A JOURNEY TO KILIMA - NJARO AFRICA

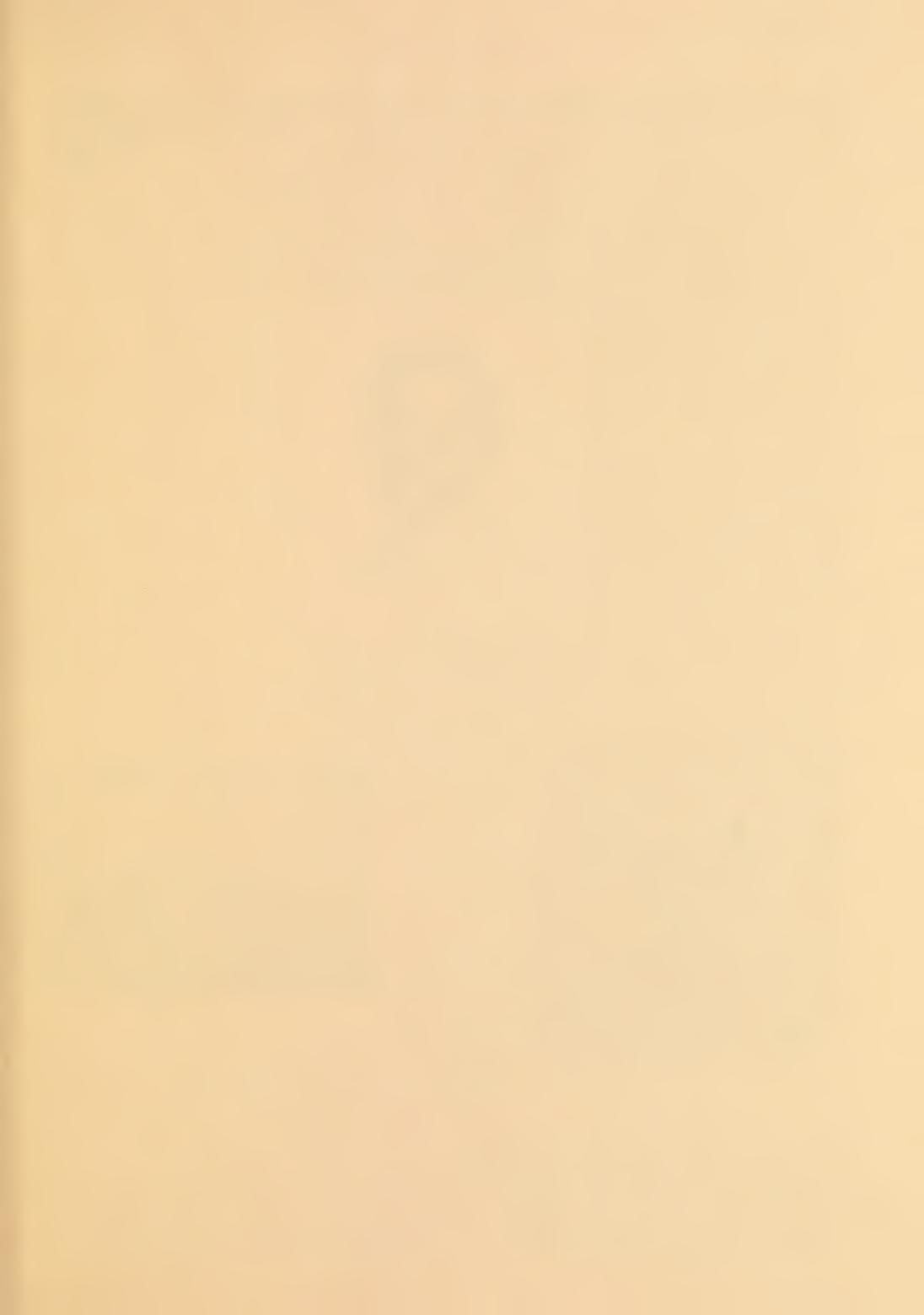
BY

H. H. JOHNSTON F. R. G. S.

EXTRACTED FROM THE GRAPHIC JUNE JULY 1885

EXEXEX STEVENEY STEVE







In Four Parts—Part X.

DRAWN AND WRITTEN BY MR. H. H. JOHNSTON, F.R.G.S.

CARAVAN has been toiling on across the hot plains of Lanjora through the sultry afternoon, and now towards evening stops to lay down its many burdens amid the dusty tufts of scorched grass round the base of a great mimosa tree. Only one hour must we rest, for water lies two days behind us and

water lies two days behind us and one long day's journey in front, and we intend but to stretch our tired legs on the lumpy soil until the obscurity prevailing after sunset is dispelled by the uprising of the full moon. Then beneath her cooler rays we shall journey on towards our goal for half the night, and so be spared a longer walk through the heat of to-morrow's sun. Today has been sultry, and, though the rainy season is over, the western sky is a mass of lurid clouds, which in one part of the horizon are particularly dark and concentrated. I know what causes this, and what object these cloud-masses are jealously concealing like the courtiers and officials who surround the person of some Eastern Emperor; and I, who have journeyed many weary miles to see the Emperor; and I, who have journeyed many weary miles to see the greatest snow-capped mountain of Central Africa, impatiently long for some giant broom to clear the sky of those heavy mists and

vapours which now hide him from my gaze.

Slowly a globe of yellow-white rises in the East and mounts into the clouds, from whence a softened light descends, and shows the track across the plain winding away like a crooked snake towards the West. With many an impatient sigh and grunt the weary men take up their burdens, and I, no less tired, but compelled to show take up their burdens, and I, no less tired, but compelled to show my porters an encouraging example, stagger on to my hlistered feet and limp along in front of the caravan, which, once more on the move, jogs on with little heart till midnight. Then we can no more; so, making fires to keep off the wild beasts, we stop to rest till dawn. With the falling temperature of the small hours, a brisk wind arises from the heated plain and sweeps the clouds from off the sky, all except the mass that obstinately clings to Kilima-njaro. Feverish and over-tired, I eannot sleep, and sit and watch the heavens, waiting for the dawn. A hundred men are snoring around me, and the night is anything but silent, for the hyænas are laughing hideously in the gloom outside our circle of expiring embers. At five o'clock I wake my servant Virapan (a Tamul boy who has accompanied me from Aden), and whilst he is making my matutinal coffee I drop into a doze, from which, at dawn, he rouses me, and accompanied me from Aden), and whilst he is making my matutinal coffee I drop into a doze, from which, at dawn, he rouses me, and points to the horizon, where, in the North-west, a strange sight is to be seen. "Laputa!" I exclaim; and as Virapan, though he has read "Robinson Crusoe" and the "Arabian Nights" in his native tongue, has never heard of "Gulliver's Travels," I proceed to enlighten him as to the famous suspended island of Swift's imagining, and explain my exclamation by pointing to the now visible Kilima-njaro, which, with its two peaks of Kibó and Kimawenzi and the parent mass of mountain, rises high above a level line of eloud, and thus, completely severed in appearance from the earth

eloud, and thus, completely severed in appearance from the earth beneath, resembles so strangely the magnetic island of Laputa.

Weird is Kilima-njaro in the early flush of dawn, with its snowy erater faintly pink against a sky of deep blue-grey, wherein the pale and faded moon is sinking, and the stars are just discernible; but

watch his movements until the foremost man of the caravan comes watch his movements until the foremost man of the caravan comes up, when, taking his Snider from him, I fire it somewhat precipitately at the lion, and, whether from excitement or incorrect aim, miss. The lion, who was crawling through the long grass, turns round, gazes at me, and trots off; while simultaneously a magnificent sable antelope, who had been grazing in close proximity, and whom the lion was evidently stalking, bounds with terrific leaps through the tangled bush, and I am left alone on the scene contemplating my lost chances somewhat hlankly. The fact is, in African travel it is not easy to combine the accomplishment of twenty miles,



THE LEADER

walked every day on foot, with exploits of the chase. You leave the road just to stalk a group of zebras grazing not more than two hundred yards off, and you think if you can only creep up to that ant-hill and hide behind it, you will get a splendidly easy shot. Well, the ant-hill is reached, but the zebras have moved off a little weil, the ant-min is reached, but the zebras have moved off a little farther, and now there is a stumpy mimosa tree between you and your aim. However, it is a matter of a few paces to crawl up to it and fire from behind its branches. You reach the tree, and just as you are going to raise your gun you craek a dead twig, and the zebras move and trot off some distance farther. Now it is too long a shot to risk, but as the game is greater.

move and trot off some distance farther. Now it is too long a shot to risk, but as the game is grazing peacefully and unsuspiciously again, you may just as well creep up a little nearer and then fire. So you go down on all-fours in the grass and crawl along, putting your hands invariably down on cruel thorns or sharp twigs every time they touch the ground; your back aches with the snake-like posture you assume, and when at length you eautiously raise your head above the grass and dare to look frankly before you, you find the zebras have you, you find the zebras have moved on again, and you either erawl after them, infatuated with the love of hunting, or in desperation foolishly fire your gun at a distant speck, and of eourse miss, when all that remains of the animals you have stalked is a light cloud of red dust hanging in the hot air. And now you become fully conscious of how foolish you have been to leave the caravan. How hot the sun And your blistered fect ache as you limp back through the stubbly grass to find the track once more, of course tripping up a dozen

ind the track once more, of course tripping up a dozen times over unseen stumps and stones, and finally reaching the road to see your caravan represented by a few white specks in the extreme distance, these white specks now hurrying on with aggravating speed, just as if they knew you were limping painfully after them, and wished to pay you out for the many times when, they being tired and halting, you, burdenless and fresh, had remorselessly driven them on. And so with many sensible reasons you vow that nothing shall tempt you from the road again, for, even supposing you killed anything, can you stop the caravan for many hours while the meat is cooked and the skin cuted? Of course not, why—and here you interrupt these reflections by exclaiming excitedly to your servant, "Oh, look here; I can't stand this. Give me my gun—sh! don't you see that kudu antelope—there! standing under the shade of the big tree;" and so hurriedly taking aim you fire, and oh! joy, the kudu falls, evidently wounded, but, alas! not to the death, for it is up and off again hefore your next shot can finish the work, and, like an idiot, you forget your sore feet and fatigue, and go racing after it over stocks and stones till once more you find it is in vain to combine the cares of a marching caravan and the is in vain to combine the cares of a marching caravan and the pleasures of the chase.

However, to return from this digression to the scene of the lion and the sable antelope. When the rest of the caravan has come up

with me I look at my watch, and find with joy that it is close upon midday, the hour for test and food, so I gladly give the tired men the order to halt, and whilst my meal is preparing I explore our

present surroundings.

present surroundings.

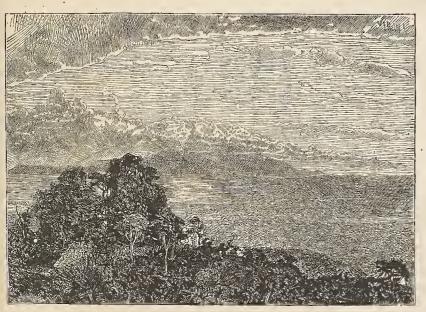
For some two days since leaving the mountains of Taïta we have been crossing a waterless tract with poor herbage of dusty brown, or yellow, white, and grey withered trees, and real verdure has been denied us; but now on reaching this point where the lion greeted us a change of an agreeable character comes over the scene. Tall umbrageous trees cast a welcome shade over the short herbage, which is closely cropped like a lawn by the many herds of antelopes. The bushes are vividly green, and some of them bear tufts of bright-coloured flowers. Many birds frequenting the bosky trees attest the proximity of water—we are, indeed, close to a little affluent of Lake Jipé—and the feeling that we are now without threatened thirst adds to the pleasure of our repose, and promises for the future less arduous journeyings. Here, indeed, we are within the influence of Mount Kilima-njaro and the area of perpetual moisture surrounding its cloud-capped snow peaks.

moisture surrounding its cloud-capped snow peaks.

Having rested, and satisfied our imperious appetites, we decide to push on further so as to reach the town of Taveita by to-morrow morning, so we walk on through scenery of increasing verdure, and swarming with animal life, till near sunset, when we build a "boma," or circular fence of thorny boughs, and sleep securely within, without fearing the possible attacks of Masai or other pre-

datory tribes.

The next morning, with the snow peak of Kibó fully in view against a sky of intense blue, we arrive at the precincts of Taveita, and are gladdened by the sight of banana plantations standing out in glistening green against the background of stately forest. For some mile or two before entering this great rendezvous of East-Central African trade the track winds through superb avenues of loftly unphrageous trees, and after many days of journeying in a superb umbrageous trees, and after many days of journeying in a sunscorched wilderness the tired eyes of the traveller are here refreshed by the soft green of the exuberant vegetation, while he no longer tramps along a stony road under a blazing sun, but follows a soft leaf-covered path plunged in absolute shade. In the near precincts of this forest settlement every path cut through the dense and impenetrable bush is blocked by a massive barricade of tree trunks, with a narrow, delta-like slit in the centre, through which the men have to crawl and drag their burdens. There is no one to challenge us in this gateway, because the "passport" regulations of Taveita have heen greatly relaxed of late years, but a few decades back this elaborate hindrance to free transit was the only protection the wretched Taveitans had against the merciless assaults of the Masai robber bands. By erecting these wooden obstructions across the only feasible approaches to their forest stronghold they checked the impetuous onslaught of the brigands, and were able, moreover, to kill many of the bewildered Masai with their guns before these people could creep round or destroy the barrier. As the Masai never throw their spears, but always use them and all their other arms in hand-to-hand conflict, they are naturally at a disadvantage when opposed to an enemy who has entrenched himself behind a slight fortification and can use his firearms to advantage. More will be said about this when I come to treat particularly of the native races



A VIEW TOWARDS MACHAME

as the stronger light of perfect day prevails, and the clouds which conceal the base of the mountain disappear, its appearance is disappointing. Owing to an atmospheric illusion Kilima-njaro, which is in reality about forty miles distant, appears to rise from the plain just beyond those distant clumps of trees, and its greater peak of snow, so distinctly crater-like in form, together with the lesser and snow, so distinctly crater-like in form, together with the lesser and more jagged Kimawenzi, are as hard and commonplace in look as the eleap Italian water-colour drawings of Vesuvius, charged with "body-colour," and devoid of aerial effect. Kilima-njaro, now, is not imposing, and I soon cease to realise its great height when it looks not much farther off than the farther groups of trees. As the day grows warm it is once more hidden behind layers of clouds, and I march on towards my destination somewhat disprepointed.

clouds, and I march on towards my destination somewhat disappointed.

The country here swarms with game, especially in the neighbourhood of Lake Jipé. Herds of hartebeest (Alcelaphus tora), gnu, eland, and buffalo defile before us, while the giddy zebras risk their lives by galloping up to inspect the passing caravan. The air is full of soaring vultures, a sure sign of abundant game, and further, as a corollary to the presence of the large herbivora, we soon detect in the soft soil the footprints of hyenas and lions. Just as we approach a green mass of bushy trees, to my amazement and surprise a large black-maned lion crosses the path not thirty yards off, and what is stranger still, appears to take no notice of our coming. I only have a bird gun with me, and my servant is unarmed, so I stop still to



THE LIEUTENANT

of Kilima-njaro; at present having squeezed through the narrow doorway we are stancing in Taveita, whilst the guns of the caravan are announcing to its inhabitants, with many a sonorous boom re-eehoing through the forest alleys, that strangers are arriving with peaceable and friendly intentions, and a wish to trade. As I am in the act of crossing a narrow rivulet, by means of the slippery stem of a banana that has been thrown across it, I catch sight of the first parties, who are on their ways to inspect our correct and who I natives, who are on their way to inspect our caravan, and when I look up, and they see my white face and strange costume, a glad shout of surprise goes up from their wide mouths, and they push forward to seize and shake me by the hand.

Such an unusual and demonstrative welcome gives me a pleasant impression of Taveita to commence with, and this, I am glad to say, is strengthened as time goes on. Its inhabitants are, however

not only remarkable for their bonhomie and kindly disposition, but present other notable characteristics which are not long in impressing



THE RIVER HABARI

themselves on my observation. Firstly, their hair is generally worn in Iong strings, where the wool is stiffened with fat and red clay into a number of rats' tails. There are generally one or two incisors knocked out in the upper jaw, the lobes of the ear are enormously dis-

tended with wooden cylinders or rings, and lastly, the Wa-taveita, like most of the natives of Inner Eastern Africa and unlike those of the West), are totally ignorant of what we call decency. I would like to express this more delicately by saying that they were innocent of all clothing, but this would not be the case, as many of the inhabitants were also be a white of the inhabitants wore cloth, or skins, round their shoulders, either for adornment or when the weather was chilly with breezes blowing off the snow-capped mountain.

I feel at home with the Wa-taveita

from the first, for they are thoroughly conversant with Swahili, the coast language—the French of Eastern Africa, and as I also know this tongue we have at once a medium of ready communication. So the natives who we have at once a medium of ready communication. So the natives who have come to meet our caravan, and trot along by my side to direct me to the accustomed camping place, chatter as we go, and not only ask for, but impart, information. One of the first questions is "What is your name, White man?" "Johnston."
"Jansan?" they shriek, laughingly.
"Why you must be Tamsan's (Thomson's) brother." (Mr. Joseph Thomson, on his way to Masai-land, had passed through Taveita, leaving a very pleasant impression behind him. As by an odd coincidence we were both white, and our names, in the natives' pronunciation, only differed in the initial consonant, the evident inference was that, to use the natives' phrase, "We were of one mother.") It would be of so little use trying to disabuse them of this happy and likely idea that I accept tacitly the suggested relationship, and it is soon noised about Taveita that Bwana Tamsan's brother is come, and many of Thomson's old friends flock to greet me.

Our camp is established in one corner of a vast clearing, nearly

flock to greet me.

