G. Granite and Porphyry, forming the foundation Rocks of the district.

S. "Nubian Sandstone" formation with a base of conglomerate.

L. Cretaceous Limestone, forming upper part of the Table-land of Edom and the Arabian Desert.

LENGTH OF SECTION ABOUT SEVEN MILES.
ORDINARY MEETING, MAY 2, 1887.

GENERAL HALLOWES IN THE CHAIR.

The Minutes of the last Meeting were read and confirmed, and the following Elections were announced:

MEMBERS:—W. Edwards, Esq., C.E., Hyderabad; Miss L. E. Loveday, London.

ASSOCIATES:—Rev. D. E. Evans, M.D., United States; Rev. E. P. Ingersoll, A.B., United States.

The following Paper was then read by the Author:

PETRA, THE ROCK-HEWN CAPITAL OF IDUMÆA.

By Professor Hull, LL.D., F.R.S.

AMONGST the ruined cities of the world there is probably none which carries with it so unique an interest as the deserted capital of Arabia Petraea, owing to the peculiarities of its construction, and the marvellous state of preservation in which its buildings are found after a lapse, in some cases, of over two thousand years. The ancient city of Petra lies deep amongst the recesses of the Edomite mountains, only accessible through narrow defiles or over difficult passes, and easily defensible against an attacking host:

"Where rocks on rocks—on mountains, mountains piled
Have form'd a scene so wondrous and so wild,
That gazing there, man seems to gaze upon
The rough, rude, ocean frozen into stone."*

So completely hidden is this wonderful city from all outside observation, that, independently of its situation in the Desert inhabited only by Bedawins, it might easily be passed by on either side by travellers proceeding to Damascus on the one side or to Jerusalem from the head of the Gulf of Akabah on the other. It is scarcely, therefore, to be wondered at that, during the Middle Ages, Petra was lost to view for several centuries. The Mahomedan wave of conquest, which swept with such irresistible fury over Western Asia,

* Petra, by Dean Burgon.
overwhelmed Arabia Petræa and its capital; its commerce was destroyed, its Christian inhabitants massacred or forced to embrace the religion of the conqueror, and all that was left—namely, its palaces, temples, and tombs—remained much as we see them at the present day. Owing to the genial climate which pervades the valleys of Mount Seir all the year round, though snow and frost visit the adjoining mountains and table-lands, the rock-hewn structures come down to the present day in a state of high preservation; and, from the beauty and boldness of design, variety of style, and peculiarities in construction, cannot fail to excite feelings of the highest admiration and interest in the minds of the favoured few who have an opportunity of visiting the remote valley in which they are situated, known amongst the Arabs as the Wady Musa.* Though much has been written on Petra——

"The rose-red City, half as old as Time"—

and its surroundings, yet the interest can scarcely be exhausted, and it is hoped some account from the pen of a recent traveller may not prove unworthy of perusal.

The history of Petra still remains to be written; and probably, were such a history in existence, it would be found unsurpassed in incident by that of most of the cities of the Eastern world. Occupying the sides of a wide and deep valley, which ultimately opens out into the Arabah, with branches bounded by cliffs and precipices of sandstone under the shadow of Mount Hor, it may be supposed that it offered a secure retreat against the nomadic tribes to the more settled descendants of Esau, who gradually established their sway over the mountainous region as far north as the borders of Moab, and southwards to the head of the Gulf of Akabah. At the period of the Israelitish Exodus, Petra was the residence of kings, the successors of the "Dukes of Edom"; and when the host of the Israelites encamped for the second time after the period of the wanderings in the wilderness at Kadesh Barnea,—which presumably lay at some distance to the west of the borders of Edom,†—the embassage sent by Moses to the King of Edom had only two days' journey in order to reach the capital of the country. The request on the part of Moses for permission to pass through the land in order to reach the table-land of Moab was refused;

* From the tradition that Moses, the Jewish Lawgiver, cleft the valley with his sword.
† Probably at the spot discovered by the Rev. J. Rolands, and described by Dr. Trumbull, 1884.
ON PETRA, THE ROCK-HEWN CAPITAL OF IDUMÆA. 141

and the Israelites were then obliged to retrace their steps down the Arabah valley as far as the Wady el Ithem, near Elim (or Akabah), and, by this narrow defile through the mountains, to make their way northwards along the high road to Damascus, known as "El Derb-el-Haj," which runs at the back of the Edomite valleys, and along the margin of the Arabian table-land.

