SECOND ORDINARY MEETING.

Wednesday, November 27th, 1878; ROBERT RAWLINSON, C.B., Vice-President of the Council, in the chair.

The following candidates were proposed for election as members of the Society:—

Allsopp, William James, F.R.A.S., 5, Eastcombe-villas, Blackheath, S.E.

Hadden, John Lawton, 25, Great George-street, S.W.


Murchland, Robert, 21, Grosvenor-street, Camberwell-road, S.E.

Mercer, Francis Montier, 59, Bishopsgate-street Within, E.C.

Fresh, W. H., Telegraph Department, General Post-office, E.C., and Gothic-lodge, Wimbledon.

Preston, near Arvon thousand, Wiltshire.

Soames, J. K., Thames Soap Works, Greenwich, S.E., and 21, Vanbrugh-park, Blackheath, S.E.

Walker, Walter Frederick, 3, Moore-park-villas, Wallam-green, S.W.

The paper read was—

MIDIAN AND THE MIDIANITES.

By Captain Richard Francis Burton.

Allow me to quote a few specimens of divergent opinion upon the subject of "Midian." The classical authors of Greece and Rome utterly ignore the word, and include the country under the well-known term "Nabathæa." The maps of Josephus, the historian, a countryman and contemporary of St. Paul, propose to settle all difficulties by splitting Midian into two Midians. The medieval Arab geographers are mostly at variance; some, however, assign to Midyan the limits which will presently be proposed. Coming down to our modern day, Voltaire, the noble Frenchman who created religious liberty in France for Europe and the world, and who had "de l'esprit comme tout le monde," made Midian a "sandy region which may have contained some villages." He adds, it was a "canton of Ídümæa, beginning north with the Arabian torrent (Wady Midyan) and ending south with the torrent Zared (Willow valley), lying among the rocks, and on the eastern shore of Lake Asphaltitis (the Dead Sea); it is thus about eight leagues long by a little less in breadth, and it is now held by a small horde of Arabs." You will see how thoroughly erroneous is all this. Later still, some of our popular books prolonged "Midian" into Sinai; whilst others, again, either knew it not, or projected it into impossible places. The map attached to Andrew Gidighton's well-known "History of Arabia" (published 1854), ignores "Midian," and supplies the whole tract with only a single name—"Moweylah," Professor Palmer ("Desert of the Exodus," p. 527) would "identify Midian with the extensive ruins of El-Midywan, a station on the Darb el Hjej, between Damascus and Mecca, three days distant from the latter town." This Orientalist goes much too far south, a reviewer in the Pall Mall (June 7th, 1878) makes "Midian" extend "from the north of the Arabic Gulf (Lake of El-Akabah), and Arabia Felix (which, the ancient or the modern?) to the plains of Moab." He goes as much too far north, intruding upon Idumea proper (Edom) which lies between Midian and Moab. Matthew adds, to reduce us to the irrepressible Lieut. C. R. Conder, R.E. ("Tent Work in Palestine," Bentley, 1878) declaring "the hosts of Midian were no doubt the ancestors of the modern Medes, who "raged about the plains of the Russians in the 13th century, who believed that the Tartars, with their four-cornered faces," were the ancient Midianites coming to rest on the plains of Idumea. Even those who have visited the seaboard give no certain sound. My last predecessor was the lamented Dr. Charles Beke. In some seventeen places, he mentions "Midian," the city; but of the northern and southern, the eastern and western limits of "Midian," the country, nothing. Thus the famous old land became, like Italy of the last generation, and like modern India and Turkey since the Congress, one of the late Prince Msternich's "geographical expressions."

So much for the outer world. The modern Midins are, on the other hand, the Bedawins who now hold the soil, give a precise topographical definition of its limits; and, as some of them have held it during the days of the Byzantine Empire, I claim authority for the Bedawin's constant tradition. The "Arz Madyan" of the Arabs begins north with the fort of El-Akabah, the Elath
or Eloth of the days of Solomon (N. Lat. 29° 28'), at the head of the dangerous Gulf so named. It extends south to the fort of El-Muwailah and its great watercourse, the Wady Surr (N. Lat. 27° 40'). These frontiers, absolutely fixed, would give the Egyptian province a latitudinal length of 108 direct geographical miles. The Bedawin, again, are as precise in their definition of the breadth as of the length. All the Tháhnáh ('Lowlands') between the sea and the double maritime range, the Ghuts of North-Western Arabia, are "Midyan;" and the depth varies between 24 and 33 miles. The country east and southeast of it, like most meridians, belongs geographically to El-Nejād (the "Uplands"); and, politically speaking, it is Syrian. Note that "Arz Midyan" the country, must not be confused, as many have the ("Mádín in Módín") p. vi.; introduction to Dr. Boke), with "Bábild Muydán:" the latter is the modern city on the eastern shore of the Ákabáh Gulf, about one third of its length from the "Gate," or straits which connects it with the Red Sea.

The whole seaboard south of Fort El-Muwailah, as far as the Íbáz, the Holy Land of the Moslems containing the sacred cities of Mecca and Medina, has, absolutely, no generic name. The Bedawin, who raise dates in excellent nomenclature, have medley of local terms, as "Country of Wady Salma," "Lands of El-Wijh," and so forth, for the section bounded by the parallels of El-Muwailah and Wady Hamz (N. Lat. 29° 55') where the Egyptian and the Ottoman possessions meet. The southern moiety of the Khédîr's province would thus measure in length 105 miles, a little less than the northern: whilst the depth inland must be at least doubled. The total extent of the Midianite seaboard then is 213 miles, which the excessive similitude of the coast would prolong to 394.