Our camp is established in one corner of a vast clearing, nearly square in shape, whereon certain Swahili traders, en route to Masailand, have built a temporary and straggling village of palm-thatched huts to accommodate their wives and concubines during their huts to accommodate their wives and concubines during their absence in the wilds. As soon as my tent is up, and my goods are properly stored and placed under the supervision of a trusted man, a food allowance is measured out to the hungry porters of the caravan. That is to say, a bale of cloth is unpacked, and each man receives three ells (or "hands," as they are here called) of white American sheeting, which is to purchase him sufficient food for three days. After the distribution of cloth the men disperse for the rest of the day to forage in the Taveita market, and I am free to attend to my own affairs and to receive my new acquaintances. Firstly, however, the tent is closed, and I have a good and muchneeded bath, for almost since leaving the coast water has been so precious that we have feared to lavish even a teacup-full on the toilet. But here we have a glorious running river, crystal clear, and But here we have a glorious running river, crystal clear, and

cool; and were it not for the inconvenient publicity which a dip in the stream itself would occasion at this moment, I should strongly prefer it to a cramped bath in the hot tent. Nevertheless, a wash of any kind and a complete change of clothes are very refreshing, and when once more my tent door is thrown open to the throng, and I appear before the Elders of Taveita seated on my camp chair, I feel surc my white face is several shades lighter than on my arrival. This little colony

of quiet agriculturists, known as Taveita, is unlike the neighbouring States in being a Republic, or Commonwealth, administered rather than ruled by an oligarchy of four or five important men known as the "Wa-zēē," or Elders. There are really two entirely distinct races inhabiting Taveita—the Wa-Kwavi, a tribe of settled Masai who have turned from lawless robbers into honest, thrifty tillers of the soil, and the Wa-taveita proper, a people of Bantu stock, allied in origin to the Wa-Kamba farther North and the Wa-chaga of Kilima-njaro. The Wa-taveita predominate over the Wa-Kwavi in numbers, and the Elders are mostly of the former stock. These functionaries have come to greet me with little gifts and offerings such as they deem most acceptable to me, and, of course, expect an equivalent present on of quiet agriculturists, known as Taveita, is unlike the neighbouring acceptable to me, and, of course, expect an equivalent present on

my part. One man has brought a baaing reluctant sheep, and ticd it to the tent pegs. Another thrusts into my lap a couple of fowls, strongly fastened together by the legs, but otherwise not disturbed in equanimity, for they peck inquiringly at the buttons of the



THE STRANGE CREEPER

A third member of the Taveitan Legislative Coun-cil points to a basket of corn cobs as his donation, and so on. Each in return receives about twice the value of his free-will offer-ing in cloth and beads, and, I am sorry to say, in ac-cordance with African cus-tom, they at first affect to be dissatisfied with the return-gifts, and try to haggle for an increase, but finding this "try on" of no avail, immediately resign them-selves to the inevitable, and march off very contentedly with what they can get. The remainder of the day is utilised by the men in buying food, while I avail myself of the unwonted rest to recruit my strength, and so do nothing in the way of active exertion beyond skin-

ning a few birds.
About half-past 7 A.M. on the morrow we resume

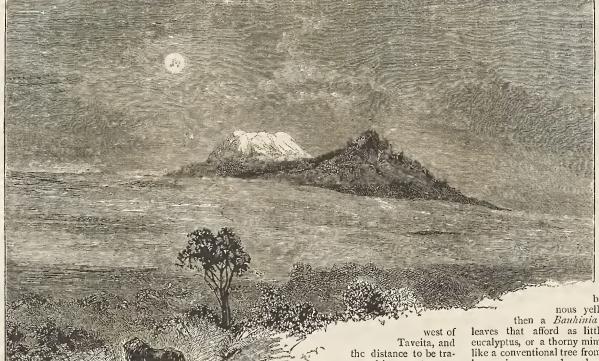
on the morrow we resume our journey towards Kilima-njaro. I am going to establish myself at the Court of Mandara, chief of Moshi, a State on the southern flank of the mountain. Mandara is almost the only man in this country known by report to Europeans on the coast. He has sent letters to, and exchanged presents with, Sir John Kirk, and has seen, perhaps, cach of the four or five Europeans who have ever approached Kilima-njaro. The way to his country lies first west then north-



THE MKUYUNI STREAM

Leaving the river we walk for about two miles through very magnificent forest, where Raphia palms reach a great development; next we emerge abruptly on an unattractive wilderness of low thorny shrubs and coarse grass. The land rises gently before us towards the huge mass of Kilima-njaro, which is at a recent screened with lowing the huge mass of Kilima-njaro, which is at present screened with louring clouds. In the middle distance, are broken chains of jagged hills, interspersed with isolated hillocks and mounds of conical shape, suggesting the idea that when the great discharge of eruptive matter from the two huge volcanoes of Kibó and Kimawenzi was temporarily or permanently checked, the sick earth broke out all over the irritated surface with minor pustules and pimples through which the disturbing matter was discharged, the present aspect of the mountain and its vicinity being the result of the scars and hardened scabs of these now healed-up earthboils. We walk for some ten miles boils. We walk for some ten miles over an unattractive country devoid of water, and little better than desert. The hills are sparsely overgrown with sad, grey-looking trees, almost leafless or else sprinkled with scanty foliage of an olive-green. In the rolling plains at their base there is little to break the monoto-

base there is little to break the monotonous yellow of the withered grass. Now and then a Bauhinia shrub or stunted tree, with its bifid leaves that afford as little shade as the poor foliage of the eucalyptus, or a thorny mimosa with flattened crown and red trunk, like a conventional tree from a child's box of toys; or, lastly, a few inconspicuous nameless shrubs, with leaves of a sliny grey colour, like those of most plants living in semi-desert countries. Once or twice we cross the drybed of a torrent and find therein a more varied but scarcely more pleasing vegetation. Rampant euphorbias, with fleshy, snake-like, coiling stems armed with horrid spikes, trail themselves triumphantly over unresisting shrubs; acacias, which from sheer viciousness have almost done without leaves to bestow all their productive powers on the development of terribly efficacious all their productive powers on the development of terribly efficacious thorns, throw out their cruel grappling-hooks over the path and rip up our faces, hands, or clothing as we pass. Other plants of the lily tribe (debased and wicked members of a beautiful family) grow like swords stuck in the ground point upwards, and woe betide any careless person who puts his hand on the apex of their rigid, blade-like leaves—their rapier-points would pierce his palm as readily as a less person who puts his hand on the apex of their rigid, blade-like leaves—their rapier-points would pierce his palm as readily as a sword of steel. But as we have crossed a ridge stretching out into the plain, and our path, from sloping upwards, descends a little on the other side, this fantastic vegetation, befitting the precincts of some horrid mediæval monster's lair, modifies its repulsive character, and becomes intermixed with shrubs and grass of vivid green, while to our joy we descry some half a mile ahead a belt of dense purple-green foliage, which in these African wildernesses always denotes the presence of water. In fact, a few minutes' walk takes us from the dull white glare of the hazy noontide in the open, shadeless waste into a cool, delicious bower of deep green shade, where at first, so great is the contrast, we blink our eyes and can see no details. Then I make out a clear limpid stream slipping along over small stones, or forming still, quiet, mirror-like slipping along over small stones, or forming still, quiet, mirror-like pools between grey walls of smooth, massive tree trunks, which

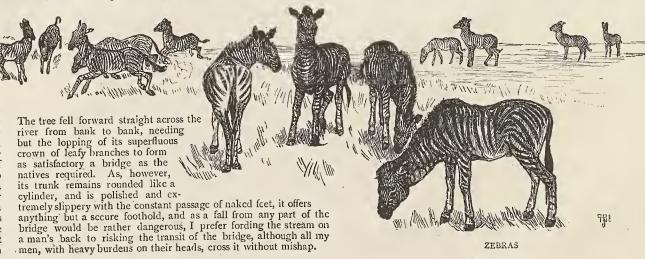


THE FIRST VIEW OF KILIMA-NJARO

versed is some twenty-seven milcs. After leaving our camp we first have to cross the River Lumi, over which a curious bridge is thrown.

Some years ago the Wa-tavcita were much inconvenienced by repeated floods, which rendered their river (fed from the snows of Kilima-njaro) dangerous or impossible to ford, and consequently cut off one half of the colony from communication with the other. colony from communication with The idea of bridging this five-yard-wide rivulet was too difficult for the native mind, so the clders of Taveita contracted with a Swahili trader to do the job. The price was to be a bullock. The trafficker in ivory and slaves was not long in his operations. Selecthis operations. Selecting one of the finest and straightest trees growing on the summit of the river bank, he set

to work with his followers, and with repeated chops severed its trunk near the base.







resemble stone in their colour and polish. Often the severity of these broad wooden bulwarks will be tempered with rich masses of foliage depending from the smaller boughs above, and breaking up with graceful and fanciful detail the somewhat formal outlines of the

with graceful and fanciful detail the somewhat formal outlines of the vista. The tree trunks that border the stream are many of them singularly broad in girth. In one or two cases they are grappled with by parasitic figs that wind themselves round their stout victim like vegetable boaconstrictors, or, as in the example illustrated, like some huge, long-bodied lizard. In the shade of this green tunnel, where the little river—which the Swahili traders call the Mto wa Habari, or "River of News"—bores its way through the forest belt, we cast News"—bores its way through the forest belt, we cast down our burdens and prepare to rest and eat our midday meal. After the white glare of the shadeless open country this sweet and eool retreat beneath a dense over-arching canopy of foliage is inexpressibly soothing after our weary walk from Taveita. The men go off to the other side of the stream, and are lost to sight in the woodland, I only know of their presence by the occasional murmur of voices coming scnee by the occasional murmur of voices coming from their eamp, and by the blue eurling smoke of their cooking fires, which ascends in gentle puffs through the network of leafy boughs. My portable table and eamp-chair have been unfastened, and the former is set up on a level patch of sward by the waterside, and is quickly covered with a snowy cloth from the canteen, while my servant further lays it with the engalled iron plates and knife and fork and napthe enamelled iron plates and knife and fork and nap-kin for my solitary meal. To pass the time and forget my impatient hunger whilst the repast is being prepared, I sit down on my camp-stool and make the rough sketch of the stream which is presented opposite; but my artistic labours are gladly laid aside at site: but my artistic labours are gladly laid aside at the announcement that lunch is ready, and I sit down with keen satisfaction to my tempting table, which has been further brightened by a little bouquet of wild flowers gathered and arranged by Virapan. What do you think I eat? Well now, I will just take the trouble to describe this one meal, so that you may better realise how I ordinarily fare in Africa while on the road. Here is a plate of fowl soup to begin with, nicely flavoured with onions, thickened with a little maize-flour and rice. Two thin slices of toast lie beside it, made from some loaves my eook baked while we rested at Taveita. After the soup is finished comes a little good curry made from the soup meat, while we rested at Taveita. After the soup is finished comes a little good curry made from the soup meat, and flavoured with cocoa-nut milk (for we have carried a sack of cocoa-nuts from the coast). Then, when the curry is eaten, a fresh plate is brought me, and a dear old battered calabash about half-full of delicious honey, which tastes like the smell of mimosa blossoms; and after eating some of this spread on a slice of Taveitan bread (which deserves its recipe in brackets: 2 lbs. of maize-flour, half-a-cup of palm wine, a quarter of an ostrich egg, a pinch of salt, and a spoonful of butter), I wind up my lunch with a eup of fragrant tea, and sit over an old book, while my men pack up the impedimenta once more, and start again on the road towards Moshi.

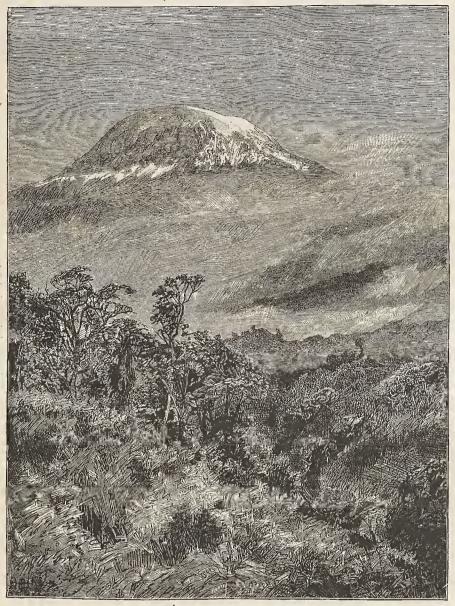
road towards Moshi.

The afternoon is sultry, and we feel so meritorious in having accomplished our ten miles before lunch, that there is a general disposition to take things easily; besides which, our path takes us through much more pleasing country than in the morning. We

much more pleasing country than in the morning. We cross a biggish stream (which rises near the summit of Kilima-njaro, and is called the Kilema River), then a smaller one, and at last, near our preordained camping place for the night—a charming "almost-island" (this term sounds more expressive than peninsula), nearly surrounded by the little Mkuyuni River. You can hardly imagine a more romantically beautiful spot than this in which I camp. It is only approachable at one point—where a huge tree trunk spans the tiny gulf between the bank and the island, and forms a bridge over which to pass to and fro. It is this fallen tree which has made our camping place a peninsula, for in lying across the stream its lower branches acted as a kind of dam by stopping all the stones, earth, and refuse washed down by the rivulet, and so forming in time a firm barrier that sent all the water careering all the stones, earth, and refuse washed down by the rivulet, and so forming in time a firm barrier that sent all the water careering round the other side of the island. In the centre of this pretty peninsula rises a gigantic sycamore fig tree (which among the Swahili traders gives its name to this stream—Mkuyu—a sycamore; Mkuyuni—the place by the sycamore)—and under the vast canopy of its mighty branches the whole caravan encamps, feeling tolerably protected from the weather by the leafy thatch o'er head. Lions roar at us all night long from across the water, but we sleep securely. Soon after dawn I am aroused from a labyrinth of dreams, and have to dress hurriedly while my tent is pulled down and packed up, and my coffee is being prepared. By seven we are on the road once more, following in the spoor of the lions who visited us last night. Their foot-marks continue along the path for several miles before they are lost in the bush. I have already observed in Africa how much wild animals avail themselves of the natives' paths as convenient highways along which to pass, whether seeking water or foraging for food. seeking water or foraging for food.

The path now divides into two tracks, one going still due west and keeping to the plains, the other turning round towards the southern flank of Kilima-njaro, and mounting upwards. Here, at this junction, we encounter some rather disreputable Wa-swahili, shabbily clothed (it is the wearing clothes, by-the-bye, which enables one in this country to distinguish between the Wa-swahili, or natives of the coast, and the people of the interior), and armed with Snider guns. They are courtiers of Mandara's, sent thoughtfully by that chief to meet us and see we don't take the wrong road. by that chief to meet us, and see we don't take the wrong road. Their greeting, however, is too familiar and impudent, to my taste, and I begin to have a lurking presentiment that these scampish parasites of the chief of Moshi may prove inimical to my mission; for, in the interior here, white men are looked upon by the coast-traders as spies on the slave trade, and though outwardly fawned on and flattered from fear, yet are secretly thwarted and hindered in every possible way, especially as regards the native chiefs, whom the Um-swahili are desirous of alienating from enlightenment. However, keeping these reflections to myself, I toil along the ascending eath and after an analysis stiff mill eath a dimension on production. path, and after an hour's stiff pull, catch a glimpse of an enchanting land. Hitherto our track has led through thick bush, with every view of the surrounding country shut out. Now we have entered a clearing, near to cultivation, and nothing impedes our view. Northwards the vast mass of the mountain stretches upwards into the heavens, its twin peaks shrouded in heavy eumulus clouds, and below the clouds, the hillowy swell of hill more hill and ridge successions. below the clouds, the billowy swell of hill upon hill and ridge succeeding ridge is a deep sullen blue under the heavy shadow of lowering cumuli. Then come a few lines of dark purple green forest, still in shade, and, in the middle distance, where the sunlight breaks upon the scene, the gentle, rounded hills glean out against the sombre background with their groves of emerald green bananas marking the commencement of the cultivated zone. Nearer to us succeed deep ravines, with thread-like cascades, clumps of tidy forest—just a few tall trees left growing out of religious veneral. tion—smooth, sunny downs, whereon flocks of goats are grazing, patches of freshly-tilled soil, cultivated fields, hedge-lined lancs,

and lastly, the red denuded hill, the No-man's land, the Pisgah, on which we are standing to gaze on this Promised Land, towards which for thirteen days we have been toiling through the wilderness. There is, however, no pre-ordained restriction to my entering it, nor is my lieutenant qualified to play the part of Joshua, so I, who



KIBÔ IN THE EARLY MORNING

have been pausing here to let all my followers come up with me and regain their breath, once more take up my staff and march into Mandara's country. We descend one hill, cross a stream, and mount another, following a slippery red-clay path, which leads us over a village green into the collection of bee-hive huts and gardens which

Some soldiers, decorated with white and black monkey skins, and armed with tremendous broad-bladed spears, come forward to greet us, and indicate a eleared space of

forms Mandara's eapital.

retire to rest in my camp. We are here about 3,500 feet in altitude, relatively at the foot of the mountain, but yet with splendid views over the plains, which lie fifteen hundred feet below. All around are signs of agriculture of a high order, and though the people are naked, one can see they are anything but savages. There is nowhere a congeries of houses that can be called a town, but the whole eountry, where it is cultivated, is equally inhabited. Here and there the yellow thatch of a bee-hive hut peeps out from the green fronds of the banana groves. The fields are intersected with numerous runnels of water, diverted at different levels from the parent streams in the ravines above. The air is musical with the murmur of trickling rivulets and tinkling bells, for the flocks and herds are now being driven in from the pastures to the natives'

compounds, to be shut up for the night. Wherever the ground is not in cultivation it is covered with brilliantly-coloured wild flowers - balsams, hibiscus, dissotis, green and white ground orchids, scarlet aloes, and numberless species whose names I know not, and from all these the bees are taking toll.

The mild-eyed kine driven from the pastures suggest supplies of

The mild-eyed kine driven from the pastures suggest supplies of milk; the throng of bees about the blossoms imply that honey is also to be had. On the branches of all the big trees hereabouts are hung oblong eases—boxes—made of bark, in which these half-domesticated bees construct their hives and store their honey.

These "Honey-boxes," called by the natives "Mizinga," which word is also applied to cannons on the coast, are familiar objects in East Africa, and may generally be met within the vicinity of villages.

On the day after our arrival Mandara sends me guides to point out the site of land on which I am to settle and build my first station. It lies about two miles to the north-east of the chief's residence on the brow of a fine hill nearly 5,000 feet high, but of course not much elevated above the surrounding country.

On either side lies a deep ravine with a stream flowing On either side lies a deep ravine with a stream flowing through each; but at the back the hill, which is only one of the many spurs of the mountain side, joins the one of the many spurs of the mountain side, joins the parent mass, and may thus be easily approached without much climbing. It would be a splendid site for a city! On the summit of this elongated hill—colline, or "little neck," is a French word which describes it well—is a nearly level and broad plateau, three sides of which descend almost precipitously into the valleys below. With a very little work it might be made unapproachable save from the north, where it joins on to higher ground. Along one side and then across and down the other side flows a tiny artificial canal of clear water brought from a tumbling stream higher up the mountain, and carried along this arthcial canal of clear water brought from a tumbling stream higher up the mountain, and carried along this hill from above in a very gently descending channel. Thus you have water at your very door, and need not seek it in the ravine a thousand feet below. It seems so strange and quaint to find a placid brooklet flowing along high ground up in the clouds and at the edge of a precipice. All this is due to the patient industry of the Wa-chaga of Kilima-njaro, who prefer to live on the tops of hills for safety, and therefore earry their water in artificial channels from therefore earry their water in artificial channels from the heights above, and make it flow the whole length of these inhabited spurs, while the parent streams go dashing down the valleys, descending in cascades of seventy and a hundred feet, till they flow far, far below the placid canals which water the hill crests stretching out into the plains. Sometimes, as in the sketch here given, the mountain stream will be dammed up at certain points along its source and the med up at certain points along its eourse, and the water raised to the requisite level for filling the hill canals. The dam is usually made of a wattle frame-

work, over which clay and turf are plastered.

The morning after our arrival at Kitimbiriu (as our hill-site is called) I have so much to do that there is no time to contemplate the beauties of the scenery. There are ninety men of Mombasa, who have carried my goods hither, to be discharged and sent back to my goods hither, to be discharged and sent back to the coast. There are all the necessary preparations to be made for commencing our settlement, and each of the men remaining with me must have his work told off to him. This one is to set to and clear the ground for a kitchen garden, that one must drive our milch cow and her calf, our goats and sheep to the green pastures, and follow them as they browse, and hing them home at susset. Another takes the fourless the fourl bring them home at sunset. Another takes the fowls under his care (all these live creatures have been bought immediately after our arrival), and so each of the thirty

men who remain with me must have his appointed task. The eooks set to work to organise a kitchen, the builders seek for poles in the forest to make the framework of our dwellings, the road-makers ply



out the hours of daylight. When the red disc of the sun dips below the blue horizon of the plain I ring a bell, and the men with gleeful shouts acknowledge the signal for suspension of labours and return the implements to the tent before they troop off to their cooking fires.



MOMBASA

Southward and castward I look across to the beau-tiful blue hills of Ugweno, at the base of which lies Lake Jipć. The lake cannot be seen from the eleva-

to sleep roof

under. Our primal houses are

roughly made in a very few days. The men proceed to the forest, cut a certain number of

But after a day or two, when things are going smoothly, when all palavers with Mandara and his subjects are at an end, when the seeds have been planted in my gardens, and I can trust the immediate superintendence of my men to my licutenant, when I have set my two eollectors at work pressing plants, and eollecting insects, I am able to spend a few hours of the day in invigorating, health-giving rambles round the neighbourhood of my settlement.