Coming down somewhat later, to the time of the Kings of Judah, we find that Amaziah revenged the affront shown to the Israelites by the terrible slaughter of the Edomites in the Valley of Salt,—probably the great plain at the southern end of the Dead Sea; and after his victory, marching southwards into the mountains, he captured the capital, then called "Selah" (or the Rock), synonymous with Petra, and changed its name to "Joktheel," or "subdued by God" (2 Kings xiv. 7). According to the usual reckoning, this was B.C. 839 years, from which we may infer that Petra had been the capital of Edom for some time previously,—that is to say, for about a thousand years before the Christian era. In the centuries immediately preceding this era, the influence and prosperity of Petra appear to have expanded to such an extent that we find it referred to by classic authors both of Greece and Rome. Strabo gives a very clear description of its position and surroundings. It is described as the metropolis of the Nabateans, and distant from Aila (or Elath), at the head of the Arabian Gulf, ten Roman miles. (The real distance is much greater.) According to the same historian, Petra was situated in a level valley, decorated with gardens and fountains, but bound in by rocks on all sides; beyond its precincts lay the deserts, chiefly in the direction of Judæa.* In the fourth century B.C., the city was so strong as to have successfully resisted Antigonus; and, at a later period, B.C. 24, also, the invasion of Gallus, the Roman governor of Egypt; but ultimately it fell before the Roman armies, under their general, Hadrian, and became a portion of the province of Syria during the reign of Trajan, receiving the name of Hadriana, as shown by the coins of that period. This brings the history of Petra down to the commencement of the second century of our era; and it is probable that to this time may be referred many of the temples, together with the rock-hewn theatre, aqueducts, and other public buildings, of which the remains come down to the present day. The city was the great entrepôt of commerce for Central Arabia. It was

* Strabo, lib. xvi.
connected by several high roads with Damascus, with the cities of the Persian Gulf, with the harbour of Aila, and with the coast of the Mediterranean, and thus with Egypt, Palestine, and Tyre. We may gather from Strabo that spices landed at Aila in the ships of the Minæi and Gerraræi, probably from the district of Southern Arabia known as "the Yemen," were taken to Petra, and exchanged for the products of the Phœnicians. At some very early period—perhaps in Apostolic times—Christianity was introduced into Arabia Petræa; we might even hazard the conjecture that this event took place through the agency of St. Paul himself, who, as we know from the Epistle to the Galatians, went into Arabia after his conversion, and thence returned to Damascus. It is not improbable that he took advantage of this opportunity for visiting the capital of the country, and preaching to the inhabitants the Gospel he had himself received. However this may be, about the beginning of the fifth century, according to Reland,* the region extending from the borders of Arabia to those of Syria, and constituting the ecclesiastical province of Palestine, was divided into Palestina Prima, Secunda, and Tertia, the metropolis of the first being Jerusalem; of the second, Scythopolis; and of the third, Petra.† In this sense, Eusebius speaks of Petra as being a city of Palestine, at which time it was the seat of a bishop who had the oversight of the Christian populations; and there can be little doubt that during the fourth and fifth centuries Christianity had been embraced by a large proportion of the population of Arabia Petræa, especially amongst the more settled inhabitants. This brings us to the consideration of the religious history of the people of this region.

Going back to the earliest ages of Arabian history, it seems clear that the Semitic races, occupying the region between the Caucasus on the north and Southern Arabia on the south, had dispossessed the prehistoric races, whose remains we recognise in the dolmens and stone circles which are so abundant in the table-lands of Moab and to the east of the Jordan valley. According to Le Bon‡, Arab tradition points to two divisions of the Arab race; the first descended from Kachtan (the Joktan of the Bible), who now occupy the fruitful district of the Yemen, in South-Western Arabia; and the second from