I have taken the liberty of applying the venerable name "Midian" to all the littoral between El-Ákabah and El-Íbáz; and of distinguishing the upper half as "Mádín proper," or "North Midian," as opposed to "South Midian" the lower. In the by-gone days of Midianitic splendour and power, the frontiers were so elastic that they extended at times, as in the age of Mozes, across the Gulf, and deep into the Sinaic Peninsula. When Gideon judged, they stretched forth through Edom and Moab to the Edbraeion plain. Their expansion and their contraction depended upon the relative strength of the tribes and clans, each acting upon the good old plan of taking and keeping all it could. My distribution is justified by ethnology. In the first place, the whole country was held by the Nabat or Nabateans; in these times the people are, with one trifling exception, Egyptians. It is also politically correct. "North Midian" and "South Midian" the former, and the latter, was the rule of H.H. Viceroy of Egypt: this prince garrisoned all the seaboard forts that protect the pilgrim-highway from Suez to the sacred cities.

Dr. Aloys Spengler, whose reputation as an artist is world-wide, offers two main objections to my thus extending the term "Midian." Firstly, it is an innovation. Granted—we cannot be Conservatives in geography and history. Secondly, it prejudices the historic question concerning the relative claims of the rival Thamidites and the Qodhí's or Kudhí tribes, who, in hoar antiquity, held the land. But this is going too far back; in the 19th century we need hardly be subjected to events preceding the 7th. On the whole it seems to me that by adopting the innovation we gain more than we lose. The question, however, must be left to that high tribunal—the Public Opinion of geographers.

As regards the proprietorship of our future mining province, I would remove every shadow of doubt. The Times correspondent from Alexandria (April 27, 1873) says, "that Midian lies to the east of the Red Sea, and that it belongs, for some mysterious reason, to Egypt, is all that 99 out of every 100 know about it." The mystery is easily cleared up. "Mádín Proper," or North Midian, was an Egyptian province in the days of the Pharaohs. The fort of El-Wijh still bears the name of Ahmad Ibn Taylín, founder of the Taylín dynasty in A.D. 888-84. The "Migdoll" or castle of El-Ákabah is yet inscribed with El-Ashraf Kamal El-Ghori, the last but one of the Circassian Mamluk kings of Egypt, who, in A.D. 1301, was defeated and slain by the Turks near Aleppo. Sultan Sulamín Khán el-Falih, the conqueror, after putting to death the last of the dynasty, established Ottoman rule over all Egypt; and, consequently, over its dependencies, the land of Midian. About 16 years later (A.D. 1517) he rebuilt the two forts and committed the charge and safeguard of the country to the Mamluk Beys, the successors of the Circassian kings. The frontiers were defined by the simplest process; all was to be Egyptian in which the tribes paid tribute to, or acknowledged, the authority of Egypt: beyond them began the rule of Syria, the "impracticable and monstrous government" of the Porte, as it is called by General di Cesnola (p. 40). The reign of the Beys lasted till the French invasion (A.D. 1799); and was indefinitely ended by their massacre at Cairo in March 1, 1811. This event brought into play the great Mohammed Ali Pasha: he transmitted all his possessions and prerogatives to his descendants; and the latter, as you know, still rule all that has ever been called Egypt—and more. There is a greater Egypt, even as there is a greater Britain.

I must further trespass upon your patience by a short notice of the word "Midian." According to the Hebrews (Gen. xxi., 1) the land took its name from Médian or Médin, Abraham's fourth son by Keturah the Cushite, whom the "Friend of Allah" married after the death of Sarah (b.c. 1890). Médian, the eponymus, became the sire of the patriarchs, who represent the progenitors of the extinct Midianites and their Pentarchy. Certain Hebraists declare that "Mádín" signifies, in its own tongue, "strife, contention," a "litigious people," or a race struggling (for the possession of a country equally coveted by Asians and Africans). The word, however, occurs in many hieroglyphic texts; and the plural of Mád is would be Mid-ánu, or Mád-ánu: we only know that in old Egyptian it is a barbarous and unmeaning term. According to the mediæval Arab geographers, whose testimony upon such remote events must not be accepted, "Mádán" is the name of the tribe to which El-Shu'áb, the prophet Jethro, belonged. And I repeat, that "Mádán" is a word confined to only, writings of the Hebrews and the Arabs. The classics, as Strabo, Plinius, and Ptolomey, would include it under the comprehensive term Nabathæa,
whose western capital, Petra, has become familiar to us by Thomas Hall and the Journals of the Society of Arts. November, 1878.

Mowaylah, seems to rise and fall as if by magic: 

it imitates in fact the climate of mountainous regions during early morning, when the "dancing of the air" adds many a cuvita to its stature, at midnight, after the equinoctial and "El Misr" (Egypt, and Cairo).

