

## LAKE REGIONS OF CENTRAL AFRICA,

A PICTURE OF EXPLORATION.

BY

## RICHARD F. BURTON,

Capt. H. M. I. Army; Fellow and Gold Medalist of the Royal Geographical Society.

"Some to discover islands far away."-Shakspeare.

pr. 1-xvi, 17-572

NEW YORK:

HARPER & BROTHERS, PUBLISHERS, FRANKLIN SQUARE

1860.

Republished 1971 Scholarly Press, Inc., 22929 Industrial Drive East St. Clair Shores, Michigan 48080



perature of these cloud-capped and rainy crags, which never expose their outlines except in the clearest weather, affects the plains; by day bleak northeast and northwest gusts pour down upon the sun-parched Dut'humi, and at night the thermometer will sink to 70°, and even to 65° F. Water is supposed to freeze upon the highlands, yet they are not unhealthy; sheep, goats, and poultry abound; betel-pepper grows there, according to the Arabs, and, as in the lowlands, holcus and sesamum, manioc and sweet potatoes (Convolvulus batata), cucumbers, the turai (Luffa acutangula), and beans, plaintains, and sugar-cane, are plentiful. The thick jungle at the base of the hills shelters the elephant, the rhinoceros in considerable numbers, the gnu, and the koodoo, which, however, can rarely be found when the grass is high; a variety of the ngole—a small dendraspis—haunts the patriarchs of the forest, and the chirrup of the mongoose, which the people enjoy, as Europeans do the monotonous note of the cricket, is heard in the brakes at eventide. This part of the country, about six hours' march northward from Dut'humi, is called the Inland Mgogoni; and it is traversed by the "Mdimu" nullah, which falls into the Mgeta River. The fertile valleys in the lower and southern folds are inhabited by the Wakumbaku (?),\* and by the Wasuop'hangá tribes; the higher elevations, which apparently range from 3000 to 4000 feet, by the Waruguru. They are compelled to fortify themselves against the cold and the villainous races around them. The plague of the land is now one Kisabengo, a Mzegura of low origin, who, after conquering Ukami, a district extending from the eastern flank of the Dut'humi hills seaward, from its Moslem diwan, Ngozi, alias Kingaru, has raised himself to the rank of a shene khambi, or principal headman. Aided by the kidnapping Moslem coast-clans of Whinde, a small coast-town opposite the Island of Zanzibar, and his fellow tribemen of Uzegura, he has transferred by his frequent commandos almost all the people of Ukámí, chiefly Wásuop'hángá and Wárúgúrú, to the slave-market of Zanzibar, and, thus compelled to push his depredations farther west, he has laid waste the lands even beyond the Mukondokwa river-valley. The hill tribes, however, still receive strangers hospitably into their villages. They have a place visited even by distant Wazaramo pilgrims. It is described as a cave where a p'hepo or the disembodied spirit of a man, in fact a ghost, produces a terrible subterraneous sound, called by the people kurero or bokero; it arises probably from the flow of water underground. In a pool in the cave women bathe for the blessing of issue, and men sacrifice sheep and goats to obtain fruitful seasons and success in war. These hill-races speak

peculiar dialects, which, according to the guides, are closely connected with Kik'hutu.

Despite the bad name of Dut'humi as regards climate, Arabs sometimes reside there for some months for the purpose of purchasing slaves cheaply and to repair their broken fortunes for a fresh trip to the interior. This keeps up a perpetual feud among the chiefs of the country, and scarcely a month passes without fields being laid waste, villages burnt down, and the unhappy cultivators being carried off to be sold.

At Dut'humi a little expedition was sent against Manda, a petty chief, who, despite the presence of the Sayyid's troops, had plundered a village and had kidnapped five of the subjects of Mgota, his weaker neighbor. I had the satisfaction of restoring the stolen wretches to their hearths and homes, and two decrepit old women that had been rescued from slavery thanked me with tears

