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EL SHAM Damascus Kiswah Plan of the Cave at UMM NÍRÁN Route Map of the TULUL EL SAFA from Observations taken in May, 1871 R.F. Burton F.R.G.S. C.F. Tyrwhitt Drake English Miles Geographical Miles 36°

Published for the Journal of the Royal Geogra

and tides were contrary, and our ground tackle was not to be trusted-one anchor having been already lost and a light kedge only remaining.

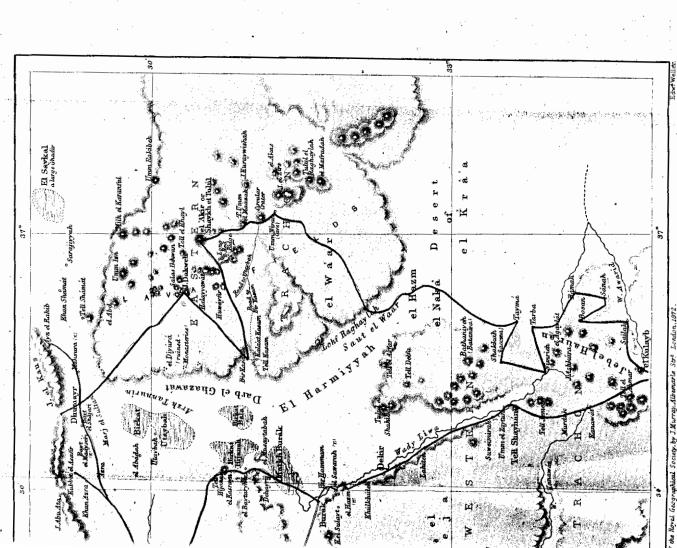
From Senhor Neves (the representative of the Maison Favre of Marseilles at Lorenço Marques), who has travelled on the Limpopo between the Lipalule and the sea, most satisfactory evidence was collected with regard to the river. This gentleman reports it as broad and deep-"large enough for a frigate" when you once cross the bar-and describes the land as most fertile and capable of producing magnificent cotton crops. This, too, is the report of a practical cotton-planter, and his statements regarding the wonderful luxuriance of the wild plant fully bear out my own observations and remarks.

II.—Notes on an Exploration of the Tulúl el Safá, the Volcanic Region east of Damascus, and the Umm Nirán Cave. By Captain R. F. Burton, Medallist R.G.S.

Read, Nov. 27, 1871.

During upwards of a year and a half's sojourn at Damascus I had been tantalised by the sight of the forbidden Tulúl el Safá, the Tells or hillocks of the Safá region, the Oriental Trachon (Τράχων, i.e. "rough region") of the Greek geographers. These pyramids, hardly bigger than baby finger-tips, dot the eastern horizon within easy sight, and prolong northwards the lumpy blue line of the Jebel Durúz Haurán, which appears to reflect the opposite wall of the Anti-Libanus. Many also were the vague and marvellous reports which had reached my ears concerning a cistern, tank, or cave, called by the few who knew it "Umm Nírán," the Mother of Fires—that is to say, the "burning," probably from its torrid site, the great basaltic region of the Eastern Durúz line. It is alluded to in 1860 by Dr. J. G. Wetzstein, formerly Prussian Consul for Damascus (note 1, p. 38, 'Reisebericht über Hauran und die Trachonen,' Berlin, Reimer, 1860), an official whose travels and whose writings, not to mention his acquirements as an Orientalist, have perpetuated his name in Syria. After a journey through the Safá and the Hauran Mountains, peculiarly rich in results, he was prevented by the imminence of the Damascus massacre of 1860, from exploring Umm Nírán. The cave also escaped, in 1867, Mr. Cyril Graham, whose adventurous march is too little known,—a collection of his papers, scattered throughout various periodicals, and published in a handy form like the 'Reisebericht,' would be a valuable addition to modern travel-tale in Syria.