* Palestina ex Monumentis veteribus illustrata (Nuremberg, 1616).
† In a MS. in the library of the Patriarchate of Jerusalem, a fourth Province, that of Bostron or Arabia, is mentioned. Palmer's Desert of the Exodus, Appendix, vol. ii. p. 551.
‡ Dr. Gustave Le Bon, La Civilisation des Arabs (1884).
Ishmael, the son of Abraham, who now constitute the nomadic tribes, and whose territory extends through Arabia Petraea, and the table-land east of the Jordan Arabah valley. Esau, the son of Isaac, married into the family of Ishmael, and settled in Mount Seir (Gen. xxxvi. 8), which ultimately became the possession of his descendants; and thus was established a double family relationship between the nomadic descendants of Ishmael and the more settled inhabitants of Mount Seir. Thus we may, with much certainty, refer the early history of Petra (then called “Selah”) to the time of Esau, or of his immediate descendants, the Dukes of Edom, about b.c. 1700. The Edomites were doubtless at first Mono­theists, worshipping the God of Abraham; but Assyrian inscriptions belonging to the seventh or eighth century b.c., together with those of Safa, afford evidence that at a later period the Arabs, including probably the Edomites, were polytheists, and erected statues to their gods. An Assyrian inscription recounting the return of Hassar-haddon from an expedition into the Arabian Desert, states that the Arab King X. arrived at Nineveh with numerous presents, petition­ing humbly for the restoration of their gods, and so effectually that the monarch restored the images, together with the Arab Princess Tabura, who had been captured, and who returned to her own country along with her gods. The deities ultimately became so numerous (being, probably, chiefs of dis­tinction) that on the authority of Le Bon, when the images were collected together in the ancient temple of Mecca called the Kaaba, the very Pantheon of Arabia, they amounted, in the time of Mahomet, to three hundred and sixty in number, collected from various tribes, thus constituting a bond of unity between all the Arabian populations, which became of great service to Mahomet in his work of unification. The Kaaba still remains. Tradition carries its foundation back to the time of Abraham, the father of the race; and Mahomet, when preaching the doctrine of the One God, had only to point out to the Arabs that it was the God of Abraham, the founder of the Kaaba, whom he proclaimed.

The transition from the worship of the Invisible God to that of the heavenly hosts, especially of the sun, is easy amongst an untutored people. There is reason to believe that at a very early period the worship of Baal was general throughout Edom and Moab.* Amongst the most ancient of

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* Baal signifies “Lord,” and, according to Prof. Robertson Smith, is not a proper name; but is applicable to the God of any tribe or locality.—Contemporary Review, April, 1887.
the ruins of Petra is the supposed "Altar of Baal," of which an excellent representation is given by an American traveller, Mr. Edward T. Wilson.* It consists of a circular basin, cut on the surface of an isolated rocky platform, and in a conspicuous position. A perforation in the centre of the basin communicates with an underground cavern, into which the blood of the sacrifice may be supposed to have flowed away. When, in the reign of Trajan, A.D. 105, Petra fell under the Roman sway, and became the capital of the province of Palestina Tertia, it may be supposed that some of its magnificent structures became temples of the gods of Rome. To what extent Christianity gained a footing in Petra is uncertain. From the Excerpta ex Graeco Notitia Patriarchatum it may be inferred that the settled inhabitants of Arabia Petraea had generally embraced the Gospel, and that there were a large number of villages and churches scattered over that region, of which Petra was the metropolis. By the close of Mahomet's life the whole of Arabia Petraea had been brought over to Islamism, and the only representative of Christianity which has survived to this day is the Greek convent of St. Katharine, at the foot of Mount Sinai. The stream of commerce which had flowed through Arabia became diverted by the events of the seventh century, and Petra, the fountain-head, fell into decay, and has ever since lain desolate, except when the Bedawin condescend to pitch their tents amongst the ruins. The fellahin of the Wady Musa at the present day are of a decidedly Jewish cast of countenance. Islamism has even less influence with them than with the Bedawin themselves. According to Professor Palmer, they are the sons of Leith, a lineal descendant of Kacab, and a branch of the Kheibari Jews who resided near Mecca, and played an important part in the early history of Islam. The Kheibari are still found in large numbers about Mecca and Medina, and are much dreaded by the Haj caravans, as they invariably rob and murder unarmed travellers. Intending visitors to Petra should, in the first instance, come to terms with the head sheikh Arari. On an occasion subsequent to our visit to the city (in December, 1883), I had an interview with this redoubtable chief near the shore of the Dead Sea, and I was favourably impressed by his conversation and

* The Century Magazine (New York), Nov. 1885.
† In the Vatican, edited by Luca Holstenio (1704). Eusebius in the Onomasticon, says, "Mount Hor in quo mortuus est Aaron erat juxta urbam Petram." This is a sufficient identification of the Mount known amongst the Arabs as "Jebel Haroun."
bearing. He had faithfully kept his promise upon receiving a present of £5 to protect our party from attack when marching towards our camping-grounds at Es Saifeh, and he assured me that he was friendly to English travellers, and did not wish them to be put to any annoyance while passing through his territory, nor that they should pay more than what was just and reasonable for right of way.*

In recent times Petra has been visited by Burckhardt (1812), Leon de Laborde, Robinson, Wilson, Dean Stanley, Palmer, and Drake; within the last few years by Dr. Strong, Mr. Edward L. Wilson, and the members of the expedition sent out to Arabia Petraea in 1883 by the committee of the Palestine Exploration Fund. De Laborde, who spent several days in the Wady Musa, made an excellent map of the valley and its branches, and has left us a graphic account of his visit and dealings with the Arab inhabitants.