of iov

This easy good deed done, I was able, though with swimming head and trembling hands, to prepare accounts and a brief report of proceedings for the Royal Geographical Society. These, together with other papers, especially an urgent request for medical comforts and drugs, especially quinine and narcotics, addressed to Lieut. Colonel Hamerton, or, in case of accidents, to M. Cochet, Consul de France, were intrusted to Jemadar Yaruk, whom, moreover, I took the liberty of recommending to the prince for the then vacant command of the Bagamoyo garrison. The escort from Kaole, reduced in number by three desertions, was dismissed. All the volunteers had been clamoring to return, and I could no longer afford to keep them. Besides the two supplies of cloth, wire, and beads, which preceded, and which were left to follow us, I had been provided by Ladha Damha with a stock of white and blue cottons, some handsome articles of dress, 20,000 strings of white and black, pink, blue, and green, red and brown porcelain beads, needles, and other articles of hardware, to defray transit charges through Uzarama. This provision, valued at 295 dollars, should have carried us to the end of the third month; it lasted about three weeks. Said bin Salim, to whom it had been intrusted, had been generous, through fear, to every half-naked barbarian that chose to stretch forth the hand of beggary; moreover, while too ill to superintend disbursements, he had allowed his "children," aided by the Baloch and the "sons of Ramji," to "loot" whatever they could seize and secrete. Ladha Damha, unable to complete our carriage, had hit upon the notable device of converting eighteen pieces of American domestics into saddlecloths for the asses: the stuff was used at halts as bedding by the Baloch and others; and—a proof that much had fallen into wrong hands—the thirteen men composing our permanent guard increased the number of their laden asses from two to five; moreover, for many weeks afterward, the "sons of Ramji" could

<sup>\*</sup> This unsatisfactory figure of print will often occur in these pages. Ignorance, error, and causeless falsehood, together with the grossest exaggeration, deter the traveler from committing himself to any assertion which he has not proved to his own satisfaction.

rent, lay in muddy holes broadly fringed with silky grass. Travelers drink without fear this upper Marenga Mk'hali, which, despite its name, is rather soft and slimy than brackish, and sign of wild beasts—antelope and buffalo, giraffe and rhinoceros—appear upon its brink. It sometimes dries up in the heart of the hot season, and then deaths from thirst occur among the porters who, mostly Wanyanwezi, are not wont to practice abstinence in this particular. "Sucking-places" are unknown to them, water-bearing bulbs might here be discovered by the South African traveler; as a rule, however, the East African is so plentifully supplied with the necessary that he does not care to provide for a dry day by unusual means. Ascending another steep incline we encamped upon a small step, the half-way gradient of a higher level.

The 24th September was to be a tirikeza: the Baloch and the sons of Ramji spent the earlier half in blowing away gunpowder at antelope, partridge and parrot, Guinea-fowl and floriken, but not a head of game found its way into camp. The men were hot, tired, and testy, those who had wives beat them, those who had not "let off the steam" by quarreling with one another. Said bin Salim, sick and surly, had words concerning a water-gourd with the brave Khudabakhsh, and the monocular jemadar, who made a point of overloading his porters, bitterly complained because they would not serve him. At 2 P.M. we climbed up the last ladder of the rough and stony incline, which placed us a few hundred feet above the eastern half of the Lesser Desert. We took a pleasant leave of the last of the rises; on this line of road, between Marenga Mk'hali and Western Unyamwezi, the land, though rolling, has no steep ascents nor descents.

From the summit of the Marenga Mk'hali step we traveled till sunset—the orb of day glaring like a fire-ball in our faces through dense thorny jungle and over grassy plains of black, cracked earth, in places covered with pebbles and showing extensive traces of shallow inundations during the rains; in the lower lands huge blocks of weathered granite stood out abruptly from the surface, and on both sides, but higher on the right hand, rose blue cones, some single, others in pairs like "brothers." The caravan once rested in a thorny coppice, based upon rich red and yellow clay, whence it was hurriedly dislodged by a swarm of wild bees. As the sun sank below the horizon the porters called a halt on a calabash-grown plain, near a block of stony hill veiled with cactus and mimosa, below whose northern base ran a treelined nullah, where they declared, from the presence of antelope and other game, that water might be found by digging. Vainly Kidogo urged them forward, declaring that they would fail to reach the Ziwa or Pond in a single march; they preferred "crowing" and scooping up sand till midnight to advancing a few miles, and some gourdfuls of dirty liquid rewarded their industry.

On the morning of the 26th of September, I learned that we

had sustained an apparently irreparable loss. When the caravan was dispersed by bees, a porter took the opportunity of deserting. This man, who represented himself as desirous of rejoining at Unyanyembe, his patron Abdullah bin Musa, the son of the wellknown Indian merchant, had been engaged for four cloths by Said bin Salim at Ugogi. The Arab with his usual after-wit found out, when the mishap was announced, that he had from the first doubted and disliked the man so much that he had paid down only half the hire. Yet to the new porter had been committed the most valuable of our packages, a portmanteau containing the Nautical Almanac for 1858, the surveying books, and most of our paper, pens, and ink. Said bin Salim, however, was hardly to be blamed, his continual quarrels with the Baloch and the sons of Ramji absorbed all his thoughts. Although the men were unanimous in declaring that the box never could be recovered, I sent back Bombay Mabruki and the slave Ambari with particular directions to search the place where we had been attacked by bees; it was within three miles, but, as the road was deemed dangerous, the three worthies preferred passing a few quiet hours in some snug neighboring spot.

