About 9 A.M. we reached Gurowa, where we found that the 'Pleiad,' owing to some temporary false alarm, had left two days previously. We followed, and, as the current ran strong, went rapidly along. Towards evening we entered a wrong creek, and soon found ourselves in submerged country; and it was not till 9 next morning that we regained the river, having pulled over fully 20 miles of flooded land. This forenoon we overtook the 'Pleiad,' aground on the weather end of a bank, having gone about 120 miles in our gig. By considerable exertions the ship was floated on the afternoon of the 2nd of October, and on the morning of the 3rd, having no fuel on board, dropped down the river about 20 miles to Zhibú, where we remained for some days to re-rate

the chronometers and to cut wood.

During our descent we touched at many towns and villages, and wherever practicable repeated and tested the observations made during the ascent, and by the 18th of October Mr. May was enabled to get the sun's meridian altitude, the angle previously having been too great to be measured by the sextant. On the morning of the 20th of October we once more reached the confluence, and anchoring off Igbégbe, remained for 5 days, during which time fresh chronometer rates were once more obtained. The only incident I have to mention is, that a man whom I had taken from this place as a guide and interpreter, and whom I left at O'jogo, brought on board with him, when we called to re-embark him, a boy, whom he confessed, after much questioning, to be a slave for sale. I told him that our vessel could not be considered as a slave-ship, and that I should take and free the boy, but as he might have erred in ignorance, I should pay him his market value, viz., 50,000 cowries, or from 7l. to 8l. He agreed very gladly, but on reaching Igbégbe tried to kidnap the boy; on which I had him sent for before the king, to whom I related the whole circumstance, ending by telling him and the people around our views on the slave trade. Before leaving I ascertained that my ransoming the boy had given much general satisfaction, and it showed the natives that, although no one was wronged, we are opposed to slavery in deed as well as in word. The boy, whose native name is Gato, is of the Mitshi tribe; he is a smart, intelligent youth, and under the English name of William Carlin is now at school in Sierra Leone.

Of the remainder of our voyage I have little to say. We crossed the bar under most favourable circumstances on the morning of the 6th of November, and anchored next afternoon in Clarence Cove, not having lost a single life, and all being in tolerable health.

The 'Pleiad,' as might have been expected from her experienced designer Mr. Laird, answered admirably, and was in every respect beautifully adapted for the purpose intended. Most of her officers were carefully selected, and I have in particular to mention the conduct and the assistance I derived from the chief mate, the chief engineer, and the surgeon. Of my own party, I can hardly speak in too high terms of the ability or the behaviour of Mr. May, who contributed greatly towards the success of the expedition; and I had in Mr. J. T. Dalton a very active zoological assistant. To one more person I must allude, namely, the Rev. S. Crowther, who, by his amiable character, his unassuming behaviour, and the quiet, yet perfect manner in which he discharged his duties, endeared himself to all on board.

In conclusion I would only remark that, from all appearances, there is less war and turmoil and greater feeling of security along the river than formerly, as detached huts and patches of cultivated ground are now to be seen all along the banks, none of which, I am assured by Mr. Crowther, existed during his visit in 1841.

> Table of some of the principal Positions. Long. E. 5° 14' 41" Agbéri 6° 29' 11" 5° 31' 16" Αδό Adamugù Iddá 6° 44' 27".5 44' 33" Igbégbe Yimaha 7° 59' 14" Okétta 8° 1' 0" A'batsho 7° 53' 41" 7° 59' 30" Dágbo 8° 5' 22".5 7° 55' 34" A'kpoko 7° 45′ 8′′ O'jogo 8° 40' 12"'5 7° 45′ 45″ Rògan-Kòto.... 9° 42' 7".5 80 10' 39" Gándiko 9° 56' 17" 8° 18' 32" Zhibú 11° 0' 37".4 Gùrowa .. 11° 25′ 7".4 9° 22' 0" Djin 11° 30′ 9° 30' 0" Dulti

IV -A Journey from El-Mediná to Mecca down the "Darb el Sharki" on the Eastern Road (hitherto unvisited by Europeans) in September 1853. By RICHARD F. BURTON, Lieut. Bombay Army.

Read, March 12, 1855.

To the Secretary of the Royal Geographical Society, London.

Sir,-At 8 A.M. on Wednesday 31st August the camel-shaykh suddenly appeared, warning us that we must lose no time in loading. All started up, and at 9 I found myself standing opposite the Bab el Misri, or eastern gate of the city, surrounded by my Madani friends, who had accompanied me thus far on foot, to take leave with customary politeness. After many affectionate embraces and parting mementos, we mounted. In company with some Turks and Meccans (for Shaykh Masud had a string of 9 camels) we passed through the Bab el Saghir, or "little gate," of the Munakhah suburb, near the castle, and turned our course towards the N. On our right lay the palm groves which conceal this part of the city, and far to the left rose the domes of Hamzah's Mosques at the foot of Mount Ohod.

After an hour's slow marching towards the N. and N.E. we fell into the Nejd road, and came to a place of fame called Ghadir, or "the Basin." * Here historians locate the battle of Boas, celebrated in the pagan days of El-Mediná (circa A.D. 615). It is a hollow in the plain, and conducts the drainage towards the northern hills. The skirts of Ohod still limited the prospect to the left; on the right was the well of Rashid, and the little whitewashed dome of Ali-el-Urays, a holy man whose tomb is visited by devotees. There we halted for a while, and turned round to enjoy a parting view of the Holy City. All the pilgrims dismounted, and took a fond and yearning leave of the venerable minarets and the green dome, to them the most interesting spot on earth.

Remounting, at noon we crossed a fiumara, which runs, according to my camel-shaykh, from N. to S., proving that we were now emerging from the Mediná basin. The sky began to be clouded over, although the air was still full of simum, held to be unwholesome here from the alternation of hot blasts from the plains and cold draughts from the hills. Travelling over a rough, stony, and thorny path, we arrived about 2 P.M. at the stream of lava heard of by Burckhardt.† The aspect of the country was strictly volcanic, abounding in basalt and is scoriæ more or less porous. The lava appeared in a large broad band, black and veiled with drift sand; a considerable portion is probably concealed, which makes the descriptions of the Arab historians sound exaggerated. I made diligent inquiries about the existence of active volcanoes in this part of El Hejaz, but no one could tell me of any.

At 5 r.m., travelling towards the E., we entered a bughaz or pass, which follows the course of a wide fiumara, walled in on both sides by steep and barren hills—the portals of a region too wild even to support Bedouins. The torrent-bed was in places narrow, with abrupt turns, and the drift of stones showed that after rains a violent stream, sometimes 7 feet deep, runs from S.E. and E. to W. and N.W. Water is at all times close to the

surface, as evidenced by a sparse growth of acacia, camel-grass, and the dum or Theban palm. In some parts I remarked what is sechnically called "hufrah," "holes," dug for water like wells in the sand, and my guide assured me that there is a spring flowing from the rocks.

After the long and sultry afternoon, beasts of burden began to sink in numbers, and troops of Takruri pilgrims disputed with flights of rakham * the precious morsels. Two hours' slow marching up the fiumara eastward led us to an abrupt turn towards the S. We then left it for rising ground. Already it was growing dark. An hour, however, elapsed before we saw at a distance the twinkling lights and heard the watch-cries of our camp. It was pitched in a hollow among hills, and was in excellent order; the pacha's pavilion surrounded by his soldiery and guards disposed in tents, with sentinels regularly posted around the outskirts of the encampment. One of our men, whom we had sent forward, met us at the entrance, and led us to an unoccupied spot, where we unloaded the camels, raised our canvas house, lighted fires, and prepared with supper for a good night's rest. Living is simple upon such a march. The pouches in and out of the shugduf or litter, contain bread, cheese, dates, limes, and water, with which you supply yourself when inclined. At certain hours of the day ambulant vendors offer you sherbet, lemonade, hot coffee, and water-pipes admirably prepared; and when you halt, provisions are cooked, generally boiled rice, or the mixture of rice and vetches called "kichri," with a relish of onions or limepickle, and rarely a little meat.

... We arrived at our first halting-place, Ja-el-Sharifah, which was the rendezvous of the scattered parties of the caravan, at 8 p.m., after a march of 22 miles.† This station lies 50° S.E. of El-Mediná, and belongs rather to Nejd than to El-Hejaz.

Thursday, September 1.—At 3 a.m. we were roused by the roar of the signal gun, struck the tent, loaded the animals, mounted, and found ourselves hurrying through a dark pass in the hills towards the S.E. It was now our object to obtain a good place in the caravan, as travellers generally adhere to that first chosen. As might be expected, we met with a variety of minor

^{*} Dictionaries translate the word "pool;" here it is applied to places where water stagnates after rain.

[†] Travels in Arabia, vol. ii. p. 217. The Swiss traveller was prevented by sickness from visiting it.

^{*} A foul vulture, or rather kite, with a dirty yellow plume, and wings partly black. It is the Ukab of Sindh.