The danger and difficulty of visiting these places arose simply from certain petty tribes of Bedawin; they are liege descendants of the refractory robbers of the Trachonitis. who, to revenge the death of their captain, Naub or Naubus (El Nukaryb, diminu-VOL. XLII.



tional treographical Society, by I.Murray.Albertarle Str. Eondon, 1872.

tive of El Nakíb?), rose up against the garrison of 3000 Idumæans, stationed in their country by Herod, son of Antipater. They number nine clans, and they are known by the generic term Urbán el Jebel, Arabs of the Mountains, because they dwell in the highlands of the Haurán, under the patronage of the Druzes. The worst are the Ghiyas and Shitaya, who, although they have given hostages, were allowed, during my stay at Damascus, to ride the country within three hours of the walls, to plunder the villages, and generally to make paying work for the tribunals. They never hesitate to attack a stranger who enters their lands without the guidance of a fellow-tribesman. Hence the three broken-down Ghassanian convents called El Diyúrá (the Dayrs) have never, to my knowledge, been visited by a European traveller. I was fortunate enough to reach them in December, 1869 and 1870; on the latter occasion, however, the Ghiyas Bedawin formed a line of some 40 skirmishers, and, advancing steadily as if on parade, treated us to a shower of bullets, severely wounding my gallant companion, Bedr Bey, son of the deceased Kurdish chief, Bedr Khan Pasha.

I found nothing remarkable in the Diyúrá, except their excellent state of preservation where man has left them uninjured. Their site is the Lohf,* the Hebrew Chabal, the raised and rope-like edge of the lava-torrents poured out by the volcanic Tulúl. This lip forms a true coast to the alluvial ground, over which runs the Darb el Ghazawat, or Robbers' Road; westward are the Damaseus Lakes, more properly called swamps, the "Fanges" of Spa, a salt clay-flat in the dry season and a draining-ground for the Barada and the 'Awaj when they have any water which the irrigated fields can spare. I often visited, at all seasons, these features which appear upon the heaps neatly contoured and sky-blue like the Lake of Lucerne: but I never saw a drop of surface-water in any one of the four different beds. The architecture of the three convents, like that of the Hauran Mountain and Valley-plain, and that of the 'Ulah, or upland, north-east of Hamah, is old Christian, dating from the days when the Benú Ghassán (Gassanides) of Yemen ruled the Damascene. The material is basalt, generally porous; the stones are for the most part rudely trimmed, and the shape of the buildings is parallelogramic. The comobites who owned the religious houses doubtless converted into smiling fields the now desolate clay-flats which separate the swamp-beds from the true coast. In the present day the ruins might be utilized

as guard-houses and depôts for irregular cavalry; and the latter, when happier times come to the province, will patrol along this line between the villages El Hijaneh and Dhumayr, so as to bar the Bedawin bandits from their occupation of driving the fertile Merj or Ager Damascenus.

On Wednesday, May 24, 1871, we—that is to say, Mr. Charles F. Tyrwhitt Drake and I-left Damascus, intending to commence a tour through the Hauran Mountain (Jebel Durúz Haurán) by an exploration of the Tulul el Safá. Little need be said concerning our first eight days of travelling over a well-worn lines weept that we found the mountain, like Syria and Palestine generally, explored as to the surface in certain wellworn lines, and elsewhere absolutely unknown. My friend's map of the tour will be a considerable addition to our scanty geographical knowledge of the Trachonitis. Its correctness will be vouched for by the fact that his unbroken series of compassbearings through the Tih and the rest of the Sinaitic Peninsula, which "covered 600 miles of country, shows an almost inappreciable error on subsequently joining a place the latitude of which has been ascertained" (p. 7, The Desert of the Tih and the Country of Moab, by G. H. Palmer, 'Palestine Exploration Fund Quarterly Statement,' New Series, No. 1,

Jan. 1871; London, Bentley).