At 1.30 P.M., much saddened by the disaster, we resumed our road, and, after stretching over a monotonous grassy plain variegated with dry thorny jungle, we arrived about sunset at a waterless kraal, where we determined to pass the night. Our supplies of liquid ran low, the Wanyamwezi porters, who carried our pots and gourds, had drained them on the way, and without drink an afternoon march in this droughty land destroys all appetite for supper. Some of the porters presently set out to fill their gourds with the waters of the Ziwa, thence distant but a few miles; they returned, after a four hours' absence, with supplies, which restored

comfort and good-humor to the camp.

Before settling for the night Kidogo stood up, and to loud cries of "Maneno! maneno!"—words! words! equivalent to our parliamentary hear! —delivered himself of the following

speech:

"Listen, O ye whites! and ye children of Sayyidi Majidi! and ye sons of Ramji! hearken to my words, O ye offspring of the night! The journey entereth Ugogo—Ugogo (the orator threw out his arm westward). Beware, and again beware (he made violent gesticulations). You don't know the Wagogo, they are ——s and ——s! (he stamped). Speak not to those Washenzi pagans; enter not into their houses (he pointed grimly to the ground). Have no dealings with them, show no cloth, wire, nor beads (speaking with increasing excitement). Eat not with them, drink not with them, and make not love to their women (here the speech became a scream). Kirangozi of the Wanyamwezi, restrain your sons! Suffer them not to stray into the villages, to buy salt out of camp, to rob provisions, to debauch with beer, or to sit by the

sion, when our tent had not appeared, Said bin Salim, to whom message had been sent, refused to lend us one half of the awning committed to him, a piece of canvas cut out to serve as a tent and lug-sail. Bombay then distinguished himself by the memorable words—"If you are not ashamed of your master, be ashamed of your servant!" which had the effect of bringing the awning and of making Said bin Salim testily refuse the half returned to him.

Jiwe la Mkoa, or the Round Rock, is the largest of the many hogs'-backs of gray syenite that stud this waste. It measures about two miles in extreme diameter, and the dome rises with a gentle slope to the height of 200 or 300 feet above the dead level of the plain. Tolerable water is found in pits upon a swamp at its northern base, and well-covered mtego or elephant-traps, deep grave-like excavations, like the Indian "ogi," prove dangerous to travelers; in one of these the jemadar disappeared suddenly, as if by magic. The smooth and rounded surface of the rock displays deep hoof-shaped holes, which in a Moslem land would at once be recognized as the asr, or the footprints of those holy quadrupeds, Duldul or Zu'l Jenah. In places the jiwe, overgrown with scattered tufts of white grass, and based upon a dusty surface blackened by torrent rains, forcibly suggested to the Baloch the

idea of an elderly negro's purbald poll.

We encamped close to the jiwe, and in so doing we did wrong: however pleasant may be the shadow of a tall rock in a thirsty land by day, way-wise travelers avoid the vicinity of stones which, by diminished radiation, retain their heat throughout the night. All caravans passing through this clearing clamor to be supplied with provisions; our porters, who had received rations for eight days, which they consumed in four, were no exceptions to the rule. As the single little village of Jiwe la Mkoa could afford but one goat-skin of grain and a few fowls, the cattle not being for sale, and no calves having been born to the herds, the porters proposed to send a party with cloth and beads to collect provaunt from the neighboring settlements. But the notable Khalfan bin Khamis, the most energetic of the coast Arabs in whose company we were traveling, would brook no delay: he had issued as usual three days' rations for a long week's march, and thus by driving his porters beyond their speed, he practiced a style of economy usually categorized by us at home as "penny-wise and poundfoolish." His marching was conducted upon the same principle; determining to save time, he pushed on till his men began to flag, presently broke down, and finally deserted.