[†] A day's journey in Arabia is generally reckoned at 24 or 25 (Arab) miles. Abulfeda leaves the distance of a "marhalah" (or manzil, a "station") undetermined. El Edrisi reckons it at 30 miles, but speaks of short as well as of long marches. The only idea the Bedouin of El-Hejaz, and indeed of Arabia generally, has of distance is the "saat" or hour's walk, and the manzil or stage. The former varies from 2 to 3½ miles, and the latter from 15 to 25. Twelve hours' marching, with an occasional halt for the sake of the camels, is considered good average work.

accidents, camels falling, gugglets breaking, shugdufs bumping against one another, and plentiful bad language. We travelled on till 6 A.M., at which hour we emerged from the black pass. The sun rose upon us, disclosing a large hollow basin of coarse gravel, resting upon hard clay. It is about 5 miles broad by 12 long, collects the waters of the high grounds after rain, and distributes its surplus through an exit towards the N.W., in the low undulating hills that surround it. At the entrance we dismounted, prayed, breakfasted, and then proceeded to cross the plain. Even at this early hour the country reeked with abundant vapour, extracted by the fiery breath of the simum. About noon, however, the sky again became cloudy, and nought of colour remained, but that white haze, dull, but glaring withal, which is the prevailing day-tint in these regions. At this hour we reached a narrowing of the basin, where from both sides "irk" or low hills stretched their last spurs into the plain. But after half a mile it again widened to about half its previous breadth. At 2 P.M. we turned our course towards the S.W., ascended stony ground, and one hour afterwards found ourselves in a desolate, rocky flat, among the hills called Mahattah * Ghurab. That day our route was unusually winding, and the distance travelled over did not exceed 24 miles. Ghurab lies amongst the irregular masses of hill which lead to the highlands of Nejd, 10° S. W. from our last night's resting-place. Here we found water in some wells at a distance of about 2 miles, and had to pay 10 piastres for a couple of skins' full. The irregular cavalry has a pernicious practice of occupying water in force, and of compelling travellers to be generous or to die of thirst. We passed a pleasant evening at Ghurab. I began to like the old Shaykh Masud, who, on his part, thought me worthy to hear his battles, his genealogy, and his family affairs. The rest of the party could not repress their contempt when they heard me putting divers questions about torrents, hills, and the directions of places. "Let the Father of 'Mustachios † be," said the old man; "he is friendly with the Badu, and knows better than you all!"

Friday, September 2nd.—The hateful signal gun awoke us at 1 A.M., and we travelled drowsily for 4 hours, through utter darkness, over a country which, to judge from the stumbling of the camels, was rough and stony. At half-past 5 A.M. we entered a

spacious basin, at least 6 miles in breadth, overgrown with acacia-trees-mere vegetable mummies - and camel-grass: in many places it showed a water-mark, and here and there the ground was pitted with recently dried-up pools. After an hour's rapid march we toiled over a rugged harrah or ridge, composed of broken and detached blocks of basalt and scoriæ, fantastically piled up and dotted thinly with thorn-trees. Shaykh Masud went to and fro along the line of camels, addressing his charges with a "Place yourselves forward" (in the litter) as we ascended, and "Throw yourselves backward" during the descent. I know not which to admire the most, the circumstance of our shugduf not slipping over the crupper, or the sure-footedness of our dromedaries. The animals stepped from block to block slowly and staidly, assuring themselves of their forefeet before they trusted all their weight to advance. They mound, however, piteously, for the sudden turns of the path puzzled them; the descent was even more troublesome than the ascent; the rocks were hot and cutting, deep holes yawned between the blocks, and now and then an acacia would catch the shugduf, almost overthrowing the hapless bearer by the suddenness and the tenacity of its grasp. This passage took place during daylight; but we had many at

night, which I shall not describe, nor forget.

Descending the ridge, we entered another hill-encircled basin of gravel and clay. In many places piles of basalt and crumbling streaks of hornblende schist, disposed edgeways, green within and sunburnt to blackness, cropped out of the ground. At 10 30 A.M. we found ourselves in an "acacia barren," one of those thorny places that pilgrims dread, and which give rise to many scenes, comic as well as tragic. On the left the road was flanked by an iron wall of basalt. Noon brought us to another ridge, whence we descended into a second wooded basin surrounded by hills. We were persecuted by the simum, and the air was filled with those majestic pillars of sand so graphically described by Abyssinian Bruce. At 1 P.M. we crossed a fiumara. and in an hour afterwards we pursued the course of a second. Old Masud called this the Wadi el Rahnah, and assured me that it runs from the E. and the S.E. in a northern and north-westerly direction to the Mediná plain. Early in the afternoon we reached a diminutive flat on the bank, or rather a wide bulge in the torrentbed: around it were hills everywhere, except about the road, which we could see running into the far distance, over a "mahjar" or stony ground, black as usual in El-Hejaz. Some opined that the caravan would cross the mahjar and halt beyond it. We were soon tired of discussion, alighted, and, in a burning sun, pitched the tent. Shaykh Masud called the place "Hijriyah;" according to my computation it is 25 miles and S.E. 22° from

^{* &}quot;Mahattah" means a spot where you take down luggage, i.e. a station. By some Hejazis it is used in the sense of a halting-place where you spend an hour or

⁺ The Bedouins of El-Hejaz belong for the most part to the Shafei school, which delights in clipping or even in shaving the moustachios and the perioral region. Like all Arabs they must have a nickname for every one of God's creatures. "Khalik ma el Badu"-a friend with the Bedouin-is a proverbial saying, and means that you are no greasy burgher.

Ghurab. We found an abundance of water, and in the evening were rewarded for our disappointment in not seeing the new moon by the prospect of a fine nimbus discharging its blessed load on the western hills.

Saturday, Sept. 3.—We loitered at El-Hijriyah, though the camel-shaykh warned us that we had a long day's march to make. At 7 A.M. we crossed the grim mahjar by a cruel footpath, and at 9 struck into a broad flumara which runs from E. towards the N.W., its bed overgrown with acacia, the senna plant, different species of euphorbia, the wild capparis, and the dum palm. Up this line we travelled the whole day. About 6 P.M. we came upon a basin at least 12 miles wide, which absorbs the water of the adjacent hills. Accustomed as I have been to mirage, a long thin line of salt efflorescence appearing at some distance on the plain below us, when the shades of evening began to fall thicker, completely deceived me. Even the Arabs appeared divided in opinion. Beyond, upon the horizon, rose dark fortlike masses of rock, which I mistook for buildings, the more readily as Shaykh Masud had informed me that we were approaching a populous place. At last, descending a long steep hill, we entered upon the plain, and discovered our error by the craunching of camels' feet upon large curling flakes of a nitrous salt, overlying caked mud. Hereabouts the Arabs call this phenomenon "bahr milh,"—a sea of salt; in other places it is known as the "bahr bila ma," or waterless sea. Those civilised birds, the crow, kite, and martin, now warned us that we were in the vicinity of a town. It was not, however, before 11 P.M. that we entered the confines of El-Suwayrkiyah—a fact most patent to us by the stumbling and falling of the dromedaries over the ridges of dried clay disposed chequer-wise upon the fields. Then came other obstacles, such as garden walls, wells, and hovels, so that midnight had elapsed before our weary animals reached their resting-place.

Sunday, Sept. 4.—Rising betimes in the morning, I proceeded to inspect the town of El-Suwayrkiyah. It is situated about 28 miles from Hijriyah, and, according to my reckoning, 99 miles along the road from El-Mediná. Its bearing from our last station was S.W. 11°. Some geographers, therefore, place it much too far towards the centre of Arabia. Here the territory of the Meccan sherif begins, and the pachalik of El-Mediná ends.

The town is small, consisting of about 100 houses. It is built upon the side and at the base of a mass of basalt, which rises abruptly as though raised by the hand of man from the clayey plain. The summit is converted into a fortalize—in these lands no town can lack one—by a rough bulwark of stones piled up, so as to make a parapet. The lower part of the settlement is also protected by a mud wall with the usual semicircular towers.

Inside there is a bazár well supplied with meat, principally mutton, by the Bedouins of the neighbourhood, and dates, wheat, and barley are grown near the town. There is little to describe in the narrow streets or the mud houses, which are essentially Arabian. Outside, the country bears traces of cultivation, the fields are divided by ridges and stone walls, there are some fine palmplantations, and the wells are numerous. The water is not deep below the surface, but it has a brackish taste, sensible enough after a day's use, and the effects are emphatically the reverse of chalybeate.

The town is inhabited by the Beni Husayn Sayyids, a race of schismatics, noticed by Burckhardt.* They claim the allegiance of all the Bedouin tribes around, and pay fealty, in name only I was told, to the Meccan sherif.

We made a half-halt at El-Suwayrkiyah, and, determining to have a small feast, I bought some fresh dates and a sheep for a dollar and a half. Arab travellers consider liver and fry a dish to set before a shaykh; on this occasion, however, our enjoyment was marred by the brackishness of the water—a civic feast would lose by being washed down with a thin solution of Epsom salts.

At 10 A.M. we started in a south-easterly direction, and travelled over a plain thinly dotted with desert vegetation. At 1 P.M. we came to a basaltic ridge, and then entering a long depressed line of country, which could scarcely be called a valley, paced down it 5 tedious hours. The simum, as usual, was blowing, and it seemed to affect every one's temper. At 6 P.M., before the light of day had faded, we traversed a rough and troublesome ridge. Descending it, our course lay in a southerly direction; the road was flanked on the left by low hills of red sandstone and bright porphyry. About an hour afterwards we came to a long basaltfield, through whose blocks we threaded our way slowly and painfully, for it was now dark. At 8 P.M. the camels began to stumble over the little divisions of the wheat and barley fields, and presently we came to our halting-place—a large village called El-Sufayna. The plain was already dotted with tents and lights. These belonged to the Baghdad caravan, whose route here falls into the Darb el Sharki. It consists of a few Persians, Kurds, and tribes contiguous to the capital of the Caliphs, collects en route the people of north-eastern Arabia, Wahhabis, and others, and is escorted by the Agayl tribe of Bedouins and the fierce mountaineers of Jebel Shamar, Scarcely was our tent pitched

^{*} Travels in Arabia, vol. ii. p. 239. "In the Eastern Desert, at 3 or 4 days' journey from Mediná, lives a whole Bedouin tribe called Beni Aly, who are all of the Persian creed." The traveller, however, confounds the Beni Husayn Sayyids of El-Suwayrkiyah with the Beni Ali Bedouins who live about Kuba, near El-Mediná.

when the distant spitting of musketry and an ominous beating of the kettle-drums announced a disturbance. The Baghdad caravan, it afterwards appeared, though not more than 2000 in number, men, women, and children, had been proving to the Damascus caravan that, being perfectly ready to fight, they were not going to yield in any point of precedence. From that time the two bodies encamped at a distance about a mile one from the other. We had travelled 17 miles. The direction of El-Sufayna from our last halting-place was S.E. 5°. Though it was dark when we encamped, the Shaykh Masud set out to water his moaning camels, who had not quenched their thirst for 3 days. He returned in a melancholy mood, having been charged by the soldiers at the well 40 piastres (8s.) for the luxury.