As regards the architectural ruins of the Wady Musa, it would be useless to attempt to give anything like a detailed description within the limits of this paper. A better idea of their style and former magnificence may be obtained from a study of the beautiful drawings of David Roberts, or those in *Picturesque Palestine*, and of Mr. E. L. Wilson, already referred to. The predominating style is that known as Greco-Roman, but superadded to these are evidences of the influence of Persian and Egyptian art amongst the earliest structures, and of Christian art amongst the latest. What is specially remarkable is the total absence of Saracenic sculpture or decoration, showing how in the case of Arabia Petraea, as throughout the Sinaitic Peninsula, the Mahometan power was essentially destructive, rather than constructive, as was the case in Egypt, Persia, India, and elsewhere. Mecca and Medina having been constituted the sacred shrines of the Prophet, his followers were probably determined that no other city in Arabia should be permitted to become a rival. Hence Petra shared the fate of Feiran, and of numerous other Christian towns and villages in the Peninsula.

Of all the tombs and temples in Petra, the Khazneh is unquestionably the gem. When first seen through the narrow chasm, called the Sik, which forms the channel to the stream and the entrance to Petra from the East, the Khazneh appears like a beautiful vision. The delicate rose-tinted façade, supported by its graceful columns, lighted up with

* The account of this interview, as also of the visit to Petra and Mount Hor, will be found in the author's *Mount Seir, Sinai, and Western Palestine* (1884).
a blaze of sunshine, being set off in high relief when seen from the deeply-shaded recesses of this narrow cleft. This temple, like others, has been hewn out of the face of the solid sandstone cliff; and from the arrangement of the upper part of the façade above the portico into nine spaces or niches, containing originally as many figures, Professor Palmer came to the conclusion that this "mysterious excavation" is nothing but the Museum of Petra,—not what the Turks would call an "Antiquity House," but the "Philharmonic Institution of the place."

What constitutes the special wonder of Petra is the fact that with few exceptions its public buildings are hewn out of the living rock. Elsewhere I have hazarded the view that Nature herself first suggested the adoption of this plan, as the massive cliffs and vertical faces of sandstone which line the sides of the Wady Musa naturally assume, in some cases, the forms of artificial structures.* However this may be, all the great temples and tombs are hewn from the stone in situ, of which, besides the Khazneh, may be cited "the Temple of the Urn," another great temple surmounted by two tiers of Corinthian columns, and the Dier (or Convent). The Roman Theatre, though peculiarly exposed, is in a condition of remarkable preservation; but the hand of man, earthquake shocks, the rains, and torrents from the mountains are slowly wasting the wonderful and beautiful structures which adorn the Wady Musa, and which through nearly two decades of centuries have in some instances come down to our time as monuments of the taste, industry, and power of the Idumæan inhabitants.

"And this is Petra—this the lofty boast
Of Edom's once unconquerable coast!
These the gay halls through which in days of old
The tide of life so rapturously roll'd;
These the proud streets where wealth with lavish hand,
Pour'd the rich spoils of every Orient land;
All that the seaman's timid barque beguiles.
From Cush and Ophir, Tarshish and the Isles;
Afric's red gold—Arabia's spicy store—
And pearl and plume from India's farthest shore!
How changed—how fallen!—all her glory fled,
The widow'd city mourns her many dead.
Like some fond heart which gaunt disease has left
Of all it lived for—all it loved, bereft;
Mute in its anguish! Struck with pangs too deep
For words to utter, or for tears to weep."