The first glance which the voyager casts upon the land of Midian is a sight to be remembered in after years. That majestic scene, at once grand and simple, was right well suited to the heroic race of Bedouin who once held the soil. It reflects to a certain extent the Sinaic Peninsula that faces its shores. Here, however, there is a sharper contrast of the flat and the high, the low and the tall, the horizontal and the perpendicular; of the well watered lowlands, with a luxuriant vegetation of emerald green, and of the rocky uplands, sterile and cruel as a moon-landscape; of the cloud-shadows flecking the mountains, and of the serene and lofty sky, so remarkable in these regions, that domes the plains.

Let us briefly note what we first see from the deck of our corvette. Beyond the cushions of golden sand which, hemmed in on either side 

and striped with verdure, oppose the bright blue waves, rise flat-topped banks and peaky hillocks, of modern grit and arenaceous stone. Their dull yellow are almost hidden by sprinkles of dark silex, by weathered fragments of ruddy porphyritic traps, and here and there by blocks of pale, neutral-tinted, granite. Inland, these banks become foothills as gloomily metallled and rossed; but

whilst the picture is glazed with azure and purple by the intervening air of matchless purity and brilliance. The background is a towering line of kingy mountains, a surprise and a delight to the eye after the meanness and flatness of the Suez coast.

This sea-wall is known as the Jibal el-Thîmah, the "Mountains of the Lowlands," which correspond with the Ghats of Western India; apparently continuous, it is broken into sundry blocks lying on different planes, and it reaches a maximum of 6,000 to 6,500 feet above the "water mirror."

Amethyst-hued with aerial blue distances; here golden in the sun-glow, these bright with rose-leaf and flame-tint, and there again shaded with stripes of violet-brown and purpling red; barren and nude of vegetation, yet gorgeous in its coast of mother lode, it stands fantastically steen and sharply outlined against the bright ocean of cloudless air. Nothing can be more striking than these "Alps unclouded;" these monoliths of the奠定了 mountains, which the prosaic old British navigator (Irwin, 1779) dubbed the "Bullock's Horns," and which a later writer (Wellsted, 1850) compared to "enormous icebergs." Their Titan shoulders, beaten by the suns and storms of ages, support peaks and pinnacle, organ-pipes, chimney-tops and Logan-stones; huge domes, truncated towers and sharply isolated cones. Fresh from the Dolomites of the Tyrol and Dalmatia, I had a first impression that the building material must be the same fire-blessed calcareous. Happily, it was a wrong impression, and when anchored apparently at the base of El Sharr, the "Landmark," we remarked that the mighty curtain, which backs El-
The coast is dangerous in the extreme; the lead often fails 120 fathoms without striking bottom; both the north and south winds are a terror to navigators; and the fine ports mentioned by Ptolemy, are little coves barred and blocked with coraline reefs. About midway the Gulf implages upon the shore; they then shiver off, and their place is taken by foothills rising from a slip of coast. About Maknâ, two-thirds down the 'Abâlah Gulf, the eye is pinned by a secondary formation of gypseum, which contrasts strangely with the blue mountains, and the blue sea. Now tinged with a sickly yellow or greenish hue, then a ghastly glaring white, and everywhere bare as a bone, it is the bleached skeleton of a gristy land. The formation which extends in a broken sheet to the Sinaitic peninsula opposite, and which may be traced down coast to our extreme limit, is evidently older than the Gulf. It is ribbed by ridges of felsite and porphyritic trap, dark-red and bottle green, usually trending north-south, a black-stone land in a white stone land, and looking from afar like gloomy reefs in a milky sea.

The name, Maknâ, is the same in Ptolemy (vi. 7) who writes also Mana and Maina. Josephus terms it the village Midian, and the medieval Arab geographers describe it as the “ruined town Midyan, containing the well where Moses watered the flock of El-Shu'ā'b” (Jethro). It is still known to the Arabs as “Midyan,” the name of the country; and it has evidently borrowed it from the capital, Madîna, or Maqhir Shu'âb. Here we found vestiges of an artificial harbour, a high town, which may have been a mosque, a monastery, and the “Praying place of Moses,” a ruined building of alabaster, but no well.

The bôh, or “gulf,” of the ‘Abâlah Gulf is formed by a series of long low projecting points, named by the chartas Ras Farakt, “the headland which powders or heats to pieces.” It is known to the Bedawin as Ras ‘Eshâkh Hamid, and pious visitation is still made to the tomb of its holy man. Here, after a total length of 90 miles (N. Lat. 29° 30’ to 28°), ends the ‘Abâlah Gulf, whose umbra, the eastern shore-line, runs from NN.E. to SS.W. Beyond this point, the Midian coast suddenly sweeps from west to east for an extent of 40 miles. It is torn and broken by the violence of the southerly gales into a fringe of thin sand-tongues, often sickle-shaped; and it is outflanked by a small archipelago of îles brèches, reefs, and shoals. The chief islets, ranged upon a parallel of latitude, number four, Titan (of birds), Sinafik (possibly after Pharaoh Osenofre), Shu’âb, and Barakah—Kutab; with Yuhûd and Silah to the south. They were evidently known to the ancients; and every modern geographer has the pleasure of identifying for himself Iotâb and Dâia, Sâlyûd, Soukahb, and Ila Islands.