Monday, Sept. 5.—After a delightfully cool night we arose at 5 30 A.M. and prepared to start. There is nothing to see in the village of El-Sufayna: it consists of 50 or 60 mud-built, flat-roofed houses, surrounded by the usual mud rampart and turrets; the bazár at this season is well supplied, even fowls being procurable, and the country around produces dates, wheat, barley,

and maize.

We travelled towards the S.E. and entered a country destitute of the low ranges of hill which from El-Mediná hitherto had bounded the horizon. After 2 hours' march our camels climbed up a precipitous ridge, and then descended into a broad gravel plain. From 10 to 11 A.M. our course was southerly, over high table-land, and we afterwards traversed for 5h. 30m. a plain which bore signs of standing water. This day's march was peculiarly Arabic-a "Sahara la Siwahu," as my companions called it, "a desert where is no living thing but Allah." The horizon was a sea of mirage, and fantastic streams gushed over every descent. Gigantic columns of sand whirled about the plain, and on both sides of our road were piles of bare rock standing detached upon the surface of sand and clay. Here they appear in oval lumps heaped up with a semblance of symmetry; there a single boulder stands with its sharp foundation resting upon a pedestal of low dome-shaped rocks: all are of coarse pink granite, which flakes off in large crusts under the influence of the atmosphere, and I remarked one block which could not have been less than 30 feet high. Through these scenes we continued travelling till about 4 30 P.M., when the guns suddenly roared a halt. There was not a trace of human habitations around us. Shaykh Masud guessed correctly the reason of our detention in these inhospitable wilds. "Cook your bread," said he, "and boil your coffee, for the camels are a little tired, and the gun will soon sound again."

Our present station was called the "halting-place of the Mutayr," a clan of ruffians which infests these parts. We had

passed over about 18 miles of ground, and our present direction was S.W. of Sufayna 20°.

At 10 30 that night we heard the signal of departure, and as the moon was still young we prepared for hard work. Our course was south-westerly, through what is here called a waarrough ground and thickety plains. The camels tripped and stumbled, tossing their litters like cock-boats in a short sea; at times the shugdufs were well nigh torn from their backs by the pitiless thorn-trees, and nothing could be wilder or more picturesque than our passage over the basaltic fields and ridges. The morning broke as we entered a wide plain. In many parts were traces of water, but no such luxury now met the eye. Lines of basalt here and there seamed the surface, and in many places wide sheets of tufaceous gypsum, called by the Arabs sabhhah, shone like mirrors set in the russet framework of the plain. After our fatiguing night, day came on with a sad sensation of oppression, and we were disappointed in our expectations of water, which usually abounds in this station, as its name "El-Ghadir" denotes. At 10 A.M. we pitched our tent, after a march of about 20 miles. The direction of the night's journey was

S.W. 21°.

Tuesday, Sept. 6.—The Pacha gave the signal for departure at 6 P.M. We mounted and traversed the eastern plain. A heavy shower was falling among the western hills, which sent forth damp and dangerous blasts. Between 9 P.M. and the dawn of the next day we witnessed a recurrence of the last night's scenes, over a road so rugged and dangerous that I wondered how men could prefer to travel there by night. But the sturdy camels of Damascus were now worn down by fatigue; they could not endure the sun, and our time was so short that we could not afford a day's halt. My night was spent upon the front bar of my shugduf, encouraging the dromedaries; and that we had not one fall excited my extreme astonishment. At 5 A.M. we entered a wide plain thickly dotted with the common thorny trees, in whose strong grasp many a litter lost its covering, and not a few were dragged with their screaming inmates to the ground. About 5 hours afterwards we crossed a high ridge and saw below us the camp of the caravan not more than 2 miles distant; and at 11 A.M. we reached the station, which is about 24 miles from El-Ghadir, in the direction SE. 10°. It is called El-Birkat,* or the Tank, from a now ruinous receptacle for water built of hewn stone by the Caliph Harun el Rashid. The land belongs to a tribe of Bedouins called Utaybah, reputed to be the bravest and the most ferocious in El-Hejaz;

^{*} In this country a "birkat" may be an artificial cistern or a natural basin smaller than a "ghadir."

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and the citizens denote their dread of them by asserting that they drink the blood of slain foemen in order to increase their courage.*

The Pacha allowed us a rest of 5 hours at El-Birkat.

Wednesday, Sept. 7.-We left El-Birkat at 4 p.m., and travelled eastwards over rolling ground, thickly wooded. There was a network of paths through the thickets, and the moon was mostly clouded: the consequence was almost inevitable loss of way. About 2 A.M. we began ascending hills in a south-westerly direction, and presently fell into the bed of a wide rock-girt fiumara, which runs from E. to W. The sands were overgrown with saline and salsolaceous plants-Coloquintida, Senna, the Rhazya stricta, and a luxuriant variety of the Asclepias gigantea, whose broad leaves were cottoned over with mist and dew. At 6 A.M. we left the fiumara, and turning to the W., arrived about an hour afterwards at the station. "El-Zaribah," "the valley," is an undulating plain amongst high granite hills. In many parts it was faintly green; water was close to the surface, and rain stood upon the ground. During the night we had travelled about 23 miles, and our present station was S.E. 56 of our last.

Thursday, Sept. 8.—After eating and sleeping we prepared for the ceremony of El-Ihram, tor assuming the pilgrim garb, El-Zaribah being the "mikat," or appointed place for the rite. Between the noonday and the afternoon prayers we bathed, and then the barber shaved our heads; after which we deposited our laical clothes, and invested ourselves with the two long cotton cloths, the same as those used in the Cairo baths, which compose the religious toilette. Our heads and feet were naked, a state by no means suited to the September sun in Arabia; and a leathern purse was the only article we were allowed to carry round our necks. Then came long prayers, and a drowsy exhortation to be good and faithful pilgrims, to abstain from the enormously long list of things forbidden to the faithful at this season, and diligently to cry the "Talbiyat" at the height of our voices. This is a short prayer which derives its name from the first word of the

four sentences comprising it.

Here I am! (labbayk) O Allah! here am I! No sharer hast thou; here am I! Verily the praise and the benefit are thine, and the kingdom! Here I am! O Allah! here am I!

+ El-Ihram-literally meaning "the prohibition"-is applied to the ceremony

of putting on the pilgrim's garb and the dress itself.

It is a serious interruption to profitable conversation, for whenever you begin talking upon indifferent matters with a sensible man, he—if there be hearers—replies by asking what has become of your "Talbiyat." And this lasts till the return to Mecca from Muna.

Friday, Sept. 9.—We left El-Zaribah at 3 P.M., travelling towards the S.W., and a wondrously picturesque scene met the eye. Crowds in the pilgrim dress, whose whiteness glittered upon their dark skins, Bedouins galloping their blood camels, fierce Wahhabis following their enormous kettle drum and green flag flaunting in the wind, Turkish grandees, fair-haired Syrians, sable Africans, chocolate-coloured Indians, and a score of other nationalities, all urging their camels wildly and shouting the Talbiyat with willing lungs. Looking back at El-Zaribah soon after our departure, I saw a heavy nimbus settled upon the hill tops, and the growling of distant thunder smote our ears joyfully. We had hoped for a shower, but were disappointed by a dust storm, which ended with a few heavy drops of rain.

At 5 P.M. we entered the wide bed of a fiumara, down which we were to travel all that night. It varies in breadth from 150 feet to about 3 of a mile. Its course, I was told, is towards the S.W., and it enters the sea near Jeddah. The channel is a coarse sand, with here and there masses of sheet rock; and it bears in some places the vegetation usually found in fiumaras. It is everywhere flanked by dark and barren buttresses of rock. Half an hour's ride brought us to a suspicious-looking place. On the right was a precipice, at the base of which flows the stream when there is one; and to this half of the channel was our road limited by the stones and thorns that covered the other portion. The left almost reflected the right side; and opposite, the way seemed to be barred by piles of hills. Day still smiled upon the upper peaks, but the lower slopes and the flumara bed were already curtained with a grey and sombre shade.

A damp fell upon the pilgrims' spirits as they approached the place. The men ceased their loud prayers, and the very women became silent. While still puzzled by this phenomenon, an explanation was vouchsafed to me. A small curl of blue smoke, like a lady's ringlet, on the summit of the right-hand precipice, caught my eye; and simultaneous with the matchlock's echoing crack, a high-trotting dromedary in front of me rolled over upon the sands. A bullet had split his heart, throwing his rider a goodly somerset

of 5 or 6 yards.