I extend my walks, gun in hand, and a collecting port-folio on my back, in all directions, but my first favourite stroll is up the valley of our little stream. Following stroll is up the valley of our little stream. Following the tiny path which runs parallel with our irrigating channel, I come to the place where the latter branches off from the parent stream. Here, at will, a passing native can cut off our water supply by laying a packet of grass and mud athwart the little channel, and, therefore, bearing this in mind, and regarding also the fertility and beauty of the rich valley (full of the alluwal soil washed down from the hill-sides by the rain), I resolve that hereabouts my principal plantations shall be made. I obtain Mandara's consent to the plan, and accordingly set my man, Kadu Stanley, to work at once, directing him to clear away the brushwood, burn it, mix the ashes with the soil, and then plough the whole field up and break the clods of soil. Soon many a rich bed of dark red earth is sown with seed, and separated from its fellows by little runnels, along which, once from its fellows by little runnels, along which, once a day or oftener, water, diverted from the nearest waterfall, is turned. Indeed, perpetual irrigation is here much simplified. The plenteous stream goes bounding through the valley, with a cascade every hundred yards or so. From the head of these waterfalls nothing is essier them to divert a stream on either side carry it. easier than to divert a stream on either side, carry it

along a banked up channel above your plantations, and turn the water wherever you will into the network of tiny trenches which intersect the plots of ground.

However, artificial irrigation seems almost a superfluity in Chaga, where never a month passes without rain, and where the climate is as moist as that of Devonshire. I soon begin to find that my first care must be to get a rain-proof

to the forest, cut a certain number of poles, use those that are forked at one extremity as "uprights," and lay the horizontal rods across them, tying everything securely with long lithe strips of wetted banana fibre.

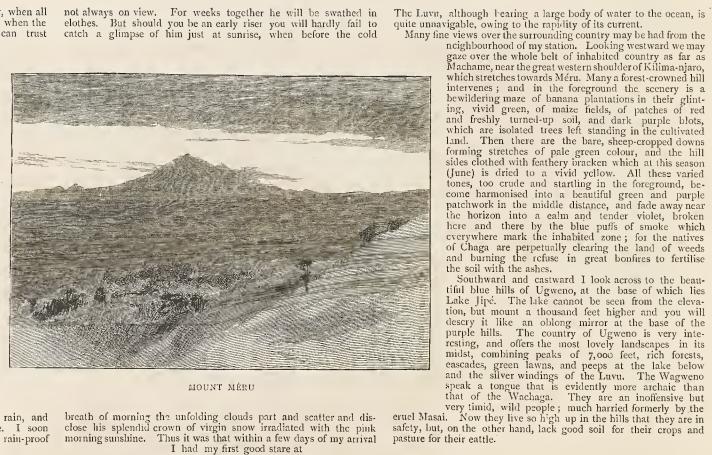
Then to this rough frame-work they affix a number of smaller sticks, until a rough lattice work is formed, and finally the whole, roof and all, will be neatly thatched with the old fronds of the banana tree, resembling brown paper in look and texture. (By the bye, when civilisation extends to Africa and people have got beyond the stage when

extends to Africa and people have got beyond the stage when they only seek for gold or diamonds, it strikes me that sun-dried banana leaves would form an admirable material for paper-

dried banana leaves would form an admirable material for paper-making, superior to esparto grass.) Provided the roof is done with care, it ought to be completely raın-tight. As it is, a little patching generally has to take place after the first shower. No windows, of course, are made. Light is obtained from the open doorway, which is closed at night by a mackin-tosh curtain and a door of wooden framework. Inside, the carthen floor is stamped hard by men's feet, and before inhabiting the house numerous fires are burnt on the ground and their ashes pounded into the beaten earth. Of course a trench or moat, to carry off the heavy rain, is dug all round the house, so that it

carry off the heavy rain, is dug all round the house, so that it generally happens that these hastily-constructed abodes are wonderfully dry and snug. When the house is built for my own occupation I have a large mat made from plaited strips of the useful "migomba" (dried banana leaves), and thrown down on the bare floor of beaten earth. Then, on this, one or two wild beasts' skins

not always on view. For weeks together he will be swathed in elothes. But should you be an early riser you will hardly fail to catch a glimpse of him just at sunrise, when before the cold



MOUNT MERU

breath of morning the unfolding clouds part and scatter and disclose his splendid crown of virgin snow irradiated with the pink morning sunshine. Thus it was that within a few days of my arrival

I had my first good stare at and began my first detailed sketch of Kilima-njaro, I hurried a short distance from my eamp to the edge of the ravine, whence there was little to obstruct the view, and there, squatted amid the crushed bracken fronds at the commencement of the precipitous descent, I looked across first to the opposite hill, crested with opposite hill, crested with feathery trees, mimosas, sycamores, and palms, and then to the swelling forest-clul heights beyond, gloomy and sombre in the shade, as yet untouched by the sloping sunshine. Above these a vast white sheet of fleecy cloud, uniform and flat, and crowning all, as if cut off from the lower earth, and floating majestically in the pale blue heaven, the snow-covered dome, with its blemishes of shadow and blaze of preponshadow and blaze of prepon-derating light like that of

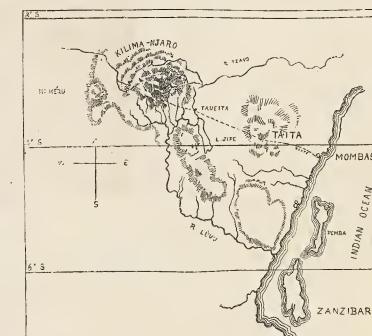
VIEW TOWARDS UGWENO

the dise of the moon. The jealous clouds, however, grant me but a poor half-hour in which to sketch the features of

poor half-hour in which to sketch the features of their monarch, and I am compelled to defer the completion of my work to other opportunities.

Meantime I go right and left in search of studies.

There is Méru, for instance, searcely less majestic than Kilima-njaro, lying some thirty miles away to the west, a vast pyramidal mountain, reaching to nearly 15,000 feet, with a lesser peak at the side. Méru is visible across the plains for a distance of at least seventy miles, and is at all times a majestic object. It is said to be inhabited by a gentle race of agriculturists, akin in origin and tongue to the Wa-cha of Kilima-njaro. At its base dwell tribes of Masai, who are great eattle-keepers, and whose herds of kine range over the vast green plains that lie between Méru and Kilima-njaro at the upper waters of the Luvu River.



It is most delightful thus to look forth from my eyrie on the many lands spread before me as on a huge and living map, and also to feel that I am safe from all attack on the part of the lawless rovers of the plains. My gaze stretches away, even into parts of Africa that are unknown and unvisited of white men, and I can scan the that are unknown and unvisited of white men, and I can scan the natural features of these countries at a glance, and correct the disposition of their rivers and mountain ranges on the map. Sometimes, when the partial mists rise over the nearer hills and valleys, and the brow of my hill seems to be an island floating in the air, the effect is a most pleasing and novel one. I, my men, my huts, and my domestic animals seem to be sailing over Africa in a giant balloon. Below us, beyond the mists, are the sunlit plains, the lines of velvet forest bordering the winding streams, the stretches of open pasture-land like lakes of grass, green amid the darker forest and the purple hills. Then, at our feet, rolling clouds of grey vapour, and, standing out in strong relief against this vacuous background, the soaring kites who wheel and poise with outspread pinions just below my feet, seeming like the birds which accompanied Solomon when he flew through the air on his magic earpet as the Arab legends tell us.

Throughout the four months of my residence on Kitimbiriu the beauties of the scenery never palled and never grew monotonous. With such varied atmospherie agencies the effects around us changed

beauties of the scenery never palled and never grew monotonous. With such varied atmospherie agencies the effects around us changed like the designs of a kaleidoseope, and rarely eame two alike. Sometimes, perhaps at early dawn, everything would be veiled in blank mist, save only the summit of Kibô, and this would gleam out above the clouds, like some supernatural vision, rosy in the effulgence of the coming dawn. Or, it may be, in the noontide every trace of vapour will have vanished, and the velvet forest lies glowing in gold-green light and dusky purple shadows, every detail strongly marked, while the precipices, jutting rocks, and shining nexves of Kibô are discernible with startling clearness, though the peak lies distant nearly fifteen miles. In the afternoon, perhaps, the sky is hung with dense curtains of purple grey cloud, and the plain below lies in monotonous blue shadow; only away to the west, behind the pyramid of Méru, the heavens exhibit one clear cloudless belt, which the descending sun turns to refulgent gold, and against this relief, as on some antique illumination or decorative design, the peak of Méru and the jagged hill tops at its base stand

and against this relief, as on some antique illumination or decorative design, the peak of Méru and the jagged hill tops at its base stand out in a simple tone of indigo.

So passed my first few weeks in Kilima-njaro; in planting, building, seheming; sketehing landscapes, and skinning birds. No troubles as yet overeast my horizon, and if, afterwards, I was harassed with anxious fears and worried with intolerable suspense, the memory of those darker days is overborne by the vivid impression I retain of this first and brightest period of my sojourn in Kilima-njaro, which I find noted in my diary as "The happiest time I ever spent in Africa."

H. H. Johnston

(To be continued)



A KITE

or a bright-coloured Zanzibar "mkeka" (dyed grass mat), add quite a comfortable look to the interior. My bed is mounted in one eorner, my portable table stands in the centre of the dwelling, boxes of necessaries are ranged along the walls, my washing-basin is poised on a roughly-made tripod, shelves are hastily rigged up to support the lighter articles of my equipment, and lastly, nails and hooks are knocked into the accommodating rafters, and from these depend all the heterogeneous articles that will let themselves be

depend all the heterogeneous articles that will let themselves behing up.

Happy time this is! Everything is fresh to me. The cares of journeying, the weary tramps of twenty miles a day are over. I can be sure of water and food, and know at stated hours in the day a tempting meal will be awaiting me. So with a light heart I set out to explore the beauties of my African Switzerland. First of course, I crave for a good view of the giant dome of Kibô, the highest summit of the mass, the "Kilima-njaro" ("Mountain of the Snow Fiend"), as the coast people call it, the "Home of God" (Engaji Engai) as it is more reverently termed by the Masai of the plains. This, the highest peak in Africa (18,800 feet high) is

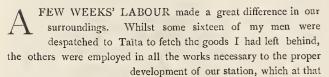


Nearly all the streams flowing from Kilima-njaro, except two or three in the west and east (there are apparently none on the northern slope), ultimately unite to form this great stream which enters the Indian Ocean at Pangani (vide map), nearly opposite Zanzibar,

In Jour Parts—Part HI.

LIFE AT MOSHI

DRAWN AND WRITTEN BY MR. H. H. JOHNSTON, F.R.G.S.



time I intended to become my principal and permanent abode on the mountain. In the preceding supplement I have given some account of the preliminary steps taken to render our little colony of Kitimbiriu not only habitable but comfortable, and fitted for a white man's residence. We will presume, therefore, that most of my ideas have been carried out, that some of the roads are made, the gar-

dens not only planted but producing, the hens laying, the cow and goats in full milk, the houses built, and the leader of the expedition, now that the first cares of installation are over, with

A SOLDIER OF MANDARA'S sufficientleisure on his hands to devote much of his time to natural history pursuits. I

think, therefore (my object being to convey to you a clear conception of my mode of life in Chaga), I might adopt a somewhat hackneyed method, now common in travel books, and attempt to describe in detail the events and incidents occurring-or supposed to occur-in one day. Remembering, however, that one day must be taken with another, the good with the bad, and that if a mean is struck between two extremes the most correct general impression may be formed, I shall not describe one day only but two-two typical days taken from my diary, with a little filling in of details and addition of explanatory information, necessary to my readers but superfluous in my own journal, when I write from one day to another with due regard for my memory of recorded events and

observations. One day shall show me lulled in contentment, satisfied with my surroundings, and seemingly as safe as though I were in an English county; and the other shall exhibit the reverse of the picture, the anxieties, suspense, and disappointment I occasionally had to undergo. Let us begin

THE HAPPY DAY

ABOUT seven in the morning (in these equatorial regions it is scarcely light till nearly six) I hear the plashing of water in my sitz-bath, mingling with the last echoes of some fantastic dream-perchance some incongruous vision of English life that has come upon me in my heavy morning slumber-and I gradually awake, with many a sigh and groan, to find my servant Virapari filling my bath with several kettlefuls of warm water and a pail of cold from the stream, whose murmur I occasionally hear coming as a second to the treble of the cackling hens and bleating goats. Ah! how I hesitate to leave my nice warm bed! Though the slanting morning sunbeams pierce the crevices of the thatched wall, and fall in golden paillettes on the matted floor, the thermometer still marks little over fifty, and the air is sharp and keen, even within my sheltered hut. Nevertheless, the steaming bath will soon be lukewarm if I dally, and moreover breakfast-and in

this healthy life I love my meals, and look forward to them with tender longing-cannot be laid until the bath is out of the way, so with one impetuous bound I am out of the sheets, my pyjamas are flung off, and I can sponge myself with the warm water which, in

the tropies, is so much healthier and more beneficial than the icy douche which strong-minded, generally disagreeable, people affect in England.

I find my pen was leading me into a detailed description of my toilet, an act so purely superfluous and uninteresting to the reader that I am glad I stopped short in time. Give me a quarter of an hour after my bath, and I am clothed, and brushed, and spruce, and standing at my cottage door lustily ringing a small handbell. When its last brazen tinkle is silent, cries are heard from the distant huts of my Swahili porters. "Tayari, Bwana, Tayari. Aya! Kazi, Kazi!" "Ready, master, ready. Work, to work!" These ejaculations are meant somewhat to appease me while the utterers are turning regretfully from their couches or their firesides, and donning their scanty garments. Then nine or ten men come running down the incline, for their quarters are higher up the hill than mine, and hastily form themselves into a line in front of my door.

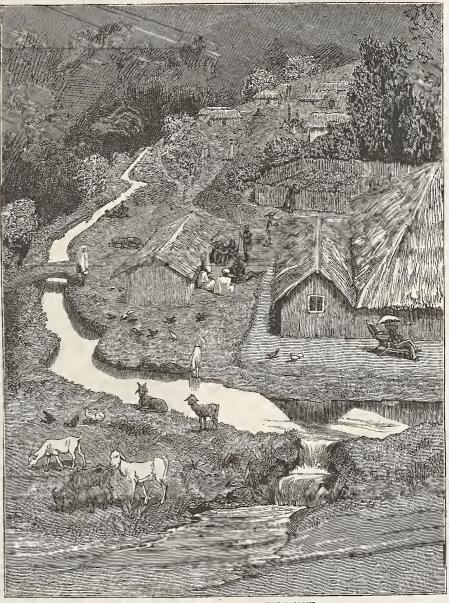
I call over the roll :- "Cephas?" (Cephas is the chief cook, and is engaged in cooking my breakfast, so I excuse his reply.) "Faraji?" "Ndimi, Bwana-Here I am, sir," comes a cry from the cowshed, where milking is going on. "Abdallah?" (Abdallah is for the time being headman, and Minister of Public Works in my Cabinet. He is slightly deceitful, invariably courteous, always tidy and smartly dressed, rather a rogue but an accomplished one). "Hapa, Bwana -Here, sir." "Farijala?" "Yes, sir."

last fragment of the English tongue. He also sings "Te Deums" when at work, imagining them to be popular English melodies. He is a good, willing fellow, thoroughly honest.) "Ibrahim?" (Ibrahim is the best man in the caravan. He is short, fat,



"KITIMBIRIU" (OUR FIRST SETTLEMENT ON KILIMA-NJARO)

with an enormous mouth, and always in a good temper). And so I go through the list of names till all the twelve are accounted for. This task over I then have to attend to the small ailments of some. This man has an ulcer, that a stomach-ache, another



A CORNER OF OUR SETTLEMENT

(Farijala has been an old mission boy, and retains "Yes, sir," as the complains of a cough, more often the maladies suddenly assumed are of a less tangible character, like the neuralgia of civilisation. "A pain here, sir, oh! so bad. I'm afraid I can't work to-day." "Oh nonsense! you atc too much yesterday. Go and chop some firewood, that'll do you more good than medicine."

And so all are finally told off to their tasks-two to attend to the gardens, one to get firewood, one to herd the goats, sheep, and cow, another to look after the fowls, five to build the big house or cut the roads, as the ease may be. Faraji and Cephas of course attend to the cooking, and nothing else.

Now I am a free man, and may go for a stroll in the fresh morning air before breakfast is served, walking along the path that fringes the crest of the narrowing hill spur on which the settlement is placed, gazing, perhaps, at the majestic snow peak of Kibô which rises sharp and clear above the morning mists, or gathering wild flowers to deck my breakfast-table. Here grow gorgeous dissotises, large-petalled mauvered flowers, primrose-yellow and purple-centred hibiscuses, creamy-white clematis, with thick, woolly petals, and many lovely blossoms of balsams, and a mauve-white thing like phlox-quite a glowing mass of colour in my natural garden, which makes me hotly refute the theory that the tropies cannot produce flower-shows equal to those of the temperate

I come back in answer to the earnest appeals of Virapari, who assures me breakfast is getting cold, but I must yet delay my sitting down till my floral treasures are placed in water, and put in the centre of my repast. I must describe to you my breakfast-table. I

have a right to pride myself on its appearance, as most of the good things it bears are our own local productions and not imported from Europe, and I want it to preach a little lesson that will show how much Africa may be made to yield in the way of comfort when



comfort is sought. Of course this applies more to the resident than to the traveller, who cannot stay long enough in a place to develop its resources.



Firstly, there is a nice snowy cloth spread over the table, then the silver is bright, and the enamelled iron plates are clean, all details

which are due to a little supervision over servants' work. The grateful steam of coffee comes from a pretty cafétière, a little white jug contains hot milk from my own cow, there is a pat of fresh butter of our own making lying in a cool green leaf, a nicely-baked loaf, made from maize-flour and eggs (and in a long parenthesis I might explain that this flour is of our own grinding and sifting, and the eggs are from our own poultry), and lastly, there are grilled kidneys from a sheep we killed yesterday, fried bananas as an entremet, and a bowl of honey.

Of all these delicacies, only coffee and sugar are extraneous, so that I thus hope to show you how much comfort and good living may be extracted even from savage Africa.

When the meal is finished I set out to visit my plantations. They are situated about a half-mile from my house. The walk thither takes you along the little stream which supplies a canal, or—to use a more expressive Cornish word—a "leat" of water to our settlement, and the ground has been cleared and planted near the water-side, so that irrigation is easy. Here is working Kadu Stanley, a bright, willing, Uganda boy, given by King Mtesa of Uganda to Stanley when he visited that monarch in 1876. Kadu has sojourned several years on the Congo, and after his return to Zanzibar has taken service with me. I have made him head-gardener.

Here are planted all the seeds I have brought from England, together with potatoes, onions, &c., brought from Zanzibar, and many native vegetables as well. Already, after a month or six weeks, the growth is surprising. Radishes are still in good condition for eating, the mustard and cress have run to seed, turnips are nearly ready, carrots and cucumbers are coming up, and sticks have been already placed in long rows for the peas and beans. The purpl green shoots of the potatoes are springing up wherever "eyes" have been planted, some of the onions are in flower. The only recalcitrant thing is spinach, which for some reason will not flourish here.

I leave Kadu and go onwards up the valley, sketch-hook under my arm, and my small bird-gun in my hand. Across the stream there flits a

large kingfisher, grey and rufous-brown and verditer-blue, with red beak. Like the real aboriginal kingfisher he feeds only on insects, as there are no fish in these streams. Fishing has been quite an after-thought with the kingfishers, and is a pastime by no means shared by all the members of the group. Many Australian species, the halcyon of the Cape Verde Islands, and this common East African halcyon found on Kilma-njaro never attempt to catch fish, even though they be near streams well-stocked with piscine prey, but content themselves with the variety of insects that haunt the water-side. I shoot this kingfisher just to identify him, and afterwards when his little stomach is opened the carapaces of beetles and remains of grasshoppers are found within.

Now the stream I am ascending becomes two streamlets, and the valley bifurcates into two ravines, while the broad slope of a hill faces me, so I leave the pleasant path along the waterside and toil up the clayey ascent. But when I have reached the level crest of this bracken-covered height, I slip into a smooth and level track, winding along between low hedges of strychnia and draccena, and giving off many side turnings which lead to native compounds and enclosures. Several maidens pass me shyly, going to market with bananas or neat baskets of millet meal or bags of Indian corn. Some of the bolder, who have perhaps met me before in the market-

place or at Mandara's, give me the Chaga greeting, "Mbuïa" (friend), to which I heartily reply "Mbuïa, mbuïa." How strange it is! In all probability many of these Chaga girls have never seen me or any other white man before; yet we meet in a lane suddenly, and beyond a somewhat timid shrinking to one side there is no fear and no surprise exhibited. Each after the formal greeting wends his or her way tranquilly. And yet, to imagine a similar contrast, suppose some English country girls—say in the most rural depths of Somersetshire-were suddenly to come upon a naked black man striding along a leafy lane, armed with spear and shield, and decked with strange adornments, necklaces of human teeth, and such like, would they not in all probability shriek for help, or giggle convulsively, or in some obtrusive fashion betray their amazement. Yet these African maidens, to whom I, clothed where they are accustomed to utter nakedness, with aneroid hanging round my neck, sketch-book under my arm, and gun in hand, suddenly appear, merely give me a modest greeting and a shy look, and quietly pursue their way.