I cannot but hold this great bend to be the Képês (gulf) of which Diodorus thus speaks: “The navigator, passing the grassy plains of the north where little grass now grows, is received by a bath of paradox of nature, which trends inland to the immense salt lakes (60 geographical miles), enclosed everywhere by rocks of marvellous size. The mouth is crooked and hard to hit, for a low reef lies in the bay allowing neither ingress nor egress. Amidst the rush of the current and the shifting of the wind the billows boil tremendously, and are ever breaking upon the stony shores that oppose them. The people, called Banizomene, live upon the flesh of wild beasts hunted by dogs. At that place is a most holy fane held in highest honour by all the Arabs.

It is impossible not to suspect that these fantastic, imaginary, sensational horrors were fabled by the Midianites to deter strangers from interfering with their monopony—metal-working. Bûppell, the landscaper, repeats that 'Aynâmah Bay, the “innermost recess,” is “full of shallows, and quite useless for shipping.” Wellsted, the sailor, describes it as well sheltered from all winds; and assures us that “under a good pilot a vessel might enter with every facility and safety.” According to Agatharkides, Diodorus, and Pho- tus, the “tallings,” or gold sands, began to the south, in the land of the Deba (Doba, Toke, or Dahanâb—N. Lat. 21°); while the Allhûd (Allah of Hall, N. Lat. 18° 15’?) were rich in nuggets. They find, say our authorities, “a quantity of gold in the crusty substrata” (the Causses of the Brazil), “not dust, melted and treated with technological skill, but produced by nature and called by the Greeks Agopy. The word, meaning metal not requiring purification by fire, is synonymous with the Arab Zîbr, or nugget gold, purer than stream ore. They continue, “The smallest pieces are not smaller than an olive-stone, those of medium size equal a medlar, and the biggest a walnut. The people wear nuggets round their wrists, threaded alternately with transparent stones, and sell them cheaply to their neighbours. Brass (copper? zinc?), is worth twice, iron double, and silver ten times their weight in gold.” And yet there are moderns, Niebuhr for instance, who declare that “the precious metals are not found or known to exist in Arabia, which has no mines either of gold or silver.”

Let me finish the bird’s-eye view of the maritime Midian. South of El-Muweylah, the face of the country preserves its peculiar physiognomy with slight alterations of feature. The mountains decline in height from a maximum of 6,500 feet to 3,500. The volcanic chain approaches the shore; fewer and smaller islands break the coast-line. The seaboard-plain waxes broader and more important; the temporary “tabernacles” of the Bedawin, were shanties or booths, became villages of masonry; and the southernmost El-Wîf claims rank as an Arab town. Finally, with these characteristics ever more forcibly displayed, we reach the great Wady Hamz, the frontier of Egypt and the Ottoman Hejaz.

Midian is not included by Hebrew Holy Writ in surreitious Arabia; and the rich booty of precious metals which fell to Moses and to Gideon might have been made by merchandise as well as by mining. The chief diggings (Gen. x. 28-29) were Sheba, Opbir, and Havilah, all in the southern peninsula; while the centres of minor importance were Hazerosh, Parwain, and Uphaith. Hazerosh is mentioned in the Exodus (Deut. i. 1); where the A. V. reads “Hazerosh and Dizâkah,” instead of “Hazerosh, where there is gold,” or “is a place of gold.” This Hazerosh is usually identified with the modern Ayn el-Hazarah, a fair valley near the
N.E. coast of the Sinaitic peninsula, a little north of the Wady and Marsâ Dahab, I saw the "water-course and anchorage of gold." Farvaim is the modern Farwâh in Khâuhlûr which represents the land of Havilah; and Uphaz may be a simple corruption of Ophir.

After this general mise en scène, I proceed to the actualities of our travel in Midian. Let me mention, by way of preliminary, that both of the expeditions, which I had the honour to lead, were sent out at the sole expense of H.H. the Khedive of Egypt, Isaac I, a Prince to whom the future will be more generous than the past has been just. To this Viceroy alone we are indebted for our present knowledge of the neglected and almost mythical old "kingdom." Dr. Edward Bippell, the first explorer in 1826, was compelled by slender means to make a flying trip through a land inhabited by tribes who were never safe, and who, at times, were dangerous. Wellled, when surveying, under Moreau, the coast of Midian, in 1853, shows that more than once he and his men ran risks from wreckers; and had to face the chance, when they landed, of being held to ransom. The late Dr. George Augustus Walin, in 1841, had only made a flying across the country, and was unable to visit the most interesting sites.

The energetic Viceroy changed all that. During the spring of 1871 His Highness forwarded, in his little steamer Erânum, my regretted friend, Dr. Charles Bero, who, at the ripe age of 74, gallantly went forth to find the "True Mount Sinai." You are doubtless familiar with the splendid volume, "Sinai in Arabia" (Trümper, 1878), nobly and festively edited by his widow, Mrs. Emily Bero. In early 1877 the Khediv was pleased to place under my command the first Khedivial expedition; it consisted of a small guard of Egyptian officers and men, with a French engineer, M. George Morice, and an Englishman, Mr. Charles Clarke, acting commissariat officer and accountant. This preliminary visit lasted little more than a fortnight (April 1-18), but it gave me a fair general view of the country; it brought back specimens of gold, silver, and, in fact, all the metals mentioned in the Book of Numbers; and it enabled me to publish my preface volume, "The Gold Mines of Midian."