We sketched during that week some 120 inscriptions, including three in the Palmyran dialect. We also dug under the tower of Bassos at Shakkah, the Saccæa of Ptolemy, and we found that here, as at Palmyra, the dead were mummified. Three long inscriptions in Greek hexameters and pentameters, give all possible information about Bassos, and the date of his death is generally placed in A.D. 176. On Friday, May 26, we ascended the quaintly-fashioned tumulus of clay, or rather indurated mud, sprinkled over with scoriæ, which the people call Tell Shayhan, from the holy man whose tomb crowns the summit. The importance of this feature has been greatly under-estimated in all our maps. A view from the south-west, where it appears a huge legless arm-chair, at once shows that the Leja or Refuge, the Argob of the Hebrews and the Western Trachon of the Greeks and Romans, is mostly the gift of the Tell Shayhan. It is, in fact, a lava-bed, a stone torrent poured out by this volcano over the ruddy-yellow clay and the limestone floor of the Hauran Valley, whilst in later ages the surface has been modified by the action of the elements, Dr. Wetzstein rightly defines the limits of the pyriform "Mal Paiz," placing "Brâk" town (Burák or the Cisterns) on the north at the stalk of the pear, Umm el Zaytún on the east, Zorå (Dar'ah) at the westernmost edge, and Rimat el Lohf to the south. But he

^{*} Murray's Handbook (p. 471) translates El Luhf the "coverings;" it is certainly not "a narrow strip of the plain extending round the Lijah."

feeds the Leja with a "grosser lavastrom," proceeding in an artificially straight line from Jebel Kulayb, and flowing from south-east to north-west. We ascertained, by careful inspection, that this feature does not exist. At Kanawat, the ancient Kenath and Canatha, Mr. C. F. Tyrwhitt Drake secured the fine altar-head of basalt now lying in the rooms of the Anthropological Institute. At the noble ruins of Si'a (سيع) were found two Palmyran inscriptions, showing that the Palmyrene of Ptolemy extended to the south-west, far beyond the limits assigned to it by the moderns. We then ascended the Kulayb for the purpose of mapping the tops of many craters which appeared to be scattered in confusion. Viewed from the heights of the Libanus, the Anti-Libanus, and the Hauran, this mountain appears like a dwarf pyramid, studding the crest of a lumpy blue wall, and it is popularly supposed to be the apex of the range which palæographers have identified with the Ptolemeian "Alsadamus Mons." * The name is erroneously written Kulayb (کلیب), meaning "little dog," and is mispronounced Kulayyib. The orthography is Kulayb (قليب), "little heart," or "turning-point," and the latter is doubtless the correct sense, as the central ridge of the Jebel Haurán here drops southwards into an upland valley. On a nearer view, El Kulayb has one peculiarity: where all the cones are barren heaps of red and yellow matter, it is feathered with trees up to the summit. A little south of the apex we found a diminutive erater opening southwards. The aneroid showed 4:18° lower than the summit of the Cedar Block, the greatest altitude in Syria and Palestine; the B.P. 205.50° (temp. 75°), and the hygrometer supplied by Mr. Casella stood at 05.

The summit of El Kulayb gave us two valuable observations. The apparently confused scatter of volcanic and cratered hill and hillock fell into an organized trend of 356° to 176°, or nearly north and south. The same phenomenon was afterwards noticed in the Safá Region, and in its outliers, the Tulúl el Safá, which lie hard upon a meridian. Thus the third or easternmost great range separating the Mediterranean from the Euphrates Desert, does not run parallel with its neighbours the Anti-Libanus and the Libanus, which are disposed north-

east and south-west.

The second point of importance is that the "Turning-point Mountain" is not the apex of the Jebel Durúz Haurán. To the east appeared a broken range whose several heights, beginning

1. Tell Ijánah bearing 38°, and so called from its village. Though not found in Dr. Wetzstein's map, its rendered remarkable by a heap of ruins, looking from afar like a cairn, and it is backed by the Umm Haurán hill bearing 94°.

2. The Tell, rock and fountain of Akriba* (Dr. Wetzstein's

Akraba), bearing 112° 30'.

3. Tell Rubáh, bearing 119°; and

4. Jafneh, a table-mountain with a cairn at the end,

During the course of the day we passed between Nos. 1 and 4, and we assured ourselves that our observation with a pocket goniometer and spirit-level, taken from the summit of El Kulayb, was not far wrong in assigning 300 feet of greater altitude to Tell Ijánah. But though the "Turning-point Mountain" is not the apex of the Hauran highlands, it conceals the greater elevation from those standing either upon the crest of

the Hermon, or in any part of the Auranitis Valley.