Then came a scene of confusion and hurry which jammed the whole line into a solid mass. Shrieks, groans, curses, orders and counter-orders, with an occasional "phit" and a death-cry-the Utaybah seldom missed-lasted about half an hour. At length

^{*} Some believe this literally, and it is the only suspicion of cannibalism attaching to El-Hejaz. Possibly such a thing might take place after a fight when more than usual Bedouin rancour has been displayed. Who does not remember the account of the Turkish officer licking his blade after having sabred the body of a

the bold Wahhabis beat off the robbers, and our halt was exchanged for a kind of flight, in which all Shaykh Masud's skill was barely sufficient to steer our desert-craft clear of danger. That many fell was evidenced by the quantity of boxes and baggage strewing the ground. I had no means of ascertaining the number of men killed and wounded, reports were so contradictory and exaggeration so rife. The robbers were said to be 150 in number. Their object was plunder: they would eat the dead camels; but their principal ambition was to boast, "We, the Utaybah, on such a night, stopped the Sultan's mahmal one whole hour in the pass."

That night we travelled down a chasm between dark and formidable rocks, and the roughness of the road caused many small accidents. Dawn broke whilst we were still in the flumara, which here is about 100 yards wide. The granite hills on both sides were now less precipitous, and the borders of the torrent were natural quays of stiff clay, which showed a water-mark of from 12 to 15 feet in height. In many parts the bed was muddy, and the moist places as usual caused the camels to fall. We then turned northwards, and came in sight of the trees of El-Mazik, more generally known as Wadi Laymun, the "Limevalley," from the quantity of its fruit. Here, on the right hand, stood the Meccan Sherif's tent, surrounded by his attendants, and duly prepared to receive the Pacha of the caravan. We advanced about half a mile, and at 8 A.M. encamped temporarily in a hillgirt bulge of the fiumara. We had travelled about 24 miles from El-Zaribah, and the direction of our present station was S.W. 50°.

Saturday, Sept. 10.—Shaykh Masud warned us that we should only have 4 hours' halt, as it would be advisable to precede the great body of pilgrims. After breaking our fast upon the produce of the lime, the pomegranate, and the date trees, we sallied forth to enjoy the sight of verdure and listen to the melody of flowing waters. A line of the great Arabic poet Lebid—

Time-worn as primal writ that dents the mountain's flinty face,

led me to suspect the existence of ancient inscriptions in this part of El-Hejaz. I had no time, however, for research, and could derive no information from my companions. Some months after my return to India the Abbé Hamilton wrote to me that he had discovered in Wadi Laymun one of the rock monuments of Sesostris (Rhamses II.). Future travellers, therefore, will do well to examine this valley, which is accessible and comparatively civilized, the citizens of Mecca using it as a picnic and watering place.

Exactly at noon Shaykh Masud seized the halter of the foremost

camel, and we started down the fiumara girt with orchards. At 2 P.M., travelling towards the S.W., we arrived at a point where the torrent-bed winds to the right, and, quitting it, we climbed with difficulty over a steep ridge of granite. A little before 3 we entered a large hill-girt plain, which my companions called Sola. In some places were clumps of trees, and two or three villages warned us that we were approaching a city. Far to the left rose the blue peaks of Taif, and the mountain-road was pointed out to me. Here I first saw the tree, or rather the shrub, which bears the Balm of Gilead (or Mecca), celebrated for its healing, tonic, and stomachic properties. At 4 P.M. we came to a steep and rocky pass, up which we toiled with considerable difficulty. The general face of the country was rising once more, and again presented the aspect of numerous basins divided and surrounded by hills. As evening approached we halted for prayer, and tried, but in vain, to catch sight of Mecca, which lies in a winding valley. Then remounting, we journeyed through the darkness of night. At about 1 A.M. I was aroused by a universal excitement. "Mecca! Mecca!" cried some voices; "The Sanctuary! O the Sanctuary!" exclaimed others, and all burst into loud "labbaykas," not unfrequently broken by sobs. I looked out from my litter, and saw by the light of the southern stars the dim outline of a large city, a shade darker than the surrounding plain. We were passing over the last ridge by an artificial cut called the Saniyah Kudaa. It is flanked on both sides by watch-towers which command the entrance to the Darb el Maala, or road leading from the N. into Mecca. Thence we passed to the Maabadah,* or northern suburb, in which the Sherif's palace is built. After this, on the left hand, came the deserted abode of the Sherif bin Aun, now said to be a "haunted house:" opposite it lies the Jannat el Maala, the holy cemetery of Mecca. Thence, turning to the right, we entered the Sulaymaniyah or Afghan quarter, and exchanging the main road for a bye-path we ascended by narrow lanes the rough heights of Jebel Hindi, upon which stands a small, whitewashed, crenellated building called a fort. Descending, we traversed several dark streets, in some places crowded with rude cots supporting dusky figures, and finally, at 2 A.M., we heard the shrill cries of joy with which my companion's mother received him. From Wadi Laymun to Mecca, according to my calculation, the march was about 23 miles, the direction S.E. 45°.

The following is an itinerary of our marches,† which, protracted on Burckhardt's map, offers an error of at most 10 miles:—

^{*} El Edrisi, and after him Sale, call this place "El Marbaah." I never heard the word at Mecca.

[†] I paid 20 dollars—advancing half that sum as earnest-money—for two camels and part of a beast to carry our water-skins. The shaykh was also bound to

2. 3.	Ghurab to El-Hijriyah	••						Miles. 22 24 25	
4.	El-Hijriyah to Suwayrkiyah		• •	• •	• •	S.W. 11°		28	,
								99 m	iles
5.	Suwayrkiyah to Sufayna					S.E. 5°		17	
6.	Sufayna to halting-place of t	the	Beni	Mut	avr	S.W. 20°		18	
7.	Thence to El-Ghadir					S.W. 21°		20	
8.	El-Ghadir to El-Birkat					S.E. 10°		24	
9.	El-Birkat to El-Zaribah				••	S.E. 56°	•	23	
10.	El-Zaribah to Wadi Laymur	٠.,	••	••	••	S.W. 50°	••	24	
11	To Manage	• • •	••	• •	• •		• •		
11.	To Mecca	• •	• •	• •	• •	S.E. 45°	• •	23	
								149	,,
			248						

The general face of the country along this line is a succession of low plains, here quasi-circular, there irregularly oblong, surrounded by diminutive hills, cut by fiumaras. Their basins are divided by belts of basalt and greenstone. The ridges may average from 100 to 200 feet in height; often they are in the form of prisms; sometimes the summit is a flat plain. The landward faces of the hills are disposed at a sloping angle, contrasting strongly with the precipitous rise of their seaward sides, and there does not appear to be any regular range within and parallel to the maritime chain. Nowhere have I seen a land richer in volcanic and primary formations,* or one where earth's anatomy is laid so bare. It is a country of lofty hills, abrupt and vertical, with black and barren flanks ribbed with fissures, furrows, and dingles, crowned by turreted and castellated heights, with wide and formidable chasms between. The predominant formation was basalt, here porous and cellular, there black and compact; again coarsely grifty, of a tarry colour, and, when fractured, shining with bright points. Hornblende of a fine black abounds at El-Mediná, and throughout this part of the Hejaz; it generally crops out of the ground, presenting edges from which pieces are easily detached, and darkened by the sun and air. Greenstone, diorite, and actinolite are found, but they are not so abundant as those above mentioned. Next to these come the granites, called

convey us to and from Mount Arafat, but during the whole time he and his son were to be supplied with raw or cooked provisions out of my stores. I bought a new shugduf or litter for 80 piastres (16s.), and for 15 a shibriyah (cot) for my servant. We laid in provisions for 14 days, although the journey never takes more than 12: but Bedouins are hungry, and pilferers abound. The stores consisted of rice, wheat flour (to be kneaded into bread), unleavened bread of two kinds, cheese, onions, turmeric, dates, limes, tobacco, sugar, tea, and coffee. We had three water-bags, two large and one small; in this country they demand the traveller's utmost attention. Large barádiyah, or water-gugglets, bought at El-Medina, furnished us with ready drink in the litter.

* I collected a few specimens on the line of march, and, after returning to Bombay, submitted them to Dr. Carter (Sec. As. Soc. Bombay), whose name is a guarantee of accuracy.

in Arabic suwan. Some are of the pink, large-grained kind, before described; others are of a grey colour, exceedingly compact, capable of being cut into a smooth surface, and susceptible of high polish. This latter is the material of which the Baitullah or Kaabah is built. The syenite is generally speaking coarse, but there is a rich red kind which at once strikes the eye. I have never seen eurite or euritic porphyry but in small pieces, and the same may be said of the petrosilex and milk-quartz. In some parts, particularly between Yambu and El-Mediná, there is an abundance of tawny-coloured gneiss, presenting a marked appearance of stratification. The transition formations are represented by a fine calcareous sandstone of a bright yellow, like ochre, which is used at Mecca in the external ornamentation of houses, bands of this stone being here and there inserted into the courses of masonry. There is also a small admixture of the greenish sandstone, found so abundantly at Aden. The secondary formation is represented by a fine limestone, in some places almost fit for the purposes of lithography, and a coarse gypsum, often of a tufaceous nature. The coast is wealthy in coralline, of which, indeed, the maritime towns are principally built. For the superficial accumulations and the face of the desert, the reader may be referred to any description of the country between Cairo and

To conclude with a few remarks upon the watershed of El-Hejaz. From El-Mediná to Él-Suwayrkiyah the beds of fiumaras abound, generally running from the E. and S.E. towards the W. and N.W. From El-Suwayrkiyah to El-Zaribah they cease, their place being taken by "Ghadir" or basins, in which water stagnates. Beyond El-Zaribah the traveller enters a region of Misryal (fiumaras), tending W. and S.W. The water obtained by digging is good where the rain is fresh in the fiumaras; saltish, so as at first to taste unnaturally sweet, in the plains; and bitter in the basins and low lands, where nitre effloresces and the water has had time to be tainted.