* The art of fashioning the rock in situ was not uncommon in very ancient times in India, Persia, and other Asiatic countries.
The formation of this remarkable valley is intimately connected with the geological history of Arabia Petrea and Palestine. Down to the close of the early Tertiary epoch, known as the Eocene, the whole of this region formed a part of the bed of the ocean; the only lands within a circuit of several hundred miles around being the summits of the Sinaitic Mountains, which probably rose above the surface in the form of an archipelago of islands. But during the succeeding Middle Tertiary epoch, known as the Miocene, all this was changed. The crust over the part of the globe bordering the Mediterranean of the present day, which for a lengthened period had been at rest, or was only slightly subsiding, gave way to the irresistible strain due to contraction, the result of the process of secular cooling. The strata were bent, fractured, and displaced; some portions relatively elevated, and thus converted into dry land, while others were more deeply depressed. In this way, and at this period, the regions of Northern Africa, Arabia, Palestine, and Syria were converted into land areas, and their outline, together with that of the adjoining seas, roughly defined. Amongst the leading lines of fracture and displacement (known technically as faults), one was produced of over-mastering influence in the formation of the physical features of the region now under description. This fracture, known as "the Jordan-Arabah fault," has been traced at intervals from the head of the Gulf of Akabah northwards along the base of the Edomite and Moabite Mountains, and along the line of the Jordan Valley to the western base of Hermon, and thence (recently by Dr. Carl Diener) into the Valley of Coele-Syria, a total distance of over three hundred miles; how much further its influence is felt in the stratification is not at present known. Everywhere on approaching this leading line of fracture the strata are displaced, having been elevated along the eastern, or lowered along the western, side. Adjoining this line, the depressions of the Arabah, the Jordan, the Litany, and the Orontes have been produced, partly by rain and river erosion, partly by actual displacement of the strata; while the table-lands of Edom, Moab, and of the Syrian Desert have been elevated along the Eastern side.

Concurrently with the structural changes in the position of the strata, numerous valleys descending from the table-lands on either side began to be hollowed out by streams descending into the great Jordan-Arabah depression. Amongst these is the Wady Musa, or Valley of Petra. The stream which flows along this valley, generally as a gentle rivulet, fringed with oleanders, tamarisks, and reeds, takes its rise in springs, which break out at the base of the cretaceous limestone.
terrace forming the margin of the great Arabian plateau, which here rises to a level of about 5,000 feet above the sea, and, having cut its channel deep into the underlying "Nubian sandstone," ultimately emerges on the Arabah plain, and flowing northwards, unites with the River Jeib a few miles to the south of the Dead Sea, into which the waters pass. The streams of Edom, generally tiny and feeble throughout the greater part of the year, descend with great force and im­petuosity when replenished by the thunderstorms which burst, from time to time, upon the mountains during the three or four winter months of the year. From this cause they have cut down their channels to extraordinary depths, especially when they traverse the soft sandstone of which the central parts of the range of Mount Seir are mainly composed, and which breaks off in grand precipices along the master-joints and faults which traverse the rocks in various directions. This sandstone rock (known as "The Nubian Sandstone of Russegger"), two or three thousand feet in thickness, with its base on very ancient volcanic crystalline rocks, and sur­mounted by the white cretaceous limestone lining the sides of the valley in a series of noble cliffs, vertical walls, or succes­sive terraces, afforded an admirable opportunity for the construction of a city, unique because cut out of the living rock itself. The stone, compact, moderately hard and uniform in texture, coloured moreover with ever-varying shades of orange, red, and purple, disposed in bands and wavy folds, which give the surface the appearance of some gorgeous Eastern robe, formed a suitable material for the skilled masons and architects of the period. As we gaze on those noble specimens of a bygone art—sometimes clinging, as it were, to the sides of the precipitous valley—we ask ourselves what was the modus operandi adopted in their construction? Did the architects commence from below or from above, in the work of hewing and shaping the rock-­faces standing up before them, or frowning down upon them so forbiddingly? I venture to reply, "from above"; first, and chiefly, for greater security against accidents from falling blocks; and, secondly, because it was always possible to add to the vertical height of the building, when this was required, simply by cutting down deeper below, while from the natural slope of the face the builders were limited in an upward direction. Above all things, it was necessary that the crowning portion of the fabric should be complete and entire, and this could only be easily accomplished by commencing at the top and working downwards. In a few cases the holes for the insertion of the timber scaffolding are still visible. We may, therefore,
suppose that the design of the intended building having been roughly drawn on the face of the rock, the sculptors began their work at the top and completed it at the base, in a manner the opposite of that rendered necessary where hewn stone is used. It has been suggested that the Nabatheans were the descendants of the Rechabites, who were commanded by their father neither to build houses, sow seed, nor plant vineyards for ever. I do not know that there is much foundation for this view, but it seems to gain some support from the absence of domestic architecture in the Wady Musa. The tombs, temples, and palaces seem to constitute nearly the whole of the structures. The inhabitants were either troglodytes or dwellers in tents, perhaps both. That the architects and builders were visitors from Greece or Rome, following in the wake of the merchants and traders of the West, can scarcely admit of a doubt; their names, their very countries, are unknown to us, but their works remain, splendid monuments of a bygone art and civilisation.

The Chairman (W. N. West, Esq.).—I am sure we are all greatly obliged to Professor Hull for his most interesting paper, and I have to tender him the cordial thanks of the Meeting.

