

V.—A Coasting Voyage from Mombasa to the Pangani River; Visit to Sultan Kimwere; and Progress of the Expedition into the Interior. By Captains RICHARD F. BURTON, commanding the East African Expedition, and J. H. SPEKE, F.R.G.S.

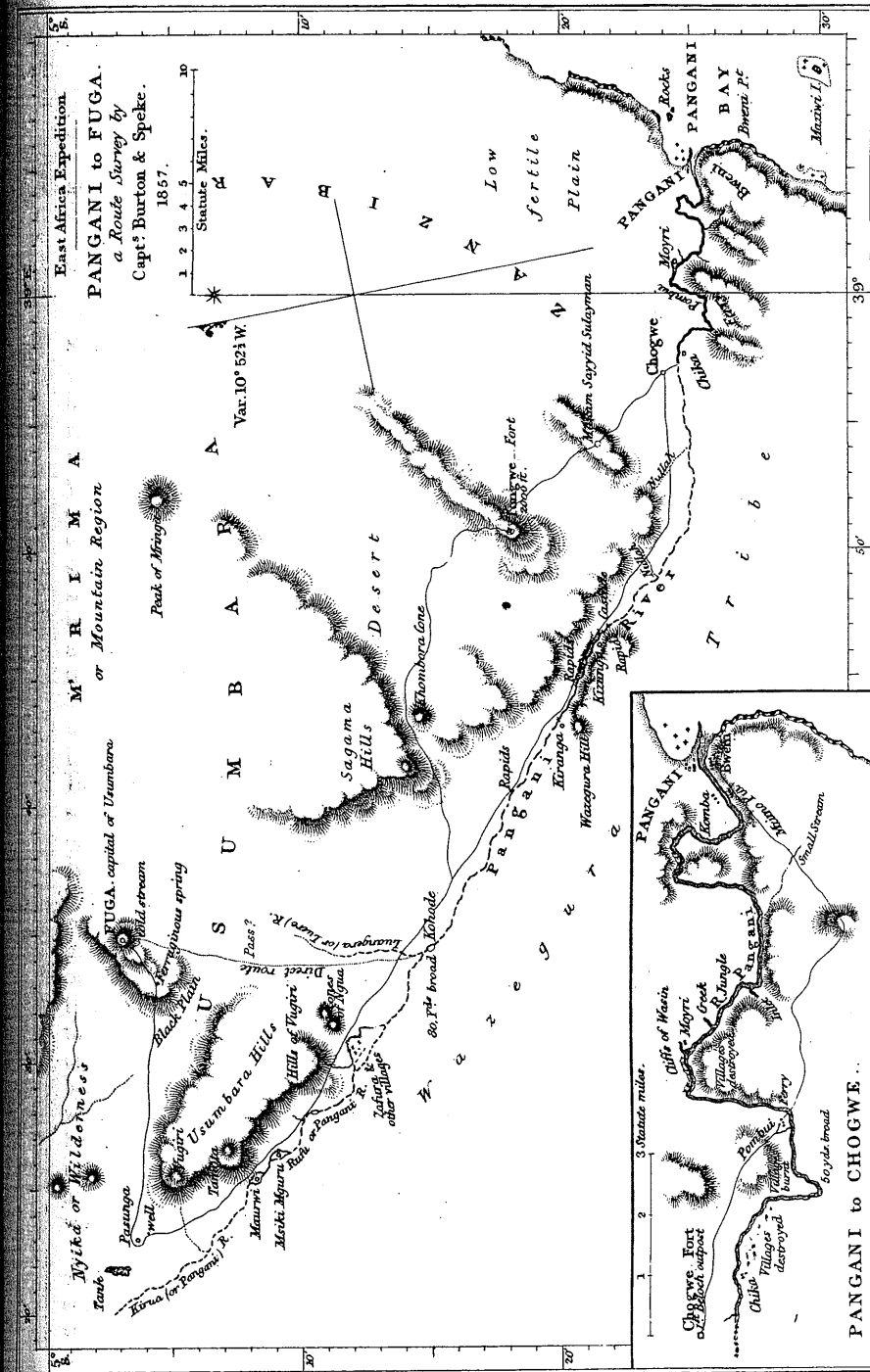
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PART I.

ON Monday, the 5th January, 1857, we left Zanzibar in the *Riami*, a small Arab "Beden," commanded by one Nakhoda Hamid of Sur, and manned with a crew picked out of the bazar. Our party consisted of Captain Speke and myself, two Portuguese servants, and Shaykh Saïd bin Salim, a respectable Arab of Zanzibar, commissioned by the Sultan to accompany us. A north-easter blew dead in our teeth: our men would not "wear round" by day, and at night all showed a predilection for the "Safar Khoriyah"—i. e. anchoring in some snug bay. Consequently we did not make Kokotoni, the usual departure point from this island, till the morning of the 8th of January.

Kokotoni, "among the pebbles," is an anchorage about 18 miles from, and nearly due n. of, the town of Zanzibar. Formed by a bight and three low islands, Tumbatu, Manawamaná, and Popo, this roadstead is rendered dangerous during the kaskazi, or n.e. monsoon, by a heavy rolling sea and a coral-bound lee shore. I visited Mwanda, a village at the bottom of the bay, inhabited by Makhadim, a servile tribe of the Sawahili. The country around is, as everywhere in Zanzibar, prodigiously fertile, green and monotonous. Mangrove and an inner belt of jungle line the coast. The interior is a mass of cultivation, manioc and sweet potato, mangos and cocos, limes and oranges, the latter planted as by the Italians, in long rows. The weeds had been burned, a rude manner of manuring, and the peasants were preparing, with ruder implements, the lower grounds to receive paddy as soon as rain might fall. After a long walk we returned on board in a "monoxyle," or boat made out of one tree;—these and the πλοιαρία βαπτά, or small craft sewed together, are still the staple of the coast,—paddled by Tumbatu fishermen, and propelled by a loir cloth acting as sail. Makhadim, like those of the mainland, Tumbatu mariners, are celebrated in these regions. They abound in curious superstitions. Like the Nasamones, who, for insight into futurity, slept upon their ancestral graves, these people pass the night in a cave where an attack of inspiration comes upon them; they are skilful in divination, and at funerals practise a pagan kind of wake, men and women foully abusing the corpse before it



goes to its long home. There is no water upon their low bank of coralline, and their sooty skins testify its heat.

With thunder, lightning, squalls, and heavy showers, which generally fell in the morning, our progress was slow. On the 5th day from Kokotoni, after stumbling over 33 miles, we sighted the southern point of Pemba, the "Green Island" of the Arabs. Chak-Chak, the chief port, fort and town, is situated in a deep inlet on the western side, and the narrowest part of the island: the only settlement of importance, it lies about 25 miles N. of the Southern Cape, and its approach is winding and difficult. Its entrance has that silent, mountainous, melancholy beauty, the beauty of death, which belongs to the creeks and rivers of these regions. The air was pure and sparkling; a light breeze curled the little waves; the sand wherever it appeared was of the purest yellow, creamed over with the whitest of foam; and luxuriant trees of brightest green drooped from their coral ledges over a sea, here deeply azure, there verdigris-coloured by the sun shining upon a shoal. But animated nature was wanting; we heard not a voice, we saw no inhabitant—all was still as a great grave. A chain of islets here forms a complicated approach to a creek, all mangrove below and covered above on both sides with rounded hills, which bear upon their rugged surface the coco and the clove. On a wooded eminence, 4 or 5 miles distant from the creek where we lay, rise the white walls and tall towers of Fort Chak-Chak, standing boldly out from its dark-green background. With the distinctest remembrance of Indian rivers, my companion and I could not but admire this scenery. Next morning early we rowed through a "gate," formed on the right by Ras Kululu, and on the left by a high plantation, Ras Bannani: it led to a broad shallow basin where two or three small Sayas (Arab craft), not wishing to approach the town, rode at anchor. After a couple of hours, during which progress was of the slowest, we entered a narrow channel bounded off by a luxuriant growth of mangrove, the black and fetid ooze that supports these forests of the sea contrasting strangely with the gay green of their foliage. The tide, which hereabouts rises 12 or 13 feet, was then rapidly ebbing: when the water is in, large boats run up under the walls of Chak-Chak; when out, the channel, within several hundred yards of the landing-place, is a quaking bog, in which man sinks up to his waist. We nearly despaired of reaching our destination when a sharp turn showed us the fort almost above our heads. After three hours of constant grounding we disembarked and waded up to the landing-place.

Ascending the hill I was struck, even after Zanzibar, with the wondrous fertility of the country. All that meets the eye is green; cocos, jacks, limes, and pyramidal mangos, grow in clumps upon the rises; the wild egg-plant and castor shrub spread over the uncultivated ridges, and the little fields bear crops of holcus,

mung, thúr, sesamum, chana or "gram," cassava, vetches, and many kinds of greens. The eternal dampness of the air, unfavourable to human, promotes vegetable development, in a luxuriance almost oppressive. After a few minutes' climb we entered the principal street of Chak-Chak, a long narrow lane, formed by square wattle dab-huts raised on platforms of tamped clay; inside consisting of a "but" and a "ben," externally of a deep verandah, where poultry, fruit, and stale fish are exposed for sale.

My first visit was to the Wali or Governor. In his absence I was received by his brother Sulayman, who lay shaking with fever upon his bed. We then took refuge from the sun at the place of Customs, where I was greeted by Pissu, the Banyan, who here collects the government dues. His reception was far more cordial than it would have been in his own land, where Bhattias are by no means renowned for hospitality. He sent for our casks and filled them from a little stream behind the town. This water is superior to the ship supplies, the brackish produce of the sands near the anchorage ground. He gave me mangos, rice, and other provisions, reproached Saíd, the guide, for not landing the night before, and when I took leave of him in the evening, sent me off in his own boat. I determined Pissu to be an exceptional man, but afterwards, on the coast, we received the same civilities from all the Hindu and almost all the Indian merchants. It need scarcely be said that besides the dignity of our companion "Saíd," we were provided by Colonel Hamerton's forethought with letters from the Sultan of Zanzibar, and, better still, perhaps, from Ladhá Damha, his collector of Customs.

Pemba is an irregular coralline bank, of the long narrow class, 38 miles from n. to s. and in breadth varying from 2 to 10. It is situated between $4^{\circ} 52'$ and $5^{\circ} 30'$ s. latitude, and $39^{\circ} 40'$ e. longitude. The latter in Owen is $39^{\circ} 35'$. Since this time, however, Bombay and the Cape have been placed 5' farther e., and the correction has been generally applied in charts and maps to the African coast. The n.w. point, Ras Kigomathe, nearest to the main, is separated by a channel 18 miles broad. The reefs and shoals, branching northward from the island to a considerable distance, are still unexplored: every ship that sounds makes some discoveries. A strong current runs between Zanzibar and the East coast of Pemba, carrying vessels northwards sometimes at the rate of 50 miles per diem. This mass of verdure, justly called the Green Isle by the Arabs of Yellow Oman, has nought objectionable but climate. As in Egypt and other damp hot lands, no man here is in rude health: laming ulcers on the legs, and painful indigestions, afflict new comers; the small pox is a plague, and the population is decimated by hydrocele and bilious fever.

The fort, situated at the town's extremity, upon a hill commanding the creek and landing-place, is probably built after an old

Portuguese model. A loopholed curtain of masonry, flanked on the right by a large round tower, a mere shell, and on the left by a square turret, penthoused with cadjan mats, forms the frontage. A few iron guns, honeycombed to the core, lie around the walls; the entrance is dilapidated; and the building, now undergoing repairs, is, like most forts in these regions, about as capable of defence as the castled crag of Drachenfels. The garrison consists of twenty Baloch, who live a life of congenial do-nothing-ness. Hearing the people of Pemba call their fort, as at Maskat, "Gurayza," doubtless a corruption of "Igreja," I inquired about Portuguese ruins, and heard of two deserted churches, in one of which a bit of steeple is still standing. The Portuguese long made the Green Isle one of their principal slave depôts: as late as 1822 their ships traded regularly to Chak-Chak. There is nothing to interest in the remnants of their semi-barbarous rule. I did not visit the ruins.

Pemba supplies to Zanzibar a little excellent ghee and poor rice: it grows cocos and cloves, and in common with all the coast exports cowries. This year, articles of consumption, except fowls, are dear. Bullocks reared on the island cost from 6 to 10 dollars, sheep brought from the mainland 3 or 4, and goats, which are rare and dear, from 7 to 9. Fowls are sold at 20 or 23 the riyal, half price of Zanzibar. The ten Banyans who make Pemba their head-quarters, demand high agio for small change, giving only 111 pice for the German crown, whereas 128 is now the rate at the capital. They also regulate the price of provisions according to the Zanzibar market, and keep the gross value of exports and imports, as usual in these regions, a profound secret.