A visit to the eastern settlements facing the Euphrates Desert convinced us that the Jebel Durúz Haurán has greatly changed since it was described by travellers and tourists. Until the last 150 years it was wholly in the hands of the Bedawin; at that time it began to be occupied by the Druzes, whom poverty and oppression drove from their original seats in the Wady Taym and upon the slopes of the Libanus and the Hermon. During the last five years not less than seventeen villages have been repeopled, and in the autumn of 1866 some 700 or 800 families fled to this "safe retreat." We can hardly wonder at the exodus, when we are told that nearly half the villages of the Jaydur district, the ancient Ituræa, eleven out of twenty-four, have been within twelve months ruined by the usurer and the tax-gather. It is hardly necessary to dwell upon the shortsighted policy which drives an industrious peasantry from its hearths and homes to distant settlements, where defence is much more easy than offence; and where, as Cromwell said of Pease Burn, "ten men to hinder are better than a hundred to

On the evening of Wednesday (May 31st) we reached Shakkah, the ancient Saccaea, still showing extensive ruins and sundry fine specimens of Hauranic architecture, especially the house of Shaykh Hasan 'Brahim, with its coped windows and its sunken

^{*} See, however, Dr. Wetzstein (p. 90). I avoid making extracts from his excellent 'Reisebericht,' as my leisure moments have been employed in translating and annotating it.

In Syria and Palestine there are many Akribas, two villages of that name lying within a few hours of Damascus. The most celebrated of all is that built 6 miles south-east of Nablus, identified with Ekrebel (Jud. vii. 18), and after-

court. Here we were received by the Druze chief, Kabalán el Kala'áni. This person had met us at Kanawát, and had promised an escort to Umm Nírán. He now warned us that his people were on bad terms with the Ghiyas Bedawin, who were in their summer quarters, the Ruhbah Valley, distant only about 15 geographical miles from the cave. Presently we found out that his only object was to urge an exorbitant demand for some ten horsemen-a smaller number would fear to travel. We at once determined to make our point de départ the little village of Taymá, lying about 8 miles to the south-east. It was out of our way, but the Shaykh Yusuf Sharaf had shown himself our friend. In justice to the Druzes, I must remark that Kabalán el Kala'ani was the sole base exception to the hospitality of his race, and to the national affection with which they regard their old friends and allies the English. And as a proof that his conduct was generally reprobated, six youths, the sons of Shayks, or chiefs, at once volunteered to escort us, and refused all remuneration.

Despite the stiff sirocco, which blurred the outlines of the distant highlands, before beautifully crisp and clear, we left Taymá at 1.50 p.m., on Friday, June 2nd. The bridle-path led past sundry small villages of Druzes to the well-defined Wady Jahjáh (جعتار), which after rain discharges eastward into the basaltic outcrop, known as El Harrah, the "hot" or "burnt land." One hour's ride over rough but not difficult ground placed us at the K'rá'a (القراع), which is simply a lava-torrent, showing volcanic dykes, secondary craters, and blow-holes, with barrows arbitrarily disposed at all angles. The two normal forms, the long barrow and the round barrow, are sketched by Dr. Wetzstein (p. 13). He considers them to be big bubbles, whose reticulated surface is almost invariably blown off at the top, or split along the ridge, by the bursting of the gases which elevated them. In some cases, however, the narrowness and sharpness of the gashes at the summits, and of the clefts which divide the lengths, seem to argue that the mere contraction of the cooling mass is sufficient to part and split it; moreover, not a few have cross cracks as well as longitudinal fissures.

Evidently the basaltic formation of the Trachons is of younger date than that of the Hermon. An active volcano presupposes the neighbourhood of the sea or of some large lake.* This out-

break probably belongs to the days when the Eastern Deserta flat stoneless tract extending from the Trachonitis to the Euphrates—was a mighty inlet of the Indian Ocean. The northern limit of this extinct Mediterranean may be found in the range of limestones and sandstones, the furthest outliers of the Anti-Libanus, upon whose southern and eastern part Palmyra is built, and which runs via Sukhneh eastward to the actual wave of the Great River. At the river known as Kasr el Hayr (1), in the Jayrud-Palmyra Valley, I found the stone composed mainly of scallops or pectenes so loosely agglutinated that the fingers could pick them out.