At Jiwe la Mkoa the neck of the desert is broken: the western portion of the Mgunda Mk'hali has already thinned out. On the 23d October, despite the long march of the preceding day, Khalfan proposed a tirikeza, declaring that the heavy nimbus from the west, accompanied by a pleasant cold, portended rain, and that this rain, like the "choti barsat" of India, announces the approach

of the great masika, or vernal wet season. Yielding to his reasons, we crossed the "Round Rock," and passing through an open forest of tall trees, with here and there an undulating break, now yellow with quartz, then black with humus, we reached, after about three hours, another clearing like Jiwe la Mkoa, which owes its origin to the requirements of commerce. "Kirurumo" boasted of several newly-built tembe of Wakimbu, who supplied caravans at an exorbitant rate. The blackness of the ground, and the vivid green of vegetation, evidenced the proximity of water. The potable element was found in pits, sunk in a narrow nullah running northward across the clearing: it was muddy and abundant. On the next day the road led through a thin forest of thorns and gums, which, bare of bush and underwood, afforded a broad path, and pleasant, easy traveling. Signs of elephant and rhinoceros, giraffe and antelope, crossed the path, and, as usual in such places, the asses were tormented by the tzetze. After traveling four hours and thirty minutes, we reached a new settlement upon the western frontier of Uganzi, called "Jiweni," "near the stones," from the heaps of block and boulder scattered round pits of good water, sunk about three feet in the ground. The Mongo Nullah, a deep surface-drain, bisects this clearing, which is palpably modern. Many of the trees are barked previous to felling, and others have fallen prostrate, apparently from the depredations of the white ant. On the 25th, after another desert march of 2hrs. 20m. through a flat country, where the forest was somewhat deformed by bush and brake, which in places narrowed the path to a mere goat-track, we arrived at the third quarter of Mgunda Mk'hali. "Mgongo T'hembo," or the Elephant's Back, derives its name from a long narrow ridge of chocolate-colored syenite, outcropping from the low forest lands around it; the crest of the chain is composed of loose rocks and large detached boulders. Like the other inhabited portions of Mgunda Mk'hali, it is a recent clearing; numerous "black-jacks," felled trees, and pollarded stumps still cumber the fields. The "Elephant's Back" is, however, more extensive and better cultivated than any of its neighbors-Mdáburu alone excepted-and water being abundant and near the surface, it supports an increasing population of mixed Wakimbu and Wataturu, who dwell in large substantial tembe, and live by selling their surplus holcus, maize, and fowls to travelers. They do not, like the Wakimbu of Jiwe la Mkoa, refuse entrance to their villages, but they receive the stranger with the usual niggard guest-rites of the slave-path, and, African-like, they think only of what is to be gained by hospitality. Here I halted for a day to recruit and to lay in rations. The length of the stages had told upon the men; Bombay had stumped himself, several of the sons of Ramji, and two of Said bin Salim's children were unable to walk; the asses, throwing themselves upon the ground, required to be raised with the stick, and all preferred rest ta of Sindh and Arabia, with its currant-like bunches of fruit, is conspicuous for its evergreen verdure; the ragged and stunted mtungulu rains its apples upon the ground; and the mbembu, in places sheltered from the sun, bears a kind of medlar which is eagerly sought by the hungry traveler. The euphorbiæ here rise to the height of 35 or 40 feet, and the hard woody stem throws out a mass of naked arms, in the shape of a huge cap, impervious

to the midday sun.

Wild animals abound through these jungles, and the spoor lasts long upon the crisp gravelly soil. In some districts they visit by night the raised clay water-troughs of the cultivators. The elephant prefers the thick jungle, where he can wallow in the pools and feed delicately upon succulent roots and fruits, bark, and leaves. The rhinoceros loves the dark clumps of trees, which guard him from the noonday sun, and whence he can sally out all unexpected upon the assailant. The mbogo, or bos caffer, driven from his favorite spots, low grassy plains bordering on streams, wanders, like the giraffe, through the thinner forests. As in Unyamwezi, the roar of the lion strikes the ear by night, and the cry of the ostrich by day. The lion upon this line of Eastern Africa is often heard, but rarely seen; on only two occasions its footprints appeared upon the road. The king of beasts, according to the Arabs, is of moderate stature: it seldom attains its maximum of strength, stature, and courage, except in plain countries where game abounds, as in the lands north of the Cape, or in hills and mountains, where cattle can be lifted at discretion, as in Northern Africa. In Unyamwezi its spoils, which are yellow, like those of the Arab lion, with a long mane, said to hang over the eyes, and with a whitish tinge under the jaws, become the property of the sultan. The animal is more common in the high lands of Karagwah than in the low countries; it has, however, attacked the mbogo, or wild bull, and has destroyed cattle within sight of the Arabs at Kazeh in Unyanyembe. The lion is rarely a maneater; this peculiarity, according to some writers, being confined to old beasts, whose worn teeth are unfit for fight.