The country in my humble opinion has a compound slope. It falls towards the W., as the direction of the torrent-beds shows. I regret not having a better proof than Arab opinion for my belief that the country also declines from N. to S. This, as geographers are aware, is a disputed point. Ritter, Jomard, and some Arab authors make the peninsula rise towards the S. Wallin and others support an opposite opinion. But all the modern Arabs declare El-Hejaz to be lower than Mesopotamia, assert that the general course of water is from N. to S., and believe the spring at Arafat to flow underground from Baghdad.

I beg to propose this profile of the country through which I marched:—From the sea to Muguhhal is a gentle rise. The

watermarks of the flumaras show that El-Mediná is considerably above the level of the sea; and though geographers may not be correct in claiming for Jebel Radhwa (near Yambu) a height of 6000 feet, that elevation does not appear too great for the plateau upon which is the Prophet's burial place. From El-Mediná to El-Suwayrkiyah is another gentle rise, and from this to El-Zaribah stagnating waters would argue a level. It is this circumstance most probably that has given rise to reports about a perennial lake on the eastern boundary of El-Hejaz, in which I believe as little as in the fiumara turned into a river and placed by Ptolemy between Yambu and Mecca. The lake probably owes its existence to similar conditions—a heavy fall of rain. Beginning at El-Zaribah is a decided fall, which continues with minor intervals to the sea. The Arafat torrent sweeps from E. to W. with great violence, sometimes carrying away the habitations and even injuring the sanctuary of Mecca.

I venture to hope that the delay in forwarding this paper will be attributed to its true cause—the heavy calls upon my time in making preparations for penetrating into Eastern Africa. Shortly after the hot season I start again from Aden as a Mohammedan trader to visit a part of the country whence the Ameer—silly young man!—has determined to avert the danger of Europeans by threatening their throats. On my return I will, with your permission, forward a copy of my notes; they may be valuable in some points, for the country is utterly unknown. But again, unhappily for me, it will be impossible to use anything but watch and pocket compass.

V.—Narrative of a Trip to Harar. By RICHARD F. BURTON, Lieut. Bombay Army.*

Read, June 11, 1855.

In May, 1849, the late Admiral Sir Charles Malcolm, an ardent geographer and a warm encourager of adventure, in concert with the President and Secretary of the Royal Geographical Society, urged upon the Honourable the Court of Directors of the East India Company the desirability of ascertaining the productive resources of the Somali country; but the project lay in abeyance until March, 1850, when Sir Charles Malcolm offered the charge of an expedition to Dr. Carter, of Bombay, an officer well known as surgeon to the 'Palinurus' during the maritime survey of Eastern Arabia. The state of that gentleman's health and the

exigencies of the service caused certain difficulties, and the project was again given up for the time.

In March, 1854, after my return from Arabia to Bombay, I applied myself to the task of resuscitating the expedition. My plans were favourably received by Lord Elphinstone, the enlightened Governor of the Presidency, and by the local authorities, amongst whom the name of the Hon. William Lumsden, then member of council, will ever be remembered with the liveliest feelings of gratitude and affection. In August a despatch from the India House authorised the expedition. It was originally composed of three members—Lieut. Herne of the 1st Bombay Europeans, Lieut. Stroyan of the Indian Navy, and myself. The first-named officer was accustomed to survey, to daguerreotype, and to observe; and the second was distinguished by his surveys of the coast of Western India, in Sindh, and on the Panjáb rivers. Soon afterwards the expedition received an addition in Lieut. J. H. Speke, of the 46th regiment Bengal N. I., who had spent many years in collecting the Fauna of Tibet and the Himalayan mountains, and who volunteered with ardour to become a sharer in the hardships and the perils of African travel.

Assembled at Aden, in the summer of 1854, we found the public voice so loud against our project, that I offered as a preliminary to visit Harar in disguise, thus traversing the lands of the dreaded Eesa clan, and entering a place hitherto closed to us by a ruler with the worst of reputations. I could not suppress my curiosity about this mysterious city. It had been described to me as the head-quarters of slavery in Eastern Africa, and its territory as a land flowing with milk and honey; the birthplace of the coffee-plant, and abounding in excellent cotton, tobacco, saffron, gums, and other valuable products. But when I spoke of visiting it, men stroked their beards, and in Oriental phrase declared that the human head once struck off does not regrow like the rose.

Our arrangements were soon made. Lieutenant Speke was detached to Guray Bunder, with directions to explore, if possible, the celebrated Wadi Nogal, and to visit the Dulbahantas, most warlike of the Somal. Lieutenants Stroyan and Herne established their camp at Berbera, the great mart and harbour of the Eastern coast; and they employed themselves in ascertaining the productive resources of the country; in mastering the subject of slavery—still, I regret to say, flourishing in these regions;—and in collecting carriage for a more extended journey. They were also directed, in case of my detention by the Emir of Harar, to demand restitution before allowing the great caravan, which supplies that city with the luxuries of life, to leave the coast.

In the mean time I prepared for a trip into the interior. The political resident at Aden, our possession in the Red Sea, assisted

^{*} See Report on the Position of Harar, &c., by Lieut. Barker. Journal of the Royal Geographical Society, vol. xii. p. 238.—Ed.

me with two Somali policemen, and I provided myself with a small stock of cloth, tobacco, rice, dates, trinkets, and other articles with which a Moslem merchant would load his camels. I determined to travel as El Haj Abdullah, a personage of some sanctity. Perhaps my adventures and a short description of a city hitherto unvisited by Europeans may not be unacceptable to a Society which, though essentially scientific, does not withhold encouragement from the pioneer of discovery, reduced by hard necessity to use nature's instruments—his eyes and ears.

On the 29th October, 1854, I started from Aden in a Somali boat bound to Zayla, a small port on the African coast of the Red Sea, nearly opposite and about 140 miles from our Arabian settlement. After two days' sail we reached our destination, when I found that the mules, ordered three months before, and paid for, had not been procured. The governor, our old friend El Hai Shermarkay, sent immediately to the neighbouring port of Tajurrah; but between the delay of catching the animals and a contrary wind which delayed the vessel, I lost at Zayla twentyeight days. Travellers, like poets, are mostly an angry race: by falling into a daily fit of passion, I proved to the governor and his son, who were profuse in their attentions, that I was in earnest. He supplied me with women (cooks), guides, servants, and camels —under protest, warning me that the road swarmed with brigands. that the Eesa had lately murdered his son, that the small-pox was depopulating Harar, and that the emir or prince was certain destruction. One death to a man is a serious thing: a dozen neutralize one another. I contented myself with determining the good Shermarkay to be the true Oriental hyperbolist.

With four mules and five camels laden with cotton cloth, Surat tobacco, rice, dates, various "notions," a few handsome tobes or sheets (intended as presents to chiefs) and necessaries for the way, on the 27th November, 1854, El Haj Abdullah, attended by the governor, his son Mohammed, and a detachment of Arab soldiers, passed through the southern gate of Zayla, and took the way of the Desert.

There are two lines of road from Zayla to the ancient capital of the Hadiyah empire. The more direct numbers eight long stages through the Eesa territory, and two through the mountains of the Nola tribe of Gallas. In this country the "gedi" corresponds with the "hamlah" of Arabia: it is a stage varying from four to five hours. The camels are laden at dawn, and they proceed leisurely till about 10 A.M., when they are allowed to rest and feed. The march is resumed in the afternoon, and at nightfall the beasts and baggage are deposited in a thorn fence, which serves as a protection against lions and plunderers. I estimate the average progress to be 15 miles per diem; in places of danger

the Somal are capable of marching 27 or 28 without a halt; on the contrary, when water and pasture abound, they content themselves with a single short march. Shermarkay objected to my travelling by the direct route on account of the Eesa and the Gallas. These tribes inherit from their ancestors the horrible practice of mutilation. They seek the honour of murder, to use their own phrase, "as though it were gain," and will spear a pregnant woman in hopes that the unborn child may be a male. Then bearing with him his trophy, the hero returns home and places it before his wife, who stands at the entrance of her hut uttering shrill cries of joy and tauntingly vaunting the prowess of her man. The latter sticks in his tufty poll an ostrich feather, the medal of these regions, and is ever afterwards looked upon with admiration by his fellows.

The route which I pursued is by no means direct; its sole merit is that, after a march of about 50 miles through the Eesa territory, the merchant enters the lands of the Gudabursi Somal, amongst whom life is, comparatively speaking, safe. My compass bearings were as follow:—

	From Zayla to Gudingaras	 		distance	19 r	niles.
	From Gudingaras to Kuranyeli	• •	145 ⁰	,,	8	**
3.		 	225°	"	25	"
	From Adad to Damal	 	205°	,,	11	"
5.	From Damal to Ilarmo	 	190°	**	11	,,
6.	From Ilarmo to Jiyaf	 	202°	"	10	"
7.	From Jiyaf to Halimalah	 	192°	"	7	"
8.	From Halimalah to Aububah	 	245°	"	20	"
9.	From Aububah to Koralay	 	165°	"	25	"
	From Koralay to Harar	 ••	- 260°	**	65	"

The distances give a total of about 202 miles. As regards the names of stations, it must be observed that the Somal, like the Bedouins of Arabia, the Todas of the Neilgherry hills, and other wild races, are profuse in nomenclature of every feature of ground. Each little watercourse, hill, dale, and plain, is distinguished by some descriptive term: "Adad," for instance, denotes the quantity of gum found upon the banks of the fiumara; Koralay (the "saddle-like") describes the peculiar appearance of a mass of rock.

