser leucagaster and melanogaster.

[^16]:    * I propose to name this new spucies Aintilope Vardonii, after the Africal tiaveller, Major Vardon.

[^17]:    * Matiamvo is an hereditarv title-muáta meanng lord, or chief.

[^18]:    * From the census of $1850-51$ we find the population of this city arranged thus:-830 whites, of whom only 160 are females. This is the largest collection of whites in the country, for Angola itself contains only about 1000. There are 2400 half-castes in Loanda, of whom only 120 are slaves; and 9000 blacks, mor? than 5000 of whom are slaves.

[^19]:    * After dwelling upon the geological structure of the Cape Colony as developed by Mr. A. Bain, and the existence in verr remote periods of lacustrine ennditions

[^20]:    * The discovery of this last species is thus mentioned by that accomplishęd 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 waggou. The workman, while sawing the trunk longitudinally uearly aloug 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 specinens of the species just described, each about an inch in length. Every exertion was made to discover a means of communication between the extermal 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 au inch from the cavity. The tree, at the part where the latter existed, was 19 inches in diameter, the length of the truuk was 18 !eet. The age, which was observed at the time, 1 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 to erably active, and able to move fiom place to place apparently with great ease."

[^21]:    * Extracts from Captain Parker's desrription of this part of the river are given in the Appendis to this yolume.