Next morning we set sail. The crew wasted time, hoping to pass a snug sleepy night, anchored in some quiet "Khor." I insisted, however, upon a *δρομος νυχθημερος*, and they obeyed grumblingly. Grave misgivings as to the wisdom of such proceedings, however, came over me as the moonless night closed in, and, exaggerated by the dim light of the stars, rose within biscuit-throw the "silhouettes" of islet and flat rock which sent forth the threatening sound of a wash. Presently, emerging from the reefs, we smelt the sea air and felt with pleasure the long throb of the Indian Ocean.

During the three days that followed our patience was sorely tried by all the great discomforts and the small dangers of a cranky old tub, half manned by a useless, careless crew, beating against and often taken aback by half a gale, with a strong current setting the wrong way, a dark angry sea to windward, and a lee-shore of coralline banks and bars. After long gazing at the three hummocks, called by the Portuguese the "Crown of Mombasa," we were not sorry to enter the land-locked harbour,

to cast anchor opposite "English Point," and to pass the quiet night, of which we had disappointed our Arabs at Pemba. Leaving orders with Lakhmidass, the Banyan collector of customs at Mombasa, to land and lodge our luggage, Captain Speke and I set out with dawn on Saturday the 17th of January, to visit the Rev. Mr. Rebmann at Kisulodini, his mission station. A heavy boat, far too heavy indeed for its crew, two men and a small boy, carried us up the channel, or inlet, which bounds the eastern side of Mombasa Islet. Behind, or north of the town, lies "Port Tudor," a salt-water basin about 2 miles broad, and in depth varying from 1 to 15 fathoms. This prolongs itself towards the interior in two tidal arms, the northern named the "water of Wakirunga," and the north-western known as the "water of Rabai," from tribes owning the banks. Captain Owen has christened them respectively "William Creek" and "River Barrette," after officers who aided in his survey. Westward of Mombasa Island is Port Rietz, the counterpart of Port Tudor. It projects a third salt-water arm, called the "water of Doruma" from the region through which it runs, and receiving the "Muache," a sweet rivulet flowing from a spot 20 or 30 miles distant from the coast. Mr. M'Queen's "Tuaca, or Nash River" (Map, 1843) contains two distinct errors. "Tuaca" is confounded with "Mtu Apa," the "River Matwapa" of Captain Owen, a creek north of Mombasa. Moreover the great stream which appears on paper is a mere runnel: the existence of a river would have altered fundamentally the social condition of the whole interior.

We followed the "water of the Rabai," which so strongly resembles the entrance to Chak-Chak that description would be as a tale twice told. After 10 miles rowing and pulling that occupied seven hours, whereas with wind and tide three are ample, we landed at the pier,—a tree projecting over the right bank. Having carried off rudder, sails and oars, to secure the presence of the boat next morning, our land-journey commenced. We began with rolling ground, a narrow footpath crossing an expanse of high, coarse, dry grass, studded with mimosa thorn and other trees. Among them I remarked the "Galol" of Somali-land: it bears a cone like a filbert, hollow inside, with a long sharp thorn at the end, soft whilst young, but when old, dry, hard, and woody. Rolling ground extends to the foot of Rabai Hills, and the short but sharp ascent of a rocky path, at times shaded by clumps of trees, leads to the summit. Here among a little cultivation we found a "lodge" of Wanyika, or the "Desert-people," who tenant these mountains: it is useless to identify their land with the *Νικανος ὄρημος* of the Periplus, as every wild in this country is called "Nyika." The savages were all armed, being in terror of the Masai plunderers, the natural enemies of their caste. None,

however, had guns, the people of Mombasa strictly forbidding the importation of powder, a wise precaution which might be adopted in the more southern portions of the coast. They received us civilly, with the "Yambo" salutation which recalled dim memories of "Mumbo Jumbo." The road lay under the grateful cover of a little wood, and then over ridgy ground where a scattered village,—it has since been almost depopulated by the Masai spear,—was surrounded by the scantiest cultivation. At the end of a 5 miles walk we entered the Mission House, introduced ourselves, and received from its inmates the kindest welcome.

A subsequent visit to Kisulodini added somewhat to our knowledge of the country. Under different names, as Shimba and others, this range, varying in height from 700 to 1200 feet, fringes the coast from Melinde to Pangani. Distant but a few miles from a shore of shelly coralline, I found no trace of the limestone formation which forms the Somali sea-board. These hills are composed wholly of sandstones, red yellow and dark brown with oxide. The soil, as usual in East Africa, from Zayla to Mozambique, is red, and bits of quartz lie scattered upon the surface.

Above Mombasa the Rabai range is a mere ridge, rising abruptly seawards, with a gentler landward inclination. This probably has given rise to the novel idea of an interior depression in a region bounded n. and s. by rapid rivers, the Adi and Pangani. Its summit is broken into deep ravines, which during the rains pour heavy torrents into the sea-arms at their base. The people might make ample reservoirs by damming the smaller clefts; but they prefer thirst and famine to sweating their brows. Though exposed to the sea-breeze, the land requires nothing but water. We found cocos, mangos, plantains in abundance, papaws and guavas, small custard-apples, the cassava, and the castor-plant. The woods contain, it is said, copal-trees, and the higher hills supply the "mvule," whose huge trunk serves for planking and doors at Zanzibar. A little gum copal or animi is here dug; but the inveterate indolence of the natives, their rude equality, in which, as among Bushmen, no one commands, and their fondness for "tembú," or palm-wine, are effectual obstacles to progress. When we visited these hills, drought and its consequence, famine, compelled the people to sell their children. Contented with this exertion, they did no more. Shortly after we left Mombasa the wretches were attacked by the Masai, a pastoral horde, from the west, and the terror of this country; their cows were driven off, many were slain, and a party of soldiers sent from the town to defend them lost, it is reported, 25 of their number. As I hope to furnish a separate memoir upon the ethnology of East Africa, the Wanyika and Masai may now be dismissed.

We had proposed a short excursion inland from Mombasa; but

everything was against the project. Indeed it is to be feared that the entrance to Chaga, Kilimanjaro, and the hill country around, will now be closed for many years. Caravans dare not face a contest with professed plunderers, and a successful raid hereabouts always leads to divers repetitions. Such is the normal state of East Africa, from the Red Sea to the Cape. The traveller never can be sure of finding any particular road open to him—a few deaths will shut it for years and stop the explorer at the threshold of his exploration. On the other hand, the merchant commands an entrance for his goods: if one line be closed, another forthwith opens itself. Such we found the case this year at Mombasa. The western country has suddenly been shut to Arabs and Sawahili: the north-western has become as unexpectedly practicable. On the 19th of January returned the van of a large trading party, which had started for the interior in September last. About 200 men—Arabs, Sawahili, and slaves, of whom 150 were armed with muskets—left Mombasa, carrying packs to the value of 300 dollars in “merkani” (American long-cloths or sheetings) and other stuff, beads, knives, brass-wire and small chains, with stores and comforts for the way. After 14 long stages and sleeping out 24 nights, they reached Kitui, the farthest point visited by the Rev. Dr. Krapf in 1849; thence they dispersed through Kikui and Ukambani to purchase ivory. The latter article sold per frasilah of 35 lbs., for 88 cubits of cotton cloth, worth probably 11 German crowns at Zanzibar. A small merchant brought back from 1400 to 1500 lbs. I wrote down a list of their stations and marches, carefully comparing the accounts of several travellers. Ukambani was described to me as a country rich in game, with gazelles, “wild camels” (giraffes), and buffalo in the plains; hippopotamus in the rivers; rhinoceros (which the Arabs here call “el Zurráf”) and elephants, lions and leopards, in the jungle. The tribes are subject to headmen, whose influence extends over a few miles: these must be propitiated with cloth and beads, and travellers receive provisions in return for their presents. At Kikui they found a powerful chief, Mundu Wazeli, whose magical powers were held in great awe. The people, a semi-pastoral race, escort travellers, and appear hospitable: they are braver than the Wanyika, and effectually oppose the Masai when invading the country to drive off the Galla cattle. Water abounds, the climate is good, and provisions are cheap. The honey is “white as paper;” sugar-canes, cassava, holcus, and tobacco, are everywhere cultivated by the women; fowls are cheap, goats cost 8 and cows 24 cubits of long cloth. The beasts of burden are asses and a few camels. Their return road was rendered dangerous by the Gallas, who, however, did not dare to attack so large and well-armed a body. Every night they surrounded themselves with a rude abattis, and

lighted fires against wild beasts. I did not hear that any of the party perished. My informant could tell me nothing about the “giant snow-mountain Ndur-Kenia,” the volcano 6° distant from the sea, the Tumbiri or Monkey River flowing to the n.w., and the other geographical wonders detailed in late years. Yet these Arabs were acute and not incurious men: one of them, Mohammed bin Ahmed, had kept a journal of his march, noting down the several stages and distances.

Nothing, even among the Bedouin Somal, can be wilder than the specimens from Ukambani, whom I saw dancing in the streets of Mombasa. About 50 blacks, dyed with ochre, were performing the zumo or procession, men blowing kudu (coudou) horns or firing their muskets, and wild women, screaming after the fashion, called “zagharit” in Egypt, here “vigelegele.” The warriors were armed with the usual poisoned arrows and long bows, spears, knob-sticks, knives and sword, a rude imitation of the straight Oman blade; some had shock-heads of a hair fit for door-mats, others had twisted it into a hundred little corkscrews; their eyes were wild and staring; their voices loud and barking, and all their gestures denoted the “noble savage” who had run out of his woods for the first time: they were, however, in exceeding good humour. Before the last year no Arab had visited their country—trading-parties from Ukambani sold to the Wanyika, who, after fleecing those more savage than themselves, retailed their goods to the citizens. The Wakamba of the coast are, of course, anxious to promote intercourse between Mombasa and their kinsmen of the interior: thus a road first opened at the imminent risk of life, by the enterprising Dr. Krapf, now bids fair to become a highway into the interior of Eastern Intertropical Africa—a region full of varied interest. But let not geographers indulge in golden visions of the future! Some day the Arabs of Mombasa will seize and sell a caravan, or the fierce Gallas will prevail against it. Briefly, no spirit of prophecy is required to foresee that the Kikui line will share the fate of many others.

We found in the people of Mombasa by no means the most friendly inclinations. They are justly taxed with pride, bigotry, evil-speaking, insolence, turbulence, and treachery by other Arabs, and they are too far from Zanzibar for rigid control. The jemadar or fort commandant, “Tangai,” a gaunt old Mekrani, who commands about 300 men, could do nothing but beg for our guns and pistols: a little cloth, powder, and a gold chronometer would have been acceptable to his worthy son. With the governor, Khalfan bin Ali, an Arab of noble family from Oman, we were on the best of terms. The Arabs and Sawahili generally appeared to regard us as man regards his rival—viciously: the terrors of the interior were studiously exaggerated, and throughout their discourse

lies were plentiful as pronouns. We lost no time in making inquiries about the different points of interest to us, and, theta sk concluded, set sail with gladdened hearts on the morning of the 24th of January.

The conditions of our voyage were changed, wind and a counter current—running 30 and 35 miles a day—now being both in our favour. At 2 P.M. we made Gasi, a village of Mazrui Arabs driven from Mombasa by the late Sayyid Sáid. It lies half way between the former port and Wasin Island.

The position is correctly laid down in the Mission map. Gasi is an open roadstead, without other protection against the unbroken sweep of the Indian Ocean than a few scattered "washes" and a coralline islet. Concealed by a screen of mangroves, and betrayed by cocos, sure indicators of man's presence in East Africa, lies the settlement, a large village of mud huts. It is surrounded by plantations, and the inhabitants, unmolested by the Wadigo savages to whom the land belongs, live in comparative comfort.

Having passed a cool breezy night on board the *Riami*, at sunrise we made sail, and in three hours entered the passage which separates Wasin Island from the main. This channel runs due E. and W., is 2 miles long by 1 broad, and has never less than 5 fathoms of water. The north of the island is defended by diminutive coralline cliffs, against which the open sea breaks with violence. The southern shore is low and rich in "floatsoms and jetsom." Here the tide flowing among clumps of mangroves, forms little bays by no means unpicturesque. To windward lies the Wasin Bank with 4 or 5 plateaux of tree-tufted rock, emerging a few feet from the waves.