Invited, in 1873, to carry out the discoveries of the previous year, I returned to Cairo, and organised, under the auspices of His Highness a second Khedivial expedition. This time it was mounted upon a larger scale. Besides my two former compagnons de voyage, an artist, M. Lacaze, and a smith, M. Philipin, were engaged. Six Egyptian officers, including two upon the staff, commanded an escort of twenty-five Negro soldiers, carrying Remingtons, and a gang of thirty unarmed miners, or rather quarrymen. We were liberally supplied with mules, tents, and rations for four months; and we had an abundance of rude implements, picks, crowbars, and boring rods. As the first expedition had been purely tentative, so the second was expected to bring back, in masses sufficient for assay and analysis, quantitative and qualitative, and specimens of all the formations that appeared metalliciferous.

After the delays and troubles inherent in such undertakings, the Expedition embarked on board the dispatch-boat Makhlûr; and, after duly break-
it, we returned to Sharmá, and marched upon 'Aynamá. Of these places I shall say nothing, have they not all been written in my published volumes? We then broke new ground from 'Aynamá to Maqbár Shu'ayb, the "Caves of Jēhābo." It corresponds with "Mādīmá," the "Mesopotamian city" of Ptolemy (N. Lat. 28º 15') and must not be confounded with his Mo'dīmá, or Medīmá (N. Lat. 27º 43') whose position (Sharma? Tiyama?) is still under the judge.

These ruins show what was, after Petra, a "Queen of the desert," one of the earliest of our many "overlands," which began at Louké Kómó, the southernmost port, and which followed the eastern coast of the Red Sea, in order to avoid the dangers of the Akabah Gulf. From its northern terminus, the "City of the Rock," roads branched off to Syria, Egypt, and the Mediterranean; and these, with the "Route of the Silk," "Route of the Cloths," and "Route of the Ivory," the spices and perfumes of India found their way to the outer world.

The remains are most interesting, despite their maltreatment by time and man. My coming book "The Land of Midas (revised)" will enlarge upon the picturesque high-town and palace (Laura?), crowning the gypseous hill which overlooks the broken alabaster walls, forts and houses of the "Mafahd-Dŭmm" suburb, or old ones; the Nabataean catacombs dug in the solid rock, and the huge tank and guard-house of the medieval Moslema. Here, and here only, we found some 250 Midianite coins; besides which we brought back specimens of stone weapons, and articles of steatite like those of the Benád; copies of griffins, and fragments of bronze, which will be compared by awe with the metal of the European prehistoric age.

From Mādīmá, whose ancient civilization was apparently that of the Nejob, or South Country mentioned by Abraham, we marched down a remarkable valley to Makná, its sea-port. The little core, at the northern extremity of the gypseous-field, has been minutely described by the late Dr. Beke and myself (p. 14, 15). At Makná the aviso Mithbir awaited us, and after a severe storm that blew away our heavy tents like umbrellas, we embarked for the other side of the Akabah Gulf. How we rounded that restless and perilous water; discovered the metallic diggings of ancient Elath, now Akabat-AYalah, and escaped shipwreck only by the energy and courage of Mr. David Duguid, our Scotch engineer; and, finally, how we returned to El-Muwaylah safe and sound, by a manner of miracle, will presently be told to the world in detail.

The first Khechivial expedition had brought back, from this fine mining country, specimens of fire-gold, found in basilat apparently erupted; silver appeared in the red sands, and in the lava of the quartz, and titaniferous iron of the Jebel el-Abjész; silicate, carbonate and other forms of copper, extracted from chromite Schist and quartz; lead and iron lay everywhere; zinc was abundant; half the land was composed of gypseous and selenite, and the sulphur rivalled that of Naples. The second visit added to these metals a quantity of antimony, mercury, and lead.

After a short rest for man and beast at El-Muwaylah, I organised the second excursion through Central Midian. The object was to determine the depth of the metalliferous region from west to east, and, in the latter direction, I had hopes of finding a virgin goldfield. We set out on February 19th, and travelled 18 days, not including a week devoted to exploring the mighty Shān massif, behind El-Muwaylah.

A leisure march of five very short stages led us through the double parallel line, known as the Jībāl el-Tibrām and the Shāfah. The expedition then reached the region called El-Himám, a word primarily meaning a desert-flat, with dusty hillocks. It is a long, thin line of the New Red Sandstone; a hollow plain, measuring about 170 miles from north to south and varying in height from 3,000 to 3,800 feet. The loose, alluvial soil, here pink, there pink-white, dotted with isolated cones, is fair to look upon; and wants only water to become exceptionally fertile. In the south it is prolonged by El-Jawf, "the hollow," a region as yet unvisited by Europeans. Eastward, the Himám slopes upon El-Harragh, the "hot" or "burnt" region, a volcanic tract, to which inadequate limits have been assigned, Wallin, who traversed it in 1848, makes it a parallelogram, about one degree long (N. Lat. 28º 27'), and disposits it diagonally from north-west to south-east. Thus, it heads a little north of El-Muwaylah, where it lies some 60 miles from the sea; and it partly fills the El-Jawf. I found, however, by inquiry from the Arabs, that this eruptive region is much more extensive and important than our maps allow. It begins to the south-east of the Dead Sea (N. Lat. 31º), about 150 miles south (N. Lat. 28º 30'), we found an off-set near Makná; we first sighted it, on this excursion, east of the parallel of El-Muwaylah (N. Lat. 27º 40'), with a little north, and we last saw it near El-Harragh (N. Lat. 25º 6'). Moreover all assured us that it reaches the neighbourhood of Medina and El-Yaama, some 80 miles further south (N. Lat. 24º 6'). If these limits be true, the line of vulcanism subduing the north-western flank of Arabia would measure from north to south nearly 7º, or, more exactly, 414 direct geographical miles.