After a further ascent I arrive on the summit of a rounded hill which considerably o'ertops its fellows for miles round, and offers views of unexampled magnificence in all this lovely country. To the north, without a single fleck of intervening cloud, rises Kilimanjaro, the whole central ridge and both the peaks completely visible. The eye first rests irresistibly on the splendid snowy dome of Kibô, absolute in whiteness under the glare of the vertical sun, with a few faint purplish blots, like the crater-shadows on the moon's face, coming out where the bare rock breaks through the snow, and

VIEW OF MANDARA'S VILLAGE FROM KITIMBIRIU

then in the few hollows, gaps, or *crevasses*, tender cool shadows of pale blue break somewhat the dazzling effect of unsullied white.

pale bluc break somewhat the dazzling effect of unsullied white. Below the snow cap of Kibô lies a great stretch of purple moorland, broken up dimly into ravines, cliffs, hillocks, and ridges by shadows of deeper tint, but seen with the eyes half shut seeming a band of purple colour merging into a colder bluish tint where it reaches the distant snow, and becoming darker and sombrer where it mingles with the middle distance of dark green forest. To the left of Kibô a rounded descent of the mountain-mass stretches down with some few jags and undu-HEAD AND SHOULDERS OF OUR COW lations till it passes away into the

far off plain, and to the right of the snowy dome a ridge nearly horizontal reaches to the

sister and minor peak, the jagged Kimawenzi, which has merely patches and streaks of snow resting amid its strange black peaks and pinnacles. The background to the entire scene is a sky of



CLEMATIS AND HIBISCUS

intense blue which is almost free from cloud save for a few vapourous cumuli lying behind the centre ridge of the mountain. In the middle

distance are grandly swelling rolling hills, magnificently wooded with, in some cases, a forest growth so uniform that, looked down on from a height, its surface is like rich green velvet pile. Here and there, but rarely, on the hill sides there are open patches of land, covered with short turf or bracken. These offer, by the side of the darker forest, tracts of lovely grass green colour, almost unrepresentable in pigment, from the fact that in water colours or oil there is no plain tint, or combination of tints, that will exactly give it, or in which any permanency can be hoped for. From the matrix of onc or two of the nearer hills springs gush forth and flow through ever deepening ravines with musical clamour, though their course and their birthplace can only be conjectured at a distance from the greater luxuriance of the forest which they provoke. In the foreground I look upon the descending northern slope of the great hill from whose summit this unexampled view is obtained, and here there is an intricate mass of low forest, principally composed of the Mkindu palm (I think belonging to the genus Raphia) mixed with indiscriminate shrubs, many of them overgrown with parasitic cucurbits and loranthuses. This palm is the only member of the order I have ever found growing on the slopes of Kilima-njaro. In the plain below there are several others, the Hyphane thebaica, or branching palm, the "Mwale" (another species of Raphia), and the Borassus, but I have never seen any of these on the mountain.

Having worked industriously at my sketch, and shot three sun birds who were hovering round the teazle-like flowers of a labiate plant in my vicinity, I now begin to think of returning homeward, for lunch time is approaching, and, besides, the monarch of mountains has begun to weary of his condescension, he thinks I have stared at him enough, and he is wreathing light fleecy clouds round his august features as a signal that the interview is at an end. So I gather up my sketching materials, pop the sunbirds into a roll of wadding in my carnassière, and stroll homeward through the red lanes bordered with dracænas, aloes, strychnia, and bramble, the latter covered with delicious blackberries, and the strychnia, which

is semi-cultivated by the natives, with tiny yellow fruit exactly resembling miniature oranges, though scarcely larger than big peas. These are good to the taste, and, according to the natives, wholesome to eat, though in some way I connect them with ideas of poisons, and never largely indulge in their consumption. As I near my settlement I hear a great clamour of tongues, and find a market is going on in the vicinity of the Zanzibaris' quarters. About thirty Wa-Chaga are there busy chaffering their goods for cloth and blue beads. The men are all naked, excepting for a tiny cloak or mantle of dressed fur round their shoulders. The women are principally clothed with thick bands of beads, but they generally have a short leathern apron or petticoat. The warcs of thesc people consist principally of Indian corn, in the ripe grain, and also green cobs; two or three kinds of bcans and peas; flour made from millct seed; tobacco in the leaf; honey; bananas, ripe and unripe; calabashes of sour milk or rancid butter, and numbers of live fowls. Perhaps on such a day as this I have purchased as many as eighty fowls for one "hand" (about an ell) of cloth each (approximate value 2d. an cll). Or there may hy chance be a goat or sheep for sale; but this not often, as Mandara is supposed to own all the live-stock of the country as personal property, although he gives many goats, sheep, and cows to his subjects as presents, conditionally on their not being parted with, so he himself is almost the exclusive dealer in live-stock. I amuse myself by a little friendly chaffering before lunch, but leave all serious purchases to my

servants, for the natives invariably deceive me when I wish to buy, either palming off old scraggy fowls, bad eggs, and adulterated honey on my inexperience, or else charging me extravagant prices. One little item may be noticed in this market which will show how observant and practical the people are, and how they seize any lawful means of making money. I have only resided here, let us suppose, some few weeks, and yet the natives have noticed my fondness for eating blackberries, a thing they never do themselves for some reason or other. Consequently, without any hint from me, children have been sent by their parents to collect industriously all the berries to be got, and here NATIVE DOORWAY they are, wrapped in banana leaves, on sale for a trifle in cloth or beads. Also many women

have brought bundles of firewood, so neatly done up and chopped into such handy logs that, although it seems superfluous to buy it, when one man's mission in the station is to collect nothing else in the woods all day long, yet it is sold so cheaply, and is so conveniently ready for use, that I often purchase it, and feel by so doing that I am encouraging the enterprise and spirit of my black neighbours.

After lunch I sit for an hour or two skinning birds; then, when the afternoon sun is declining, I set out for another ramble. Perhaps before starting I sip a welcome cup of tea in the natural arbour behind my house. Then taking my sketch book, I wander forth in delicious aimlessness, now stopping to sketch a distant view of Mandara's village, seen from the head of our ravine, now scrambling up a bracken-covered hill side in almost wild exuberance of spirits, ""How happy life seems here," I stop and reflect to myself, as, my face all aglow with the flush of exercise, I rest awhile, seated on some grassy mound at the summit of the hill, and looking down on my busy settlement beneath, where the men at work are so many ants creeping two and fro, my gardens are green patches, and my houses might be the tiny habitations of leaves and twigs which some species of ants are wont to construct. Whilst I am gazing over this most varied prospect—over the tiny beginnings of a colony on the hill below, over the many ridges of banana-covered hills beyond, and further away the illimitable plains marked and patterned like a carpet with patches of purple forest, streaks of yellow sand, red hillocks, and pale green savannahs-a slight noise behind me attracts my attention, and I look round to find a Chaga man regarding me with a friendly grin, which exposes a row of filed and villainous teeth. It is my milkman, he who supplies me every morning with an extra quantity of milk which is needed for butter-making. A conversation ensues, wherein neither understands the other to any extent, for I am as yet ignorant of Kichaga, and my interlocutor knows no Swahili. However, he evidently wants me to do something, for like a dog he won't leave me alone, but keeps going on a little way along the path, and then looking back. So I gather that he wishes me to accompany him. We soon arrive at the hedge round a native compound, and, passing through the narrow triangular doorway, girt about with living tree-trunks, and blocked, if need be, by a rough-hewn massive plank, we enter a small yard wherein stand three buildings. One is a neatly-built store house, raised on piles (as may be seen in the illustration), and the other two beehive huts, surmounted with peaks like hay-cocks, goats and fat-tailed sheep are feeding on the pea-shucks which a woman, who is shelling peas, casts from time to time on the ground; and fowls are busy picking in the several rubbish heaps, or kitchen-middens, which stand outside the doorway. Little surprise is manifested at my entrance. Another woman comes out from the smaller house and stares for a short time at the unexpected arrival, but the woman shelling peas scarcely looks up from her work. Invited by my Chaga friend to make myself at home I sit on the only available seat, a rough-hewn log cast on the ground, and commence a sketch of the scene before me. The stone house is

rapidly drawn in, the doorway of another dwelling is outlined,

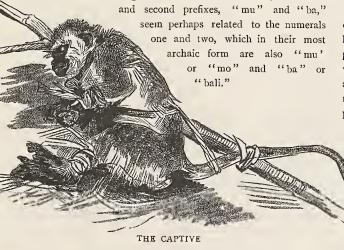
and I am just adventuring on a study of the seated figure shelling peas when she divines my intention, rises indignantly, and walks into her house. My host also seems a little uneasy, for the people look upon Art as magic, and imagine drawings are made of things and people for sorcerish reasons. However, I reassure him, put up my sketch book, and rise to go. This Chaga man is (and always was throughout my stay) exceedingly amiable, and thinks perhaps this time that his fears about magic have hurt my feelings, so he presses me to accept some green ears of Indian corn, and together we go to the corn-field, outside the compound, and cut some five or six cobs, which are tied together by their sheaths and hung over my arm. Thus burdened, and taking a friendly farewell, I descend the hill and walk back to my settlement. Here I find two or three natives have come to see me, bearing several live monkeys for sale. The poor creatures are tightly tied to forked sticks, and are so bound with withes and strips of bast that they can only grind their teeth in impotent rage. I do not really want them, as they are of a very common species, but to encourage the people to search for and bring me live things, I buy them for a small amount of cloth. Then the canines of the savage males are docked, and the monkeys are tied round the hips with leathern thongs fastened to tree trunks, and then relieved of their fetters and rcleased. Whereon, of course, they career about at the length of their tether, vainly hoping to escape. Strange to say, they will all pause in their wild gyrations to eat bananas or other food that is thrown to them. (In the night, however, all escape, by gnawing resolutely through the leather bands which keep them in captivity.)

When the monkeys are disposed of there is still half-an hour or so before sunset, so I induce the natives to sit at my feet and instruct me in their language. Ah! If you knew how difficult it is to collect an accurate vocabulary you would be little disposed to blame travellers from savage regions who return without linguistic information. Think how you have to deal with people who have not the faintest conception of what you are about, except that it



NATIVE STOREHOUSE AND DWELLING

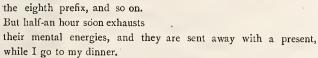
weary work it is to elicit information, and how delighted one feels when some important doubt is solved, or a new explanation is unconsciously offered of some puzzling phenomena. The language of Kilima-njaro (Ki-Chaga) is one of the Bantu group, which includes nearly all the African tongues south of the Equator. It is one of the prefix-governed tongues, and the forms of its, various classes of prefixes are varying, but always show a common ancestral origin. The utmost number of known prefixes is by some computed at sixteen—by Bleck at cighteen, as he includes two pre-positions, "ko" and "mo" ("to" and "in") with the regular prefixes. The origin and primary use of these prefixes is still disputed, but we may dimly guess at the original meaning of one or two. Thus, the first



Now in the language under consideration all the sixteen classes of prefix (except the twelfth) are represented, but some of them are much altered from the typical form. My object is to obtain examples of them all; but I want particularly to ascertain the form of the eighth prefix (a plural one). Unfortunately I can't ask any

my friends, "What is your eighth prefix?" I should never be understood if I explained for a hundred years. I have to get at it in some other way. "What is this?" I ask, holding up a knife.

"Ki-osho," they reply. "Just so," I reflect, "'ki' is the seventh prefix, and the plural must give the form of the eighth." "Ilow do you say 'many knives?'" I continue; "ki-osho' is one, what is for many?' " Shingi " (many), they "No, but many knives?" "Shingi" is again repeated. Then I ask, "See, this is one knife - ki-osho kimo (holding up one finger). What is for two knives?" (holding up two fingers). "Two fingers," they reply, looking up very much puzzled. Then in despair I send for another knife, and placing it beside the original one again, ply them with a question. This only elicits the word for "another;" but, at length, after many disappointments, they are induced to say " Shi-osho shivi" (two knives), which gives me "shiosho" as the plural of "ki-osho," and consequently shi is the form of



MKINDU PALM

My little table has been laid with a snowy cloth, and the lamp placed on it spreads abroad its soft effulgence. My muddy boots are taken off, and my servant slips my feet into a pair of red morocco slippers that nestle into the skin rug just in front of my camp-chair. A pleasant book is placed at my side, and the gloom of the night and its weird children—the bats and the hawkmoths—are shut out by a heavy curtain, and I feel how pleasant and easy it is, even in Africa, to create an atmosphere of home. Here in three or four days my servants can build me a dwelling, and I can furnish it so that when my door is closed and my thoughts abstracted it needs an effort to realise that the wilderness lies outside.

When my dinner, a meal of three courses—soup, meat, and honey dumplings—is finished, the cloth is cleared, the lamp trimmed, and the door closed for the night. Then for two hours I sit and write my diary, much in fact of what I am re-writing now. But at length my eyelids grow heavy, I find my head nodding over the book, so I relax from my labours, undress, and creep thankfully into my snug little bed. I feel as safe and as much at home as in a well-appointed English inn. Only the occasional wild laugh of a prowling hyæna, slinking round our settlement, or the distant booming roar of the hungry lion, recall to me, almost pleasantly, that I am lodging in the wilds of Africa. But slumber soon intervenes, and thus ends, as far as consciousness is concerned, what my diary has characterised as a "thoroughly, happy day."

Now for the other side of the picture.

AN UNHAPPY DAY

IMAGINE, perhaps a week after the "happy day" herein described, that our relations with Mandara, the Chief of Moshi, have gradually assumed a disagreeable character. The African potentate may have suddenly awakened to the fact that the white man living in his country was not nearly so generous as white men ought to be. Perhaps he may have made a great number of exorbitant demands lately which I have felt compelled to refuse. He may for instance have asked on Monday for my bcd, and on Tuesday for my favourite gun, on

Wednesday for my despatch-box, and on Thursday for my sketch-book. And on Friday he may be brooding over each successive rebuff. Or perhaps it is some other cause of disappointment. He may be annoyed perhaps at my declining to buy his slaves and war-captives, or be angered at my refusal to send the Zanzibari labourers on my settlement to swell some one of his raiding armies on the western frontier. At any rate, Mandara

feels that time has come to assert himself, and show the white man who is the master. Doubtless he is egged on by his worthless Swahili courtiers, who are very jealous and suspicious of my residence in Moshi, imagining that I must have come to spy the workings of the slave trade, and send information to the Consul on the coast of the despatch and destination

of the various slave caravans. These unscrupulous men, who would gladly see my throat cut and my goods distributed among themselves, are far more dangerous enemies than Mandara at his worst, for that savage has just a vestige of humanity and bonhomie mixed with his untutored rapacity, and, moreover, eannot rid himself of a lurking fcar lest the English Consul's arm may be long enough and strong enough to strike from the coast to Kilima-njaro and avenge my death, a possibility which the less ignorant Wa-Swahili laugh to scorn. So, perhaps, as Mandara sits in the morning hiccupping over his potations of banana beer, and begins to grumble in his cups about "his" white-man's close-fistedness, the wily councillors gradually work him up from a state of ill-humour into a blind fury. They remind him how the "Baroni" (Baron von der Decken) was muleted by Mandara's mother of sainted memory, when he ventured to visit Moshi; of how Mandara himself had taken from the "padre" New his gold watch, his silver instrument of unknown usc (aneroid), and many other things; how, too, Thomon

but a year ago had been forced to give up all the guns and clothes that Mandara had demanded; and yet in all these cases the English Consul had made no remonstrance, nay, rather, had he not sent gifts of powder and lead and cloth to Mandara, and letters expressing friendship? And who was this other white man, to oppose Mandara's wishes and refuse his demands? Thomson had a hundred men and more with him; yet he preferred to give rather than to fight. What, therefore, should this other white man do, who had but ten soldiers? Let Mandara send, therefore, to this stranger in the land, and say, 'Give me this, and this, and I will let you stay here in peace; but if you answer proudly, and refuse me, I will send many soldiers, who shall kill you and all your men, burn your houses, uproot your gardens, and the place shall know you no more. And if the Baloza (Consul) sends to inquire after you, I will say you are gone into the land of the Masai, and perchance they have killed you there."

This message is no sooner eoneocted than Mandara is impatient to send it red-hot and see the result. Accordingly, about noon, a naked gentleman, with a broad-bladed shining spear and a monkey-skin head-dress, struts into our settlement with an easy nonchalance of manner which makes an evident impression on the Zanzibaris, for they do not attempt to oppose his passage into my private compound, but allow him to enter unchallenged, plant his spear into the ground with an emphasis that makes it quiver, and stand at ease in a eonqueror's pose.

Perhaps my temper has been already ruffled that morning. We may have lost our favourite milch goat or fattest sheep in the night, earried off by hyænas; or I may have suddenly learned that the natives refuse to sell milk, fowls, or other provisions, in obedience to secret orders from their chief. Or, for misfortunes never come singly, my servant may have fallen sick, or my cook have cut off his finger chopping wood. So when I look up from my work, perhaps skinning birds that lend themselves badly to my taxidermist skill, and see the

swarthy figure planted in front of my house, I wrathfully cry out to my attendants, "What does this man want here, and why do you let him in without telling me?" Abdallah comes forward, and mildly questions the Chaga warrior as to his purpose," "Words from Mandara," he laconically replies, and then, the interpreter being summoned, proceeds to detail the ultimatum of the Chief-so many guns, barrels of powder, bags of shot, tables, chairs, cups and saucers, knives, forks, and spoons to be handed over at once, together with the greater part of my trade goods, or-and then follow Mandara's terrible threats of slaughter and rapine. The purport of this speech I somewhat understand from the occasional words and phrases of Ki-Chaga that are familiar to me, and any doubt as to the import of the threats which close the message is set aside by the man's expressive gesture. When he comes to talk of killing he draws the edge of his dexter finger across his throat, severing in fancy his jugular vein. At the close of his speech the Swahili interpreter repeats all that has been said, striving to exaggerate as much as possible the gruesome nature of the threats, and the advisability of conceding everything asked for. But I have long since made up my mind. To yield to the "Sultan's" demands would entail the loss of all means of defence, of livelihood, and would be the ruin of the expedition. Even if I succeeded in reaching the coast, it would mean that I had failed in my attempt, and all this would be far worse than the risk of assassination at Mandara's hands, for I knew his moods varied with his potations. So affecting a calm manner which I do not feel I refuse Mandara's demands in toto. ("Hatta sindano") "Not even a needle," I add, taking one from my coat lappet and showing it. This reply having been explained to the envoy he withdraws stolidly to repeat it to his master, and I am left alone with my men to discuss the further proceedings to be taken. Of course only the leading men of the earavan are consulted; the rank and file are supposed to be left in ignorance of our danger lest panic should seize them. They know well cnough, however, having questioned the Chaga soldier, and now sit in a melaneholy group discussing the probability of having their throats cut, and rueing openly the day that their ill fortune brought them to such a country. However, I have finished my confabulations, and now order the men to go about their work as if nothing had happened, or was going to happen. One man is told to go and get firewood.