The "polygamous bird" was first observed on the Ugogo plateau; it extends through Unyamwezi and Usukuma to Ujiji. The eggs are sold, sometimes fresh, but more generally stale. Emptied and dried, they form the principal circulating medium between the Arab merchants and the coffee-growing races near the Nyanza Lake, who cut them up and grind them into ornamental disks and crescents. The young birds are caught, but are rarely tamed. In Usukuma, the bright and glossy feathers of the old male are much esteemed for adorning the hair; yet, curious to say, the bird is seldom hunted. Moreover, these East Africans have never attempted to export the feathers, which, when white and uninjured, are sold, even by the Somal, for eight dollars per lb. The birds are at once wild and stupid, timid and headstrong;

their lengthened strides and backward glances announce terror at the sight of man, and it is impossible to stalk them in the open grounds, which they prefer. The leopard and the cynhyena, the koodoo and the different species of antelope, are more frequently killed in these deserts than in any other part of the line. Hog of reddish color, and hares with rufous fur, are sometimes started by caravans. The hyrax of the Somali country basks upon the rocks and boulders, and the carapace of a small land-turtle, called khasa, fastened to a branch, serves as a road-sign. The k'hwalu, a small green parrot with yellow shoulders, the upupa or hoopoe, a great variety of fly-catchers, larks with jet-black heads and yellow bodies, small bustards, hornbills, nightjars, muscicapæ, green pigeons, sparrow-hawks, and small doves, are seen in every jungle. Near the settlements, the white-necked raven and the common chil of India (Falco cheela) attest the presence of man, as the monkey does the proximity of water. The nest of the loxia swings to and fro in the fierce simoom; the black bataleur eagle of Somaliland, a splendid bird, towering shyly in the air, with his light underplume gleaming like a silver plate, and large vultures (condors?) flocking from afar, denote the position of a dead or dying animal.

Until late years, the Wagogo, being more numerous than they are now, deterred travelers from traversing their country: in those early days the road to Unyamwezi, running along the left or northern bank of the Rwaha, through the Warori tribe, struck off near Usanga and Usenga. It is related, when the first caravan, led by Jumah Mfumbi, the late Diwan of Saadani, entered Ugogo, that the people, penetrated with admiration of his corpulence, after many experiments to find out whether it was real or not, determined that he was and must be the Deity. Moreover, after coming to this satisfactory conclusion, they resolved that, being the Deity, he could improve their country by heavy rains, and when he protested against both these resolutions, they proposed to put him to death. A succession of opportune showers, however, released him. By degrees the ever-increasing insolence and violence of the Warori drove travelers to this northern line, and the Wagogo learned to see strangers without displaying this Libyan mania for sacrificing them.

Three main roads, leading from Western Usagara westward, cross the desert of Marenga Mk'hali. The most northern is called Yá Nyiká—of the wilderness—a misnomer, if the assertion of the guides be correct that it is well watered, and peopled by the subjects of eight sultans. The central line, described in the preceding pages, is called, from its middle station, Marenga Mk'hali: it is invariably preferred when water is scarce. The southern road is termed Nyá Ngáhá, a continuation of the Kiringwana route, previously alluded to: it has provisions, but the people cause much trouble.

The superiority of climate, and probably the absence of that

wait upon appetite; and that, as in Egypt, Mazanderan, Malabar, and other hot-damp countries, no man long retains rude health. The sequelæ of their maladies are always severe; few care to use remedies, deeming them inefficacious against morbific influences to them unknown; convalescence is protracted, painful, and uncertain, and at length they are compelled to lead the lives of confirmed invalids. The gifts of the climate, lassitude and indolence, according to them, predispose to corpulence; and the regular warmth induces baldness, and thins the beard, thus assimilating strangers in body as in mind to the aborigines. They are unanimous in quoting a curious effect of climate, which they attribute to a corruption of the "humors and juices of the body." Men who, after a lengthened sojourn in these regions, return to Oman, throw away the surplus provisions brought from the African coast, burn their clothes and bedding, and for the first two or three months eschew society; a peculiar effluvium rendering them, it is said, offensive to the finer olfactories of their compatriots.

THE LAKE REGIONS OF CENTRAL AFRICA.