To resume the narrative of my trip. Our little caravan, consisting of about twenty well-armed men and two women cooks, was led by one Raghe, a petty chief of the Eesa tribe. Shermarkay had constituted him our abban or protector; in return for food and sundry presents of cloth and "notions," he afforded us a safeguard in the hour of danger. The "Abbanat," as it is called, is an intricate subject; I may describe it generally as a primitive and truly African way of levying custom-house dues. Your "protector" constitutes himself lord of your life and property; without him you can neither buy nor sell; he regulates your marches, and supplies

you, for a consideration, with the necessaries of the road. In six days we traversed the maritime plain of Zayla; its breadth is from 45 to 48 miles. Along the shore all was desert, a saline flat warted with sand-heaps and bristling with a scanty salsolaceous vegetation. The sun singed as through a burning-glass, and the rare wells yielded a poor supply of bitter bilge-water. As we advanced inland, the country improved. Frequent flumaras, or freshets, fringed with shrubs and thorn trees of the liveliest green, showed traces of the copious African monsoon. The ground was covered with a growth of yellow grass not unlike an English stubble; the kraals of the nomades appeared scattered over its surface; long lines of milch camels tossed their heads as they were being driven to pasture; numerous sheep, white as snow, flocked the plain; the beautiful little sand-antelope bounded over the bushes; and flights of vultures, unerring indicators of man's habitation in these lands, soared in the cloudless skies. Wherever we halted we were surrounded by wandering troops of Bedouins. The coarser sex is almost black and exceedingly plain, but tall and well made: their frizzly hair is dyed dun by a mixture of ashes and water, and its only Macassar is a coat of melted sheep's fat. The toilette is simple—a dirty cotton cloth covering the loins, leathern sandals, a round targe, a long dagger strapped round the waist, and two spears. The women are mostly habited in chocolate-coloured leather fringed at the border; their ornaments are zinc earrings, armlets of the same material, a necklace of beads, and a fillet of blue cloth worn only by matrons. The girls plait their wiry locks into numerous little pigtails, and the heads of the naked children are shaved in a galeated fashion, with a crest of curly

By the power of my star, I escaped a large plundering-party of Habr Awal horsemen, who were sweeping the plain with malicious intentions. A few rifle bullets would doubtless have beaten them off; in this land, if you clear two saddles per cent, the remainder will surely run. But pilgrims and peaceful travellers should avoid using carnal weapons, especially if they intend progress in Eastern Africa. On the 3rd of December we arrived at the southern frontier of the Eesa tribe, under the hills which form the first step to the highlands of Ethiopia and fringe the Somali coast from Tajurrah to Jerd Hafun or Guardafui; their formation is successively limestone, sandstone, and granite in the higher regions. The air became sensibly cooler, and we remarked an increased degree of fertility, together with traces of a monsoon which lasts from June to September in the torrent beds and cataracts which seam the faces of the hills. When I traversed this country it was a desert, the cold having driven the nomades to the maritime plain, but thorn fences and rings dotted the slopes,

showing that in summer it is thickly inhabited. On the 7th December we threaded a *fiumara*, the primitive zigzag of these lands, and stood upon the summit of the maritime chain.

From the 7th to the 23rd of December we traversed the country of the Gudabursi Somal, a large tribe, whose habitat is between the Eesa eastward and the Girhi to the W. Theirs is the rolling ground diversified with thorn-clad hill and fertile vale lying above the first zone of maritime mountain, and they have extended their lands by conquest towards Harar, being now bounded in that direction by the Marar prairie. These nomades, who are said to number 10,000 shields, are rich in camels and cows; their warlike reputation depends upon a few wretched ponies. They are more hospitable and docile than the Eesa, but their brighter qualities are obscured by knavery, thievishness, exceeding covetousness, and a habit of lying, wonderful even to the Eastern traveller. Some of the girls are not wanting in attractions. I gave to one of the prettiest a bead necklace, and she repaid me by opining that I was painted white. The savages, who take a delight in sight showing, insisted upon my visiting the Halimalah tree and the ruins of Aububah and Darbinyah Kolah. The former is a gigantic fig (Ficus religiosa), under which is performed the ceremony of binding the turban around the brow of each newlyelected Ugáz or chief. The ruins, composed of rough stones,—the mud used for cement in these regions,—and bars of wood inserted as in Cashmir between the courses of masonry, are interesting, as they prove that the land has not been always barbarous. The only tradition preserved by the nomades is, that the fort of Kolah -so called from its queen - as well as Aububah belonged to the Gallas, once lords of the soil, and that their violent hostility ended in mutual destruction.

In the Harawwah valley I met with a notable disappointment as regards elephants. At Zayla they were represented to be plentiful as sheep; after beating the country nothing appeared but the last year's earths. The animals were still in the higher jungles, and we hastened to quit a place where it is impossible even to ride out without being covered with swarms of flies. The Tsetze of Southern Africa does not exist here; there is, however, a red variety called Diksi-As (red fly), whose bite, according to the natives, is so hot in summer that it causes violent vomitings. This, together with the fever produced by the mosquito-sting, is universally believed by the people; the traveller will receive the information cum grano.

On the 23rd of December I crossed the Ban Marar (Marar Prairie), a grassy tract not unlike our English downs, which separates the first from the second zone of hills. Its length is considerable; the breadth varies from 25 to 28 miles. The undu-

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lating surface is covered at this season with a glaring yellow coat of dried up grass; about half-way we halted for an hour in a wady or flumara, where my Somal employed themselves in eating the acacia gum. The place is infamous for razzias, and a small caravan, laden with hides and clarified butter to be bartered for maize and grain, had the honour (as the phrase of the country is) to sit under the shade of our sandals. Starting at 6 A.M., we arrived at 8 in the evening under the hills of Harar, with no other adventure than being dogged by a lion, who fled at the ring of a rifle. The cold was excessive, 42° in the hut at dawn, and in the noon-tide sun the mercury rose to 120°.

Though almost in sight of Harar, our advance was impeded by the African traveller's bane. The Gudabursi tribe was at enmity with the Girhi, and, in such cases, the custom is for your friends to detain you and for their enemies to bar your progress. Shermarkay had given me a letter to the Gerad Adan, chief of the Girhi; a family feud between him and his brother-in-law, our Gudabursi protector, rendered the latter chary of committing himself. We found ourselves forced to idleness until "Dahabo," one of the chief's six wives, and his eldest son Sherwa, visited our

kraal for the purpose of escorting us onwards.

On the 27th of December we exchanged the rocks, thorn-trees, and dried grass of the desert for alpine scenery rendered by contrast truly delicious. We stood upon the portals of the highlands of Abyssinia, the huge primary chain which runs N. and S. along the length of Eastern Africa, and which—I hazard a conjecture may have given rise to the theory of the "Lunatic Mountains." This range is broken into abrupt masses, often with table-formed summits; mountain rills of the purest crystal bubble down the ravines, a system of fissures in the pink granite, and, collecting into one broad shallow stream, flow towards the Webbe Shebayli. A species of fir (the Sinaubar of India, here called Dayyib) clothes the flanks and summits of the hills which are bared of earth by heavy rains; its presence in these lands usually denotes an altitude of 5000 feet. The valleys were yellow with corn and tawny crops of the gigantic "Holcus Sorghum;" it was "harvest-home" when the song of the reapers and the sound of the flail gave pleasant proof that we had left the land of Bedouins. The roads were thronged with peasants and market-people, and in the hedges the daisy, the thistle, and the sweet briar were so many mementos of an English home.

We remained six days under the roof of the Gerad Adan, one of the most treacherous and dangerous chiefs in this land of treachery and danger. My Somali attendants saw with horror that preparations were being made to enter the city of evil fame. They attempted by all means in their power to deter me from the attempt, but the unfortunates little knew the persistency of a Haji. On the 2nd January, 1855, I mounted my mule, intending to enter Harar alone; the two policemen were shamed into accompanying me, and I left my third servant with the Gerad Adan, in charge of my heavy luggage and a letter of directions to be forwarded to Lieutenants Stroyan and Herne in case of accidents.

We passed on over the hills of Harar by roads so rugged that loads are shifted from camel to donkey back. As I approached the city men turned out of their villages to ask if that was the Turk who was going to his death? The question made me resolve to appear before the Emir in my own character, an Englishman. In these lands it is a point of honour not to conceal tribe or nation, and, as a general rule, the Ottoman is more hated and feared than the Frank. On the 3rd of January I entered Harar.

The ancient metropolis of the Hadiyah empire-now sadly decayed—is about 175 miles S.W. (220°) from Zayla and 219 S.W. (257°) from Berbera. This position, which I could ascertain only by dead reckoning, gives a latitude of 9° 20' and a longitude of 42° 17': it agrees nearly with the traditional site according to the following authorities:

My thermometer showed an altitude of about 5500 feet.* The city lies upon the slope of a hill which falls from W. to E.: in the latter direction are plantations of bananas, citrons, limes, the coffee-tree, the kat—a theine plant well known in Arabia—wars or "bastard saffron," and sugar-cane. Westward are gardens and orchards on a terraced slope; northward is a hill covered with tombs, and to the S. the city falls into a valley or ravine. It is about 1 mile long by half that breadth; the streets and alleys are like mountain roads; and the abodes, built of sandstone and granite cemented with a reddish clay, present a dingy appearance, strikingly different from the glaring whitewash of the East. The houses are flat-roofed, with small holes for windows and coarse wooden shutters; most of them have large court-yards and sepa-

* My thermometric observations were as follows:-* My thermometric observations were as follows:—

Temperature.