KILIMA-NJARO SEEN FROM ABOVE MOSHI ("PALMS AND SNOW")

He takes an axe, and reluctantly leaves the timorous group of gossipers, but behold! he has scarcely got a hundred yards from the cleared ground of the settlement, when we see him turning about and hastily retraeing his steps, while from the brushwood and fern rise the glinting spears and white headdresses of Mandara's soldiers. It is then, on going to investigate, that I find we are regularly invested by an irregular ring of armed warriors, who are squatted in the grass and fern, without however any attempt at concealment. They have formed a cordon which they intimate must not be broken until the demands of the "Mangé" (as they call their ehief) are satisfied. Though firm in their language they are not uncivil, and are evidently only performing their duty. They are even respectful to me personally, evidently assuming that a quarrel between the white man and their chief is not their affair. We learn from them that Mandara means to try and starve us into submission, that he intends to place these soldiers here to cut us off from all further food supplies. I laugh at this. "What," I ask, "does Mandara know I have eighty fowls, a cow, a calf, four goats, and two sheep, beside a storehouse crammed with grain and a garden full of vegetables? Say, how long can we not live on those supplies, and does your chief intend to keep you here for months?" They only

shrug their shoulders indifferently. "Theirs not to reason why, theirs but to do or die." One man, however, suggests that perhaps if my water supply were cut off at the river head I might not feel so comfortable. I then ask what the other Chaga people would say, whom my little canal also supplies with water? Meanwhile my message, with its decided refusal, has reached Mandara, and we can from our height conjecture somewhat the effect produced. How anxiously our gaze wanders over the intervening valley, and rests on the little cluster of yellow beehive huts which masks Mandara's capital! We have seen the messenger enter the town, and after more than a quarter of an hour's interval he emerges alone, and once more takes the winding hill-path to our settlement. I am affeeting to continue my work in my hut, for it would not do to let either my own men or the natives perceive that I am alarmed at the critical state of affairs, but as I stoop over my bird-skins again I hear the claug of a spear-shaft striking the hard ground, and again Mandara's emissary stands

"The Mangé wants to see two of your men," he says.

"I will go myself," I reply, getting my hat and stick.

JUNE 20, 1885

"No," answers the envoy, "Mandara does not want to see the white man. His heart is bitter. Send two of your servants."

After eonsiderable parleying, for my men naturally feel that it is like entering the lion's den, Abdallalı and another Zanzibari volunteer to go on this dangerous errand. Accordingly they set out, secretly armed with revolvers, and accompany the soldier to Mandara's town. Following their progress with my opera-glass I see them enter the native compound, and then ensues an anxious wait before they re-issue and make their way alone back to Kitimbiriu. When they enter the settlement I see bad news painted on their lineaments, so I hurry them into my house before they can communicate it to my quaking men. When they are seated in the doorway of my dwelling, their dark bodies like silhouettes against the flaming evening sky, they unfold their ominous tale.

When they had reached Mandara's place, it seems, they found him seated among his couneillors and captains in a quivering rage. His one eye gleamed with anger, and his whole frame trembled with eonvulsive wrath. Speaking slowly and distinctly, evidently trying to keep control over himself, he told them that there was but one ruler in the country, and that one he. It sufficed for him to send an order to the white man and it must be instantly obeyed, or the throat of every man in the settlement should be cut. "What," he exclaimed, "do I eare for his Consul or his Queeny? Have I not a thousand soldiers? Go and tell him!" The men erept away from the precincts of the irate monarch thoroughly cowed, but they were not gone far before he sent to recall them. On again entering his presence, Mandara assailed them with imprecations and horrible threats, and dismissed them a second time, summoued them back again, hurled at them hoarsely more vituperation, and finally bade them hurry to my presence and inform me what they had

This they are in no way loth to do, fearing, indeed, for their lives in this assemblage of warriors armed to the teeth, whom a word

from their chief would precipitate on any victim of his wrath. I suspect, even when I hear their terrified account, that this scene was a good bit of clever acting on Mandara's part, meant to have its due effect on me by the panic it should produce among

At any rate, as we sit in the gloom of the early night still discussing our situation, my dinner untouched on the table, and, to judge from the gleam of their watch fires in the bush, the soldiers of Mandara still encircling us, the prospect seems a sufficiently sombre one. Nor does the night bring a temporary truce to my anxieties. I find it difficult to compose myself to sleep, for my brain is continually forming projects for escaping secretly from Mandara's country, and yet carrying away somehow my fifty-eight loads of goods; a well-nigh impossible feat to accomplish with ten men. Every sudden noise from the bush, the anxious whispers from my watching men, the distant blowing of a horn, or firing of a gun makes me start from bed wide awake and dreading a midnight attack from the savages. And when towards dawn I find a short forgetfulness in fitful dozing, it is but to awake on a morrow of similar anxiety, nor do the days of happiness and peace return till Mandara's hostility and avarice have been dissipated by patient resistance on my part and a fickle temperament on his.

II. II. Johnston

In Jour Parts—Part XXX.

SECOND ASCENT

DRAWN AND WRITTEN BY MR. H. H. JOHNSTON, F.R.G.S.

OR NEARLY FOUR MONTHS I chased under my sense of impotence. Here I had come to Kilima-njaro expressly to visit and collect the fauna and flora living at high altitudes near the snow line, and owing to the obstacles arising from the hostility and suspicion of the natives I was continually repelled in my various attempts

to ascend the mountain and make my habitation in the upper re-

HEAD OF GREAT-BILLED RAVEN

above the inhabited zone. At one time I was detained a semi-prisoner by Mandara, at another, when I had regained his good graces, and endeavoured to ascend with his guides, Mandara's enemies, the Wa-Kibôso, came in force and turned me back. If I sent my followers to collect they fared even worse than I did, being too timorous and apprehensive to do any work, and falling constantly into ambushes, where they nearly fell victims to the wiles of the savages.

At last deliverance came. My convoy, which I had despatched to Zanzibar soon after my arrival, returned with reinforcements, but not until we had anxiously awaited their coming for many weeks. I then took leave of Mandara and our charming settlement in Moshi, and changed my headquarters to Taveita, thinking thus to proclaim my neutrality in the quarrels of the rival tribes of Kilima-njaro, for Taveita is a peaceful republic, on good terms with all the neighbouring states. Without loss of time I sent messengers to the Chief of Marang'u, informing him that I wished to pass through his country as a friend and ascend Kilima-njaro to the snow, promising to pay liberally any guides who might volunteer. My embassy was well received, and returned to Taveita with a fine fat sheep as an offering of the "Sultan's." I went to Marang'u (a state lying on the south-east flank of Kilima-njaro), gave its sovereign handsome presents and magnificent promises to slake his exorbitant greediness, procured three guides, and at length, nearly worn out with worry and hard work-for remember, gentle and sympathetic reader, that all the burden and responsibility of the Expedition lay on my shoulders undivided —I had the satisfaction of

starting for the third or fourth time to reach the snow, not any longer apprehensive of native hostility, for besides the protection now accorded me by my whilom foes, I had what was more valuable-a little force of forty well-armed resolute men.

Marang'u so much resembles in its physical features the country of Moshi, already described in the Graphic, that I will not reiterate my former descriptions of banana plantations and tidy lanes bordered with dracænas and aloes. Imagine that

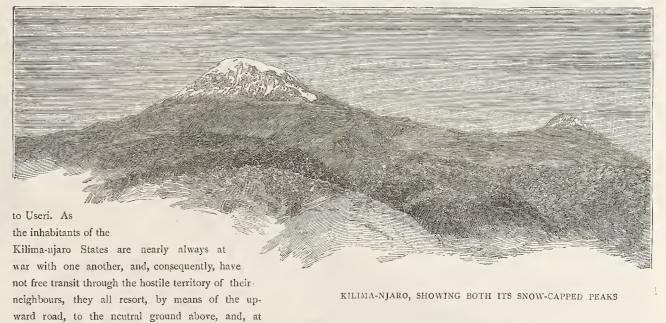
we have spent all one afternoon climbing through the well-cultivated, inhabited zone, and have at length reached the heathy wilderness at an altitude of 6,500ft., where, beside a lovely fern-choked brook, we encamp for the night. As soon as morning breaks we strike the tents, swallow a hasty breakfast, and recommence our climb, and soon enter the dense virgin forest, which within the limits of 7,000 and 10,000 ft. clothes all the southern face of Kilima-njaro. The woodland scenery here is very pretty and English-like, though fine timber is rare, the trees being short and twisted, and choked with dense undergrowth. The wild flowers are beautiful. Parasitic begonias trail their lovely pink bells in long festoons, magentacoloured balsams gleam out from among the fern fronds, and every now and then we come across clumps of crimson and salmon-

RAVEN SOARING

coloured gladioli that provoke expressions of admiration even from my followers, whose eyes are caught with the rich displays of colour. The tree trunks, even to the minor branches, are densely hung with moss, orchilla-lichen, or delicate epophytic ferns. Other species of ferns grow luxuriantly at the side of the path, some of them actually British in their extended range. There are polypodics, holly, ferns, bracken, maidenhair, identical apparently—I have since found at Kew they were actually the same-with those we know in England. Unfamiliar, though, to our English scenes are the magnificent tree ferns (of the species I.onchitis pubescens), which rise grandly above the dense undergrowth, with fronds of a shiny, bluish green whenever the pale green light of the forest falls athwart their downy leaflets or silky stems. At a greater altitude than 8,000 ft. these tree-ferns are rarely met with; indeed, they are mostly confined to a zone round the mountain between 7,000 ft. and 8,000 ft. above sea-level.

Our path is very wet with the moisture that drips from the forest, and often obstructed with huge trec-trunks that lie across it. It is one of a series of tracks which converge from the different little kingdoms on the mountain up to a height of about 9,000 feet odd, where they join a path running nearly due east and west from Shira

water is everywhere abundant. I catch a small chameleon and several beetles in this place. The next day we leave this camp at eight o'clock and journey eastward for about two hours, searching for a good site whereon to make my settlement, which must be close to water, and not too high up, so that my shivering followers may not suffer unreasonably from cold. I soon fix on an admirable spot—a grassy knoll rising above the river of Kilema, which takes its source near the base of Kimawenzi. The altitude of this site is nearly 10,000 feet. It is about four miles in a direct line from Kimawenzi, and about seven from Kibô. Directly my choice is made, so that no time may be lost, the men set to work at once cutting down the giant Ericas (heaths), and using their trunks for building poles and their dry heather for thatch, while the coarse grass that here covers the ground is reaped, and also employed for roofing the huts and making snug beds on the ground. With such rapidity do the men work that before nightfall on the day of our arrival some fifteen cosy huts have been largely completed, and a rough kind of kitchen has been made for my behoof. For my own lodging the tent has to serve, as I am not yet confident as to the rain-proof character of the heather huts. That night they are to be roughly tried.



I have taken to my bed early in the afternoon, having severely hurt my knee, falling over sharp rocks in the stream-valley; but I can see through the tent door clouds of fearful portent rolling up over the upper slopes of the hidden mountain. In the early night growls themselves occasionally in ambush at the cross-roads, and leap out

on any passing travellers too weak to resist them, in which case the men are killed and the women carried off in triumph as slaves.

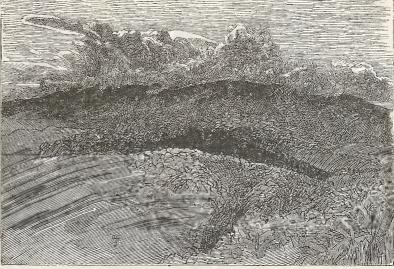
varying heights above the inhabited district, pursue their journey

round the mountain. They do not always do so peacefully,

however, as it is the frequent custom of the mountaineers to post

On our former journeys up the mountain we had passed these dreaded hiding-places in nervous apprehension, and not without much stealthy that our enemies were lying in wait; but now we fear no man, and pass blithely along the ascending path, talking and laughing gaily, in pleasant contrast to the silent tread and cautious whispers which marked our previous excursions into the wilds of the Alpine region. The ascent is so gradual, that after walking from dawn till half-past eleven we still find ourselves at an elevation little exceeding 7,000 feet. By three o'clock a height of 9,000 feet has been reached, and here we proceed to camp for the night. On the way we have passed for some distance through a region clear of forest, and merely

the woodland again, and here, fortunately, we find a little stream of lightning, which shimmer through the awful complete darkness. water. Indeed, on the road between the mountain and Marang'u Big drops fall one by one with thuds like pellets on the tightly-



KIBÔ CLOUD-CAPPED

covered with open grass. At our camping place, however, we enter of thunder begin to be heard, together with lurid quiverings of



stretched covering of the tent. Then, suddenly, a bellow of thunder, so deafeningly loud that one's ears are stunned for a moment, bursts from the storm right over our heads, seemingly, and re-echoes from all the ravines and hollows of the mountain side. Flash after flash of lightning reveals the whole scene in momentary brilliancy, and then the few desultory drops of rain change into a soaking downpour. I call my two body servants and my cook into the tent, which, happily, is water-tight, and they gratefully huddle together on the floor till the tempest ceases.

The next morning, however, by a happy contrast the scene is fair and smiling. The sky is cloudless and serene, the two snow-peaks are in full view, and mild as the heat of the sun is at this elevation it is nevertheless of some service in drying the soaked garments of the men. All through this day succeeding the storm the men work unremittingly at their houses, especially thatching their roofs with increased care, and when another downpour takes place we observe with pleasure that no wet has penetrated the interior of the dwellings,

The day succeeding our arrival bands of natives—our whilom foes—arrived from Kibôso, bringing provisions for sale, both good in quality and cheap in price, so that all anxiety about provisioning my party is at an end. I cannot but admire the enterprise which these people showed in carrying their wares a distance of some eight or nine miles to trade with one whom but a few days before they had considered a dangerous magician. I soon got on excellent terms with these Wa-Kibôso, whom in past days I had looked upon as my bitterest foes, and who had been in turns amazed and mystified by my fireworks and my theodolite.

Now that we are friends I have many pleasant chats with them, and offer to visit their country and chief, but this last proposal they



KIB!

hesitate to accept. Their Sultan has given them permission to trade with me, and he wishes to remain at peace with the white man, but as to seeing him—"No, he is much too undoubted a sorcerer!" The chief of Kibôso is an old man, and it would be easy to bewitch him. So, on the whole, it would be better for both parties that we should remain apart. I do not insist, as I only care now to collect in the chilly regions near the snow, and wish for no more native complications after my delays and difficulties in Moshi and Marang'u. Every day during my stay at this high elevation, the Wa-Kibôso come to trade, bringing bleating goats, magnificent clusters of ripening bananas, sweet potatoes, honey, and tobacco; and, moreover, as soon as they are made aware of my wishes, they capture animals for my collections, and will bring me squeaking, wriggling hyraxes, tied securely to forked sticks.

Unfortunately, the bruise which my kneecap has sustained forces me to confine my rambles for the first few days after my arrival to the immediate vicinity of my new settlement, though I have plenty to do in collecting specimens of the very interesting flora and fauna which surround us: The first lengthy excursion I make is to the base of Kimawenzí, the lesser of the two peaks. The terrible hurricane of wind; however, that rages round this jagged series of

lava spurs prevents mc from continuing the ascent, though I doubt whether it be possible for any one to reach the summit owing to the want of foothold. The snow varies very much in quantity on



TREE_FERN

Kímawenzí. Sometimes the whole peak will be covered down to the parent ridge, with only the precipitous rocks peeping blackly through the mantle of white. At other periods the snow will he

reduced to an insignificant patch, and the reddish sand which fills the crevices and glissades between the lava rocks

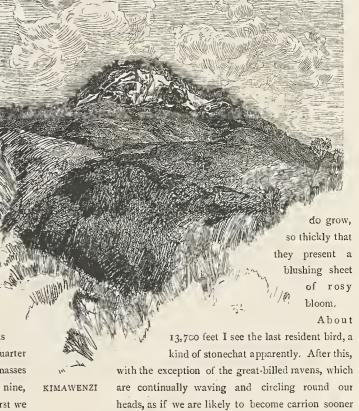
will be left exposed to view. This change from an almost complete snowcap to nearly no snow at all may be effected in twelve hours. My chiefidea, naturally, is to attempt the ascent of the great peak of Kibô, which marks not only the apex of the Kilima-njaro mountain-mass, but is also the highest of all known African mountains, reaching, as far as I can calculate, to 18,800 feet above the sea level. To make a successful ascent it will be necessary, owing to the time occupied on the journey, to pass a night at some point half way. Accordingly, I cannot go alone, but must induce a few followers to accompany me to carry my necessary impedimenta. My Indian servant, Virapari, of course volunteers, but I have to leave him behind, as he is not only disabled with severe ulcers on the legs, but I am afraid to quit the settlement without putting some responsible person in charge. So I select three of my followers who look agile and strong, and providing each man with a warm blanket, and loading them with my own coverings, with food, and with implements for collecting and observing, I wait until the morning mists have somewhat cleared, and then turn my face to that quarter of the sky where the heavy concentration of cloud masses indicates the presence of the great Kibô. Starting at nine, I walk upwards, with few stoppages, until 1.30. At first we cross grassy undulating hillocks, the road being fairly easy. Then we enter a heathy tract, scorched and burnt with recent

Then we enter a heathy tract, scorched and burnt with recent bush fires, but higher up, where the blaze has not reached, the vegetation is fairly abundant and green. Small pink irises stud the ground in numbers, an occasional gladíolus of a vivid crimson gleams out brightly from the tufted grass. About 12,600 feet we



tation, and gaily lit up with the brilliant red leaf-shoots of the Protea (*P. abyssinica*) shrub. At the place where we cross the stream the banks are shelving, and above the little ford the water falls in pretty cascades through a rift in the higher ridge of rock. About this spot ahe surrounding scenery has lost much of its accustomed asperity.

On the further side of the stream is a patch of level greensward somewhat spoilt by the buffaloes who come hither to drink and sport, and who have rucked up and befouled much of this little natural lawn. Strange sessile thistles grow here, belonging to the genus Carduus, also an extraordinary lobelia (Lobelia Deckeni), three to four feet in height, with a teazle-like crown of silvery green bracts and bright blue blossoms. Other remarkable plants are the lovely Cynoglossun amplifolium, with rich ultramarine flowers, and an extraordinary arborescent plant (since named Senecio Johnstoni), looking somewhat like a banana in the distance, but in reality consisting of a tall, black, smooth trunk, twenty to thirty feet in height, and surmounted by a huge crown of broad leaves, interspersed and headed up with bunches of yellow blossom. This strange plant grows abundantly in the streamlet's bed, and its trunk is so superficially rooted and so rotten that, in spite of its height and girth, I can pall it down with slight effort. As we ascend on the further side of the stream-valley, we come to some strange boulders, or smooth masses of rock, about which the ground becomes pappy and boggy with water; in fact, three or four warm springs of a temperature of 91 deg. Fahr. here issue from the ground. Mounting high above the rivulet, the scenery becomes much harsher, vegetation shows itself in dwarfed patches as we pass the altitude of 13,000 feet, and the ground is covered with boulders, more or less big, apparently lying in utter confusion and without any definite direction. These slabs of rock are singularly shaped, and marked like huge tortoises, being divided by lines and seams into a tesselated surface. They are not very difficult to climb over, and even seem to act as irregular stone steps upwards. In their interstices heaths of the size of large shrubs grow with a certain luxuríance, and bright yellow Euryops flowers stud the occasional patches of bare earth; while every now and then my eye alights with pleasure on lovely clusters of pink everlasting flowers, growing, where they



or later, there are no other living creatures in sight, though we continually encounter the footprints of buffalo and antelope. On reaching a height a little above 14,000 feet, I stop again to boil the thermometer and refresh myself with a little lunch. Throughout this ascent, which is easy, I suffer absolutely nothing from want of breath or mountain sickness, although my three Zanzibaris lay behind panting and exhausted, and complain much of their lungs and head. Moreover, roaring gusts of wind breaking the silence of the mountain makes them look round with ashy countenances, convinced that the Spirit of Kilima-njaro, in fact Njaro himself, the frost demon, is upon them, coming in propria persona to chastise our presumption. I often dread that their panic will overcome them, and that they will turn and flee, casting away my collecting things, instruments, and provisions. About this time too we occasionally hear distant rumblings of thunder echoing among unseen cliffs and valleys; and though these weird sounds may only he referable to that cause, still I confess that to a negro's imagination they do resemble somewhat the rising murmurs of an angry spirit. However, I resolve not to try their powers of endurance much longer; so, with due directions for making fires and constructing a rough shelter for the night, I hasten to continue my ascent while the weather will

Mounting up a few hundred feet higher than the last stopping place, and rounding an unsuspected ravine, I arrive close to the base of a small peak which has been a continual and useful point to aim at during the whole journey from my station. I am now at an elevation of 15,150 feet, and on the central connecting ridge of Kilima-njaro, and can see a little on both sides, though the misty state of the atmosphere prevents my getting any good view of the country. This ridge, which from below looks so simple and straight, is in reality dotted with several small monticules and cut up into many minor ridges, the general direction of them being, on the southern side, from north-east to south-west. To the eastward I can see the greater part of Kimawenzi rising grandly with its jagged peaks and smooth glissades of golden sand. Westward I still look vainly in the piled-up clouds, for the monarch of the chain yet remains obstinately hidden, and I am at a loss how best to approach his crown of virgin snow. At length-and it is so sudden or so fleeting that I have no time to fully take in the majesty of the snowy dome of Kibô-the clouds part, and I look on a blaze of snow so blinding white under the brief flicker of sunlight that I can see little detail. Since sunrise this morning I have caught no glimpse of Kibô, and now it is suddenly presented to me with unusual and startling nearness. I begin to notice that the outline of the eastern face of the summit is much less convex or rounded than it has appeared from a point lower down, and more under the peak, and that now its square craterous form becomes more evident, as when seen from a distance in the plains below. But before I can get out my sketch-book and sharpen my chalk



CURIOUS ROCKS, "MARKED LIKE A TORTOISE-SHELL"

pencil the clouds have once more hidden everything—indeed, have enclosed me in a kind of London fog, very depressing in character, for the decrease in light is rather alarming to one who feels himself alone and cut off at a point nearly as high as the summit of Mont Blanc. However, knowing now the direction of my goal, I rise from the clammy stones, and, clutching up my sketch-book with benumbed hands, begin once more to ascend westwards.