The mukunguru of Unyamwezi is perhaps the severest seasoning-fever in this part of Africa. It is a bilious remittent, which normally lasts three days: it wonderfully reduces the patient in that short period, and in severe cases the quotidian is followed by a long attack of a tertian type. The consequences are severe and lasting, even in men of the strongest nervous diathesis; burning and painful eyes, hot palms and soles, a recurrence of shivering and flushing fits, with the extremities now icy cold, then painfully hot and swollen, indigestion, insomnolency, cutaneous eruptions and fever-sores, languor, dejection, and all the inconveniences resulting from torpidity of liver, or from an inordinate secretion of bile, betray the poison deep-lurking in the system. In some cases this fever works speedily; some even, becoming at once delirious, die on the first or the second day, and there is invariably an exacerbation of symptoms before the bilious remittent passes away.

The fauna of Unyamwezi are similar to those described in Usagara and Ugogo. In the jungles quadrumana are numerous: lions and leopards, cynhyenas and wildcats, haunt the forests; the elephant and the rhinoceros, the giraffe and the Cape buffalo, the zebra, the quagga (?), and the koodoo wander over the plains; and the hippopotamus and crocodile are found in every large pool. The nyanyi or cynocephalus in the jungles of Usukuma attains the size of a greyhound; according to the people, there are three varieties of color-red, black, and yellow. They are the terror of the neighboring districts: women never dare to approach their haunts; they set the leopard at defiance, and when in a large body, they do not, it is said, fear the lion. The Colobus guereza, or tippet monkey, the "polume" of Dr. Livingstone (ch. xvi.), here called mbega, is admired on account of its polished black skin and snowy-white mane. It is a cleanly animal, ever

occupied in polishing its beautiful garb, which, according to the Arabs, it tears to pieces when wounded, lest the hunter should profit by it. The inbega lives in trees, seldom descending, and feeds upon the fruit and the young leaves. The Arabs speak of wild dogs in the vicinity of Unyanyembe, describing them as being about eighteen inches in height, with rufous-black and shaggy coats, and long thick tails; they are gregarious, running in packs of from 20 to 200; they attack indiscriminately man and the largest animals, and their only cry is a howl. About the time of our autumn the pools are visited by various kinds of aquatic birds, widgeon, plump little teal, fine snipe, curlew, and crane; the ardea, or white "paddy-bird" of India, and the "lilytrotter" (Parra Africana), are scattered over the country; and sometimes, though rarely, the chenalopex or common Egyptian goose and the gorgeous crowned crane (Balcarica pavonina), the latter a favorite dish with the Arabs, appear. In several parts of Unyamwezi, especially in the north, there is a large and well-flavored species of black-backed goose (Sakidornis melanota): the common wild duck of England was not seen. Several specimens of the buceros, the secretary-bird (Serpentarius reptilivorus), and large vultures, probably the condor of the Cape, were observed in Unyamwezi; the people do not molest them, holding the flesh to be carrion. The Cuculus indicator, called in Kisawahili "tongoe," is common; but, its honey being mostly hived, it does not attract attention. Grillivori, and a species of thrush about the size of common larks, with sulphur-yellow patches under the eyes and two naked black strize beneath the throat, are here migratory birds; they do good service to the agriculturist against the locust. A variety of the loxia or gross-bill constructs nests sometimes in bunches hanging from the lower branches of the trees. The mtiko, a kind of water-wagtail (Motacilla), ventures into the huts with the audacity of a London sparrow, and the Africans have a prejudice against killing it. Swallows and martins of various kinds, some peculiarly graceful and slender, may be seen migrating at the approach of winter in regular traveling order: of these, one variety resembles the English bird. The Africans declare that a single species of hirundo, probably the sand-martin, builds in the precipitous earth-banks of the nullahs: their nests were not seen, however, as in Southern Africa, under the eaves of houses. There are a few ostriches, hawks, ravens, plovers, nightjars (Caprimulgidæ), red and blue jays of brilliant plume, muscicapæ, blackcaps or mock nightingales (Motacilla atrocapilla?), passerines of various kinds, hoopoes, bulbuls, wrens, larks, and bats. We saw but few poisonous animals. Besides the dendrophis, the only ophidia killed in the country were snakes, with slate-colored backs and silver bellies, resembling the harmless "mas" or "hanash" of Somaliland, the Psammophis sibilaris (L.); C. moniliger Lacepède-according to Mr. Blyth ("Journal of the

the Semite and the Hamite have been and will be contented with human labor. The first thought which suggests itself to the sons of Japhet is a tram-road from the coast to the lake regions.