The island, which belongs to Zanzibar, is a coralline bank about $2\frac{1}{2}$ miles in length by one in breadth. The rock is thinly veiled on the leeward side by a red argillaceous soil, which produces a thick growth of thorn-plants, creepers, parasites, and jungle trees. Eastward, where the mould is deeper, there is a screen of high vegetation, and even some stunted cocos. Water must be brought from the mainland; it is brackish, but not unwholesome. The climate, however, is hot, damp, and malarious; the inhabitants, destitute of comforts and conveniences, suffer severely from fevers, sores, and small-pox. They are a bigoted, jealous, and evil-minded race, a mixture of lymphatic Arabs, hideous Sawahili, ignoble half-castes, and thieving slaves. No Banyans make this place their home. A young Cutch Bohrah manages the custom-house, and we found a small trader of the same caste purchasing the cowries, which, drying in every yard, poisoned the air. All were unarmed, and, the Indians excepted, received us with niggard civility.

The only settlement is built upon the northern shore, about

the centre of the island's length. It is composed of stone and lime mosques—long rooms with flat roofs—scattered among little huts and large houses of mangrove-timber, popularly called Zanzibar rafters. The trunks of trees are tied together with coir rope, plastered with mud, and in some cases adorned with white-wash: the sloping thatched roof is of a magnitude approaching the Madagascar type. Huge calabashes, some of them 40 and 45 feet in girth, spread their fleshy arms over the hovels, affording the favourite luxury of a cool seat, and giving a pleasant village air to the squalid settlement.

The coast opposite Wasin Island is concealed by a thick hedge of verdure, above which nod the tufts of a few cocos: its background is the rocky wall of Bondei, here and there broken by lofty blue cones. Northwards rise two high hummocks, called the "Peaks of Wasin," a conspicuous sea-mark for the voyage. This land belongs to the Wadigo, who, with their southern neighbours, the Wasegeju, are porters of the inland traffic. Trading parties, sometimes a hundred in number each, slaves included, set out at the beginning of the rainy season, March or April, from Wanga, and the other little "Bunders" on the coast. If the capital be 1000 German crowns they take 400 worth of beads, iron and brass wires (Nos. 7 and 8), and 400 of American sheeting, with stuffs of sorts; the remainder serves as pay for 40 porters, who receive 10 dollars per trip, 5 before starting, the other half after return. These caravans, if they may be so called, arrive in 20 days at the Masai and Wakuafi countries, remain trading there for three or four months, and return laden with ivory and a few slaves purchased en route.

Our Nakhoda of the *Riami* again showed symptoms of "dodging." He was anxious to spend another day at Wasin; but the will of Japhet was, as ordinarily, firmer than that of Shem. At 1 P.M., on the 26th of January, we drew in our ground-tackle, flirted with some reefs, and floated into the open sea, where combing waves were foaming under a stiff north-easter. After 2 hours of brisk sailing we were abreast of Jongoliani, a deep bay, with a prominent headland and a garnishing of little islands. A few miles nearer to Tanga than to Wasin, it is correctly placed and incorrectly delineated in the Mission map. We shortened sail when we approached Tanga, or we might have made it at 4 P.M. The sea had fallen under the lee shore of Pemba Island, but as the entrance is considered intricate, and we had no pilot, the crew preferred hobbling in under a jib, which they took a good hour to hoist. After 5 P.M. we threaded the narrow rock-bound passage which separates Tanga Island from Rashid Point, on the mainland; ran into the bay and anchored in 3 fathoms, opposite, and about $\frac{1}{2}$ a mile from, the town.

Tanga Bay is placed by Captain Owen in s. lat. $4^{\circ} 35'$, a few miles north of Wasin Island. It is about 5° s. lat., south of Wasin, and between that place and Pangani. How this extraordinary error could have crept in is an enigma to me. The bay from E. to W., 6 miles deep by 5 in breadth, is partially defended by a coralline bank, formerly the site of Tanga town. This islet still contains a small square stone fort and scattered huts: it is well wooded, but the water obtained by digging in the sand is more than brackish. As a breakwater during the N.E. monsoon it is inefficient, and when a high sea rolls up vessels must anchor close to the mainland. The bay receives the contents of two small streams, north westward (355°) the Mtu Mvoni or Kibokoni "Hippopotamus River," and westward (311°) the Utofu. The former, at several miles distance from its mouth, must be crossed in a ferry; it affords sweet water, but the people of Tanga prefer scratching into their sand to the trouble of fetching the pure element.

Tanga, like all settlements in this part of the coast, is a patch of thatched, pent-shaped huts, built in a straggling grove of cocos and calabashes. It numbers between 4000 and 5000 souls; 20 Banyans and a garrison of 15 Baloch, with the customary Jemadar. The country around is fertile, a hard red and yellow clay, producing in plenty cassava, wild toddy-palms,—their Indian use is not known—plantains and papaws, holcus and sesamum, castor and wild egg-plants. When we visited it, however, all was dry as Arabian sand, the fields were burnt, and the owners dawdled about in hourly expectation of rain. Of late years it has been spared by the Masai, who have driven from it many a herd; consequently it is now, comparatively speaking, thickly inhabited, and surrounded by flourishing villages; Mvoni, Amboni, Jangani and others. We were here received by the people and their Diwans or chiefs with peculiar cordiality.

Arab colonies must have been planted at an early epoch in this part of the Sawahil. About 4 miles south of Tanga, half-way on the Tangata road, I was shown the remains of an ancient settlement, now known as Changa Ndumi. It is a parallelogram, 200 yards long, of high and solid coralline wall, loopholed for musketry, bastioned, and in places split by large old trees. The site is raised considerably above the country, attesting its antiquity, and at high tides it becomes an island. In the centre is the Mosque, dilapidated, but still showing vestiges of a rude art, at which the moderns wonder. I was shown with some pretension a legend which proved to be the name of some lettered Sawahili, scratched upon a stucco column in the rudest Arabic character. The ruins of houses are scattered over the "enceinte," and a masonry well, 8 feet deep, yields a sufficient supply of earthy water; the cadjan

huts of a few Wasegeju savages tell the present degeneration of the land. In a modern village, built upon the neighbouring creek, I was shown another old well, 8 feet deep, bone-dry and well plastered. None of the present tenants could relate a tradition of the ruins; the Arabs who accompanied me, declared that they belonged to the "old ancient" Yurabi, the dynasty preceding the present rulers of Oman.

The people of Tanga hold at Amboni, every 5 days, a "Golio" or market with the savages of the interior. On the 29th January I went in an Arab dress to inspect the scene. Having followed the coast for two miles, we crossed some muddy creeks, waded over an inlet, and forded the small stream Utofu. Another mile brought us to the river Mvoni, here called Zigi—two names in 3 miles, after a truly African fashion! It was salted by the tide and flows under banks 40 or 50 feet high, crowned with calabash and other jungle trees. Crossing by a ferry, and passing through coco plantations, we ascended a steep hill and found the market "warm," as orientals say, upon its seaward slope. All Tanga was here. The wild people, Washenzi, Wasumbara, Wadigo and Wasegeju, were clothed in greasy hides, and cotton wrappers of inveterate grime; every man carried his bow and arrows, club, sword and shield, but few had muskets. Some, I remarked, shouldered low wooden stools—sitting upon the damp ground in these regions causes dysentery—and not a few rested upon the long stick whose little terminating cross is used as a churn-staff to mix their blood and milk. The women were more numerous, and harder worked; besides the baby tied in a bundle to the back,—its round head nodding with every motion of the mother,—they carried heavy loads of saleable stuff, and paid toll at a spot where the road was corded across. Here the Bedouins exchange their sheep and goats, cocos, grain and ghee, for white and blue cottons, beads, and rude iron-ware (knives, bills and hatchets, worked on the coast with metal brought from Zanzibar); fish, salt, and "tembú," or coco-toddy, together with such luxuries as spices, needles and thread, bluestone and fish-hooks. Formerly a large quantity of ivory found its way to the "golio;" now it is purchased in the interior by trading parties. The groups gathered under the several trees were noisy, but peaceful. Often, however, a lively scene worthy of Donnybrook in its palmiest days takes place; knobstick and dagger being here used by the factions, freely as fists and shillelah are in civilized lands. We returned at noon; the heat of the ground made my bare-footed companions run forward to the shade, from time to time, like the dogs in Tibet.

Traders from Tanga visit the Masai and Wakuafi countries twice a-year; in May and June, and in October and November, after the great and little rains. At such times they find on the way an

abundance of water; the land, however, supplies no food. From Tanga to Mhináni* (in Herr Petermann's map "Mikihani"), on the Pangani River, passing through Mbaramo and Pare, are 10 long days' march; here the road divides, one branch leading northward to Chaga, the other westward to the Masai country. These caravans are seldom short of 400 or 500 men; Arabs, Sawahili, slaves and Pagazi or porters, who will carry 50 lbs. each. The staples of traffic are beads, cotton-stuffs and wire; the return trade is comprised in asses and camels, a few slaves, and ivory, of which, I was told, 70,000 lbs., an almost incredible quantity, are annually brought to Tanga. I may here remark that all my native informants testify to the intense cold of Chaga and Kilimanjaro. The coast people, who spoke from hearsay, mixed up their information with odds and ends of marvel, too gross even for Herodotus. Actual travellers described the much vexed Æthiopic Olympus soberly and, I should say, correctly.

It has been mentioned that we were hospitably received at Tanga. A "Ngoma khu," or big band, consisting of three huge drums, a flageolet, and the upatu, a brass pan peculiar to grand occasions, serenaded us the first evening. The Arab governor being at Zanzibar, we were welcomed by the diwans or sultans (Sawahili headmen)—who hereabouts are in the proportion of half a dozen per village—with gifts of goats, fruits, and a bullock. They accompanied me on my various excursions, and when we went out shooting our difficulty was to shirk an escort. These diwans are respected by the vulgar, who may not sit on chairs or cartels, use umbrellas, or wear turbans before them; moreover, none but the chief must dance on solemn occasions. The people of Tanga are by no means a comely race, but they are in better condition and healthier than those of Wasin. I saw amongst them a single Albino, and many cases of white leprosy spots on the soles and palms.

Sundry excursions delayed us six days at Tanga. At 5 A.M. on the 2nd of February we drifted out to sea under the influence of the Barri, or land-breeze. After five hours of drowsy sailing we reached Mtangata, an anchorage between Tanga and Pangani. Open to the N.E. wind, and imperfectly defended by two distant islands, Yambe and Karangu, the long roll of the Indian Ocean renders it a place of trembling to the coast sailors. The country is fertile, and a line of villages skirts the shore. According to local tradition, which pretends to discover tombs at the bottom of the sea, this bay was once solid ground, the site of a flourishing city encroached upon by the wave. The existing settlements are probably modern: none of them appear in Captain Owen's charts.

* Mhináni would mean the "River of Henna," in this country called Mhiná, or Mhinna.

We delayed a day at Mtangata to inspect some ruins where I had been promised Persian inscriptions and other curiosities.

After grounding for an hour at every ten yards in our little canoe, we left the creek, entered a narrow inlet of mud and mangrove, landed at a village called Tongoni, followed the shore for a few paces, and then, turning abruptly to the left, presently reached the ruins. A city was once here. The old mosques are spacious and well built, with columns of neatly cut coralline blocks, and all display elaborate mihrabs or arches. Remains of houses everywhere cumber the ground. In an extensive cemetery we found the grave of a wali, a saint whose very name had perished, covered with a cadjan roof, cleanly swept, sprinkled, and garnished with a red and white flag. Other tombs were shown with cacophonous Sawahili appellations, embalmed in mortally bad Arabic epitaphs; the oldest numbered about 200 years. The principal mausolea had each its tall pillar of cut coralline, denoting, like the Egyptian shahadah, the position of the corpse's head. In one of these, the gem of the place, was fixed a fragment of Persian glazed tile, with large azure letters in the character called Rukaa رُقَاع, enamelled on a dirty yellow ground. The legend was ش.ش.ب.د.ر.وش.ن, which is probably (Khur-) shid i raushan—"the bright sun," and may be part of a panegyric or devotional verse, removed from the frieze of some mosque or tomb. The people of the country held it an irrefragable proof that the men of Ajem once ruled in Tongoni. But the tile was evidently—like the two China platters also mortared into the shahadah—an importation. It was regarded with superstitious reverence by the Sawahili, who informed me that Kimwere, king of Usumbara, had sent a party of bold men to carry it away. Of these nineteen died mysterious deaths, and the tile was then returned to its place. However, a few dollars had a wonderful effect upon their fancies; we were allowed to remove it, though no one would aid the Beni Nar, "Sons of Fire," as the Arabs honourably term our countrymen. The chief diwan, who had accorded permission, begged me to return and to aid them in digging for water: their present supply, he declared, was scanty and nauseous. In the ruined city four or five carefully-built old wells exist, but all are exhausted by age. As a rule, these people readily apply to Europeans for assistance in finding water: such is their opinion of the "Wazungu," or wise men; and if rain accompany the traveller, he is looked upon as a beneficent being, not without a suspicion of white magic.