Seeing but a few yards in front of me, choked with mist, I make but slow progress. Nevertheless, I continually mount along a gently-sloping, hummocky ridge, where the spaces between the masses of rock are filled with fine yellowish sand. There are also fragments of stone strewn about, and some of these I put into my knapsack. The slabs of rock are so slippery with the drizzling mist that I very often nearly lose my footing, and I think with a shudder what a sprained ankle would mean here. However, though reflection tells me it would be better to return to my followers, and recommence the climb next day, I still struggle on with stupid persistency, and, at length, after a rather steeper ascent than usual up the now smoother and sharper ridge, I suddenly encounter snow lying at my very feet, and nearly plunge headlong into a great rift filled with snow that here seemed to cut across the ridge and interrupt it. The dense mist clears a little in a partial manner, and I then see to my left the black rock sloping gently to an awful gulf of snow, so vast and deep that its limits are concealed by fog. Above me a line of snow is just discernible, and altogether the prospect is such a bleak and gloomy one, with its all-surrounding curtain of sombre cloud and its uninhabited wastes of snow and rock, that my heart sinks within me at my loneliness. But just as I am imagining myself the sole living being at this elevation, and the only spectator of this vast solitude, a something sweeps over me, driving a wave of cold, misty air against my face, and making my heart thump with a sudden inexplicable terror. There is nothing supernatural, however, in the visitation. Only a huge black-andwhite raven which, emerging from the mist, alights on a ledge of rock in front of me, and contemplates my appearance with cvident surprise.

I could easily slay this creature which so boldly regards me, but the idea of doing so never enters my head. It almost seems the embodiment of the mountain spirit, whom to fire on would be sacrilege punishable by being hurled down the abyss of snow and rock which yawns on one side of the ridge along which I climb. So I leave the raven still perched quietly on the stone until the mist screens him from my backward look, and meantime go plodding along upwards, till at length, utterly exhausted and numbed with cold, I throw myself on the snow-bespattered ground, and feel that I shall never regain the force to quit this horrid solitude of stones and snow. However, a few minutes' immobility and a sip from my flask somewhat restore my courage, and feeling convinced of the impossibility of ascending any higher on this occasion, I proceed to boil



SENECIO JOHNSTONI

my thermometer, to ascertain the altitude. The mercury rises to 183.8, an observation which, when computed, gives an altitude of 16,315 ft. This is the highest point (within a little more than 2,000 ft. of the summit) which I ever attain on Kilima-njaro. Fearing to be benighted in these Alpine solitudes, I now resolve to hasten back as quickly as possible to my improvised shelter, for the clouds are thickening, and thin showers of sleety snow are falling. A high wind arises and whips my face with the icy rain, and makes it very difficult to keep my footing on the slippery ridge. At length I reach the boulders and the sand, then descending with greater ease enter once more, at about an altitude of 15,000 ft., the region of



MY SETTLEMENT AT TAVEITA

vegetation. Keeping in view the small hillock I have already mentioned as such a useful landmark, I ultimately find my way back to the spot where I have left my men. What is my agonised surprise to discover, on searching the sheltcred hollow, that it is deserted and abandoned. I hesitate but little. Sooner than

remain here without blankets, food, or fire, I will endeavour to regain my station, even though I have to wander all night on the lonely flanks of the mountain; so, starting off in the waning daylight, I hurry over the now easy descent at a pace which soon quickens into an irregular run. I cross the stream at the wellremembered ford, and, cheered by the sight of old landmarks, and warmed by the violent exercise, I march on straight in the direction of my little village. The mists disperse, the moon shines out brightly, I can clearly distinguish familiar hill-tops, and, on reaching once more the banks of my own river, I then have an unfailing guide to follow until the glimmering watch-fires of my settlement glance out from its bushy stockade, and the loud voices of men break the still and frosty air. As I step in through the palisade, and appear before my almost terror-stricken men, I see I am at first taken for my own ghost, and not till I have spoken a few sentences in a very real and energetic tone to the three culprits who have deserted me is the impression removed. It transpires that my three followers had remained for about an hour in the place I had left them, and then, seeing I did not return, had been seized with an irresistible panic, had caught up their loads, and had returned helter-skelter to the station. Fortunately they have not lost the collections; so, after a short rebuke, I am disposed to condone their fault, the more so as I feel too thankful to return to warmth, and shelter, and familiar faces to pass unnecessary time in unprofit-

I remain some little while longer in this elevated settlement, and, although I am much hindered by the bad and tempestuous weather,



LAKE CHALA

I make excursions in all directions for the purpose of collecting. In one of these trips I once more reach the snow, but owing to the length of time involved in a climb to the snow-line (for the slope of the mountain is very gradual), I am never able to accomplish the entire ascent of either peak, going and returning in one day; and as I find it impossible to induce my shivering followers to accompany me into the mists and hailstorms, and cannot unaided carry instruments and food, I have reluctantly to resign my long-meditated feat, and leave the actual summit of Kilima-njaro still virgin.

Moreover, my time for collecting at these high levels is coming to an end. Although I have soon got inured to the climate myself, and feel invigorated by the frosty nights, my poor fellows, accustomed to the greenhouse atmosphere of Zanzibar, are suffering cruelly from the cold. To clothe forty men in warm blankets is beyond my resources, and to induce them to live for a long period lightly clad in garments of cotton, in a temperature which was often below the freezing point, requires, to say the least, considerable persuasion; but my chief anxiety arises, not so much from their unwillingness to remain a few weeks longer at an altitude of 10,000 feet, as from their unfitness to do so. Several of the men are suffering severely from bronchial affections; one or two have had touches of pleurisy; all complain of chilblains and rheumatism; so that I begin to fear that, unless I move to lower levels, I shall have no men-left to carry my loads. Therefore, after deliberating with the head men of the caravan, I prepare to evacuate my highest station on Kilima-njaro, at the end of October, and following a new route through an unexplored country return to Taveita and the coast.

Leaving our alpine settlement, with its grassy slopes and forests of arboreal heaths, we take the path runnning eastwards round the upper slopes of the mountain. For a day and a half we wander through the dense forests that clothe the southern flank of Kimawenzi, with no guide but the compass, and no track but the paths just trodden before us by wandering herds of elephants. At length we emerge on the cultivated country, and, at a height of 6,000



feet, descend into the district of Bombo. The savage inhabitants of this unvisited district at first greet us with hostile war-cries, and, taking our quiet progress for an organised invasion, advance to assault us with their feeble spears and flights of arrows. However, seeing we do not diverge from our path nor return the onset, they finally stand aloof, and we march unopposed out of their country into the No-Man's Land beyond.

We pass close to the brink of Lake Chala, an extinct erater filled with water, and strangely and most picturesquely situated above the almost level plains below. Reaching the River Rumi ("our river,' as we always affectionately eall it) we march along its banks till our beautiful forest home of Taveita is entered, and here we gladly surrender ourselves to a few quiet days of repose before starting for the coast.

The men whom I left behind here before starting for the region round the snow have not wasted their time. Abdallah, who was in charge, has cleared and dug up a large tract of land, which is planted with coffee and wheat. He has bought a number of young ostriches from the natives, this being the season of year (October—November) that they emerge from the egg, and are easily captured before they attain the full use of their legs. One of the hens has a brood of chickens; two of my ewes have lambed, and altogether the settle-

ment, with its air of thriving prosperity, gladdens my eyes. I am, indeed, unhappy for one cause only at this time-namely, the prospect of being soon obliged to quit this paradise. Still, the original term of service for which the men were engaged will be up at the end of November, and before that time I must reach the eoast to pay them off. Unless more funds are fortheoming I shall have to discharge my porters, pay their wages, wind up my affairs, and return to England, for living in Central Africa is no more possible without money (or money's worth) than it is elsewhere. Nevertheless, I cannot bear to think I am quitting the country, and feel so hopeful and convinced that help in some shape or form will await me in Zanzibar, and that in a few weeks I shall be back in Taveita with renewed zeal for my work, that I do not like to abandon my eomfortable and well-ordered settlement to the wild beasts and white ants, especially as the ground it is built on is my own, purchased from the natives of Taveita. Therefore, after a little deliberation, finding, moreover, that I have many goods and implements of husbandry which I can neither carry to the coast, for want of porters, nor bring myself to throw away, and disliking also to abandon my goats, fowls, ducks, pigeons, and tame ostriches, I finally decide to leave four men in charge of the settlement, who should await my return during three months, and if I do not then arrive, pack up as many of the things as they ean carry, and accompany one of the Swahili caravans returning to the coast.

These and other preparations made, I take a most reluctant farewell of my pretty town, and also of the pleasant-tempered and friendly Wa-Taveita, who entreat me to return very soon and dwell amongst them. I then make a short march of four hours to the northern corner of Lake Jipé, where I camp out, remaining a few

days in the vicinity of this piece of water, in order to observe the denizens of its banks. Lake Jipé is, in reality, a shallow backwater of the Lumi river, which afterwards becomes the Ruvu, and enters the Indian Ocean at Pangani. It is, in short, a tiny edition of the Albert Nyanza, about twelve miles long by three to four broad. On the southern bank the mountains of Ugweno rise grandly to heights of 6,000ft. and 7,000ft., contrasting markedly with the opposite shore, whereon we are encamped, which is a flat plain, but little raised above the lake. The water of Jipé, however, is disgusting, and only drinkable after it has been well boiled and skimmed. As there is no current through the lake-for the river that flows in turns round and flows out again-and as this stagnant pond lies exposed to the continual rays of an ardent sun, and harbours, moreover, large numbers of hippopotami, who make the lake like their tank at the Zoological Gardens, the water drawn from it is a filthy liquid, warm, green, and slimy. My men drink of it in large quantities, nevertheless, without harm, but for myself I have it boiled and boiled for hours, and the green scum or froth taken off. I am obliged to avail myself of this fluid as there is none other nearer than the River Lumi.

The last grand view of Kilima-njaro that we obtain is from the borders of the lake. The craterous shape of the larger peak becomes very massed. Here we gaze for the last time on the majestic lineaments of the King of African Mountains, and then regretfully turn our backs on him, leave the borders of the lake, and cross a low ridge of limestone hills that shut out Kilima njaro and Jipé from our gaze. Our faces are now turned towards the fine mountains of Parc, which, though not ascending to any greater height than 7,000 or 8,000 feet, still are so admirably picturesque in outline that they recall, with their green valleys and tumbling streams, the mountain scenery of Wales.

In the plains below the soil is rich, black, and alluvial, and green grass grows luxuriantly, together with some lovely lilies, whose white blossoms star the prairie in all directions. Here I see more game at once than I have ever seen in Africa. It is a sportsman's paradise—a delicious dream of happy hunting grounds hardly to be realised in this life. Hundreds and hundreds of giraffes scud before us; herds of clands (the bulls in deep dun colour, with glossy hides that look like satin in the noonday sun) saunter along, now nibbling the sweet grass, now trotting off as we advance. Myriads of red hartebeests, sable antelopes, pallahs, and zebras stud the undulating plain, while a small group of ostriches may be observed on our lefthand side, and a rhinoceros stands under the shade of a mimosa to the right of the path, flicking his short tail from side to side, and watching the movements of the caravan with suspicion. Alas!



KILIMA-NJARO SEEN FROM LAKE JIPÉ

They have no reason to fcar me. Waterless, dead beat, and sunstricken, it needs all my resolution painfully to plod along the path, and I am quite incapable of stalking big game when I doubt if I shall have sufficient force left to earry me to our eamping-place at Ngurungani.

Arrived here in the early afternoon we find a large force of Mosai camped round the drinking-pools, and it needs more than an hour's patient diplomacy to keep these worthies from submitting us to indiscriminate slaughter; we only, in fact, induce them to leave us alone and go their way by adopting an unworthy subterfuge, and assuring them that we have small-pox (a disease they much dread) in our caravan. The next day we camp at Kisiwani, a pretty spot at the foot of the Parc hills. Then twenty miles further on we come to the fruitful and pleasing district of Gouja, a settlement of Wazeguha, ruled by the sons of Semboja, the Chief of Western Usambara. Here signs of coast-influence are quite apparent, and, for the first time leaving Mombasa at the commencement of the expedition, I knew I was not among savages.

Gouja, with its elear, swift river, its groves of forest trees, its luxuriant plantations, reminds us of our favourite Taveita, and we feel a keen sympathy with this place, which is the first habitable spot we have encountered in seventy miles of wildcruess. At the back of Gouja, in the Parc hills, the seenery is enchantingly lovely—wooded erags,

rich valleys, emerald green banana groves, rippling streams, and splendid waterfalls, one of which, another Staubbach, gives rise to the river which encircles the town. We can see its grey-white shoot of descending water in the distance, too far off to show the changing light of motion, and apparently as unvarying and immobile as the blue hill-side, just like a photographed waterfall. On a little peninsula backed by hills, and nearly surrounded by a loop of the river, the rambling village of Gouja is built, the whole eongeries of houses being encircled with a tall fence of euphorbias and other prickly shrubs. The dwellings are fashioned much after the style of the native houses on the coast—structures of wattle and clay, generally divided into several apartments.

The upper classes in Gouja, and especially those connected with the family of the Chief Semboja, look like Arabs in their complexion and physiognomy. They have, however, woolly hair. I question them as to their origin, but they do not acknowledge Arab intermixture; nevertheless, they are evidently a cross breed, though the intermixture may be and probably is ancient. They are the outpost of—may I eall it civilisation?—and Mohammedanism in this part of Africa. Here one's life is quite safe, here no presents are asked for, and here money is taken and understood. How curious is the spread of the influence of a strong Government! Since

the days that India has been well governed under British rule, her commerce and her currency have begun to extend themselves widely over Eastern Africa, from Somali-land to Natal, and here in the market-place of Gouja, nearly a hundred miles from the coast, you will find the people talking of pice, annas, and rupees, and see the image and superscription of Her Majesty the Empress of India circulating freely among the various tribes who come hither to trade.

We rest a day in this pleasant spot, and then walk on in two or three stages until the mountain walls of Usambara (rising a clear 4,000 feet or more from the plain below, like giant cliffs) stand over us, and the residence of Semboja is reached. Here we see the red flag of Zanzibar flying, and are informed that Semboja, the most powerful chief between Kilimanjaro and the coast, delights to number himself among the vassals of Sayyid Barghash. I take advantage of this to present the letter of introduction given me by the Sultan of Zanzibar, and the epistle produces a pleasant and palpable result in a present of goats and bullocks. The chief, in fact, is vastly hospitable, and will not let me leave till he has had a good long gossip. On parting with him I give him a good fowling-piece and some other articles, principally clothing, and we both exchange assurances of sincere friendship.

On leaving his capital we make for the Ruva River—which takes its rise in Lake Jipé—and, following its banks for three days, at length arrive at the seacoast, and draw up in the town of Pangani, where I install myself in the comfortable house belonging to the Universities Mission. Here I get some of the sweetest foretastes of civilisation. Though the building is unoccupied save by the caretaker, it has been recently visited by the missionaries, and they have

left behind an ample store of magazines, Weekly Times and Graphies, and after being cut off for so many months from the outer world, I throw myself like a famished creature on all this store of journalistic pabulum.

In three days' time my caravan men are paid off, and I leave for Zanzibar in an Arab dhow. Arrived in the Metropolis of Eastern Africa (it will soon be ealled the Necropolis if people go on dying as rapidly as they have done lately), I find that though verbal encouragement beyond measure has been sent me to continue my work in Eastern Africa, there is, as a matter of fact, no fresh grant of funds, so regretfully I take my passage in a British India steamer to Aden. After a few days at this unjustly vilified spot, when perhaps the kind hospitality of the President caused me to view everything too much-not couleur de rose, that would be out of place in Aden where a hot red tint preponderates-but couleur de verdure, I set out for Suez, spent a few days in Egypt, and reached London viâ Brindisi, within little more than six weeks since I last saw the snow peaks of Kilima-njaro from the reedy shores of Lake Jipé. Thus ends the hasty sketch of my journey to the Snow Mountain of Eastern Equatorial Africa.

A summary of the results of my researches and observations in Natural History shall be given you in another and concluding Supplement.

H. JOHNSTON

In Jour Parts—Part HO.

HISTORY NOTES NATURAL

DRAWN AND WRITTEN BY MR. H., H. JOHNSTON, F.R.G.S.

tion of the races of man which inhabit this part of East- wholly or in part, and bestow little care on that part of their person.

Central Africa. They belong mainly to two different stocks: one, the Masai, a well-marked African group, allied distantly to the Galla races in physical appearance and possibly in language; the other, the agricultural people who form part of the great Bantu family which mainly composes the population of all Africa south of the Equator.

The Masai are a well-marked variety of African man, ranging like semi-nomads over the vast tract of plain country between one or two degrees north of the Equator and 5 deg. 30 min. south. They certainly had their origin northwards, and, in all probability, merge into the races inhabiting the great unknown tract lying between the Nile and Galla-Land. The Masai primarily admit of two great divisions, the Masai proper and the so-called Wa-Kwavi or El-Oigob. These two peoples, who are of the same stock and speak almost identically the same language, are nevertheless in perpetual conflict. The Wa-Kwavi, as they are always called by the Swahili traders, are Masai who have, through loss of cattle and other reasons, become settled agriculturists, and have adopted a peaceful and honest mode of living. The Masai proper still live a semi-nomad life, do not till the soil nor cultivate, keep huge herds of cattle and goats, and are bold and daring robbers. I call them semi-nomads beeause each tribe ranges generally over a given district within eertain limits. They also live in their quicklyconstructed towns during the rainy months. A Masai town or village consists of a huge eircle of low mud huts, surrounded by a thorn fence. In the middle of this enclosure the cattle are kept at night. Their huts are generally built as follows: First making a rough framework of pliant boughs, which are bent over and stuck in the ground at both ends, they plaster on this a mixture of mud and ox-dung, and, for further resistance to heavy rain, hides are thrown over the top, outside. The height of the dwellings barely exceeds four feet. There is a low, porchlike door. The only attempt at furniture is a hide laid across a row of stieks to serve as a couch at night. The shape of the lowly dwelling is always, as far as I have seen, rectangular, in that differing from the beehive shape given to the houses of the Bantu tribes in this part of Africa.