The subject of ivory as sold at Zanzibar is as complicated as that of sugar in Great Britain or of cotton in America. A detailed treatise would here be out of place, but

the following notices may serve to convey an idea of the trade.

The merchants at Zanzibar recognize in ivory, the produce of these regions, three several qualities. The best, a white, soft, and large variety, with small "bamboo," is that from Banadir, Brava, Makdishu, and Marka. A somewhat inferior kind, on account of its hardness, is brought from the countries of Chaga, Umasai, and Nguru. The Wamasai often spoil their tusks by cutting them, for the facility of transport; and, like the people of Nguru and other tribes, they stain the exterior by sticking the tooth in the sooty rafters of their chimneyless huts, with the idea that, so treated, it will not crack or split in the sun. This red color, erroneously attributed at Zanzibar to the use of ghee, is removed by the people with blood, or cow-dung mixed with water. Of these varieties the smaller tusks fetch from 40 to 50 dollars; when they attain a length of 6 feet, the price would be £12; and some choice specimens 7‡ feet long fetch £60. A lot of 47 tusks was seen to fetch £1500; the average weight of each was 95 lbs., 80 being considered moderate, and from 70 to 75 lbs. poor.

The second quality is that imported from the regions about the Nyassa Lake, and carried to Kilwa by the Wabisa, the Wahiao, the Wangindo, the Wamakua, and other clans. The "Bisha ivory" formerly found its way to the Mozambique, but the barbarians have now learned to prefer Zanzibar; and the citizens welcome them, as they sell their stores more cheaply than the Wahiao, who have become adepts in coast arts. The ivory of the Wabisa, though white and soft, is generally small, the full length of a tusk being 7 feet. The price of the "bab kalasi"-scrivellos or small tusks, under 20 lbs., is from 24 to 25 dollars; and the value increases at the rate of somewhat less than 1 dollar per lb. The "bab gujrati or kashshi," the bab kashshi, is that intended for the Cutch market. The tusk must be of middling size, little bent, very bluff at the point, as it is intended for rings and armlets; the girth must be a short span and three fingers, the bamboo shallow, and not longer than a hand. Ivory fulfilling all these conditions will sell as high as 70 dollars per frasilah-medium size of 20 to 45 lbs., fetches 56 to 60 dollars. The "bab wilaiti," or "foreign sort," is that purchased in European and American markets. The largest size is preferred, which, ranging from 45 to 100 lbs., may be purchased for 52 dollars per

The third and least valued quality is the western ivory, the gendai, and other varieties imported from Usagara, Uhehe, Urori, Unyamwezi, and its neighborhood. The price varies, according to size, form, and weight, from 45 to 56 dollars per frasiiah.

The transport of ivory to the coast, and the profits derived by the maritime settlers, Arab and Indian, have been described. When all fees have been paid, the tusk, guarded against smuggling by the custom-house stamp, is sent to Zanzibar. On the island scrivellos under 6 lbs. in weight are not registered. According to the late Lieutenant Colonel Hamerton, the annual average of large tusks is not less than 20,000. The people of the country make the weight range between 17,000 and 25,000 farasilah. The tusk is larger at Zanzibar than elsewhere. At Mozambique, for instance, 60 lbs. would be considered a good average for a lot. Monster tusks are spoken of. Specimens of 5 farasilah are not very rare, and the people have traditions that these wonderful armatures have extended to 227 lbs., and even to 280 lbs. each.

Among the minor articles of export from the interior, hippopotamus teeth have been enumerated. Beyond the coast, however, they form but a slender item in the caravan load. In the inner regions they are bought in retail; the price ranges between 1 and 2 fundo of beads, and at times 3 may be procured for a shukkah. On the coast they rise, when fine, to 25 dollars per frasilah. At Zanzibar a large lot, averaging 6 to 8 lbs. in weight (12 lbs. would be about the largest), will sell for 60 dollars; per frasilah of 5 lbs., from 40 to 45 dollars: while the smallest fetch from 5 to 6 dollars. Of surpassing hardness, they are still used in Europe for artificial teeth. In America porcelain bids fair to supplant them.