At 5 A.M. on the 3rd of February we hoisted sail and ran down with the bright morning breeze to Pangani, sighting Maziri Island after three hours' work. Arrived at a place

which we intended to make our starting-point into the interior, I at once sent Shaykh Saïd on shore, with my letters to the jemadar and wali (commandant and governor), to the custom-house master and the different diwans; my companion and I landed with our servant and luggage in the cool of the afternoon. We were received with high honour. The diwans danced before us with the pomp and circumstance of drawn swords, whilst a bare-headed slave girl sang, and a crowd of negroes and half-castes stood enjoying the vile squeak of the fifes and the discordant sound of the monstrous drums. After half an hour of this purgatory we entered the wali's house, and found the upper rooms, or rather room, ready for our reception. A long conversation with the jemadar, a consumptive little Baloch, and the governor, a freed man of the late Sayyid Saïd, ended the eventful day.

PART II.

A Visit to Sultan Kimwere. By Captain RICHARD F. BURTON.

PANGANI, "in the hole," and its neighbour, Kumba, hug the left or northern bank of the river; the position is a strip of flat shore, bounded by the sea and a hill range 10 or 11 miles distant. Opposite are Bweni and Mzimo Mpia, small villages built under high cliffs of yellow sandstone, precipitous, and impenetrably covered with wild trees. The river which separates these rival couples of settlements may be here 200 yards broad; the channel at the mouth is from 7 to 8 feet deep; none therefore but country craft, as some of our enterprising compatriots have discovered to their cost, can enter it. Pangani Bay is known by a "verdurous wall" of cocos, and by "diabolitos," or small detached rocks rising from the sea. Northward, by Maziri Island, a green-capped patch of golden sand bearing s.e., and, southwards, by the yellow cliffs of Bweni. It is intricate with reefs and shoals; even our Suri nakhoda expended a dollar upon a pilot. At low water the bed is partly dry; during the rains it is filled by freshes; whilst the tide flows its produce is salt, but when heavy and continued showers fall in the hills it is almost potable. Small vessels lie snugly in the river opposite the town.

Pangani, with the three other villages, may contain a total of 4000 inhabitants, a large proportion being female slaves. It boasts of nineteen or twenty stone-houses, the rest are the usual cadjan huts, each with its large mat-encircled courtyard, where almost all the business of life is transacted. The settlement is surrounded by a thick, thorny jungle; this the people call their fort, fleeing to it for refuge when pursued; it is however full of leopards as the stream is of alligators, and at times they commit

great ravages. A slave-girl, we were told, was carried off from the roof of the Wali's house, and, whilst we were there, a boy was devoured in the river. Plantains, arecas, and cocos grow in the town; around are betel, papaws, and the jamli, an Indian fruit, and in the vicinity, extensive shambas or plantations of holcus, maize, sesamum, and other grains; cloves thrive, and, as everywhere upon the coast, a little cotton is raised for household purposes. The climate has the name of being healthy, but the water of the wells is heavy and brackish, and the long wet monsoon is rich in fevers. Animals are rare. Cows die after eating the grass; goats, not being of the civilized species, give a little milk only after yeaning, and sheep are scarcely to be found. But fish, as well as poultry, are abundant, and before the late feuds began, clarified butter, that "one sauce" of the East, was cheap and plentiful. Made in the interior by the Wazegura and others, with fine cows' milk, put into clean vessels, and sold when fresh, it reminded me of the Jaferabadi Ghee so celebrated in Western India.

Pangani has had, until this year, a thriving commerce with the Nguru, Chaga, and Masai countries; twenty Banyans here find a livelihood. Trading-parties travel at all seasons, except the rainy monsoon, when they find it difficult to cross the river's upper stream. As many as 1000 Sawahili and slaves, directed by a few Arabs, set out, laden with iron and brass wires (Nos. 7 and 8), small brass chains, which, fastened together, are formed into kilts by the Masai, American domestics, indigos, and cheques, together with beads of sorts, especially white and blue. Each man carries a pack worth about 15 German crowns; consequently, the venture is of 3000*l.* They reach their ground in twenty days, and return after a period varying from two to six months, laden with ivory, rhinoceros horn, and hippopotamus teeth; a few slaves complete the export traffic of the interior. The Banyans complain loudly of their Pagazi or porters; these fellows are paid 10 dollars for the trip, half in ready money, the remainder upon return, and the merchant congratulates himself, if, after payment, only 15 per cent. abscond. The Hindu's profit however is here doubtless great. I have heard of one to whom 26,000 dollars were owed by the people:—interest and compound interest must occupy a large share of such a sum in a place where even Europeans lend money at 40 per cent. on mortgage or bottomry. Some of their gains are swallowed up by the rapacity of the savages, whose very princes are beggars. The pliant Banyan always avoids refusing: he will consequently find at his door every evening seventy or eighty suitors for butter, grain, or a little oil. Besides Zanzibar rafters, which are cut in the river, holcus, maize, and ghee, Pangani, I am told, sends annually to Zanzibar 35,000 lbs. of ivory, the

finest and largest in the world, 1750 of black rhinoceros horn, and 160 of hippopotamus teeth.

After the dancing ceremony a variety of difficulties began.

Pangani, Bweni, and the other settlements on this coast, belong, by succession, to the Sultan or reigning prince at Zanzibar, who confirms and invests the governor and diwans. These officials, however, are chosen at Pangani by Kimwere, Sultan of Usumbara, whose ancestors received tribute and allegiance. Bweni, on the other hand, is in the territory of the Wazegura savages, a violent and turbulent race, thoughtlessly allowed by the rulers of Zanzibar to arm themselves with muskets, and to store up quantities of gunpowder; of course, the two distinct races, Wusumbara and Wazegura, are at enmity, and, being so, there is no thoroughfare for travellers. Moreover, violent intestine feuds having broken out, the Wazegura were, at the time of our visit, burning and murdering, kidnapping and selling in all directions. The people of Pangani, therefore, hearing that we were bearers of a letter from Sultan Majid of Zanzibar to Sultan Kimwere of Usumbara, determined that we should follow the circuitous route, *viâ* Mtangata, where no Wazegura could let or injure them. We, on the other hand, wishing to inspect the Pangani River, resolved to travel by the most direct line along its northern bank. The timid townsmen had also heard a report that we were bound for Chaga and Kilimanjaro, the Masai were "out," the rainy season was coming on, and they saw with us no armed escort. They then resolved not to accompany us, but still each man expected a bribe of inducement. Muinyi Khatib, the eldest son and heir of Sultan Kimwere, sent a presuming message, directing us to give him what we had brought for his father. We declined in the same tone. The dancing Diwans *demand*ed a fee for permission to reside. We showed our letters and threatened them with a reference at Zanzibar. Briefly, all began to beg "Bakhshish," but I cannot remember that any one obtained it.

Weary of importunity, we suddenly resolved to visit Chogwe, the nearest outpost of the Baloch garrison, and thence to push on for Fuga, the capital village of Usumbara. We made preparations secretly, left Saïd bin Salim with our property, pretending a shooting excursion for a few days, hired a large canoe, and at 11 a.m. on the 6th of February started up the "buffing stream." The field-book and map of our route, herewith appended, will render it unnecessary to notice anything beyond the generalities and adventures of our route.

From Pangani to Chogwe,—"the bazar,"—by the river is a distance of 13.5 miles. Near the sea, when wind and tide meet current, its navigation is dangerous, and many small craft have filled and sunk beneath the short chopping waves. It is impossible to

avoid being taken aback, so abrupt are the turns of the river, and the water acts well as a wind conductor. About 5 miles from the sea we found the Pangani but slightly brackish, and a little farther up, sweet as the celebrated "creek water" of Guiana. The scenery at the mouth is that of sandstone districts, amene and diversified: its soft beauty however bears the blight of death. On both banks are traces of man's presence—the homestead blackened with fire; sugar-cane, plantains, and bitter mangos almost choked with wild growth, and arecas and cocos towering over a now impenetrable jungle. The river abounds in fish, to judge from the style of capture, an old wife's shoulder-cloth, a rude crate, or a coarse weir planted in the mud. Where we visited it, three small Arab timber-craft were laying in a cargo of red and white mangrove trunks, and in many places there floated small rafts of wild coco fronds ready to be guided down the stream. At sunset the tide began to run out like a sluice; and we halted at Pombui, a small village on the left bank, well stockaded with split arecas. Shortly after midnight we again rowed up the dark silent waters for two hours, when reaching the "ghaut" of Chogwe, we made fast the canoe and lay down to sleep.

We began the next morning with an inspection of Chogwe, to which we were escorted with sundry discharges of matchlocks by the jemadar. This outpost was occupied about five years ago, when the Rev. Dr. Krapf,—unhappiest of political divines!—discovered and published in the 'Church Missionary Intelligencer,' "that his journey to Usumbara had brought to light a fact; namely, that the Imam of Zanzibar has not one inch of ground between the Island of Wassin and the Pangani River." The Rev. gentleman's fact proved to be the purest fiction. His late Highness Sayyid Saïd of Zanzibar, with his wonted benevolence and moderation, pardoned an interference which had nearly produced most regrettable consequences, and at once garrisoned Chogwe and Tongwe with 25 Baloch. The former outpost is situated upon an eminence, rising from the grassy plain of black earth which is overflowed during the rains. It is 7 miles distant from Pangani, and its direction is 288°. A stout snake-fence contains the cadjan pent-houses of the Bashi-Buzuk garrison: its fortifications are two platforms for matchlock-men, planted on high poles like the Indian "Méchan." It is exposed to the attacks of the Washenzi "savages," who sometimes at night creep up to the huts, shoot a few arrows or set fire to the melting, and hurriedly levant. About 15 miles west of Chogwe (233° 15'), in the plain of the Wazegura, south of the river, rises the detached hill, "Tóngwe Mwanapiro," belonging to one Mweri, a chief hostile to the Baloch. The latter, if fifty in number, could easily "loot" the whole country: they suffer however at all

times severely from sickness, and appear dull as a whaler's crew. The position of Chogwe is badly chosen, water is distant, the soil is rugged, and it is within reach of the river miasma. It commands, however, the southern Usumbara road, and thus affords opportunity for something in the "looting" line.

Having communicated our project to the Jemadar, he promised all aid, told us that we should march the next day, and, curious to say, kept his word.

Our luggage was now reduced to the lowest expression. For instruments we carried sextant and horizon, two compasses and stand, a common and a boiling-point thermometer: a waterproof carpet-bag contained pens, with journal and drawing materials. Our arms were two daggers and three swords, a "six shooter" each, a Colt's revolving rifle, a small German "büchse," and a shot gun, in fact fighting kit, with the ammunition necessary for ourselves and men. A solid leather portmanteau was stuffed with a change of raiment and a present for Sultan Kimwere, namely, a black cloth coat (12 dollars), eight sprigged muslin turbans (8 dollars), eight Surat embroidered caps (8 dollars), and two bright-coloured cotton shawls, of small value. We had a few extra muslins and caps as gifts to chiefs, and a dozen German crowns which were useless. Our provisions consisted of three bags of rice (12½ dollars), onions, cassava flour, a sack of dates (2½ dollars), tea and sugar for ten days, tobacco, pepper, and salt, of which none is procurable in the interior, a lamb, three fowls, and a bottle of cognac. Our beds were in waterproofs, which might also be used as tents; a horn-lantern, wax candles, and a policeman's dark lantern were added for night work, and a portable tin canteen with a patent digester completed the equipment. This is indeed light marching order: the little settlement, however, could afford us nothing but four slave-boys, a guide and his attendant, hired for 10 dollars, and a guard of five matchlockmen. A start was effected with infinite trouble, every one complaining of his load, snatching up the lightest article and hastening forward. This nuisance continued till summarily stopped by an external application easily divined. At 5 p.m., accompanied, in token of honour, by the Jemadar and most of his men, we started for Tongwe.

The path began over rugged stony ground: at 6 it plunged into a dense thorny jungle, which, during the rains, must be almost impassable. The belling of deer and the "clock, clock" of partridge struck our ears: in the open places were the dry leses and footprints of elephants retained by the last year's mud. These animals descend to the plains during the wet monsoon, and in summer retire to the hilly interior. We were not fortunate enough to meet with a single specimen, but to judge from the

prints, two circumferences of the foot usually showing the height of the shoulder, there is nothing remarkable in the size. Game is rare throughout this track. None will live where the land is peopled: in the desert they are persecuted by the Baloch and wild huntsmen, who slay and eat even the rats. We heard, however, of mbogo or wild buffalo, antelope, and a curious hog, probably the masked boar, lions, leopards in plenty, and an elk somewhat resembling the Indian "Sambar."