The Masai youth at the age of fourteen enters the clan of El-Moran, or the unmarried fighting men. His dress is picturesque, but scanty, as may be seen by the drawing on the first page of this supplement. In ordinary times he will wear a leather cape about his shoulders, or over one shoulder, a narrow leather girdle round the waist, in which to stick his knife and wooden club, and leather sandals on his feet. His hair will be combed out into long frizzles, artificially lengthened with strips of bark, and stiffened with clay and fat.

The lobe and through them is thrust a rounded plug of wood or ivory, or a ring of the same materials; or the lower part of the lobe may be hung with fine iron ehains, or stretched with a curious wooden instrument like a cotton-reel. When going to war, however, these simple adornments above described are eonsiderably added to. The leather cape is removed, and its place is taken—firstly by a long piece of cloth, sewn down the middle with a coloured stripe; and secondly, by a thick carapace made of kite's feathers, or, as in my sketch, by a cape made of the skins of the Colobus monkey. A cap of Colobus skin may also be worn on the head, or a striking head-dress made of ostrich feathers, and shaped roughly like an ellipse. The leather cape which ordinarily is worn round the shoulders will now be twisted round the waist like a belt, and in the folds of this are seeured the knobkerry and the Seiné, or sword. Sometimes a ring of goatskin, with the fur outside, or a strip of Colobus skin, will be worn round the ankles, and then, with a long-bladed spear and shield four feet high, the equipment of a Masai warrior is complete.

The hair is often dressed by the men in the way I have described -namely, drawn out into long locks, and stiffened with grease and

ET ME BEGIN MY BRIEF OBSERVATIONS on the clay, but a pigtail is frequently worn, also, both over the forehead Natural History of the Kilima njaro district by a descrip- and at the back of the head. The women usually shave their heads,

> On the other hand, they are much more extensively clothed than the men, being enwrapped generally from head to feet in ample garments of dressed leather. Their necks, wrists, and ankles are covered with massive coils of iron or eopper wire, and beads are largely used to ornament the fringe of their clothing.

A MASAI WARRIOR

The Masai men rarely marry until they are over twenty-five, nor the women until twenty. But both sexes, "avant de se ranger," lead a very dissolute life before marriage. The married Masai is a changed being. From a bloodthirsty fiend he becomes a staid, courteous, and reasonable man, anxious to obtain and impart information, and as desirous of healing a breach and preventing bloodshed as before he loved to foment a quarrel and take part in a massacre. Whilst still an unmarried man and a warrior he abjures all vegetable food, and strictly confines himself to a diet of milk and meat. Moreover, he must not mix these two things, but, before changing from one to another, must take a powerful purgative, so that, for instance, if he has been living on milk, and wishes to eat meat or drink blood, he must thoroughly clear his system before changing from one to the other. But after marriage, when he is no longer looked upon as a fighting man, his diet is unrestricted. He now seeks to obtain vegetable food from the humble races of eultivators who dwell in the vicinity of his settlement, or eagerly purchases honey with tusks of ivory.

The Masai believe in a vague Supreme Being, whom they call "Engai," a word also meaning "the sky," or "rain." They often mention another and weaker spirit, whom they designate by a female appellation, "En-aiterkob," not necessarily implying that it is of that sex, but using the female article, "En," to denote inferiority or weakness. "En-aiterkob" seems to be a kind of earth spirit ("En-Kob," the Earth," the World) in contradistinction to Engai, who is the heavens, the sky.

The Masai keep large herds of cattle, goats, sheep, and donkeys, also a few dogs. Fowls they despise, and do not keep. The vultures and hyænas around their encampments are strangely tame, and strangers cause much offence by killing them.

Whenever the warrior Masai are on a journey they are positively accompanied by flights of vultures and a few marabou storks. Wherever they stop to slaughter cattle, these scavengers descend and feast on the offal till they are so gorged that you may see a Masai pushing them away with his foot. The hyænas that haunt the vicinity of their burial-places root up and devour the dead soon after their relatives have laid them in the soil, without in any way being eheeked or molested.

The Masai language is a very interesting one, bearing, in my opinion, signs of an approach to the Galla tongue, and as this is a member of the Hamitic group, and distantly connected with the Semitic tongues (Arabic, &c.), this offers a very curious problem in Africa for consideration—namely, whether the Semitic languages spring from an African source.

Masai has two genders, masculine and feminine, two numbers, expresses the plural principally by affixing "n" and more rarely "k" to the word, eonjugates its verbs by prefixes and suffixes, and uses pre-positions and not post-positions. It is a very copious, beautiful, and simple language.

There is hope for the future of the Masai race. Its previous history has been that of most rising and invading populations, like the Huns and Turks and Goths of Europe. First, some tribe, or division of a tribe, has been forced into war in self-defence, and has won a victory over its assailants. Then it acquires a taste for fighting, and from being persecuted becomes the persecutor. It spreads its conquests and ravages far and wide, the fighting qualities descend from father to son in increasing intensity. Soon, however, there are no weaker peoples left to subdue or to harry. The land is a wilderness, cultivation has ceased. The fighting tribe suffers from hunger. Then a section of them turns to the soil and commences a rude agriculture. This pursuit in time prospers, and the improved condition of the agriculturist attracts the envy and greed of their nomadic brothers. A civil war ensues, which, no matter what vicissitudes may happen, ends in the triumph of the tillers of the soil, for to defend their crops and granaries they eonstruct fortifications and walled towns. Then with the victory of the settled authorities comes an opening for commerce. The lives of traders are safer among a hardworking colony of agriculturists than amid lawless rovers and eut-throats. So, in time, civilisation finds an opening into what was once a terra incognita on account of the fierceness of its inhabitants. So it has been, and is, with the



MASAT CAMP

Masai. The last few decades a perceptible alteration in their conditions of life has begun to appear. That section of them known as the Wa-Kwavi has taken to a settled mode of life. No longer do they rove about seeking whom they may rob and slay, but they dwell

within fixed limits, eultivate the soil, and encourage traders to settle in their midst. In time these more civilised Masai will prevail in numbers and power over their still nomadic brothren, and thus Eastern Equatorial Africa will be opened up to profitable trade.

At the very worst, however, the Masai are neither so dangerous nor so bloodthirsty as the Soudanese Arabs or the fanatical Tuaregs of the Sahara. If you are content to pay their tribute, you need not fight, and if you are forced to defend yourself, these people are powerless in front of a stockade, as they have no guns, and never throw their spears, using them only in a hand-to-hand fight. Thank goodness, Mohammedanism has not yet reached them to turn them into mad fanatics or faithless cutthroats like their neighbours to the north and east.

Almost exclusively the Masai inhabit the plains round the Kilimanjaro district, while the uplands still retain the older population of the country. This consists of people belonging linguistically and racially to the great Bantu family, which occupies nearly all Africa south of the Equator. From a linguistic point of view the Bantu are absolutely homogeneous-there is no mistaking a Bantu tongue for a member of any other family. But ethnologically the distinction is much disputed. Some good authorities maintain that the Bantu races (Kaffirs, Congo, Swahili people, and the inhabitants of the great lakes) do not agree amongst themselves in any particular type, nor differ markedly from other negroes on the Nile or the West Coast. This is a subject that I cannot enter into here, but, at any rate, their languages all re-mount to a common origin.

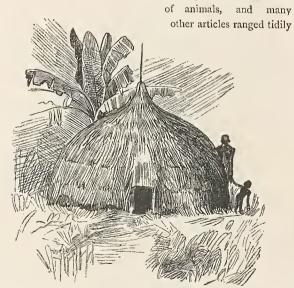
The principal tribes in the district I am describing are the Wa-Taveita on the River Lumi, at the base of Kilima-njaro, the Wa-Chaga, who under many chieftains and political divisions inhabit the great mountain, the Wa-Gwéno and Wa-Kahe to the south, and the A-Kamba and Wa-Taïta to the North-East and East.

The people of Taveita (Wa-Taveita) are the pleasantest I have ever encountered in Africa. They are of fair height, some of the men being both tall and robust, and attaining occasionally six feet in height. Their figures are often models of symmetry and grace. They anoint the body with fat and ochre, as do the neighbouring people already described. They frequently let the beard and moustache grow, and generally abstain from plucking out eyelashes and eyebrows as is done elsewhere. Circumcision is general. Marriage is a mere matter of purchase, and no pre-tended capture of the bride is simulated here as in Chaga. Both sexes have little conception of decency, and whenever clothing is worn it is merely for adornment, or for warmth in the chilly mornings. They are affectionate and kindly in their family relations, and to give you a better glimpse of how they live and feel, I will cull the following extract from my diary, which describes the visit paid to a native's compound in

Taveita:-

"Early this morning many friends came with offerings of milk, fowls, bananas, &c. One man wanted me to come and see him at his home, so I went thither with my servant. Round his little eompound was a kind of fence formed of the long mid ribs of the Merale palm laid lengthways. There were three houses inside, one for the woman, one for the man, and onc for the goats and slieep. The man's dwelling, though small, was far from uncomfortable, and the interior was remarkable for the neatness that characterises the domestic arrangements of most Africans. There was a raised daïs for the bed, on which skins were laid; a little three-corncred stool to sit on; a fire burning in the eentre of the

floor; spears, knives, horns



A CHAGA HOUSE

round the walls. At the man's earnest entreaty we partook of sour milk and sugar cane. He also wished us to try some rather dirty half-fried fish, but this not even all my adaptibility and politeness would permit me to do. Whilst I sat talking to him his wife, a motherly-looking soul, appeared leading a small, rather unhealthy child; and was further followed by a genial old hag, my friend's mother. This latter was a merry, social old body, though

very monkey-like as she sat and ehewed sugar cane, holding it before her with both hands and gnawing it laterally with her teeth, while the further end of the cane was clutched between her lean thighs. My host caught his child to him with unmistakeable affection. He earefully pinched and pressed the great protruded stomach as if divining this to be an unhealthy symptom. Seeing he was anxious, and wishing to say something kind, I offered to send medicine, which in the Swahili tongue is 'Dawa.' But he only replied, 'Dawa? What do we know of dawa?!' Then he looked up to the sky in quite a simple way and said, 'Perhaps Muungu will cure him. Who knows?the other one died!' 'Then you had another child?' I asked. 'Yes,' he said, 'but Muungu took it.' He looked again at his child, and seeing its eyes were flecked with mucus, he cleaned them with great sucking kisses. At length I rose and said in a round-about way I had better be going. He put the child from him with a sigh, and rose and followed me to my eamp, earrying a present of bananas."

The people of Taveita subsist mainly on vegetable food, of which they rear a great variety in their beautiful gardens. They also eat fish and meat. The fish are eaught in the River Luvi, which runs through the settlement, by means of skilfully-made wicker-work traps and wears. They also construct from the mid ribs of a Raphia palm most clever rods and lines, the whole material coming from the

palm, with a native-made iron hook superadded. The Wa-Taveita proper number about two

thousand. They speak a very interesting dialect, which

ing words. Much intercourse with traders from the coast has slightly robbed them of originality, and in their modes of life and forms of belief they somewhat ape the Wa-Swahili. Many of them are almost Mohammedans. I noticed one little detail about fire-making, which is worth recording. To produce fire, which is done in the common African way by rapidly drilling a hard-pointed stick into a small hole in a flat piece of wood, is the exclusive privilege of the men, and the secret is handed down from father to son, and never, under any eircumstance—so they say—revealed to women. I asked one man why that was, "Oh," he said, "if women knew how to make fire they would become our masters." Nevertheless, without this drawback, the fair sex in Taveita have pretty much their own way. I have known one or two leading matrons, who always insisted on have their voice in the deliberations of the Wazēē or Elders, who govern Taveita.

The Wa-Chaga of Kilima-njaro do not wholly resemble the people of Taveita either in appearance or disposition. They are neither so pleasing to look at, nor so pleasant to deal with. Sometimes they attain a fine stature, as in the case of Mandara, chief of Moshi, but generally they are short and sturdy. The women, however, are at times good-looking, and have very well-proportioned figures. The marriage ceremony (after the purchase-money has been paid) eonsists in the husband earrying off his wife pig-a-back, while the relatives and friends pursue with shrieks of laughter, affecting to try and rescue the screaming girl, but of course all this is simulated, and a survival of far-past customs, for nowadays a man only gets his wife when he has settled the bargain with his father-in-law.

The Wa-Chaga, like the Wataveita, live much as Adam and Eve did in the Garden of Eden, and think it no shame to walk about without one scrap of clothing. Indeed, when cold and love of

finery impels them to wear some cloak of skin or strip of eloth, it is confined to the shoulders and neck.

The Wa-Chaga are elever smiths, and forge all kinds of

utensils, weapons, and ornaments from the pig-iron they

receive from the country of Usanga, near Lake Jipé. The

forge is but a pair of goat skin bellows, converging into a hollow cone of wood, to which is added two more segments of stone, pierced through the centre, and ending in a stone nozzle, which is thrust into the furnace of charcoal. The bellows are kept steady by several pegs thrust into the ground, and a huge stone is often placed on the pipe to keep it firm. After the iron has been heated white hot in the charcoal, it is taken out by the iron pincers and beaten a stone anvil. The Chaga smiths make not only spear-blades and knives of apparently tempered steel, but they can fabricate the finest and most delicate ehains. But of a rhinoceros horn they will make a beautifully turned and polished club, carved by hand, for they ave no turning lathe. Pottery is almost unknown. Basket-work is earried to great perfection, and they can plait it so tightly that milk may be held in these utensils of woven grass or banana fibre. The wooden platters that are in use show no little skill in shaping, as they are cut out of solid blocks of wood, and not joined in any way.

But it is in their husbandry that the Wa-Chaga mostly excel. The wonderful skill with which they irrigate their terraced hill-sides

by tiny runnels of water diverted from the main stream shows a considerable advancement in agriculture. Their time is constantly spent in tilling the soil, manuring it with ashes, raking it, and hoeing it with wooden hoes. All their agricultural implements, except choppers, adzes, and siekles, are of wood-wooden hoes, wooden stakes, and so on. They have a very clever mode of irrigating equally a given surface. As the little canals of water are always elevated above the cultivated plots, they will tap the stream at a convenient spot above the bed to be watered, and then turn the flow into a rough conduit made of the hollow stems of bananas cut in half, the end of each stem overlapping the next. Then as the water enters the last joint it is freely turned right and left, dispensing the vivifying stream in all directions.

Among the plants grown for food are maize, sweet potatoes, yams, arums, beans, peas, red millet, and the banana. Tobaceo is also largely cultivated, and the natives chew it, and also consume it as snuff, mixed with salt. Honey is produced in immense quantities by the semi-wild bees which make their hives in the wooden eases put up by the natives among the forest trees. A large barrel full may be bought for two yards of cloth.

The Wa-Chaga inhabit the western, southern, and eastern slopes of Kiliman-jaro. The northern side of the mountain is without any other inhabitants than roving bands of Masai. The principal Chaga states, beginning on the west, are Shira, Kibong'oto, Machame, Uru, Kibôso, Mpokomo, Moshi, Kirua, Kiléma, Marang'u, Mamba, Mwika, Rombo, Useri, and Kimangélia. Although these little states are perpetually quarrelling among themselves, they are nevertheless closely united by ties of blood, and possess a common language. The inhabitants of Méru, Kahé, and Ugweno speak dialects so closely allied to Ki-Chaga, and resemble the people of Kilmia-njaro so elosely,

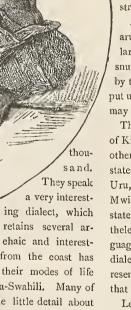
that they do not need any further description. Leaving this hasty review of, the varieties of the genus Homo to be encountered in this part of Africa, I will now descend lower in the scale, and rapidly point out the most striking forms presented in the animals and plants.

To begin with our near kinsfolk, the monkeys. I found these creatures much more abundantly present in East Central Africa than during my journeys on the West Coast. Although Western Africa is probably better provided with spe-

CHAGA UTENSILS

cies of quadrumana than any other division of the continent, the monkeys are much searcer in numbers and harder to see, possibly owing to the greater density of the forests.

During eight months on the Congo I only saw monkeys twice in a wild state, and that in one place only; and throughout my entire



A CHAGA FORGE

MEN OF TAVEITA MAKING FIRE

stay of sixteen months in West Africa I can only remember six occasions on which I actually beheld these animals in a state of nature. On the other hand, I had scarcely left the East Coast to journey towards Kilima-njaro than monkeys showed themselves abundantly

The first to attract my attention were the baboons, probably the species known as the yellow baboon. They were generally found on the outskirts of native plantations, where they almost subsisted on the maize and other food-stuffs stolen from the gardens of their more highly-developed fellow-primates. In the inhabited region of Kilima-njaro, generally known as the country of Chaga, baboons were strangely abundant. They were generally in flocks of fourteen to twenty, of all ages, and both sexes. They were so little molested by the natives that they showed small fear of man, and, instead of running away, would often stop to look at me about twenty yards off, and the old males would show their teeth and grunt. I have frequently seen the natives driving them from the plantations, as they might a troop of naughty boys, and the baboons retreating with swollen cheek-pouches, often dragging after them a portion of the spoil. On one occasion, in a river-bed at the foot of Kilima-njaro, my Indian servant, ordinarily a very plucky boy, met a troop of baboons, who, instead of fleeing up into the trees, came running towards him in a very menacing manner, and he was so frightened at their aspect that he took to his heels. The

baboons followed, and, but that the boy forded the shallow stream, and put the water between him and his pursuers, he might have had an awkward contest. I killed a baboon once in Chaga, one of a troop who were rifling a maize plantation, and its companions, instead of running away, surrounded the corpse and snarled at me. As I had fired off both barrels of my gun, and had no more ammunition, I went back to my settlement to fetch some of my followers, and upon the approach of several men the baboons ran off. We picked up the dead one and carried it back. It was a female, and apparently young and tender. Out of curiosity I had its flesh cooked the next day and ate it, hoping in this lawful way to form some idea of the practice of cannibalism; I can only say that the succulence and quality of this creature's flesh were quite unexceptionable. I have noticed this with most of the species of Old-World monkey I have as yet tasted. During my four months' stay in Mandara's country I ate the common Cercopithecus pygerythrus constantly, and found it made a very toothsome stew. The most remarkable monkey in all this region

is probably the Colobus, which apparently offers a new variety or sub-species in the country round Kilima-njaro, remarkable for

having an entirely white heavilyplumed tail. The common species, with a black tail tipped with white, I have shot in the forested plains near the coast. The Colobus monkey is almost the only one that quite avoids the neighbourhood of man; the others generally frequent the vicinity of native plantations, and doubtless profit by the abundance of cultivated food. I never observed any Galago (a lemuroid animal) in this district, nor do the natives speak of one, although it is a genus well represented in other parts of Africa.

Bats are by no means common or often seen. I saw some fruit-bats once in the forest hanging to a sycamore fig-tree. No member of the group of Insectivora came under my notice. The Carnivora in this country of big game are, of course, well represented. The lion is very abundant and very bold; but the leopard is more feared by the natives than his larger ally. While stopping in Mandara's country, two of that chief's subjects were killed by leopards, one of them close to the frequented village-green. The leopard ascends the mountain up to about 8,000 ft., scarcely higher. I shot one of these creatures in the valley of a stream in broad daylight. I think

it had been sleeping by the water, and was suddenly awakened by my near approach, and too dazed to fly immediately. The most common dog is the side-striped jackal. There is a wild dog found on Kilima-njaro which barks loudly. It is quite nocturnal, and I have never been able to shoot it; but from its appearance in bright moonlight it looks somewhat like the Abyssinian dog. The natives know it by a different name than that applied to the jackal.

Hyænas are very common, and both species, striped and spotted, are present; but the striped hyæna more affects the hills, while the spotted kind inhabits the plains. The spotted hyæna is a much more predatory animal here than one generally imagines. Not only does it steal sheep and calves from the herds, but it even carries off children, and will often attack wounded or weakly men. I once sent a sick man back to the coast a short distance by himself, and he was severely bitten at night by the hyænas. He succeeded, however, in beating them off, and recovered from his wounds.

Civets and genets are very common; so also are one or two species of ichneumon. I noticed no kind of weasel, ratel, or badger.

plains, to judge by his many huge burrows; but I have never seen him, and only identify him from natives' descriptions.