The gargatan (karkadan?), or small black rhinoceros with a double horn, is as common as the elephant in the interior. The price of the horn is regulated by its size; a small specimen is to be bought for 1 jembe or iron hoe. When large the price is doubled. Upon the coast a lot fetches from 6 to 9 dollars per frasilah, which at Zanzibar increases to from 8 to 12 dollars. The inner barbarians apply

plates of the horn to helcomas and ulcerations, and they cut it into bits, which are bound with twine round the limb, like the wooden mpigii or hirizi. Large horns are imported through Bombay to China and Central Asia, where it is said the people convert them into drinking-cups, which sweat if poison be administered in them: thus they act like the Venetian glass of our ancestors, and are as highly prized as that eccentric fruit the coco de mer. The Arabs of Maskat and Yemen cut them into sword-hilts, dagger-hafts, tool-handles, and small boxes for tobacco, and other articles. They greatly prize, and will pay 12 dollars per frasilah, for the spoils of the kobaoba, or long-horned white rhinoceros, which, however, appears no longer to exist in the latitudes westward of Zanzibar Island.

Black cattle are seldom driven down from the interior, on account of the length and risk of the journey. It is evident, however, that the trade is capable of extensive development. The price of full-grown bullocks varies, according to the distance from the coast, between 3 and 5 doti; while that of cows is about double. When imported from the main-land ports, I dollar per head is paid as an octroi to the government, and about the same sum for passage-money. As Banyans will not allow this traffic to be conducted by their own craft, it is confined to the Moslem population. The Island of Zanzibar is supplied with black cattle, chiefly from the Banadir and Madagascar, places beyond the range of this description. The price of bullocks varies from 5 to 8 dollars, and of cows from 6 to 9 dollars. Goats and sheep abound throughout Eastern Africa. The former, which are preferred, cost in the maritime regions from 8 to 10 shukkah merkani; in Usagara, the most distant province which exports them to Zanzibar, they may be bought for 4 to 6 shukkah per head. The Wasawahili conduct a small trade in this live stock, and sell them upon the island for 4 to 5 dollars per head. From their large profits, however, must be deducted the risk of transport, the price of passage, and the octroi, which is 25 cents per head.

The exceptional expense of man-carriage renders the exportation of hides and horns from the far interior impossible. The former are sold with the animal, and are used for shields, bedding, saddle-bags, awnings, sandals, and similar minor purposes. Skins, as has been explained, are in some regions almost the only wear; consequently the spoils of a fine goat command, even in far Usukuma, a doti of domestics. The principal wild hides, which, however, rarely find their way to the coast, are those of the rhinoceros-much prized by the Arabs for targes-the lion and the leopard, the giraffe and the buffalo, the zebra and the quagga. Horns are allowed to crumble upon the ground. The Island of Zauzibar exports hides and skins, which are principally those of bullocks and goats brought from Brava, Marka, Makdishu, and the Somali country. The korjah or score of the former has risen from 10 to 24 dollars; and the people have learned to mix them with the spoils of wild animals, especially the buffalo. When taken from the animal the hides are pinned down with pegs passed through holes in the edges; thus they dry without shrinking, and become stiff as boards. When thoroughly sun-parched they are put in soak and are pickled in sea-water for forty-eight hours; thus softened, they are again stretched and staked, that they may remain smooth: as they are carelessly removed by the natives, the meat fat, flippers, ears, and all the parts likely to be corrupted, or to prevent close stowage, are cut off while wet. They are again thoroughly sun-dried, the grease which exudes during the operation is scraped off, and they are beaten with sticks to expel the dust. The Hamburg merchants paint their hides with an arsenical mixture, which preserves them during the long months of magazine storing and sea-voyage. The French and American traders omit this operation, and their hides suffer severely from insects.

Details concerning the growth of cereals in the interior have occurred in the preceding pages. Grain is never exported from the lands lying beyond the maritime regions: yet the disforesting of the Island of Zanzibar and the extensive plantations of clove-trees rendering a large importation of cereals necessary to the Arabs, an active business is carried on by Arab dows from the whole of the coast between Tanga and Ngao (Monghou), and during the dear season, after the rains, considerable profits are realized. The corn measures used by the Banyans are as follows:

<sup>2</sup> Kubabah (each from 1.25 to 1.50 lbs., in fact, our "quart") = 1 Kisaga

<sup>3</sup> Kubabah = 1 Pishi (in Khutu the Pishi = 2 Kubabah).

<sup>4</sup> Kubabah = 1 Kayla (equal to 2 Man).

<sup>24</sup> Kayla = 1 Frasilah.

<sup>60</sup> Kuyla == 1 Jizlah, in Kisawahili Mzo. 20 Farasilah == 1 Kandi (candy).