We crossed the K'rá'a in 55 minutes, and entered the Naka' (النقع), rolling ground of loose ruddy-yellow soil, the detritus of basalt which, during wet weather, balls the feet so as to prevent walking, and in which, during the dry season, horses sink up to the fetlock. This is the staple material of the Hauran. Our passage of the Naka' occupied two hours. We then ascended a hill-brow, which in Spain would be termed a "Loma," and fell into El Hazm: the only difference in the aspect of the land was a trifle more of stone, whilst the basalt was either lamp-black or snow-white with the usual cryptogam. These people borrow from the Bedawin a name for every modification of terrain, however trifling. The lands to the north-a mixture of clayey soil and stone—are called El Hármiyyah; the stony ground to the east is the Wa'ar, the usual generic term; and still on our right ran the rocky Wady el K'rá'a, which we had

Here we had our first fair view of the Safa. The little volcanic block, with its seven main summits, is well laid down in outline by Dr. Wetzstein (p. 7), and to its south is an outlying scatter of cones and craters, which the Druze youths called Tulúl el Safá, a term naturally confined to the northern offsets at Damascus, where no others can be seen. A deeper blackness made the Safá stand conspicuously out of the Harrah: here the latter is a rolling waste of dark basalt, broken by and dotted with lines and veins of yellow clay, bone-dry at this season, and shimmering in the summer sun. These veins are generally known as "Ghadír," or hollows were water stagnates. The trend is north-east to the Ruhbah, a long waving streak of argillaceous formation. In the far distance, extending from east to south-east, and raised by refraction above the middle ground of flat basalt which lay beyond our rolling volcanic foreground, gleamed the sunlit horizon of the Euphrates Desert -that mysterious tract never yet crossed by European foot.

Here we began to appreciate the precautionary measures by

^{*} A curious correspondence upon this subject took place in the 'Field' newspaper of Dec. 16th and 23rd, 1871. The reporter of the meeting could not understand "why geographers were so slow and timid in reminding him (Captain Burton) that he had advanced nothing new" concerning the proximity of volcanoes to sheets of water. The text will show that I did not "claim any originality of idea with regard to the fact"-I have simply assumed that it is generally known.

which the old Roman soldiery kept the Bedawin at bay. Far to the east, and in the heart of the Harrah, which is bisected by a military road, are shown their outstations, Khirbat el Bayza, El Odaysiyyeh, and Nimára, which must have been impregnable to the wild man, and behind which lay the waterless waste

investing the fertile regions of Syria.

As the shadows of night deepened around us and the clouds, which at times shed heat-drops, obscured the moon, though near its full, we could see nothing but the wild, black stone-region, now in front, then on either side, and we could distinguish only that we were following the course of a wady, which became so winding, that at times it ran south-east and even south instead of north-east. At last, after 2 h. 45 m. of this weary work, we called a halt, determined not to exhaust horses already thirsty. Our escort wasted water enough for a week: they were more utterly helpless than children would have been under similar circumstances, and at last, reckless of water or wood, all slept the sleep of the weary. Our day's work had been a total of 6 h. 40m., which may be assumed as 17 indirect geo-

graphical miles.

The next march was peculiarly severe. We left our hard beds at 4 A.M., and a few yards of advance showed us the "Ghadir Abú Sarwál," the "Hollow of the Father of Breeches," where we had been promised water. This deep depression in a shallow wady underlies a heap of rock which forms the right bank, and the yellow surface of caked and curling silt proved to us that it had been bone-dry for the last six weeks. Here we again fell into the "Sultani," a main track which we had lost during the night; and, after half an hour, we struck El Nabash, a depression in the slope with the shapeless ruins of a settlement upon both banks. Then bending to the south-east, where a network of paths converged, we struck, at 6 A.M., the Ghadir el Ka'al (غدير القعل): thus expending a total 8 h. 40 m. upon a march which, all assured us, may be covered by laden camels in 6 h. to 6 h. 30 m. This basin is, according to our guides, the drainage point of the Wady el K'rá'a. At the season of our travel it appears to be a mere sink without watershed: trending east and west, it is about 90 yards long and some 4 feet deep: it does not outlast the year, and its highest water-mark is not more than 4 feet above the actual level when it would flood the eastern clay-plain.