Kilima-njaro (H. Brucci) between 7,000 and 11,000 feet. It lives entirely in the trees, which it climbs with the facility of a squirrel, It is much sought after by the Wa-Chaga for its warm,

furry skin, which is made into cloaks.

The elephant inhabits Kilima-njaro up to a great height. I have seen two females and a young one at an altitude of 15,000 feet, crossing a stream valley, and mounting the opposite bank with the agility of goats. As I have also met with this crea-

ture in the Chella Mountains of Angola, where he climbs to 8,000 feet, in fact, as high as he can go, I am convinced he can easily adapt himself to a mountain life.

Round the base of Kilima-njaro the rhinoceros is very abundant; and in Lake Jipé hippopotami are found. The zebra (Equus Chapmani) is present in incredible quantities in the plains round Kilima-njaro. In fact, the vast herds of

The orycteropus, or Cape ant-bear, is common on the NEOTRAGUS KIRKII varied game which pasture on the level country between the snow mountains and the coast remind one of the tales of Gordon Cumming.

Among the more noticeable Ruminatia are the buffalo (Bubalus Caffer) the giraffe (very abundant), the eland, the kudu, the bushback (Tragelaphus sylvaticus), the sable antelope (Hippotragus niger), the pallah, one or two gazelles, gnus, hartebeests, blessboks, and many small species of Neotragus and a Cephalophus. The kudu penetrates up the mountain to a height of 14,000 feet, in company with the buffalo, attracted possibly by the sweet perennial pasture. A Neotragus and a Cephalophus are also found at high altitudes. I give here a drawing of a head of the little Neotragus antelope (possibly N. Kirkii) found on Kilima-njaro. As you may see it has the nose nearly developed into a trunk, a tendency which is very common, after all, among mammals, and which reaches its utmost development with the elephant.

In the plains round Kilima-njaro the red hartebeest (Alcephalus Cokei) is found in myriads. This creature by the colour of its coat and its strange shape assimilates marvellously with the huge red ant-hills (habitations of the white termites) which abound in the districts favoured by the hartebeests. When you are out stalking it is really most difficult and puzzling

grass hiding the antelope's legs leaves mercly a red humped mass which, until it moves, may well be a mound of red earth. The unconscious mimicry is rendered the more ludicrously exact sometimes by the sharply-pointed flag-like leaves of a kind of lily which frequently crown the summit of the ant-hill or grow at its base, thus suggesting the horns of an antelope, either with the head erect, or browsing low down.

Among the passerine birds of Kilima-njaro I have brought back six that are new to science. Three of these are sun-birds, one is a flycatcher. and the remaining two are chats. The sun-birds are found very high up the mountain, in that resembling the humming-birds which frequent the Andes near to the snow-line. They hover round the long tubular flowers of certain labiate plants, and on being captured it will be noticed that the feathers of the brow are thickly covered with pollen, so that in these regions sun-birds share with insects the means of fertilising flowers.

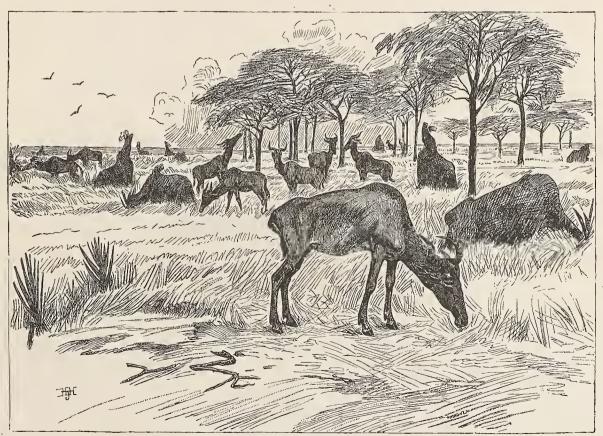
The bird mentioned in the preceding Supplement as being found at a height of 14,000 feet, the highest dweller, except the occasional apssing ravens or kites, is Pinarochroa hypopodia, a kind of stonechat.

Other passerine birds of note are a lovely oriole (Oriolus notatus), which frequents the forests of the lower slopes, and the great white-



THE GAME COUNTRY

Among the Rodentia there were few that came under my notice. sometimes to know which is hartebeest and ant-hill; for the long A species of Graphiurus (probably G. capensis) is found in the



THE RED HARTEBEEST-ANTELOPES AND ANT-HILLS

forests of Kilima-njaro. The porcupine is fairly common, and a small black rat infests the natives' houses. A hyrax is found no necked raven, alluded to and illustrated in the preceding Supplement.

The great crested hornbill (Buceros cristatus) is generally distributed over the mountain up to 6,000 feet, especially near habitations. They show no fear of man, being generally protected by the natives, who look upon them with superstitious awe, arising possibly from their being useful scavengers, as well as from their pcculiar loud cry, which resembles at times that of the wailing of a woman in distress, at others that of the braying of an ass. In August and September they are generally breeding, and occasionally the head of the female may be seen peering out from a hole in a tree, some thirty or forty feet high, where she has been plastered in by her affectionate husband. By the chips lying about it would appear that these holes are excavated by the birds to the required size. They are monogamous, and show great affection for each other, which is fortunate, as the female during incubation has entirely to rely on her mate for daily sustenance. I shot a fine male hornbill once, at Taveita, and he fell to the ground mortally wounded. His dying struggles were quite touching to behold, and I felt almost criminal in having caused his death. His breath came and went in great gasps, and his snowy stomach was streaked with red blood. His large eye with long lashes gazed at me with calm wonder and vague reproach, as if to say, "What ill have I done that you should kill me?" He disdained to snap at the stick with which I gently poked his opened beak, and still kept his eye fixed on me, regarding my impertinent investigations of his person as unnecessary insults. So he lay during some minutes, with long shuddering breathings raising and lowering the feathers of his breast and back. Then another hornbill, evidently his mate, came and perched on the bough of a neighbouring tree and uttered a low cry. The dying bird started up to life again, raised his head high, flapped his wide-spread, glossy wings, dragged himself painfully along the ground, and gave vent to one sonorous bellow; then his great head dropped on one side, and his wide open eye glazed with an expression of eager hope hardened in it even in death.

A beautiful turaco inhabits the forests in Kilima-njaro. It is bluish-green and purple, with a white-lined crest and scarlet skin round the eyes. Its wings, like most other turacos, have intense crimson pinions, and therefore it is a gorgeous object as it flaps its loose flight through the forest aisles.

There are many other interesting birds to be found on and in the neighbourhood of Kilima-njaro, but, as this is not a special article on ornithology, I fear I should weary you with their enumeration.

Among reptiles, crocodiles are found in Lake Jipé and in the River Ruva. Large Varanus lizards are frequently found in the forests of Taveita. They share the water and the trees as their habitat, generally plunging into the stream when frightened or disturbed. They seem to me to feed largely on fish, and no doubt often capture and eat small squirrels and birds. When extended full length along a tree trunk, immobile, and exactly matching the colour of the bark with their grey-green mottled skin, these creatures are very hard to distinguish from their surroundings, and doubtless often in consequence deceive the sharp eyes even of a squirrel. From what I know of these creatures, and from what the natives tell me, they use their long, heavy, whip-like tail as a powerful weapon. When driven into a corner they will slash right and left, and if the tail strikes your shins they will certainly be barked. A blow with the tail will kill a dog, and I believe many an unwary bird, squirrel, and possibly small monkey, is flicked from a tree overhanging the stream into the water, and plunged after by the agile lizard. The teeth of this creature are weak and blunt, and only sufficient for mastication.

Chameleons are not only very eommon on Kilima-njaro, but are found up to an altitude of 13,000 feet. The natives regard them as venomous and hurtful, and scream with fear if one is pushed near them. They regarded me as a sorcerer when I handled these creatures with impunity. Of course the poor little chameleons, like the "effets" that our nurses always warned us against, are entirely innocuous, and make, moreover, interesting pets, being a great source of amusement with their goblinish ways and strange appearance. Frogs are found in the ice-cold streams as high up as 13,000 feet. Tree frogs of many kinds haunt the forest, and chirp perseveringly.

Fish are nowhere found in the rivers of Kilima-njaro, save in the River Lumi, which flows into Lake Jipé. I give a drawing of the only kind eaught in the Lumi, which is the river of Taveita. In Lake Jipé a silurus is very common, and there are many other kinds of fish also present, but the shores of the Lake are deserted, nobody fishes there, and the fish would not rise to ordinary bait; therefore as my time at Jipé was short, and my health bad, I had no opportunity of investigating its piscine forms. Fresh water crabs of the genus Thelphusa (T. depressa, var. folinstoni) are present in most of the mountain streams. They appear to be most closely related to the river crabs of Natal and South Africa.

Throughout this region butterflies are few and scarce. They do not penetrate much higher than 8,000 or 9,000 feet. The common Clouded Yellow is often seen on Kilima-njaro.

Bees and wasps penetrate to a height of 14,000 feet. Most of the beetles are allied to, or identical with, South-east African forms. One new species has no allies nearer than India. Others are

related to Abyssinian species, and some to the beetles of Somali-

The flora of Kilima-njaro is naturally interesting, as may be imagined from the extraordinary range of climate between the eternal snows of the summits and the hot tropical plains at the base. The vegetation on the coast is fairly rich and luxuriant, and typical of the Tropics. There are fine forest trees-mimosas, figs, baobabs, bombax, calophyllum, and others, while the mango has been introduced from India, and become wild. The pandanus grows in marshy places; cycads are occasionally seen, and among palms the coco-nut, the borassus, the Hyphane thebaïca (branching palm), several kinds of Raphia, Elaïs, and wild date. At the

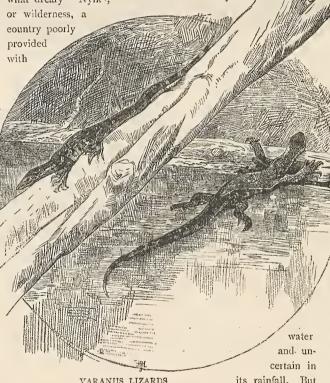
elose of the rainy season the ground is eovered with vividly-coloured wild flowers. Blue clitoreas, blue commelynas, crimson, white, yellow, purple, and pink hibiscuses, lovely epiphytic orchids, white, spotted, and green, and ground orchids of the genus Lissochilus—crimson mauve and sulphur yellow. Altogether, as I have often declared, tropical Africa differs apparently from the other parts of the Tropics in displaying splendid shows of bright-coloured flowers which really surpass anything we meet with in the temperate zone.

THE DYING HORNBILL.

with in the temperate zone.

Inland, however, a short distance from the coast this wealth of vegetation ceases as we cross the somewhat dreary "Nyika,"
or wilderness, a

commencement and



VARANUS LIZARDS its rainfall. But as soon as the beneficent influence of the giant mountains makes itself felt in

moisture-laden breezes and dew-dropping mists, then Flora revives, and puts forth all her strength. In such places like Taveita the wealth of vegetation and the grandeur of the forest trees is inspiring. You feel carried back from our age of mean devolment to some past epoch, when vegetable life was on a scale with the strange, huge animal forms which mark the lusty earth's ereative prime.

The lower slopes of Kilima-njaro are exquisitely green, and scarcely a patch of earth remains uncovered, but the general aspect



A FISH FROM THE RIVER LUMI

of vegetation recalls our English Devonshire and not the Tropics. Bushy trees crown the hill-tops, or choke the narrow valleys. The grassy downs are covered with patches of bracken and scented with a low-growing mint. The native lanes are bordered with brambles and magnificent ferns, some of which belong to common European genera. There are besides other things more properly African which do not mind the colder climate of the uplands, such as dracænas, aloes, strychnias, balsams, and ground-orchids. In some of the stream valleys the Ensele, a wild banana, grows luxuriantly. At a height of 7,000 to 8,000 feet tree-ferns may be met with. Then above that the arborescent heaths begin to appear, and the orchilla lichen covers nearly all the forest with a

grey-green veil. Between 8,000 and 9,000 feet the giant Senecios are met with (a new species, illustrated in the last supplement), and continue upwards till near the borders of the snow. Gorgeous

crimson gladioli, pale pink and mauve and cerulean blue irises, grow to great altitudes, indeed, some of the flowers of the grassy uplands between 10,000 and 14,000 feet are particularly brilliant in colour. There are vivid blue cynoglossums, the blush-pink everlastings, the yellow euryops, the strange straw-coloured proteas, with red bracts and red leaf shoots, the smalt-

coloured lobelias (L. Deckeni), and many others which it would be tedious to catalogue.

Ferns cease to be found at a greater altitude than 13,000 odd feet. The giant heaths above that altitude give place to smaller species, the vegetation generally becomes more and more stunted, and therefore the strange senecios look

the stranger from their towering in solitary grandeur above the lowly herbs. But after an altitude of 14,000 feet is passed they also disappear, then one is left with a few artemisias (southernwood), heaths, and everlasting flowers, until at length they too disappear, and then there remains a little red and greenish lichen, expanses of yellow sand, lead-coloured rocks, black boulders, and snow.

Taking into consideration the fact that the region of Kilimanjaro is volcanie, and therefore probably geologically modern, it must be evident that the main features of its vegetation are of no great antiquity. It is therefore an interesting problem as to which of the two floras-the South African or the Abyssinian-was the first to reach the chilly regions round its snow-elad peaks. It is also as yet an undecided question as to which flora is the advancing one; whether the Cape forms are slowly penetrating northward, some of them reaching Abyssinia, some of them arrested on the heights of Kilima-njaro, and marking a return flow of the vegetation (and possibly of the fauna also) of Southern Africa, or whether the great invasion of Northern forms which have so largely contributed in later epochs to the modern fauna and flora of Tropical Africa is still going on. Whilst Cape genera and species of plants penetrate to Abyssinia, Abyssinian forms have reached the Zambesi highlands and the Drakensberg Mountains.

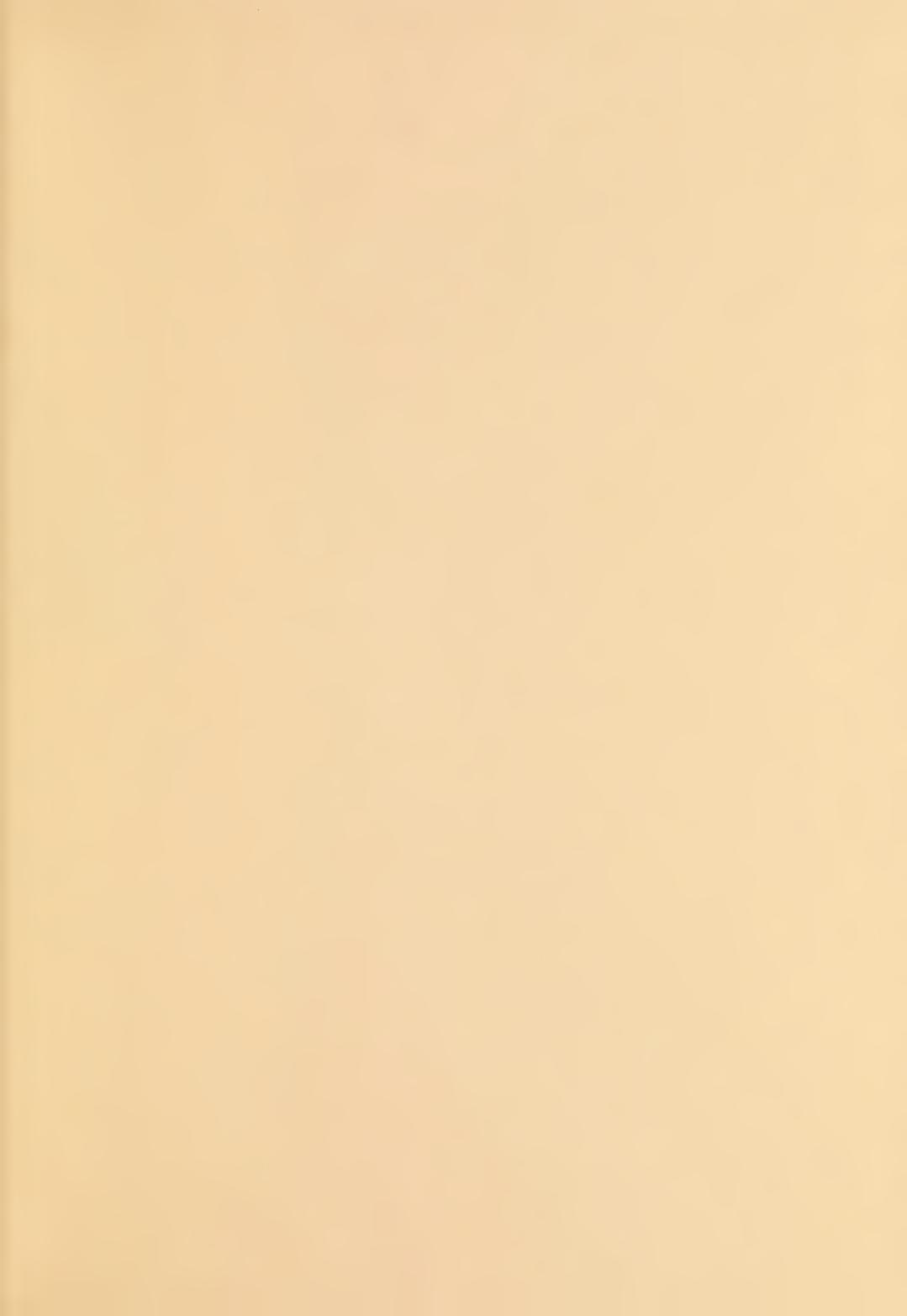
The flora of the higher regions of Kilima-njaro is almost equally divided in its affinities between Abyssinia and Cape Colony. There are besides, in the collections I have brought back, two new genera offering no near allies; types of other genera only known hitherto in Arabia or India; and some new species of East African genera that have apparently modified themselves for life at high altitudes. It is interesting to note that while some of the species whose generic home is in the hot tropical plains have strayed up the great mountain and got used to the eold, so others, which come from temperate regions, have ventured down the mountain and got used to the heat. A eurious instance of this is Artemisia afra, which I have found at 14,000 feet near the snow, and at 3,000 feet, in close proximity to the hot plains. If plants of temperate or cold elimates could occasionally stray so far as this from the regions and the temperature they most affect it would materially aid in their distribution, for the seeds of the Artemisia (this plant will be familiar to my non-scientifie readers as "southernwood," or "old man") might easily be borne from the jungle at the base of Kilima-njaro to the precincts of Mount Meru, some thirty miles distant, and find on the chilly slopes of that mountain another eongenial home and starting-place for a further colonisation of unknown peaks beyond. Thus, taking into consideration the fact that more or less high ground connects the mountains of the Kilima-njaro district with the Cape Colony in the south and the Cameroons in the west, it is possible to account for the presence of many hardy genera belonging to temperate zones on the heights of tropical Africa without always evoking a glacial epoch to account for them.

In 1855, or thereabouts, the American poet, Bayard Taylor, heard of the discovery of Kilima-njaro by the German Missionary, Rebmann. The mere announcement of the fact (for no detailed description was given by the discoverer) that a snow-crested mountain existed in Equatorial Africa, fired the poet's imagination, and he addressed a sonnet of welcome to the highest of African peaks.

Much that he sings is beautiful, but botanically incorrect; nevertheless he has with true inspiration touched on the wonderful range of climates that the slopes of Kilima-njaro must exhibit, and it seems to me that I cannot more fitly close this series of descriptive papers than by a quotation from the only poem that has been written on this mountain, where

The climates of Earth are displayed as an index, Giving the scope of the Book of Creation, There in the gorges that widen, descending, From cloud and from cloud into summer eternal, Gather the threads of the ice-gendered fountains, Gather to riotous torrents of crystal, And, giving each shelvy recess where they dally The blooms of the north and its ever-green turfage, Leap to the land of the lion and lotus!

H. H. JOHNSTON



f DT Johnston, Harry
449 Hamilton.
K4 A journey to
J73 Mount Kilima-njaro,
1885 Africa: in four parts
SCNHRB ...

1885