At Zayla and Berbera (sea-level) .. 210° .. 83° (and 86°) .. feet.

Halimalah (hill top) 204° .. 64° .. 3347 ,,

Agjogsi (foot of Harar hills) .. . 201° .. 79° .. 5133 ,,

Wilensi (near Harar) 200° .. 70° .. 5656 ,,

I have said that Harar is about 5500 feet above the level of the sea, as, for circumspection's sake, the observation was made outside and at some distance from the city.

rate apartments for women, and almost all, even the Emir's palaces, are single-storied. There are some huts called "Gambisa," shaped like a bell-tent and peculiar to the cultivating Somal; they are equally common in Eastern and in Western Africa. The walls, ignorant of cannon, are defended by irregularly oval turrets whence spearmen and archers might annoy the enemy, and the five large gateways are full of guards armed with daggers and long staves. The climate appeared to me delightful—neither cold nor hot. Of eleven days we had three rainy; the air was fresh, and the sun not oppressive. The people assured me that their monsoon lasted six months, and this would account for the prodigious fertility of the soil.

The city owes its existence to the Emir Nur, who reigned about 316 years ago. In the days of Mohammed Gragne, the Attila of Eastern Africa, it was a mere collection of villages. The history of the place is a series of jihad or crusades against the pagan Gallas, and murder and sudden death of its petty princes. There are few public buildings: the bazár is a long street; the jami or cathedral mosque is a kind of barn decorated with two queer old minarets, built, it is said, by Turkish architects; and the palaces are single-storied houses with large courts, protected by doors of holcus stalks. The five gates are-

> The Argob Bari Eastward. Asum Bari N. Asmadim Bari.. W. Badro Bari S. Sukutal Bari .. . S.E.

Harar contains a population of about 10,000 souls, including about 2500 Somal, and not including a considerable number of Gallas and other Bedouins. Women abound, a circumstance arising from the prevalence of slavery. Harar is the great " halfway-house" for the produce of Efat, Gurague, and the Galla countries; slaves are driven thence to Berbera and exported by 'the subjects of H. H. the Imam of Muscat, in exchange for rice and dates. I did not judge favourably of the morals of the Harari. They drank freely—even in the presence of the Olema and pilgrims-hydromel and Farshu or Abyssinian beer. The Emir has been compelled to establish night patrols, who punish with the bastinado lovers and robbers. The men are peculiarly unprepossessing in appearance. Shaven heads, coarse features, and clumsy figures muffled in coarse tobes or sheets of dirty cotton cloth, with long thin staves in hand, frowned upon us with mischievous brows and occasionally addressed us with the roughest of voices. The pretty Abyssinian features of the women were novel to me, and their utter ignorance of bashfulness a surprise. The dress is a long cotton robe, indigo-dyed, with two

large inverted triangles of scarlet upon the chest and the shoulders: it is girt with a long zone of Harar manufacture. No veil is used, and sandals are at a discount. The hair, confined in blue muslin or network, is tied in two large bunches or balls below the ears, and the only ornaments are armlets of buffalo horn, coral necklaces, gilt hair pins, and Birmingham rings. Their voices are harsh, a phenomenon in Africa, where that organ is the only feature truly feminine; they chew tobacco with effrontery, drink

beer, and demean themselves accordingly.

Harar is celebrated for sanctity, erudition, and fanaticism. The Shaykhs Abadil, El Bekri, and Ao Rahmah bequeathed to it a reputation. Of modern celebrities the Kabir Khalil and Kabir Yunis rank foremost. None but the purely religious sciences are studied, books are scarce, and there is no such thing as the wakf or foundation for scholars, which makes men read in the East. Yet Harar sends forth a swarm of widad, frères ignorantins, who, by the power of long prayer and chanting the Koran, live, as such folk mostly aspire to do, in plenty and indolence. Within the city a language is spoken quite different from the Somali and the Galla dialects; like the former, however, it is partly Semitic in grammar and etymology, the Arabic scion being grafted upon an African stock. I collected a vocabulary and the grammatical forms which will afford the learned some idea of this still unknown tongue. The prevailing sound is the ch of the Scotch "loch," consequently the effect is harsh and unpleasant. Men of education always know Arabic, and the stranger hears in the streets Amhanic, Galla, Somali, and Dankali.

The city is immediately surrounded by four tribes of Gallas,

namely,—

The Nola to the E. and N.E. The Alo on the W. The Babuli Southwards. The Jarsa to the E. and S.E.

It is impossible to see this people without remarking its consanguinity to the Somal. These Gallas are Christian, Moslem, and Pagan adoring Wak (the Creator), all living together without religious animosity. They might annihilate the city in a day, but it is not their interest to do so. The Emir pays them from 600 to 700 tobes per annum; they carry their lances into the palace-court, never run across H. H.'s gateway, as all others must do, and drink gratis strong drinks which they have not the art to brew. In return they are plundered by the citizens, and the Emir has made it penal to buy by weight and scale.

The Government may briefly be described as the Emir. This petty prince, whose signet bears the grandiose title of "Sultan son of Sultan," is by origin a Galla, by pretension a descendant

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from the Caliph Abubekr. He is a beardless youth, 23 or 24 years old, short, thin, and apparently consumptive; his wrinkled brow and protruding eyes give him an appearance truly unprepossessing. Men say that he was poisoned by one of his wives; others declare that his ill health is the effect of a fall from his horse. He has four wives and two young children; during his three years' reign he has imprisoned a selection from his fifty cousins, and as, in this city, political offenders are buried in a dark dungeon, confinement and death are nearly synonymous. The Emir preserves all the dignity of empire. Those presented to him must kiss the back and the palm of his hand. He must not be stared at. When his cough affects him, an attendant presents the hem of his robe. Rosaries are not allowed at the levée, and those presented are dragged by the arms to the foot of the throne, a common Cutch couch. Running footmen precede the prince in the streets, flogging the people out of the way, and at mosque two or three matchlockmen stand over him, for he fears internal treachery as much as external violence. His wazir, the Gerad Mohammed, and his mother, the Gisti Fatimah, dare not address him without permission; he is, however, punctilious in administering justice. Imprisonment, fines, and the confiscation of property, punish political offences. Murderers are given up to the nearest of kin, and their throats are publicly cut with a butcher's knife. Petty offenders are beaten in front and rear by two executioners armed with large horsewhips. Usually, the Emir allows his subjects to seek the benefits of the religious law as propounded by the Cazi Abd el Rahman. They prefer, however, the prince's prompt decisions. Generally in the East a man expects to be defrauded by the civil power, but he is morally certain of being stripped by the ministers of religion.

Harar is an essentially commercial town. Three caravans yearly convey to Berbera the rich spoils of the Galla country; those of January and February are small, that which leaves in the month of March consists of at least 3000 souls and an equal number of camels. Ivory is a royal monopoly; the Emir buys it, and his subjects are forbidden to sell it. The best coffee comes from Jarjar, a Galla district about 7 days W. of Harar. The tobes of this city are celebrated throughout Eastern Africa; handwoven, they far surpass the produce of our manufactures in beauty and durability. It is also the grand depôt for the coffee, the wars-dye, the admirable cotton, the gums, the tobacco, and the grain of the Galla country. An idea of its cheapness may be formed from the fact that a dollar will purchase 120 fowls, and the same sum suffices to provide a man with bread for a year. The only coin is a bit of brass coarsely stamped; this "Mahallak" is the 66th part of a dollar, and the Emir imprisons all subjects who

pass or possess any other money. Nothing can be more simple than the system of taxation; the cultivators pay 10 per cent. taken in kind, and traders are charged 16 cubits of cotton cloth per donkey load; the consequence is that the animal is supported through the gates by four or five porters.

After sitting for an hour at the eastern gate, waiting the permission of the Emir to enter his walls, we were ordered by a grim guard to follow. Arrived at the prince's court-yard, we were told to dismount and run, as the subjects of H. H. must never cross the gateway or approach the palace but at a long trot. I obeyed the former and resisted the latter order. Then, leading our mules, we stood under a tree close to the state prison, whence resounded the ominous clank of fetters, and turned deaf ears to the eager questions of the crowd. It was a levée-day, and troops of Galla chieftains, known by their heavy spears and zinc armlets, passed in and out of the palace prolonging our anxious delay. At last, after being ordered to take off my slippers and to give up my weapons, a mandate to which I again objected, we were escorted by the grim guard to the palace-door. A curtain was raised. I entered with a loud salam, which was courteously returned by a small yellow man, not unlike an Indian Rajah, dressed in a conical turban and a red robe trimmed with white fur. As I advanced towards the throne, four or five chamberlains seizing my arms, according to custom, hurried me on till I bent over the Emir Ahmed bin Abubekr's extended fingers. Leading me back, they then seated me in front of the presence, while my two Somali attendants were kissing the palm and the back of the thin yellow hand. Looking around the room I remarked the significant decorations of its walls-bright fetters and rusty matchlocks. The courtiers stood in double file extended at right angles from the throne; all had their right arms and heads bared in token of respect, and whoever approached the Emir saluted his hand with exceeding reverence. At the end of my survey I was called upon by the wazir or prime minister, who sat upon a rug at the right of and below the throne, to answer a variety of questions concerning my name, nation, and business at Harar. The replies proving, it is presumed, satisfactory, I was invited to become the prince's guest during my ten days' residence, and received every day three dishes of bread and beef from his own kitchen. At subsequent visits I was admitted to the honour of a seat next to the wazir, and the Emir did not disdain to be indoctrinated with the principles of free trade in coffee and cotton. Slavery was a more delicate topic, and not being authorized to treat upon the subject officially, I contented myself with observing its operations and with preparing a scheme which will easily and surely remove this curse upon the

country's industry. During my residence at Harar, the two Somal who had been sent with me from Aden behaved admirably. As small-pox was raging in the town, I found an easy pretext for hurrying my departure. These African cities are all prisons on a large scale. "You enter at your own bidding-you leave at another's"—is the native proverb, true and significant. My speedy dismissal was perhaps owing to a report that three brothers had been sent by the Government of India to Eastern Africa. Visions of cutting off caravans induced the Emir to get rid of me, he being, it is said, much puzzled how to treat so uncommon a case. Yet I had no reason to complain of him; and as a proof that my modest endeavours to establish friendly relations were not unsuccessful, the Prince wrote, immediately after my departure to Aden, requesting to be furnished with a "Frank physician." He finally dismissed me with a mule for myself and a letter addressed to our Political Resident in Arabia.