These two regions, the Himám and the Harragh, may be defined geographically as the western walls of El-Nej, the great plateau forming the heart of Arabia, the home of the Arab blood horse; and the centre of all that is brave and beautiful, and thoroughbred in the race of Arabian man and beast. This section of our march gives us a correct profile of the five formations which lie parallel and east of one another. They are:—1, the sandy and stony maritime region, the foothills of the Gház, granites, porphyries and traps with large veins of copper, deposits of quartz, and Wadys cutting through thick beds of conglomerates; 2, the Jībāl el-Tibrām, the majestic range which bounds the seaboard inland, composed of granites emerging from the fellocs and porphyritic traps; its broad sandy beds, rivers without water, and narrow rock-gorges form the only roads; 3, the Shāfah, or lip, a prolongation of the Gház, in which the porphyries almost obliterate the granites; 4, the Himám, or strip of New Red Sandstone; and 5, the Harragh, or volcanic region. Our march eastward, and its benevolent mineralogical intentions were violently arrested, it was suspected and frustrated by a bandit tribe, subject to the rule, or rather the no-rule, of unfortunate Syria. These
Ma'azah, with its kinsmen, the Beni Attiyah, have extended as far north as Moab, where their razzies are much feared. Modest demands of 100 dolars ($200) per head, and symptoms of revisiting the terrible esdubet, the blood-feud, began in the evening when we crossed their frontier. We had come, not for war, but for exploration. We were hardly strong enough to fight; and, had we fought, we should have been in the wrong. The tribe was ungentle and inhospitable, greedy and turbulent: still, according to Arab ideas, it had the fullest right of dictating the terms under which it would permit foreigners to pass its frontiers. Lastly, our Shays of the Huwayitat tribe had freely trusted their lives, their men, and their camels to my guidance; and I was bound to see them safe out of the lion's den.

Yet not the less was February 29th a veritable ember-day. We retraced our footsteps, and descended the double Khawaylah, or "pass," which connects the Hasmah with the Tihamah. Free from the Ma'azah we now bent to the south and the southeast, over what I believe to be unexplored ground. We explored and collected geographical details concerning the three great parallel basins, especially the Wady Dimah; this is a species of Ararane Amudia, where clumps of trees form important features in strangely picturesque views, worthy of Petra and Moab. We also dug into and planned the two principal ruined cities, called by the Bedawins, "Shaghah and Shuwak." The latter lies in a broad water-course, upon a long bank of modern sandstone and clay, which a sandy branch, on either side, converges into a manner of holm, or riverine islet. The town preserves only barren foundations of masonry, and little salt-white heaps, which mimic the mighty tumbled of Babylon, Nineveh, and Troy. We traced a fort, a tower, a number of smelting furnaces, and caves which have been catacombs. The arrangements for collecting and distributing water have been upon a large scale—tanks and cisterns, basins and conduits, channelled with rough cement overflowing a finer concrete. The magnum opus is the great aqueduct on the left bank, showing, where the sands have not buried it, a length of at least 1,000 metres, and ending in a reservoir which measures 48 inches each way. This Shuwak was evidently, like Madinah, a station on the great Nabatean "overland;" and, subsequently, on the highway of the Pilgrimage-Caravan before the 16th Century, when it becomes distinctly Syrian. We were prepared to be once more to meet the strong-smelling ferula, the honeybalm "Ottarangia" and the juniper tree, the trunk thick as a man's body. Of this Scriptural "heath" (Jer. xvi. 6) we brought back branches and berries; and the latter, I hope, may be induced to find a home in England and Ireland. Returning once more from the mountains to El-Mawayah, we were delighted to find our old friend, the corvette Sinuir, which H.H. the Khediv had thoughtfully and courteously despatched to take the place of a "tin kettle" so uncommonly likely to drown herself as the Atrio Makkhir. After a delay of two days, in order to sort out the party, and leave the sick at the fort, we began our exploration of South Midian, the third, the last, and the most interesting of our three journeys. Had I known what we do now, we should have opened at the south, and have devoted to it the greater part of our four months.
The first day’s cruise ended at the noble port of El-Dumayyash; which, situated only 30 miles north of El-Wijj, is so admirably fitted as a harbour of refuge for pilgrim-ships. It has been neglected by the charis, but the Egyptian staff officers carefully surveyed it. On March 24th we anchored in the dangerous cove of El-Wijj, the northernmost town on this part of the Arabian coast. It has greatly improved since my first visit in 1853, the reasons being increased traffic with the Bedawin, and the establishment of a well organised quarantine-station, with mule and light horse barracks and bakeries. Unfortunately, about two years ago, the place of penance was moved northward to Tor, in the Siniatite peninsula, where it has become a standing menace, threatening cholera, small-pox, and typhus, not only to the Nile valley, but to general Europe. I hope that the English and Egyptian governments will see the advisability of once transferring the quarantine station to El-Wijj.