Professor Hull, F.R.S.— Permit me to thank the Chairman and those present for the kind manner in which my paper has been received. It has been suggested to me that it might be of some interest if I were to give a short vivā voce description of the manner in which the Expedition got into Petra on the occasion of which I have spoken, at the end of the year 1883. Our party had gone up the Arabah valley from the head of the Gulf of Akabah, and under the guidance of the brother of the chief of the Allowin, who undertook to conduct us safely, not to the Dead Sea, where we wanted to go, but to Gaza,—though this was afterwards overruled, a little additional money payment having overcome his scruples as to taking us down to the Dead Sea. On getting to the valley which leads up from the great valley of Arabah towards Petra we conceived the idea that we might accomplish what the late Professor Palmer achieved, namely, the ascent of Mount Hor, and that we could do this, and get down into Petra, without being observed by the Arabs. However, on arriving at the foot, we found that the whole of the mountain was very carefully guarded by the Arabs, and that to ascend Mount Hor without detection would be impossible, inasmuch as our lives would have been sacrificed if we made the attempt. We therefore made a virtue of necessity, and pitched our camp at the entrance to the gorge. It was not long before we were visited by a party of the Petra Arabs, with no fewer than four of their subordinate chiefs. Unfortunately, Arari,
head chief, was away at Damascus, so that we were delivered into the hands of four chiefs instead of one, and, consequently, had to make terms with that number instead of with the head only, as would otherwise have been the case. We were received, of course, with all that affected delight which is so becoming on such an occasion. No doubt they had pretty clear visions of dollars to come which were exceedingly pleasant, and when we had pitched our tents we had a grand conference. The Arab chiefs came to our tents, and squatted around, and we sat about and commenced the discussion of terms. We stated that we wanted to visit Mount Hor (or, Aaron's Mountain), and also to pass through Petra. They said we might visit Petra, but for a Christian (they did not use the phrase "Christian dog"—they were more respectful than that) to desecrate the Mountain of the Prophet was a thing that could not be permitted on any terms. I then said we must visit Mount Hor as well as Petra, or we should not proceed at all; and upon this the Arabs held a conference, the result of which was that they gave up their point as to Mount Hor, and said we might make the ascent. It will thus be seen that, after all, the question of desecration did not bear so heavily on their consciences that their scruples could not be overcome by a certain amount of "bakhsheesh." The question of terms lasted the whole of the evening and late into the night. It was Saturday, and I am sorry to say that on the following day, Sunday, up to about noon, we had to keep up that colloquy with the Arabs as to terms, and a most annoying business it was. No sooner had one point been settled than they started another. I suppose there are no people on the face of the earth who are such wonderful adepts at making a bargain as the Arabs. At last everything was apparently agreed to—the amount to be paid, and the number of camels and horses for our party—and we were writing out the terms, while our head conductor, who kept the purse, opened his box, and, bringing out the dollars, began to count them out on the floor, when, to our astonishment, a new demand was made, the Arabs saying we must pay an additional twenty-five per cent., or some such considerable sum, which was to go to the head chief, who was then at Damascus. We were so disgusted with this that we determined to have nothing more to say to them. I gave directions to strike the tents, and put up our baggage, in order that we might at once march off, and leave both Petra and Mount Hor. I need not say that this was a terrible disappointment to us all; still, there is a limit to human endurance, and in our case that limit had been reached. Well, we packed up, and struck down the road towards the Arabah valley, the Arabs getting up in great dudgeon and riding back towards Petra. But they did not go far before they halted, and came back after us, until, when we had gone five or six miles towards the Arabah valley, they came up with our rear guard. They were evidently repenting the loss of all the dollars they had so nearly had within their grasp, and they requested to be allowed to speak with Major Kitchener, who understood Arabic, and who at once held a conference with them. The result was that they came to the terms on which we had originally agreed, and which
we had determined to stick by. And here I may say that a great deal of injury is done by those travellers who give way to extortionate demands. If people would only have the firmness to resist these demands, and give only what is fair and reasonable, their action would have an excellent effect upon the Arabs in the interest of all future travellers. The result was that we camped in a sort of amphitheatre of rocks, and spent the night, and started off for Petra next morning at four o'clock, long before dawn. It was a very beautiful sight, when the sun began to illumine the sky, the rays being thrown back on the whole of the great plateau on the western side of the Arabah, lighting it up with the most wonderful colours, reflected in gold and silver from the heavens. We divided ourselves into two parties, one of which was to ascend Mount Hor and go down into the Wady Musa, or Petra, while I was myself to cross to Petra only, as it was too much for me to make the ascent. Major Kitchener was one of the party which ascended Mount Hor, in order to make a number of observations wherewith to connect the triangulation of Southern Palestine to the north and the mountains of Sinai to the south; and this he accomplished. The Arabs of Petra, when they found we were leaving, supposed we had gone for good. They had come down on the previous day from the table-land of Edom, where they were tending their flocks, with the view of fleecing us completely; but, on seeing us march back towards the Arabah, they thought we were really off, and went their way towards the hills. The consequence was that next day, when we visited Petra, it was deserted, and we came off without any of the usual annoyances to which travellers in that region are exposed. Our party ascended Mount Hor, and came down to the valley. We were able to visit many of the wonderful temples, tombs, and palaces of the Wady Musa, and returned late in the night to the camp we had left in the morning. I may add one fact that came under my notice, which is that in that region the air is so pure and clear, as Dr. Chaplin, who knows it well, will bear me out in saying, that one is constantly deceived as to the size of objects which appear only a short distance from the observer, and it is found that they are much larger than one would suppose, judging from one's experience in England.