We spent an enjoyable 50 minutes at the water, and then the watch showed 7.15 A.M. We retraced our steps, and fell into the Saut (السوط), or whip-thong. This is a line of drab-coloured clay, which subtends the western Lohf or ruins of the northern

Tulúl el Safá. Fresh spoor of a dromedary appeared upon the older footprints: the rider was evidently bound, like ourselves, for the north-eastern regions, where the Bedawin dwelt, but not with the object of exploration, and we gave the ill-omened footprints all the significance which they deserved. Hard on our right rose the Lohf, a crested embankment of black and "man's" basalt, somewhat resembling the old Saracenic revetments. It is evidently the bank formed by the lava-torrent when beginning to cool, and thus becoming able to resist, like a dyke, the pressure and thrust of heated matter in its rear. The height varied from 30 to 50 feet, and the dark line projected into the yellow dwarf capes, bluffs, and headlands separated by dwarf wadys. Small ruins and look-out places of the liveliest colour crown the coping, and in places where the outline droops it is crossed by paths practicable to horsemen. We ascended the summit, and found the shape a tolerably regular prism, disposed in sections at right angles like giant fortifications. Here the western side was lamp-black, and the eastern was white with the normal cryptogam; there the rule was reversed. In fact, we could only determine that the lichen least affects the southern frontings.

After 1 h. 50 m. up the Saut, which often became a scatter of stones apparently swept down from the Lohf, we turned sharp to the right, and crossed the lava-ridge, where it had a break; here it was subtended by several parallels which bore much the appearance of earthworks and cavaliers. Within was a grim and grizzly scene of volcanic ruin and devastation, a landscape spoiled and broken to pieces; here ghastly white, there gloomiest black, and both glowing under the gay sun of a Syrian June. The altitude was that of Damascus city, but the light sweet breath of the north ceased when we left the Ghadír, and the shape, as well as the components of the "Wa'ar," or Trachon, admirably condensed the heat: the air danced and reeked, affecting man and beast with intolerable thirst. All was bare of Bedawin: at the Rajm el Shalshal, however, where we rested in a shady fissure, we again saw traces of our friend

on the dromedary.

We were presently surprised, at 4.20 P.M., by seeing the advanced party spring suddenly from their horses, and by hearing the welcome words, "Umm Nírán." The transit of the ugly monotonous "Wa'ar" had occupied 4 h. 25 m., and the day's journey a total of 8 h. 15 m. From Taymá we had spent 17 hours, which result was a distance of 231 direct geogra-

The feature, concerning which we had heard so many curious and contradictory tales, lies at the western foot of a fang-shaped,

scarped and round-topped block, which the Arabs called El Zirs (الزرص), from its likeness to a grinder-tooth. Occupying the eastern slope of a rounded hillock of basalt, the mysterious cave opens to the s.s.e. (133°), with a natural arch of trap which at first sight appears artificial, and it is fronted by a circular hollow of clay, to which rude steps lead from the stony eastern edge. There is another approach from the west, and both show that at times the water is extensively used. All above this cave is dry as the sand of Sind: after rain, however, there is evidently a drainage from the fronting basin into the

A plan drawn by my friend and fellow-traveller will explain the form of Umm Nírán better than any words of mine. The floor, coated with shallow dry mud, is of ropy and other basalt, and the slope is easy and regular. The roof shows a longitudinal ribbing, as if the breadth had been nearly doubled. A sensible widening, with a lozenge-shaped pier, the rock being left to act as column, succeeds the low and narrow adit through which a man must creep. Passing from this bulge to a second shaft, after a total of 200 yards we reach the water, a ditch-like channel, averaging 4 feet in breadth, with Mastabahs, or flat benches of cut rock, on either side, varying from 2 to 6 feet wide. The line then bent at an angle of 50° to the N.N.E. Here, by plunging his head below the water, and by raising it beyond where the roof-spine descended, my companion found an oval-shaped chamber, still traversed by the water. He could not, however reach the end; a little beyond this point the archceiling and the water met. The supply was perfectly sweet, and the thermometer showed 71° to 72° Fahr., the air being 74° Fahr.; the atmosphere was close and dank, and the basalt roof was dripping. The water varied in depth from a few inches to mid-thigh, and the taped length was 140 feet. Thus the total length of the tunnel was 340 feet; but it may be greater. According to the Arabs, it is supplied by springs as well as by rain, and the hottest season fails to dry it.