Another hour's marching brought us to the Makam Sayyid na Sulayman, a cleared place in the thorn jungle, bounded by a rocky and tree-fringed ravine, where water stagnates in pools, and where at times game is found. The pedometer showed 6 miles. There we passed the night listening to well-remembered Baloch lays of love and war, slapping away "mammoth mosquitoes" that flocked to the camp fires, and anon rising to get rid of a huge black pismire, whose bite burned like a red-hot needle. During the hours of darkness, two parties of savages, armed with bows and arrows, passed amongst us, carrying maize to Pangani. The Baloch kept a truly Asiatic watch, singing and shouting during the early night when there is no danger, and sleeping like the dead through the "small hours," the invariable time of assault.

At daybreak on Friday the 9th we resumed our march, having taken leave of the *poitrinaire* Jemadar, who could no longer walk. An hour's hard labour brought us to the fort of rugged Tongwe, the "great hill." Ascending the flank of the s.e. spur, we found ourselves at 8 a.m., after a 5 bad miles, upon the chain of a lower ridge with summer towards the sea and landward a wind of winter. Ascending the chain, in another half-hour we entered the small, square, crenellated, flat-roofed, and white-washed room, which here acts as a fort. It was built about 4 years ago, when this hill, deserted on account of Wazegura incursions, was offered with cheap generosity by Sultan Kimwere, as a mission station to Dr. Krapf.

Tongwe is the first buttress of the mountain-region which composes the kingdom of Usumbara, the threshold of the Chaga and Masai Highlands. The maritime portion of this tract is called by the people "Mrima," or "the mountain," a word at Zanzibar denoting the mainland generally, in distinction to the island. Its diminutive form is "Kilima," also synonymous with the French "Mont" in composition, and applied to any small protuberance as the boss of a shield: it enters into many East African proper names, as Kilimanjaro, the great mountain, Kilimani (Quilimane Riv.), "near the mountain," and Wakilima or Waki-rima, according to dialect, "the mountain people." Tongwe is 324°, and 9 miles distant in direct line from Chogwe. The descent towards the river is impassable: the summit, about 200 feet above

the level of the sea, is clothed with jungle, through which, in search of compass sights, we cut a way with our swords. The deserted ground showed signs of former habitations, and a negro who accompanied us remarked with a sigh, that his kinsmen had been driven from their own ancient seats into the interior. Tongwe projects spurs far into the plain: the river flows through a trough of rock in its lowest slopes, and the noise of its falls may be heard, it is said, at times from the fort. The surface of the mountain is a reddish, vegetable and argillaceous soil, overlying grey and ruddy granite and schist: the mica has often been mistaken for gold by the Baloch. The thickness of the jungle, which contains stunted cocos and bitter oranges, proves the fertility of the soil; the castor-plant, wild benzoin and bird pepper, flourish on the slopes, and around the fort are small plantations of manioc and maize. A deep hole in the northern flank abundantly supplies the purest water, and, below the hill, two springs are found curiously placed in a block of well-weathered granite, 20 feet high, and striped with lines of snowy quartz. The climate must be excellent; surrounded by the blaze of an African mid-summer we found it neither hot nor cold. But the lower lands are burned like bread crust: the "fertile and flourishing regions about Tongwe" belong to the category of things gone by.

Next morning saw us on foot betimes, yet it was 6 A.M. before the knotty question of portage was duly settled, and we were free to follow the thorny goat track which leads down the N.E. spur of Mount Tongwe. By dint of wandering through rushes and tiger-grass we struck into the Pangani road, and after 3 hours' walking, halted to rest at some fetid pools. Muinyi Wazira, our purblind guide, who doubtless had his reasons, induced us to advance by promising better water ahead. The way was over stony ground, rough red ridges, broken by narrow green valleys, or rather ravines, which showed signs of inundation during rain. But the Kazkazi had dried up the marrow of the land, and though we searched *secundum artem* we found no water. An apparently interminable series of wearisome mountainous slopes, traversed by a stony, dusty path, lay before us, the cool sea breeze had no business there, and the sun stung us with his fiery beams. Presently the men began to drop off. Our guide, treacherous as a Sawahili, and the four slaves spent the sultry hours at some pool which they had discovered, and wisely kept to themselves. We sought the imperfect shade of a tree, and our Baloch threw themselves under bushes in all directions.

At 4 P.M. we resumed our march. The guide, who had now joined us, again giving the lead to Shaaban, an old Mekrani, whose five wits were absorbed in the thought of water, caused Captain Speke to miss the road: I kept my companion in sight, whilst our

other men straggled far behind. Shortly after sunset we reached a narrow fiumara where stood, delicious sight! three puddles bright with chick-weed, and black with the mire below. After quenching our thirst, it became evident that we had lost the way, our shouts and shots remained unanswered, and it was useless to thread the thorns by the uncertain light of the moon. We kindled a fire, looked to our arms, remembering certain ominous growls which we had heard in the morning, lay down upon a soft place, and certain that Shaaban would be watchful as a vestal virgin, slept. The day's work had been 16 miles: they appeared 30.

Early next morning we retraced our steps, and presently came upon the rest of our people: they had followed the upper or northern road, and had encamped near the higher bed of the same fiumara which had given us shelter. The "Nyuzi" is a rocky bed, about 20 feet broad, edged with thick trees and showing a violent torrent during the wet monsoon. Even in the driest seasons pools sometimes 100 feet long abound, and, by digging in the mud, water is always procurable. It falls into the Pangani, proving a southerly slope of country, drains the hills, and shelters the only game to be found in the vicinity.

After receiving many congratulations and finding everything in order,—the sole accident of the night was a small stab administered by a Baloch to a slave by way of bringing him to a sense of his duty,—we rested till 3.15 P.M. in the grateful shade. Our human cattle then loaded one another and advanced in Indian file, over a path dented by the wild buffalo's hoof; the country around was a straggling thorn jungle, the dry grass had been fired to promote a green growth of fodder, "black-jacks" dotted the rolling ground, and ant-hills, like the "fairy-mounts" of Ireland, arose regularly as if disposed by art. It is needless to say that all was desert. Khombora's cone fell behind us, the blue walls of Sagama became brown and green, till, emerging from the thin wood, we debouched upon the alluvial plain, bounded by emerald trees, with the welcome river flashing bright in the western sun. At 6 P.M., after walking 10 miles, we stood upon the bank opposite Kohode, the village of a friendly Wazegura chief. Sultan Momba donned his scarlet coat forthwith, ordered the village boat to be launched, and as we landed, wrung our hands with many greetings and roars of laughter.

The Pangani River, called at Kohode "Rufu" or "Lufu," is about 80 yards broad: it flows deep and strong, under high banks of stiff clay, is reddened, especially after rain, by the rich loam of the hills, and abounds in hippopotamus and crocodiles. My companion, an old Himalayan, thought that he could detect in it the peculiar taste of snow-water, and the Baloch who, like all orientals, believe that drinking the element during night impairs

digestion, make of this an exception. The alluvial soil on the banks is clothed with coarse grass of a lively green, and in some places with a screen of trees. The stream is navigable, but boats are arrested by the falls below, and portages are not yet known in East Africa.

The next day was a halt at Kohode. It is the normal cultivator's village. Surrounded and concealed by a stout palisade of tree-trunks,—where foes and beasts abound the defences are doubled and trebled,—with low narrow arches formed by inclining the beams, is a heap of little, thatched, wattle-and-dab huts, here square, there circular, generally huddled together, but if space allow, scattered over some hundred yards. Goats, sheep, and cows, which thrive here, are stalled near the human habitations. The scene reminded my companion of villages in the Tirhai and the Dehra Dhoon: there was the same peaceful, quiet look, sheltered situation, and circle of tall trees. The people are cultivators, tame harmless heathen to all but one another; unfortunately they have become masters of muskets, and use the arm to oppress and plunder those who have it not. Sultan Momba, a stout, jolly, beardless young black, with an explosive laugh, and the voice of one calling out in the wilderness, has made himself a thorn in the side of Sultan Kimwere. He harries Usumbara cattle with a merciless hand. In supplying us with a bullock and milk, he said with a roar of mirth and jerking his thumb towards the blue hills, where the smoke of watch-fires curled high, that we had already become the king's guests. Our Baloch guard applauded this congenial soul, patted him on the shoulder, and swore that with a score of their number he might become lord of the mountains. From Kohode, which is more than half way, there are two roads to Fuga. The direct line crosses the highlands and numbers two marches; short, but at this season waterless. That along the river is of course longer; we determined, however, to see the stream, and we doubted the power of our men to front the passes in such heat. The worst of these walking journeys is that the least accident disables the traveller, and accidents will happen to the best regulated parties.

On the 13th of February, having exchanged warm adieux, we were ferried over the river, and at 7 A.M. fell into the beaten path upon the alluvial plain. After a few minutes' march we crossed a bridge consisting of a fallen tree, which spans the Luangera, the Luere of Herr Petermann. This deep silent stream, 23 or 24 feet broad, drains the north-eastern Bumburri mountains and is an important affluent of the Pangani. Thence marching ever the plain we skirted two small red cones, "Nguo," which are the apices of the broken ground below Vugiri. Like Sagama, this is a wall of rock, well-wooded upon the summits, with pre-

cipitous sides, which serve as boundaries to the alluvial flat. The Usumbara plateau above is said to be rather rolling ground than flat surface, and is fertile enough to support an abundant population of Washenzi. Above the junction of the Luangera, the Pangani River divides into mountain torrents, roaring over rocky and tortuous beds, forming little green islands, which are favourite sites for villages. The country appeared a garden after the deserts which we had traversed. Cocos and tall trees concealed the stream, and flocks and herds clustered over the plain. The settlements are entered by rude bridges, in the shape of narrow planks laid horizontally upon piers,—forked uprights planted a few feet apart,—sometimes parapetted with basket work, and supplied with cords of knotty fibrous creepers to steady the traveller's step. These the number and daring of the crocodiles render absolutely necessary.

We halted from 10 A.M. till 4, under a spreading tamarind near Zufura, a village on an island of the Pangani, distant about 2 miles from Mount Vugiri. Black clouds capped the hill-tops, cooling the fierce Simoom and promising a shower; we were approaching the land of constant rain. Resuming our march we crossed a dry fiumara trending towards the river; traversed a hill-spur of rolling and thorny red ground, to avoid a deep bend of the stream; passed a place where rushes and tiger-grass choked the bed, and where the divided waters, issuing from a black jungle, foamed down a steep incline of rocks; and finally at 5 P.M. entered Msiki Mguru, a Wazegura village distant from Kohode 12 miles. It is a cluster of huts in an island, formed by divers branchings of the Pangani. The headman was sick, but we met with a hospitable reception. As yet, uninitiated in the secret of strewing ashes round the legs of our cartels, we passed a night with the ants and other little beings which shall be nameless. Our hosts expressed great alarm about the Masai, which the sequel justified, as we had scarcely left the country before a plundering party attacked two neighbouring villages, murdered the inhabitants and drove off the herds.

At sunrise next morning we resumed our march, travelling up the river which is here called Kirua. It is a line of sedge and grass as far as the Maurwi village, 3 miles from Msiki Mguru; here the several branches anastomose, forming a strong but navigable stream, about 30 yards broad, and edged with a deep fringe of verdure. Thence, we turned northwards in the direction of Tamota, another bluff headland in the hill-curtain of Usumbara; the soil was a red clay, here cultivated, there a thorny jungle. The paths were full of people, chiefly women, laden with manioc, holcus and Indian corn, plantains, fowls, and other articles of food; they were walking to a golio or market, held in an open

plain. Having duly stared and been stared at, we unloaded for rest under a spreading tree hard by. Again clouds obscured the sun, a shower was imminent, and thunder rumbled in the hills; it became evident that the wet season was fast approaching.

We resumed at 1:30 p.m., passing on the right Pasunga, a large double-fenced village, belonging to one of Kimwere's multitudinous sons, and on the left a sheet of muddy water, where my companion shot a fine specimen of the gorgeous crested crane. At 2:30 we skirted another village, where the people peremptorily summoned us to halt. This annoyance, which frequently occurred, was owing to the good Wazira. He observed that we returned more than an equivalent for every goat presented, and resolved that we should never sight a village without being mulcted in sprigged muslin. When things came to this state, we saw the necessity of changing tactics; we laughed in the faces of our angry expostulators, and bidding them stop us if they could, pursued our road. Presently, ascending a hill and turning abruptly N.E., we found ourselves opposite, and about 10 miles from, a lofty azure wall, the mountains of Fuga.