I offer no description of my return route to Berbera, as it was a mere adventure of uncommon hardship. The accident which has for the present terminated our wanderings is deserving of some detail.

On Saturday, the 7th of April, the H. E. I. Company's schooner Mahi (Lieut. King commanding) entered the harbour of Berbera, where her guns roared forth a parting salute to the Somali

expedition.

The great emporium of Eastern Africa was, at the time of my second landing, in a state of confusion. But a few hours before the Harar caravan had entered; and purchase, barter, and exchange were being carried on in the utmost hurry. All day and during the greater part of the night the town rang with the loud voices of buyers and sellers. To specify no other valuable articles of traffic, 500 slaves of both sexes were in the market.

On the 9th of April, about 3 P.M., a shower, accompanied by thunder and lightning, came up from the southern hills, where rain had already been falling for some days, and gave notice that the Gugi or Somali monsoon had begun. This was the signal for the Bedouins to leave Berbera: the mats were rapidly stripped off their frameworks of stick and pole, the camels were laden, and thousands of travellers poured out of the town. On the 15th it was wholly deserted; the last craft left the port, and our little party remained in undisputed possession of the place. We awaited the mid-April mail. In their utter security the Abbans or protectors accompanied their families and property to the highlands, leaving with us their sons as an escort. The people were decidedly friendly: the most learned of the Somal, the Shaykh Jami, whom I had met at Harar, called repeatedly upon us, ate with us,

and gave us abundant good advice concerning our future movements.

On the 18th April a small craft belonging to the port of Aynterad entered the deserted creek, and brought from Aden ten Somalis, who desired to accompany us southwards. We objected to taking more than four of these men: fortunately, however, I ordered our people to give dinner to the captain and crew of the craft. That evening we were visited by spies, who deceived not only us, but even their own countrymen: accordingly, the usual two sentries were posted for the night, and we all lay down to

sleep.

Between 2 and 3 in the morning of the 19th inst. I was aroused by the cry that the enemy was upon us. My first impulse was to request Lieut. Herne to go out with his revolver in the direction of the attack; secondly, I called to Lieuts. Stroyan and Speke that they must arm and be ready; and thirdly, I sent my servant for my sabre. Meanwhile Lieut. Herne returned hurriedly from the rear of the tent, exclaiming that our twelve servants, armed with swords and muskets, had run, and that the enemy amounted to about 150 men. Lieut. Stroyan, who occupied another tent, did not appear: the other two officers and I were compelled to defend ourselves in our own with revolvers, which the darkness of the night rendered uncertain. Presently our fire being exhausted, and the enemy pressing on with spear and javelin, the position became untenable; the tent was nearly battered down by clubs, and had we been entangled in its folds, we should have been killed without the power of resistance. I gave the word for a rush, and sallied out with my sabre, closely followed by Lieut. Herne, with Lieut. Speke in the rear. The former was allowed to pass through the enemy with no severer injury than a few hard blows with a warclub. The latter was thrown down by a stone hurled at his chest and taken prisoner, a circumstance which we did not learn till afterwards. On leaving the tent I thought that I perceived the figure of the late Lieut. Stroyan lying upon the ground close to the camels. I was surrounded at the time by about a dozen of the enemy, whose clubs rattled upon me without mercy, and the strokes of my sabre were rendered uncertain by the energetic pushes of an attendant who thus hoped to save me. The blade was raised to cut him down: he cried out in dismay, and at that moment a Somali stepped forward, threw his spear so as to pierce my face, and retired before he could be punished. I then fell back for assistance, and the enemy feared pursuing us into the darkness. Many of our Somalis and servants were lurking about 100 yards from the fray, but nothing would persuade them to advance. The loss of blood causing me to feel faint, I was obliged to lie down, and, as dawn approached, the craft from Aynterad was seen apparently making sail out of the harbour.

With my little remaining strength I reached the spit at the head of the creek, was carried into the vessel, and persuaded the crew to arm themselves and repair to the scene of our disaster. Presently Lieut. Herne appeared, and closely following him Lieut. Speke, who had escaped from his captors, was supported in badly wounded. Lastly, the body of Lieut. Stroyan was brought on board, speared through the heart, with the mark of a lance piercing the abdomen, and a frightful gash apparent in the forehead. The lamented officer had ceased to exist; his body was stark and cold: we preserved his remains till the morning of the 20th instant, when we were compelled to commit them to the deep, Lieut. Herne reading the funeral service. We were overwhelmed with grief: we had lived together like brothers. Lieut. Stroyan was a universal favourite, and truly melancholy was the contrast between the hour when he lay down to rest full of life and spirits, and the ensuing morning when we saw him a livid corpse.

In conclusion, I must remark that a number of little combinations gave rise to our disaster. Our arrangements were hurriedly made. We could not take from Aden the number of well-trained Somali policemen upon which I had originally calculated, and we had to depend upon raw recruits, who fled at the first charge. But we had ever been led to believe that Berbera was as safe as Bombay itself, and we expected, after a month's march, that the men would be educated to fight. Political events at Aden also prevented our detaining the war-schooner Mahi, whose presence would have rendered the coast safe, and once in the interior we should have been secure from the Bedouins, who have a horror of firearms. Had our letters despatched from Aden arrived when expected, we should have been enabled to leave Berbera with the Ogadayn caravan.

Yet my opinion of the Somal is unchanged; nor would I assume the act of a band of brigands—for such was the cause of our disaster—to be the expression of a people's animus. They have learned to respect us: four or five of their number were, it is reported, killed or mortally wounded that fatal night; and if my plans for punishing the outrage be carried out, it will be long before a similar event occurs again. The officers whom I have had the honour to command profess themselves ready to renew the attempt; and when the ferment has subsided, we would start from Kurrum, a safer though a less interesting route. Should we be deterred by the loss of a single life, however valuable, from prosecuting plans now made public in Africa, we shall not rise in the estimation of the races around us. Briefly, permission to carry out our original projects is the sole recompense we hope for what we have suffered.

VI.—On the supposed Sources of the River Purus, one of the principal Tributaries of the Amazons.

By C. R. MARKHAM, Esq., F.R.G.S.

Read, March 12, 1855.

On the 1st of May, 1853, I left the little town of Paucar-tambo, which is 40 miles N.E. from Cuzco, the ancient city of the Incas, with the intention of exploring and collecting information concerning the valleys to the eastward, and, if possible, penetrating to the banks of the Madre de Dios, or Purus.* From the level plains on the summits of the last range of the Andes, where the clouds, charged with particles of ice, roll along the ground, and snow covers the long grass, the road descends rapidly into the Montaña.† In less than half an hour the trees of tropical growth began to rise on either side of the steep zigzag path, the heat became oppressive, torrents of rain fell continuously, while, as the mists at intervals cleared away, hills became visible on every side, clothed with gigantic

trees and tangled underwood.

After a journey down the steep path, of three hours' duration, I accomplished the descent, which was 8 miles long, and reached the banks of the torrent of Chiri-mayu, where a little shed had been erected. It was near sunset when I thus found myself at the entrance of the Montana. The torrent, descending by a splendid waterfall at the side of the path, swept by the little level space where the shed was built, and disappeared almost immediately between the spurs of the hills. From the small amphitheatre thus formed, the hills rise up perpendicularly on every side, covered with tangled brushwood, ferns, and creepers of most brilliant colours; and wherever a projecting point gave room for roots to take hold, the space was occupied by lofty palms and other forest trees. The Chiri-mayu (or cold river) falls into the Tono, one of the tributaries of the Purus. Towards sunset it ceased raining, and the mists clearing away, a scene was presented of unequalled loveliness. The brilliant and varied colours of the foliage and flowers, the splendid butterflies of immense size, and birds of the gaudiest plumage, humming birds shaking the dewdrops from the scarlet salvias, parrots crowding on the upper branches of the trees, with the sparkling fall of the torrent, combined to form a fairy-like scene of surpassing beauty.

† The tropical valleys and plains to the eastward of the Peruvian Andes are

called "the Montaña."

^{* &}quot;The passage into these valleys, where the coca grows, is over that high mountain called 'Canacuy,' descending 5 leagues almost perpendicular, which makes a man's head giddy to look down: how much more laboursome must it be to ascend and descend those ways, turning and winding in form of a serpent!"-G. de la Vega, b. iv. ch. xvi.