This curious reservoir is evidently natural, but it has been enlarged and disposed by man. There is no local legend concerning the origin of a work so far beyond the powers of the Bedawin past and present: we could only conjecture that it was made by some of the olden kings of the Damascene, who enlarged the approach for the benefit of their flocks and herds entrusted to Arab care-takers. The guides knew nought of ruins or of "written stones" in the neighbourhood, and we could see only the rudest of dry walls used to shelter the shepherds from wind and rain.

We are now at the southern limit of the northern Tulul el

Safá, a projection from the Safá Proper, the eastern Τράχων of the Classics, which apparently has been so puzzling to modern translators. Strabo (lib. xvi. cap. 2, para 20, Hamilton and Falconer; London, Bohn, 1857) says "Above (read 'beyond') Damascus are the two hills called Trachones (read 'the so-called Trachones, namely the twin Wa'ars of the Lejá and the Safá'); those towards the parts (i.e. south and south-east) of Damascus, occupied by Arabians and Idumeans promiscuously, are mountains of difficult access, in which are caves extending to a great depth. One of these caves (Umm Nirán?) is capable of containing 4000 thieves." Pliny (vol. i. chap. 16, Bostock and Riley; Bohn, 1858) reckons Trachonitis amongst the Tetrarchies. The 'Revolt of the Trachonitis' is the subject of an Essay by Josephus ('Antiquities of the Jews,' book xvi. chap. 9). Ptolemy (chap. xv. Table iv.) mentions amongst Syrian mountains the Alsadamus, whose centre would be in E. long. 71°, and in N. lat. 33°, and the "Bathanæa Provinciæ (Bataniyyah or Bashan) à cujus orientali parte est Saccæa (Shakkah). Ét hujus sub Alsadamum Montem sunt Trachonitæ Arabes." Popular works (e.g. Smith's 'Classical Dictionary,' sub voce) of course repeat that Trachonitis was "for the most part a sandy desert intersected by two ranges of rocky mountains called Trachones." Similarly in the 'Concise Dictionary of the Bible,' Trachonitis is represented to have included "the whole of the modern province (!) called El-Lejah, with a section of the plain (?) southward, and also a part of the western (add eastern) declivity of Jebel (Durúz) Haurán. This may explain Strabo's two Trachones." Our fortnight's excursion will, it is hoped, introduce a correct topography for future writers. The fact is that the Safá or Eastern Trachon, together with the western, that is to say the Leja Proper, would be included in the Tetrarchy of Trachonitis, which thus extended from Auranitis or the Hauran Valley to the Desert of the Euphrates.

The shape of the Tulúl el Safá region is pyriform, like the Leja; the lone El Mafradah forms the stalk; the bluff end to the north is the Tell Shamat together with its dependencies, whilst to the north-west the boundary is the Arz el Jaháshshiyyah, looking like the dry bed of a torrent, brown and ruststained. We did not lay down the eastern limit, but the villagers of Dhumayr pointed out certain Istirát or unnamed cones depending upon the Umm Rakibeh. This frontier may perhaps be extended to the Jebel Says bordering upon the Hamad Region.

We set out at 5 A.M. in a cool west wind, making north for the great red cinder-heap known as Umm el Ma'azah (Mother of the She-goat). After 1 h. 35 m., in which we covered