Below, the plain is full of villages, like haycocks, in clumps; the fruitful earth scratched with the smallest of hoes yields abundant return:—tall tamarinds, large-leaved plantains, papaws and other trees are scattered over the surface; water stands in black pools, and around it luxuriant sugar-cane waves almost wild. We found the cane to be of the edible kind; that used for making sugar is too luscious to be agreeable. At 4 p.m., after walking 16 miles, *in toto*, a violent storm of thunder, lightning, rain and raw wind from the s.w., drove us into the Bandani or Palaver-house of a large village. Here we passed the night, with fires to keep off fever and mosquitoes. Our Baloch looked at the clouds, shook their heads, and declared that the "Kusi" or wet monsoon had fairly commenced.

The 15th February opened with one of those steady little cataclysms which, to be seen to advantage, must be seen near the Line. At 11 a.m., thoroughly tired of the steaming Bandani, we loaded our men and set out towards the Fuga Hills. As we approached them, the rain, shrank to a spitting, gradually ceased, and gave place to that reeking, fetid, sepulchral heat, which African travellers dread. The path lay through the usual red clay and jungle, crossed a low ground where trees decayed in stagnant water, and spanned a well cultivated black plain, lying at the base of the mountains. We rested a few minutes before commencing the ascent; the path, slippery with black mire, had wearied our slaves, though aided with three fresh porters, and the damp heat overpowered the whole party.

At 1 p.m. we entered upon the ascent. It began gently

winding amongst groves of large coarse bananas,* with huge branches of young green fruit and rotting leaves. The "musa" here is the staff of life, and, besides bread, it supplies a house with fuel, cups, spoons, plates, and even bottles. The banana is probably an aboriginal of East Africa; it grows, I am told, almost spontaneously upon the Unyamwezi lake. Never transplanted, the fruit in time degenerates; it is easy to see, however, that the stock is noble. Emerging from the dripping canopy, we followed a steep goat-path, crossed a little burn of pellucid water, and, having reached the midway height, sat down to rest and take a few compass-sights.

The view before us was extensive, if not beautiful. Opposite, half-veiled with rank steam—the "smokes" of Western Africa—was the yellow Nyika or Wazegura wilderness, traversed by the Mkomafi, an affluent of the Pangani river. Three dwarf cones, the "Mbara Hills," bearing 230°, and distant about 8 miles, accurately defined this portion of the country. Almost on the horizon we could distinguish the well-wooded line of the Pangani, and around it lay an interminable plain. Nearer, the mountains upon which we sat fell in rugged folds, clothed with patches of plantains, the wild mulberry, the custard-apple, and tall trees whose brilliant green contrasted strangely with the red ochre earth from which they sprang. The salsaparilla vine being festooned from the high boughs of the tamarind, the toddy-palm raised its fantastic arms over the dwarf fan-palm, and the air was scented with bitter orange and herbs not unlike mint and sage. A palpable change of climate had already taken place, and the sunshine was tempered with clouds, which we now blessed.

Resuming our march after a few minutes' halt, we climbed rather than walked up the deep zigzag of a torrent, and at 4 p.m. found ourselves on the summit of the ridge. Here the guide pointed towards the "water of Masindi," a small lake, upon whose banks elephants are said to exist; the air, however, was too misty for the compass. Distant about 10 miles, and over-spread with clouds, the huge barrier of Makumbara closed the northern view. Our people presently interrupted the colloquy, begging us to taste the water, which was icy cold; it had a perceptible ferruginous flavour, sparkled in the cup, and had covered its spring-head with a coat of oxide. East Africa, I may observe, is a "land whose stones are iron," and some of the metal worked in the interior is of admirable quality.

We now stood upon the summit of the mountains, but, as far

* The banana is the *Musa sapientum*; the plantain is the *M. paradisiaca*. I do not know any other distinction. In India the small variety is called a plantain; the larger, "horse-plantain." The French, on the other hand, term the more delicate fruit "banane."

as the eye could see, there was no table-land. After a three mile walk, winding along the flanks of rounded hills, and crossing a small torrent which seemed to freeze our parched feet, we turned a corner and suddenly sighted a heap of huts crowning a grassy cone—Fuga. This being one of the three cities where ingress is forbidden to strangers, we were led by Muinyi Wazira to the "travellers' bungalow," in the form of tattered hovels, about 300 feet below the settlement. The cold rain and sharp rarefied air made any shelter acceptable. We cleared the interior of sheep and goats, housed our properties, and sent a message to the Sultan, requesting the honour of an audience.

Before dark appeared three mdoe or "ministers," who, in a long palaver, declared that council must squat upon two knotty points: why we had entered Usumbara *via* the hostile Wazeguras? and when his Majesty would be permitted by the mganga or magician-priest to see us? These objections being overruled with a strong hand, we were at once led to the royal abode, which is a mere clump of the usual huts, surrounded by trees, and crowning a little eminence opposite to and below Fuga.

Sultan Kimwere is an old man, with emaciated frame, shaven head, beardless wrinkled face, somewhat like an elderly lady, red eyes, toothless jaws, and hands and feet stained with leprous spots. His subjects declare him to be a centagenarian; he is certainly dying of age and decay. The royal dress was a Surat cap, much the worse for wear, and a loin-wrap equally so; he was covered, as he lay upon his cot, with the doubled cotton cloth called in India a "doputta," and he rested upon a Persian rug apparently coeval with himself. His hut was that of a simple cultivator, but it was redolent of dignitaries, dirty as their prince, and each holding a long-stemmed pipe with small ebony bowl. We were seated upon low stools in front of the couch, asked our errand, and welcomed to Fuga. As none could read our letters of introduction, I was obliged to act as secretary. The Sultan had heard that we were addicted to scrutinising stars, stones, and roots. He therefore decided that we were European mganga or medicine-men, and directed us at once to compound a draught which would restore to him that evening health and strength. I replied that our drugs were all left behind at Pangani. By no means satisfied with the excuse, he signified that we had better wander about the hills and seek the plants required. On our return home, after half an hour's conversation, we found, by way of present, a fat bullock, a basketful of fine white sima, Indian corn pounded and boiled to a paste with water, and balls of unripe plantains mashed with sour milk. We had marched that day 10 fatiguing miles; the souging blast, the groaning trees,

and the pattering rain heard from inside a warm hut affected us pleasantly, and we slept like travellers.

Kimwere, Sultan of Usumbara, is the fourth of a dynasty supposed to have originated from Nguru, a hilly region south of the Pangani. His father Shabugah extended the frontier from Pare to the coast, and from Msihi to the river; he left Usumbara to Kimwere, Bumburri and Meringa to younger sons, and Msihi, a mountain two days N.E. of Fuga, to a favourite daughter. Kimwere, in youth a warrior of fame, ranked highest of the mountain kings; the other members of the triumvirate were Bana Rongwa of Chaga and Bana Kizunga of the Wakuafi. In age he has lost ground. His sister's sons, the chiefs of Bungu in Msihi, rebelled, and were reduced only by aid of 20 Baloch, and the Wazegura are now troublesome borderers. He is said to have 300 wives, who have borne him between 80 and 90 sons. Of these the eldest, Muinyi Khatib, chief of the Kirori village, will succeed him. The king is a most pragmatical pagan: many of his children, however, have Islamized.

Kimwere rules, like African kings generally, by the sale of his subjects. Death, imprisonment, and mutilation of the hand, are foreign punishments, and rare, whilst confiscation and sale are common and indigenous. He is like the Amir of Harar, a thorough despot: he sells without reason man and woman, gentle and simple, individually, by families or by villages. The Sultan's person is sacred; even a runaway slave is pardoned if successful in touching majesty: there are also certain "lodges" inhabited by the chief magician-priests, where criminals take sanctuary. Kimwere has a body-guard of 400 musketeers, whom he calls his Waengrezi, or Englishmen: they are dispersed in the surrounding villages, for the war-horn is now silent and the watch-fire never leaves the mountain.

Money is not current at Usumbara. The small change is beads, the higher specie American domestics. No one holds property without the king's permission, and, as we had an opportunity of seeing, the greatest man dare not receive a present openly. His revenue is thus collected: cattle-breeders must offer to him the first fruit of flock or herd, elephant-hunters one of every two tusks, and traders cloth and beads. Cultivators are rated 10 measures of grain annually, which accounts for the quantity exported from Tanga and Pangani to Zanzibar, and even Arabia. Kimwere reserves part of his revenues for himself and his fine family; the rest is divided amongst his soldiers and councillors.

The principal capital of Usumbara is Fuga, distant 37 miles in a straight line n.w. of Pangani; along the river 74 or 75. It is nearly 4500 feet above the sea-line, and enjoys the cool, healthy

climate. The town contains about 500 huts, and, I was informed, 3000 inhabitants; it is unwall'd and composed of the circular habitations common to Africa, from Harar to Timbaktu, frame-works of concentric wattle rings, wrapped round with plantain leaf, and plastered with fine mud inside: a low solid door acts also as window, and a haystack roof is supported by a single tree. The population is abundantly leavened with Arab blood; it thrives, to judge by the number of children, who are apparently more than the normal fifth, and the snowy heads of the elders prove that we are still in the land of Macrobian Ethiopians. The men, who, though of light brown colour, are short and plain, file their teeth to a point, and brand a circular beauty-spot in the centre of the forehead. Their dress is a cotton sheet over the shoulders, and a cloth or hide round their loins; the characteristic kilt of the plain Bedouins, a deep line of dried and split rush or grass tied round the middle, cannot be used on the hill-tops. A knife is stuck in the girdle, and they always carry a pipe, a bow, and a few iron or bone-tipped arrows. The women are adorned with talismans in leather bags, and massive collars of beads falling from the neck; a "distinguished person" will carry from three to four pounds of these "barbaric decorations;" the rest of the dress is a sheet bound tightly round the bosom and falling to the ankles. This people is comparatively industrious. The husband and children work in the fields; those who have cattle drive them to graze when the sun has dried up the dew, and towards evening fence them in the yard and stow away the younglings within the hut. To the wife's share fall the labours of cleaning the cattle-pen, fetching wood and water, pounding Indian corn in a huge wooden mortar, baking plantain bread when she can get it, and carrying the baby. Both sexes are dirty, diseased, and half-starved; a timid, dismal, and ignoble race are these "children of the mist," as savages who have changed pastoral for agricultural life mostly appear to be.

The highlands of Fuga must be thickly inhabited; almost every hill is crowned with little "lodges," distinguished from afar by pale blue smoke. The scene strongly reminded me of the Blue Mountains in South India. There were the same rounded grassy cones, spanned by narrow footpaths—mere lines of red soil—the same "sholas," or patches of forest, clothing the slopes, the same emerald swamps through which crystal runnels continually trickle, and little torrents and rocky lynes. The northern and eastern faces are bluff and barren, the southern and western abound in luxuriant vegetation, wild and cultivated, Indian corn and holcus, plantains, huge sugar canes, and tobacco. The latter article, made into thin round cakes, and neatly packed in banana-leaves, is exported to Zanzibar and the maritime regions; its flavour is considered superior to the other growths of the mainland. The formation of

the mountains is granite and sandstone, covered with a red clay.

The rainy season had fairly set in at Fuga; heavy clouds rolled up from the s.w., and the weather was a succession of drip, drizzle, and drench. In vain we looked for a star; even the sun had not power to disperse the thick raw vapours—we were compelled to leave Fuga without a single observation. I did not dare to linger long upon the hill-tops. The rain would make the low country a hot-bed of sickness: our men were not clothed to resist the cold of the mountains (73° Fah. at 4 p.m.; whilst upon the plains it ranged from 81° to 99°), and we expected daily the attack of "seasoning-fever." In the dry monsoon, this road might be made practicable to Chaga and Kilimanjaro, with an escort of 100 musketeers, and at an expense of 600*l.*; the invalid who desires to avail himself of this "sanatorium," as it is now called by the Indian papers, may, if sound in wind, limb, and digestion, reach the snowy region—if such exist—after a ten days' mountain march.

On Monday, the 16th February, we took leave of Kimwere; he was much mortified that our rambles had not produced a plant of sovereign value against decrepitude, and the next morning we descended the hills in a Scotch mist which concealed every object from view, and deepened into a drenching shower upon the fertile plains. That night we slept at Pasunga, the next at Msiki Mguru, and the third, after marching 17 miles, our greatest distance, at Kohode—places already described. We had no adventures, but daily storms of thunder, lightning and rain, which made the returning as disagreeable as the going had been pleasant.