Here the expedition separated; M.M. Marie and Philipp were ordered to inspect a third sulphur-heath, distant some 25 miles down coast. They were completely successful; and they brought back, moreover, accounts of a classical ruin which appeared to be the turbulent Juhanah, re-visited. Monthils, accompanied by a man of the Charis, proceeded southwards in the Steen, and, after covering some 70 miles (dir. geog.) we came upon the ruins of El-Haur, in N. lat. 29° 6'. Here, doubtless, lay the celebrated emporium, first Nabathæan, then Roman, or rather Byzantine, Leuké Rome, the “White Village,” as Whitby. After surveying its land and water, we arrived at the ruins, which had returned to El-Wijj, and found that the 56 camels wanted for carriage had been collected by the venerable Sheikh Amin, chief of the Baluyi. This tribe, unlike the Baniyádd, is of ancient and noble blood, supposed to be Jactanite, as opposed to Islamite; it emigrated from the south before the arrival of the Mamelukes, and seized the lands of the Beni Tamid or Thamudites, then the allies and auxiliaries of Rome. The Baluyi retain a flavour of old civilisation; and still show the mixing instinct; this evident result of transition will prove most useful when the old diggings shall be worked anew.

Leaving El-Wijj on March 26th, we attacked the interesting interior. The ruins called “Umm el-Karakay,” and “Um el-Harab,” showed us, for the first time, scientific workmanship, and galleries sunk and pierced in the solid rock; the object was to reach the white quartz, which veins the grey and other granites. After six short, slow marches, inspecting and surveying, mapping and planning, we debouched upon the fine mountain-girl plain of Bads, whose abundant waters and dense palm-orchards are celebrated far and wide. The Greek Badais, and the Roman Badais (Ptol. vi. 32), which Polony (vii. 7), places in the Lat. 24° 30’ (instead of 26° 45’), it was the very heart and centre of Thamuditis. I may safely predict that it will still see better days. From Bads we went southwards, and now the hills stretch home.

After visiting the quartz-field called “El-Marwah,” we were compelled to take precautions; this frontier-country is swept by razzias of the Aneasah to the east and the Juhanah to the south. Marching militarily is no pleasure when your camels, faint and feeble with hunger, can hardly cover 28 miles in the hour. Thus creeping, we travelled down a succession of broad water-courses, showing glorious rocky scenery in the “Mountains of the lowlands of the Baluyi.” The land may be described as one vast outcrop of quartz, which bars the Wadys, and rises in conical heads several hundred feet high. On April 8th, we reached the great Wady Hamz, which, I have said, separates the southern limit of South Midian from the northern frontier of the Hejaz. It is by far the most important feature of the kind in North-Western Arabia, the highway of caravans leading some fifteen marches into the interior, and over and beside the ruined Nabathæan city, Madinah Saltih. Of course it is unknown to the Hydrographic Charts; Wallin, copied by the map-makers generally, miscalls it Wady Nejd, and even the erudite Grieve names it. The head, according to the Bedawin, is near Medinah, and the mouth is in North Lat. 23° 55’. This and the enlarged limits of the Harrah were the geographical discoveries of the journey.

Upon the southern bank of the Wady Hamz, and facing the Ghat scenery to the east, lie the ruins of a shrine known as Kasr Qurrayyun, Said’s, the “Palace of Said the Brave.” It is a startling contrast with its wild surroundings, this highly civilised maisoncarre, a cube of white and mottled alabaster, measuring 8,50 metres each way. Mr. James Ferguson, whose authority in such matters few will question, compares it with the fane at Suwaydah in the Harran, planned and described by M. de Vogüé (Pl. iv.). As it is late Roman, and dates from the days of Herod Angustus, Said’s the Brave was a huge negro chattel, who carried off his master’s daughter, built this “palace,” and presented it as a present for emperor, the country so scandalised by the excesses of his meat-diet, rose up and slew him.

From the Shrine we beat a little eastward of the direct route-trending north to El-Wijj, and visited the immense quartz-field, known as Abil-Marur. Our détour was rewarded by the discovery of sundry ruins, and a wall-like reef of the white stone, some 300 feet high and at least half a kilometer long. The rocks, too, were profusely veined with the variety of quartz called chalcedony, an agate used for seals; its fragments showed lenticular gold. I have no doubt that this is the mine “El-Marwah,” or “Zâl-Marwah,” mentioned by so many of the medieval Arab geographers. Marâ, both in the classical and vulgar tongue, means “quartz;” and we have found it applied, under various modifications, to sundry features in Midian, especially in the parts adjacent to the Wady Hamz. I am disposed to translate Ophir by red-land; and to hold it, like Sheba and Havilah, a district, not a settlement; you must remember, however, that every traveller in Arabia has his own “Ophir.” Marâw, for instance, in the hollog of Macow, certainly signifies a single place of quartz; Marâwût would be its plural; and, finally, Abil-Marur is the “Father of quartz,” in other words, a place were quartz abounds.