A Visitor.—Do any of those temples date back to the time of the Edomite occupation?

Professor Hull.—I think the tombs do, but the temples are all Greek or Roman, indicating that the architects were, at any rate, acquainted with Grecian and Roman art and architecture. Some of them have points of resemblance to the Persian architecture, and others to that of Egypt, as seen in the sloping of the pilasters, and so on. But no one can say how far they go back, except that the date must have been several centuries before the Christian era.

A Visitor.—Are there any traces in the tombs and caves of their having been used as places of sepulture?

Professor Hull.—Yes; there are no sarcophagi, but there are the ledges on which the bodies were placed.
A Visitor.—Are there any signs of their having been used as dwelling-places?

Professor Hull.—That is a point on which one is somewhat puzzled. One does not see where the inhabitants resided—possibly in tents. Perhaps I may be allowed to say with reference to the Biblical prophecies regarding Edom, and Petra its capital, that there is no city or country mentioned in the Bible as to which the prophecies have been more literally fulfilled. If we go back to the time of Isaac, there is one great fact that lies patent before us; the case of the blessing which was conferred on Jacob the younger son, and withheld from Esau, the elder son. In the first place, we know, as a matter of fact, that the descendants of Jacob are living at the present day, scattered all over the world, and are numbered by millions.

On the other hand, there are no representatives of Esau, as far as we know, living at the present moment: they have entirely disappeared. It will be in the recollection of all here that, when the Patriarch was moved to add to the blessing he had conferred on Jacob, by conferring a blessing on Esau, he said,—“By thy sword shalt thou live and shalt serve thy brother, and it shall come to pass when thou shalt have the dominion that thou shalt break his yoke from off thy neck.” This prophecy would seem to have been literally fulfilled in this way; that in the great battle of the Valley of Salt, at the southern end of the Dead Sea, the Israelites were victorious over the Edomites, of whom there was a tremendous slaughter, and the victors occupied Petra; consequently in that way the descendants of Jacob had the dominion, but Esau had a terrible revenge, for when Jerusalem was sacked by the armies of the Assyrians, the Edomites were present, and took part in the capture and sack of the city. It is in reference to that that we find in the Psalms the pathetic words,—“Remember, O Lord, the children of Edom in the day of Jerusalem; who said, Rase it, rase it, even to the foundation thereof.” There it was that Esau broke the yoke of Jacob from off his neck. With regard to Petra, there are several prophecies in the prophetic books of the Old Testament referring to that place, which are seen to have been literally carried out by its present condition. It was to be desolate and without inhabitants, and to be the abode of owls, vultures, and wild beasts; all this is literally fulfilled. It would be worth while to go over all the passages in the prophetic books referring to Edom and the Edomites, and compare the actual condition of that country and its people with the prophecies concerning them, as originally uttered.