At Kohode it was resolved to follow the river course, and to ascertain by inspection if the account of its falls and rapids had been exaggerated. At 9 a.m. on the 19th February we set out over the alluvial plain, along the left bank of the Pangani, and presently entered familiar land, a thorny wilderness of rough, stony, red ground, with the stream flowing in its channel hard on our right. At 1 p.m. we halted to bathe and drink, as it would be some hours before we should sight the river again. During the tornado of thunder and lightning which followed us, I observed that our savages shot their iron-tipped arrows in the air, as the Thracians of Herodotus were wont to do, and the Bheels and Cooleys of India still do. Can this be the primitive paratonnerre, preserved traditionally from ages long forgotten by man when Franklin taught him to "disarm the storm?" The splashing rain and gusty cold wind made the slaves whimper: we pursued our road, and about 4 p.m., after threading by a goat-path the dripping jungle, we found ourselves at Kiranga. This large Wazegura village lies on the right bank of the Pangani. The

inhabitants turned out with bows and muskets to feast their eyes; all, however, were civil, and readily gave coco-nuts in exchange for tobacco.

The Pangani here is a strong rapid stream flowing between high curtains of trees and underwood, and entering a rocky trough; hills on both sides in some places approach within a few yards of the banks. Leaving Kiranga, we followed its course along a vile footpath, slippery with dark mire, encroached upon by thorn-trees, and almost concealed by tiger-grass. The air was damp and oppressive, and the decayed vegetation exhaled the usual bouquet. As we advanced the roar of the swollen stream indicated rapids, whilst an occasional glimpse through its green wall showed the reef surface streaked with lines of snowy foam. Heavy nimbi purpled the western skies, and we began to inquire of Muinyi Wazira whether a village was at hand.

About sunset, after marching 15 miles, we suddenly saw cocos, the "Traveller's Joy" in these lands, nodding their feathery heads; presently crossing an arm of the river by a long rickety bridge, we entered Kizungu, a Wazegura village, and were received with some ceremony by the headmen. They emptied a hut of its inmates, introduced us, and sat down for the usual palaver. Knowing that the village had a bad name and deserved it, my companion and I fired our revolvers into trees; the sensation was such that we seized the opportunity of offering cloth in exchange for rice and ghee. No provisions, however, were procurable; our escort went to bed supperless, and we should have followed their example, had not one of the elders secretly brought after dark an old hen. The hen was easily despatched by three hungry men. We then placed our arms in a handy position, and were lulled to sleep by the moaning wind and the continuous pattering of the rain.

Early next morning we were aroused by Wazira, the guide, and after the usual delays found ourselves upon the road about 7 A.M. The country traversed was the reflection of what we had passed through, black soil in the lower, and red in the higher levels, rolling ground, torrent beds, thorny jungle, and thick, succulent tiger-grass. Hills still girt the river on both sides. At 9 A.M. we sighted from some distance the falls of the Pangani, which are not unlike the "Torc cascade" in books. Here the whole stream, emerging from the dense growth of tropical forest, hurls itself in three several sheets, fringed with flashing foam, down a rugged wall of dark rock; half way the drop is broken by a narrow shelf or ledge; a second leap precipitates the waters into the seething basin below. These falls must be grand after rain, when the swollen river forms a single horse-shoe, and acquires volume sufficient to clear the ledge which breaks its shrunken stream.

As we journeyed on, the heat became intense; the clouds hugged the cool mountain-tops, and the sun shone stingingly through the clear air. At 10 A.M., our people being clear worn out, we halted upon the bank of a dry fiumara, in whose rushy and jungly bed a little water was found. Half-an-hour's rest, a coco-nut each,—and some were so hungry that they chewed the pulp of dry calabashes,—and a pipe somewhat restored us. We resumed our march over a mountainous rolling waste of green grass, enlivened by occasional glimpses of the river, with its broad breast swelling between two rows of tall luxuriant trees. Villages became frequent. At 3 P.M., after marching 14 miles we entered Chogwe, and were received by the Jemadar and his garrison with all the honours. It would serve no geographical purpose to describe the various occupations of the next week.

On Thursday, the 26th of February, 1857, we returned to Pangani and began making preparations for a coasting voyage southwards. We had dismissed the *Riami*, and were in hourly expectation of a "Battela" from Zanzibar. But on Sunday, the 1st March, Captain Speke, my Portuguese servant, and I, were prostrated by the terrible bilious remittent of the coast. It was vain to struggle—the disease had us down, and appeared inclined for mischief. In accordance with Colonel Hamerton's injunctions, I determined upon returning to Zanzibar, and five days afterwards the Battela appearing,—our thoughtful friend had stored her with provisions necessary for our little cruise,—we reluctantly gave up the idea of sailing southwards and went on board. Early in the afternoon of the next day we reached our destination, were received by the consul with his wonted hospitality, and were duly quinned by Mr. Frost, the intelligent medical officer attached to the consulate. We had thus in our persons verified the old rule, that no European can travel or labour in the interior more than three weeks without the acclimatizing fever.

The field-book and sketch-map, now submitted to the Society, are ordinary route surveys, as carefully made as our various and great difficulties would permit. For distances we depended upon a pedometer and careful timing. We could not set up marks, and at times the thickness of the jungle rendered sights somewhat uncertain. Though observations were taken when feasible, at Fuga the monsoon was against us, and at no time of day or night was an ell of sky in view. On the coast we might easily have rectified the extraordinary errors of the charts; but not having been supplied with copies, we concluded that a regular survey had left us nothing to do. Finally, we did not waste time upon the details of a river which, being unnavigable, can be of little benefit to commerce.

In conclusion, I must draw the attention of the Society to an

important point, *i. e.* the difference between our distances and those given by the Rev. J. Erhardt to be inserted in his map. We place Fuga 37 miles in direct line from the sea; while, according to him, it is 82. According to him, the road—adding a quarter-distance for windings—would be about 100 miles: we found it between 74 and 75. I most readily bear testimony, as far as I can judge, to his general correctness, and to the great value of that which may be called the ethnographic portion. But I question *all the distances*. Mr. Cooley reduces the road between Mombasa and Kilimanjaro from 200 to 130 miles: to judge by analogy a farther subtraction might be applied. Our longest march was 17 miles: after four days' continued work the slaves were dead-beat; some of our escort murmured loudly at our habits, and the Pangani people considered the rate of walking excessive. Without measuring instruments, or the custom of correct timing, it is difficult to estimate distance. Twenty miles in a tropical sun, over bad ground, where the step is shortened, and without water, appear 40 in Europe, whilst the hour's halt seems but a few minutes.

PART III.

*Progress of the Expedition into the Interior.**

THE journals of Captain Burton not having been received, the following notes and extracts from the correspondence will elucidate the route, laid down by Captain Speke, F.R.G.S.

The travellers, after their ascent of the Pangani river detailed in the preceding pages, returned to Zanzibar about March 6th, 1857, Captain Burton and some of the party being prostrated by bilious remittent fever. They left Zanzibar after the rainy season, much indebted to the late Colonel Hamerton, and reached the mouth of the Kingani river at Bagamoyo. They started for the interior from Kaole, about 10 miles s. of Bagamoyo, on June 26th, 1857.

The party consisted of Captains Burton and Speke and 80 men. They had 5 donkeys for riding and 20 donkeys to carry their numerous packages; some portion of their goods was left behind at starting because porters were not procurable. They made a forced march. Had they not left at once, the Arabs and Sawahili, worked upon by the Hindu Banyans and the Christian merchants of Zanzibar, would hardly have allowed them to enter, according to Colonel Hamerton's opinion.

* See "Proceedings," R. G. S., vol. ii. pages 52 and 323.

The first despatches were sent from Duthumi, near the head of one of the tributaries of the Kingani and about 120 English miles from the coast, dated July 20th. The second letters were sent from Zungomero, 192½ miles (English) by pedometer from the coast, dated August 2nd, 1857. The whole camp had then been laid up with fever: Captain Burton had been prostrated for 20 days. They reached this station, Zungomero, on July 25th, and left it on August 7th, sending his papers and a box of specimens to the coast by means of a slave—a dangerous trust, but which was successful. Their stay at Zungomero in some measure restored them, but they were still weak. Their first march led them, after passing through a long alluvial tract, on to dry and rocky, yet inhabited hills,—in Captain Burton's opinion the first step to the high lands of Ugogo. With considerable trouble, on account of their animals, they ascended the Goma Pass, about 2200 feet by boiling-point thermometer above the sea-level. The party had behaved tolerably well. This information was sent from Inenge on September 6th. They were then at the eastern foot of the Rubeho chain, which attains an elevation of 5646 feet.

Captain Speke regrets being incapable of obtaining an observation for latitude during the passage of this chain, but he had such a sharp stroke of fever from ascending the mountain that all strength failed him till reaching Ugogi. The last despatch received from Captain Speke was dated Unyanyembe, November 20th, 1857 (in about lat. 5° s.), having travelled (according to their route-maps, estimated by pedometer) about 540 English miles from the coast. Captain Burton's itinerary was to be forwarded from Ujiji on the Lake.

Captain Speke, writing to Dr. Shaw from Camp Zungomero, says—

"I have the pleasure to enclose a sketch of the route made by the expedition under command of Captain Burton, with a short descriptive Appendix, which I shall feel obliged by your laying before the President and Fellows of the Society. It is with great regret I have to inform you that the chronometers have all failed in their ratings, notwithstanding the time and trouble I devoted to them at Zanzibar. I have, in consequence, been obliged to depend on the few latitudes by stars the ever-cloudy sky afforded me, on a pedometer for distances, and the general direction by compass to guide me in the construction of the map. I carried the latter instrument in my hand the whole way, constantly observing the oscillations of the card and taking the means. The pedometer gave me a very steady exaggerative rate, but, unfortunately, the last two marches I was obliged to append it to a servant whose gait much differs from my own; this was in consequence of a severe fever I caught at Duthumi, that obliged

me, through weakness, to ride on here. Taking lunars is quite impossible so near the hills; two objects scarcely ever being in view at the same time in consequence of the constantly cloudy state of the weather, added to which my assisting servants are both ill. Captain Burton has unfortunately been laid up for some time with an intermittent fever, and in consequence has not been able to do any other work than keep a diary. He is getting better now, and hopes on arrival at Ugogo—an elevated, healthy, and clear place by report—to send in all observations, &c. With the Appendix is a list of the meridian altitudes of the various objects I took and have employed in constructing the map. To show the sickly nature of the climate at this season, nearly all the camp have come to us by turns for medicine. I must add that I commenced the journey by taking rounds of observations, with the heights of all the useful celestial objects, but the unfavourable nature of the atmosphere soon caused me to desist, and now I think myself lucky to catch a latitude occasionally. About the value of the Government boiling thermometer for determining heights I am in great doubt; it is the only one I have that reads to tenths, but another, on which I feel great reliance, affords a good check to it, and will always be a means of detecting the quality of the water used."

From the sea-shore there is a slight rise to the village Kaole, the point of departure; thence to Bomani the country maintains the same low level; is generally dotted about by small villages, around which all vegetable matter, such as is usually seen in India, grows in the most extravagant luxuriance. Trees are plentifully dispersed about, and grass grows thick and tall everywhere. The soil is sand, darkened by a rich vegetable mould. At Bomani there is another slight rise of the country; this elevation continues as a boundary to the Kingani valley, as far as the Mboamaji junction, and from the top of it the Kingani valley, including all the visible country to the northwards, appears a low continuous flat. To reach this junction the road sometimes leads along this rolling elevated ground, at others dips into the valley, passing continually through trees, with thick, high undergrowing grass—there is very little bush jungle anywhere—and occasionally through some fine cultivation. The general lowness, and owing to the abundance of trees and grass, closeness of the country, precludes any chance of making an exact compass-survey. On reaching the junction the track opens on a slightly different aspect; the higher ground formerly on our left ceases to overhang us, the trees are a little wider apart, and the grass, though equally thick, is much shorter, giving the country a park-like appearance. Still there is no view. Crops vegetate around the few villages in gigantic growth, and so matters continue

alternating till Kidunda ("Little Hill") is reached. From Kidunda to Mgeta is a rolling, stony jungle; the grass is still shorter than on the preceding line, and the trees are chiefly mimosa. The Mgeta, a small affluent to the Kingani River, is passed by means of trees thrown across it,—a difficult and dangerous arrangement for the transport of property. The way from Mgeta to Kiruru is also of a park-like nature: along this line many herds of gnu and other antelopes were seen. Leaving Kiruru, we come under the hills forming the coast range; here the jungle and grass are of the most gigantic order, excepting in those places where the husbandman has usurped their place by the fruits of his labour.