On April 16th we ended our third excursion by returning to El-Wijj. During the last 24 days we had inspected and mapped a linear length of 170 miles. This South Midian differs essentially...
from the northern moity. Whilst the latter extracted its argentiferous and cupiferous ores, the former worked for gold and silver. Moreover, though the section of the province near Egypt preserves few traces of the miner, here we find extensive remains where he treated the rock carefully and scientifically. The whole western counter-slope of the lowland chain belonging to the Bally is one vast quartz-field, and, as might be expected, not one tithe of it has been touched. We brought back from the Badi's plain specimens of spalled stone, each bit showing its little mass of pure lead—a rare metal. Gold was seen in the chalcedony-quartz and in the junction of rosy schiste veins with the quartz walls. Sulpeter is everywhere, and I have noticed the third or southern sulphur hill.

The second Khedivial Expedition, which disembarked in Arabia on December 19th, 1877, had now ended the work proposed to it. On April 18th the Sinder convoy left the coast of Midian, carrying the men and mules which she had landed. There was only one death, a quarryman, who succumbed to ague and fever. The journey had covered, by sea and land, nearly 2,500 miles, of which some 600 were mapped by Lieutenants Amir and Taufik, of H.H.'s staff; and a few crucial stations were astronomically fixed by the Egyptian naval officer, Ahmad Kaptis. It had measured, and planned, and sketched the skeletons of 16 settlements, large enough to be called cities, still showing remains of extensive public works. Moreover, it had seen or heard of nearly thrice that number of villages and "ateliers." M. Launze stocked his portfolio with at least 200 croquis, oil-colours, water-colours, pencil drawings, and photographs. Besides the 25 tons of rich specimens collected for assay and analysis, we brought back to Cairo a small ethnological "find" of stone implements, rude and worked; the coins of ancient Midian mixed with Roman and Kufic; fragments of copper and bronze glasses and pottery; Nabatean inscriptions and Arab tribe-names; a box full of skulls; spirit specimens of zoology; shells from the shores of the Red Sea; and a Hortus sicurus, whose interesting particulars are still being gathered at an altitude of 5,600 feet. Finally, Mr. Clark, acting as commissariat officer, was diligent in keeping accounts, and assisted me in filing the meteorological journal.

Such, in the last quarter of the 19th century A.D., is the condition of the warring country, whose name is for ever connected with Joseph and his brethren, with Moses and Jethro, with the wanderings of the Hebrews, with Gilgam and Balann, and with the heroic Bodawin, Zelah and mumma. It is evidently far less civilised than it was in the 19th century B.C.

You now know as much about Midian as I do; instead of being a vision, a mystery, it has become to you a thing of reality. You will join me in lamenting the contrast between what it has been and what it is. Pathetic, indeed, is the view of its desolation; once the flower of Arabia Felix it has become a Petraea, a Desert. The incursions of destruction has set for years upon its glorious mountains and luxuriant water-basins; the wild man, the father, not the son, of the wilderness, has done and is still doing his worst. Similarly, when the Romans ruled Africa Propria, and Numidia,

the regency of Tripolis numbered some twenty million souls; the population, then as thick as that of Belgium, is now reduced to two millions.

But the Anglo-Turkish Convention places Great Britain with reference to Arabia nearly in the same position as that of England after the days of Augustus. I have a full and perfect faith that Midian, like many another province, will presently awake from her long trance, from her sleep of ages. She offers to the world, not a mine but a mining region, some 300 miles long, with an inner depth as yet unknown; and what the ancients worked so well we moderns can work still better. Let us look forward to the development of her mineral wealth under the fostering care of European, and especially English, companies. We may expect to see the howling wilderness, like Algeria, now the rich and fruitful province of Algiers in 1875.

Meanwhile, I have only to thank you for the patience and perseverance with which you have listened to my long story, and to bespeak your interest for the future welfare of the grand old "Land of Midian."

DISCUSSION.

The Chairman remarked that they had listened to a very graphic and exceedingly modest address, in which they had had scarcely a single description of the fatigue endured by their companions. He himself was only a sort of feather-bed traveller, having seen some little abroad, in Asia Minor and the Arctic regions, he could appreciate what one had to go through who undertook such a journey as had been detailed. Language would almost fail to describe what the travellers had to suffer in those regions. The scorching sun of the day and the chilling temperature of the night, the hard fare they had to live upon, and the mental strain they had to exercise in contending with the rude people about them, was something most appalling. They had heard that night a man who had, for a time, seen more of dangerous travel than any other man living, or, at all events, ranked amongst the select few who had opened up new and unknown countries to us—lands where the poetic vision could barely penetrate, and see what their future might be. Their thanks were due a thousandfold to all such men; for though they knew something of what they had endured, they could not say what might come. He could only thank Captain Burton personally for his great kindness in coming there to read such a paper; and he hoped they might hear some interesting remarks upon it. Perhaps Prof. Tennant would have something to say on the geological part of the subject.

Professor Tennant said he was not prepared to say anything, there being no specimens which he could examine. He knew something of a gentleman (Mr. Milne) who had gone over a portion of the ground in company with Dr. Beke, and he had seen some of the specimens he had brought home. One or two of the statements made rather startled him, as, for instance, that pure lead had been found. He should like to know if it was really pure lead or an ore?

Captain Burton said it was pronounced by Captain Rose to be pure lead.

Mr. Lee Thomas asked if Professor Tennant had ever seen pure native lead.

Prof. Tennant said he had not, except under peculiar circumstances, where its existence could be accounted for. It had been found in volcanoes when the sulphur...)