Mr. S. R. Pattison, F.G.S.—Professor Hull seemed to speak with some little doubt in reference to one point, namely, where and of what character were the dwellings of the inhabitants. Of course, at the time of Solomon, Petra must have had a large population—probably a trading and industrial population. But where are their dwellings? And the same question may be asked of almost every people of great antiquity. In all probability they were principally built of what we call “cob,” or mud, in Devonshire. In the south of Spain, and in most countries where there is a lack of stone, the dwellings are manufactured of some such material, and doubtless the rainfall
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and other meteorological influences to which they are exposed accounts for
the manner in which they have disappeared. Let us take the case of our
own forefathers. All their habitations have gone except those we find dug or
hewn out in the form of caves. No doubt the caverns found in the hills and
rocks have served at all times alternately as residences and as tombs. This
must have been the case in all countries where the population has lived at
the base of sandstone and limestone cliffs. This, I think, is the only way in
which we can account for there being no traces of the dwellings belonging
to the former population of Petra. Of course, it may be suggested, from
the social condition of this people in ancient times, that a vast majority of
them were in a servile condition, and I am afraid were very badly lodged.
Moreover, I do not think they can have been possessed of the structural
advantages of the present day; and consequently we must not expect to find
cottages equal to the dwellings of our modern artisans and labourers. All
we can tell is that their dwellings were of a perishable character. It is a
marvellous thing that all people appear to have been influenced by devo­
tional feeling, and in all places were accustomed to dedicate their best things
to the worship of their God, and therefore their most elaborate structures,
their most beautiful carvings,—whether we find them in the forests
of America or the temples of Villafranca, or in any other part of the world
where any measure of civilisation has prevailed,—and the best and most ornate
of their edifices, are those that have been erected to the worship of God,
in that way testifying to the intuitive religious sense which recognises the
existence of a Superior Being.

Mr. T. CHAPLIN, M.D.—I think it must be admitted that these old-world
matters are much more intimately associated with many of our modern ideas
and with much of our more recent history than we are sometimes apt to imagine.
Personally I feel exceedingly indebted to Professor Hull for the interesting
and able paper he has put before us. In making a few remarks upon the
subject, I ought to premise that I have never been to Petra myself, although
I have been very near it, but from time to time I have been in intercourse
with people coming from that remote part of the world. It is interesting
to remember that in the barbarous times which succeeded the death of
Alexander the Great, when the Asamonean family rose in power, the
invasion of Idumæa took place, and the country became subject to the
Jews. Antipater, who afterwards became Prefect of that district, was the
father of the famous Herod, who built the Temple of Jerusalem which
existed at the time of our Lord. Christianity prevailed in that district in
the earlier centuries of the Christian Era, and a Bishop of Petra still exists,
even though he has no clergy to superintend and no flocks to look after. I
remember him as a very venerable and amiable man, and his office is
one that possesses a certain interest through his being what is called in
Jerusalem the “Fire Bishop,” by which is meant that he is the officiating
Bishop on the day after Good Friday, when the remarkable ceremony of
the Holy Fire takes place, the pilgrims who assemble at the Holy Sepulchre
believing that fire comes miraculously from the tomb of our Lord. Another
point of great interest is the existence of a tribe of Jews in the neighbourhood of Khaiber, to which allusion has been made. I have seen some of these, and had one under my professional care in Jerusalem for a long time. I tried to make something out of him, but he was too ignorant. He always said he was a Jew, but he looked more like a genuine Bedouy. Indeed, he spoke of himself rather as one of the children of Israel than as a Jew. He stated that his tribe were the men of Israel, and that is an expression used by all the Arabs with reference to the Jews as well as to the Israelites. The man was so ignorant that he could not even repeat the Jewish profession of faith, so that I had great doubts whether he was a Jew at all; and I think that, if these people really are Jews, they have entirely given up the Jewish religion. He told me the tribe to which he belonged has the right of collecting a tax or toll from the Mahommedan pilgrims who come down from Damascus on their way to Medina and Mecca; but I very much suspect that that tax or toll is not given voluntarily, but is exacted from the strangers by these so-called children of Israel whenever they get a fitting opportunity. Another point on which I would say a word is in reference to the dwellings of the ancient inhabitants of Petra. Professor Hull's paper concludes with an allusion to the Rechabites, who were commanded not to build houses. I do not understand that, although these rocky excavations in Petra have evidently been made with the greatest care, there is any evidence that they were used for human habitations, and it seems to me to be a question whether the people who lived in Petra did not reside in huts or tents. I think Josephus relates that one Scaurus, a Roman general, invaded Idumaea and besieged Petra, burning all the place around, though he could not have burned Petra itself. So that I conclude that the inhabitants of the district were accustomed to live in houses that might be consumed by fire. With regard to the discovery at Petra of what is called the "altar of Baal," that is a matter of great interest. I must say, I have my doubts as to its having been an altar of Baal. We know that, in countries where it is quite certain Baal was worshipped, the altars that have been discovered are very different from that which exists at Petra, and, as far as I am aware, no altar, that can be shown to have been an altar, has ever been discovered in any part of the world resembling this one. I should be rather inclined to imagine that this may have been a magazine for corn, such as exists in many districts near to Petra, where corn is stored in order to preserve it from decay.

The Meeting was then adjourned.