The mountains rise directly out of the plains without having any foundationary elevation; our march has therefore been along one almost undeviating flat. The Kingani may be said to have a flow quite equal to, if not exceeding, that of the Pangani, but the water, possibly owing to the season, is of a different colour and taste: the latter, the Pangani, as we found it in the interior, was of a bluish-grey colour, not unlike a new slate pencil, and had a harsh, raw taste; but this river, the Kingani, is muddy, red, and the water soft and sweet. There is a bar across its mouth, obstructing the entrance of native craft, excepting at high tide. Many of the rafters that find their way into the Zanzibar market come down this river from as far as three days' journey. I visited the hot springs Maji Yaweta, but could not approach the centre of heat in consequence of the swampy nature of the ground around it. The water I tasted was warm and very sweet; the area of the place about which the water was boiling and jetting appeared to be 2000 square feet. On the surface were sundry small white mounds of lime, and the face generally bore a whitish aspect, tinged with some streaks of yellow. The specimens I brought away will be transmitted by Captain Burton, along with his other collections, to the Bombay Geographical Society.

Bomani	* Benetnasch	6° 30' 29"	South lat.
	* α Centauri	6 35 47	"
Nzasa	* α Centauri	6 49 23	"
Thumba La Here	* β Centauri	6 55 20	"
	* α Centauri	7 16 0	"
	* α Cygni	7 16 28	"
Muhonyera	* β Centauri	7 27 0	"
	* α Centauri		
Madega Madogo	\odot		
	* α Centauri		
Kidunda	* α Centauri		
Zungomero	* α Δ Aust.		
	* Vega		
	* Vega		

Total distance shown by pedometer, 192½ miles (statute?). Height of Zungomero Station by Government boiling thermometer, 278 feet.

Zungomero, 1st August, 1857.

J. H. SPEKE.

From Unyanyembe, Captain Speke, on the 20th of November, 1857, transmits a farther portion of his route-map with the following remarks:—

“Since leaving Ugogo my principle in protracting the map has been in carefully observing the distance by time, making due allowance for curvature, &c., of the track, and by taking the latitude from a star at every 10 to 20 miles. The same name for different villages, it will be noticed, is repeated two or three times in certain places about the map. This reiteration signifies that those villages are all in the same district, the name of which they take. The proper signification of the word Unyamwezi has not yet been determined. The name of the country, and not its occupants, as I have hitherto used in marking out the limits of the principal tribes (which is usually denoted by the syllable Wa preceding the name), is therefore given for the present. Another source of great regret is in the destruction, by a fall whilst boiling, of our last thermometer. I am now reduced to a bath thermometer by Newman, cut to degrees only, but readable by estimation very much closer; I began using it first at Rubuga, and find it answers pretty uniformly. Col. Sykes's method, as given in the ‘Hints to Travellers’ of the Royal Geographical Society, is the one I have adopted in reducing all my calculations for levelling since the commencement.

Equipment of the Expedition.

Camp, Zungomero in Khutu, about 200 miles from coast, Sunday, 2nd Aug., 1857.

SIR,

I promised you an account of our outfit: here it is, pretty perfect. It should have been sent before, but all our camp has been laid up with fever. We are getting on better for a few days' rest. I had fever twenty days, and could not halt; some marches were 20 miles.

The Party.—R. F. Burton, commanding; second in command, J. H. Speke. (A doctor sadly wanted.) Ras Kafilah Shaykh Said ben Salim el Lamki, with 4 slaves armed with muskets, 1 slave boy and 2 slave girls. His assistant, Muinyi Wazir, a Sawahili man who acts as linguist and guide. 13 Baloch guards as escort, including jemadar as commandant; with 2 slaves: 1 of the Baloch is a tailor, and most useful. 2 Portuguese servants. 2 black servants armed with swords, gun-carriers, &c. 9 black guards for asses, armed with muskets, and to act as guides, slaves belonging to Ramji, an Indian merchant (one to follow with our remaining equipment). 5 donkey-men. 36 porters (Unyamwezi men) carrying American domestics, blue cotton cloth, beads of sorts, especially pink and black, and brass wire, Nos. 7 and 8; value about 600 dollars. (We are to be followed by 22 more.) 9 extra porters engaged *en route* to assist the asses. Total 80 men.

Provisions, &c.—This is the harvest season, so travellers rarely carry provisions.

At other times they drive goats and sheep for provisions. 1 dozen brandy (to be followed by 4 dozen more); 1 box cigars (tobacco here everywhere procurable—5 large cakes for 1 cloth of 4 cubits); 5 boxes tea (each 6 lbs.); a little coffee; 2 bottles curry stuff, besides ginger, rock and common salt, red and black pepper, one bottle each, pickles, soap, and spices; 20 lbs. pressed vegetables; 1 bottle vinegar; 2 bottles oil; 20 lbs. sugar (honey procurable in country); rice, Indian corn, holcus, fowls, ducks, sheep, goats, and eggs, are generally purchasable.

Land Conveyance.—5 donkeys for riding, with Arab saddles and halters (English would have been better); 20 donkeys for carrying goods; 20 packsaddles, with straps and ropes (these are partly procurable in the country, and partly made by Belochies of fan-palm); 20 sacks for asses (a few extra), packing-needles, and twine.

Arms and Ammunition, including 2 smooth bores, 3 rifles, a 3-revolver, spare fittings, &c., and swords. Each gun has its leather bag with three compartments, for powder-flask, ball, caps, patches, &c. Also 100 lbs. gunpowder (2 safety copper magazines and others); 60 lbs. shot; 380 lbs. lead bullets, cast of hardened material at Arsenal, Bombay, placed in boxes 40 lbs. each for convenience of carrying, also to serve as specimen boxes, and screwed down to prevent pilfering; 20,000 copper caps; wadding.

The Belochies are armed with matchlocks, shields, swords, daggers, and knives; plenty of falitah, or matchlock match. They have for ammunition—40 lbs. gunpowder (4 kegs); 1000 lead bullets; 1000 flints for slaves' and blacks' muskets. To be followed by about an equal quantity of ammunition. Total 500 rounds for each big gun, and 2000 for each little gun.

Camp Furniture.—1 sepoy's rowtie; 1 small (gable-shaped) tent of two sails joined, to cover and shelter property in this land of perpetual rains; 1 table and chair; 1 Crimean canteen tin, with knives and forks, kettle, cooking-pots, &c.; 1 bed, painted tarpaulin cover, 2 large cotton pillows for stuffing birds, 1 air pillow, 2 waterproof blankets (most useful), 1 Maltese blanket (remarkably good), and 2 other blankets; 1 bed, cork, 2 pillows, 3 blankets, and mosquito net. The Portuguese boys have thick cotton padded mattresses, pillows, and blankets. All the servants have some kind of bedding; kitandahs or native bedsteads are sometimes met with in the villages, but they are about 4 ft. by 2; 3 solid leather portmanteaus for clothes and books; 1 box, like Indian petarah, for books; 1 patent leather bag for books, washing materials, diaries, drawing-books, &c.; 1 small leather bag, round neck, for instruments, &c.; 5 canvas bags for kit generally; 3 mats to sit on.

Instruments.—1 lever watch; 2 chronometers; 2 prismatic compasses, slings, and stands; 1 ship's azimuth compass; 2 pocket compasses; 1 pocket thermometer; 1 portable sundial; 1 rain gauge; 1 evaporating dish; 2 sextants and boxes, and canvas bags to be slung over porters' shoulders; * 2 artificial horizons (a little extra mercury, to be followed by more); 1 pocket lens; 1 mountain barometer lent by Bombay Geographical Society (very delicate); 3 thermometers; 1 measuring tape (100 ft.); 1 sounding lead; 2 boiling thermometers; 1 box of instruments; 1 glass; 1 telescope; 2 ft. rule, brass slide; 1 pocket pedometer by Dixie (an invaluable instrument, 3 more wanted); 1 parallel ruler.

Stationery.—Foolscap paper; 1 ream common paper; 6 blank books; 3 Letts' diaries; 2 dozen pencils; 6 pieces caoutchouc; 6 metallic note books; 3 memorandum ditto; 1 box wafers and sealing wax; 2 field books; steel pens; bone ditto; ink powder which makes up well without acid; 3 bottles ink; 1 bottle native ink; 2 sets meteorological tables, blank; 4 tin cylinders for papers (very bad, everything rusts in them); Nautical Almanac for 1857 and 1858; charts, Mr. Cooley's; missionary map; skeleton maps drawn up by Captain Speke; table of stars drawn by Captain Speke; account book; portfolio; wooden and tin cylinders for pens, &c.

Tools.—1 large turn-screw; 1 hand saw; 1 hammer; 20 lbs. nails; 1 hand vice; 1 hone; 9 hatchets (as a rule every porter carries an axe); 2 files; 9 Yembe or native hoes; 9 Masha or native picks; 1 cold chisel; 1 heavy hammer; 1 pair pincers.

To be followed by 1 bench vice; 1 hand ditto; 12 gimlets of sizes; 1 stone grinder, with spindle and handle 18 inches; 6 splitting axes; 12 augers of sizes; 2 sets centre bits, with stock; 12 chisels; 4 mortise chisels; 2 sets drills; 24 saw

* A third sextant was forwarded by Admiral Beechey.—Ed.

files; 6 files of sorts; 4 gouges of sizes; 50 lbs. iron nails; 2 planes, with 2 spare irons; 3 hand saws; screws. These things will be useful at the lakes, where carpenters are in demand.

Clothing.—The shirts are flannel and cotton; turbans and thick felt caps for the head.

Books and Drawing Materials.—Norie; Bowditch; Thompson's 'Lunar Tables'; Gordon's 'Time Tables'; Galton's 'Art of Travel'; Buist's 'Manual of Observation'; Jackson's 'What to Observe'; Jackson's 'Military Surveying'; 'Admiralty Manual'; Cuvier's 'Animal Life'; Prichard's 'History of Man'; Keith's 'Trigonometry'; Krapf's 'Kiswahili Grammar'; Krapf's 'Kinika Testament'; Amharic Grammar (Isenberg's); Belcher's 'Mast Head Angles'; Cooley's 'Route to Unyamesi Lake'; and other miscellaneous works; 1 paint box complete, soft water colours; 1 small ditto, with Chinese ink, sepia and Prussian blue; 2 drawing books; 1 large drawing book; 1 camera lucida.

Portable domestic Medicine Chest.—Vilely made; it is glued, and comes to pieces. Some medicines for natives in packages. I have written to Zanzibar for more quinine, some morphia, Warbeng's drops, citric acid, and chiretta root. This country is a hot-bed of fevers.

Miscellaneous.—10 pieces red cloth for presents (3 expended); 3 knives for servants; 4 umbrellas; 1 hank salmon gut; 1 dozen twisted gut; 1 lb. bees wax; 2 dozen penknives; 2000 fishing hooks; 42 bundles fishing line; 2 lanterns (policeman's bull's eye and common horn); 2 iron ladles for casting lead; 1 housewife, with buttons, needles, thread, silk, pins, &c.; 12 needles (sailor's) and palms; 2 pair scissors; 2 razors; 1 hone; 2 pipes; 1 tobacco pouch; 1 cigar case; 7 canisters snuff; 1 filter; 1 mouth filter; 1 looking-glass; 1 small tin dressing-case, with soap, nail-brush and tooth-brush (very useful); brushes and combs; 1 union jack (this precedes the caravan, in rear the flag of Zanzibar); 10 steels and flints (matches almost useless in this damp air).*

F. Galton, Esq.

VI. — *Explorations in the Desert East of the Haurán and in the Ancient Land of Bashan.* By CYRIL C. GRAHAM, Esq., F.R.G.S., &c.

Read, February 22, 1858.

IN the early spring of the year 1857, on my arrival at Jerusalem, from Egypt, having just concluded a journey of considerable length into the higher and less known countries through which the Nile flows, I began to make preparations for a very extended tour in Palestine and Syria. My object was to become as thoroughly acquainted as possible, not only with the general features of the country, but with all the minute details of the topography. I had long felt convinced of how much might be done by careful research, how many sites which have long since been forgotten might be rescued from oblivion; and that each step we make in our knowledge of the ancient topography of Palestine is of incalculable value, as a subject of general interest to all, but more especially as affording the strongest proofs of the invariable accuracy of the sacred Historian. Dr. Robinson and Dr. Eli Smith were the first

* A box containing botanical and geological specimens had been sent to the Secretary of the Bombay Geographical Society. For information, since received, of the farther progress of this Expedition, see "Proceedings" R. G. S., vol. iii. —ED.