perhaps 4½ direct geographical miles, we halted for observations at the foot of the cone, and then we fell into the trodden way which winds round to its west. After 20 m. of slow march, we directed the camel-men to make straight for the Bir Kasam, whilst we ascended the Tell 'Akir, by the Bedawin pronounced El 'Ajir. Usually known as the Shaykh el Tulul. this "Head-man of the Hillocks" rises some 7 statute miles from the Umm el Ma'azah. We then rode up in 1 h. 20 m. to the foot of the cone, which springs from a high plane, and whose large outliers trend to the south with a little westing. Some minutes were spent in stiff climbing up the ridgy surface of thoroughly burnt scoriæ. The angle of the north-western slope was 19° 30', that of the north-eastern 22°; the southern ramp up which we walked showed 22° 30', and the stoniest part above the lateral folds reached 24°. We then ascended the eastern or highest point, for a better prospect of the peculiar scene before us. Viewed from this elevation the volcanic Tells and craters, modern tertiary and pleiocene, which before seemed scattered in wild confusion, fell into three regular lines, disposed nearly north and south. The middle range is represented by the Umm Izn (Mother of an Ear), so called because the table-top has a projection at one end, a kind of "cock-nose," breaking the straight line of features. About the centre of the line stands the "Monarch of the Mounts," and to the south project the Zirs and the Raghayleh Blocks. The plain is silt upon a limestone floor, explaining how from afar a yellow sheet appears spread to the very basis of the cones and pyramids. The latter rise from this sterile investment in naked heaps, black and white, red and yellow; they are table-topped and saddlebacked, as well as conical, whilst inky dots show the smaller fumaroles and sable bars and lines the connecting ridges of basalt. All the Tells, especially those to the north-west, project immensely long black tails to the east. The zebra-like stripes of black and white are the effect of the regularly blowing west wind, which disposes the fine and comminuted dust of the shells produced about the Swamps, in thin sheets over the western slopes of the cones, whilst the latter shelter the basalt ground to their lee or east.

After inspecting the 'Akir, we had a truly wearying and monotonous march over the hilly plains to the west. The Druzes, as usual, rode forwards, leaving us to follow with the camela, and every hour and a quarter of march obliged us to dismount. tiring us by want of exertion. At last, after 3 h. 30 m. of actual riding, we came upon the scorched, yellow-white flat of the Kala'at and Ayn Kasam (the Fort and Hill of an Oath). concerning which I cannot discover a trace of Arab tradition.

We reached the fort in 30 m., and thus ended our total of 7 h. 48 m., the work of that day. We had great trouble in finding the well which maps place to the south-east of the Kala'at. It really bears 10° and 9° 30′ from the Tell Kasam.

The next day (Monday, June 5) was the last of our desert excursion. The Druzes quietly left us during the night, under the escort of one of their number, Mahommed Kazamani, who, though badly wounded in a late fray, followed us to Damascus and received a five-shot revolver as a reward. But instead of making for Dhumayr viá the Derb el Ghazawát, or Road of Razzias, fortunately for us we determined, despite the unusually hot and still weather, to inspect the Dakweh Mountain, upon which so many of our fellow-countrymen have cast longing looks from the minarets of Damaseus. The view from the summit enabled us to correct the position of the Salás Ikhwan, or Three Brothers. As will be seen, they adjoin the Dakweh, whereas our maps place them upon a parallel instead of a meridional line, and give them the curiously corrupted name "Tulesawa." At 4.50 P.M. we reached the Dhumayr village, where we were received with effusion by the good Rashid El Bostaji. We had covered 20 indirect miles from Jebel Dakweh, and a day's total of 30.

III.—On the Neighbourhood of Bunder Marayah. By Captain S. B. MILES, F.R.G.S.

[Read January 8th, 1872.]

BUNDER MARAYAH, in lat. 11° 43' N., the chief port of the Mijjertheyn tribe of Somâl, is situated at the foot of the range of hills bearing the same name, which rise about a mile behind the town to a height of 4000 feet. The town extends nearly half a mile along the beach, and contains upwards of two hundred houses, about a quarter of which are built of sun-dried bricks, and the remainder of matting. The permanent population of the town is only some six or seven hundred, but during the trading season, when the kafilas arrive from the interior with gums and other produce, and the Arab merchants come across from the opposite coast, this estimate must be quite doubled. The largest and most conspicuous building is the Sultan's, situate at the back of the town; it is of Hadramaut fashion, is everal stories high, and was built forty years ago: there are everal others also of the same style and almost as large. There are three mosques, all whitewashed, but in rather a dilapidated state; the town also boasts a school, attended by thirty