
E. N. WYNDEANI。


## PALESTINE <br> EXPLORATION FUND.

Patron-THE QUEEN.
Quarterly Statement

FOR 1881.

7939:

LONDON:
SOCIETY'S OFFICE, I, ADAM STREET, ADELPHI, AND BY
RICHARD BENTLEY \& SON, 8, NEW BURLINGTON STREET.

$$
\begin{aligned}
& \text { GN1 } \\
& 700 \\
& 81 P 2 \\
& 825 \\
& 881
\end{aligned}
$$

## INDEX.

Aaroth Adar, 41.
Abel Meholah, 42.
Adasa, 46.
Aceldama, 271.
Adraha, 77.
Adullam, 4t, 46.
Enon, 17.
Ai, 36 .
Ain Ḱadcirat, 211.
Ain Karim, 101.
Ain Kaseimeh, 211.
A in Qadis, 208, 211.
Alali el Bonat.
Almon, 15.
Anderson Major, death of, 243 .
Antipatris, 47.
Anuath, 48.
Aphek, 101.
Apheka, 83.
Arelir, 41.
Assyrians, the, in Eastern Palestine, 224.
Azotus, Mount, 45.
Baalbek, 158.
Bahurim, 45.
Balak's Altars, 278.
Beit Aula, 89.
Belfrst, Meeting ut, 136.
Beth Haccerem, 271.
Beth Rima, 48.
Bethabara, 46.
Bethel, sl.
Bethulia, 45, 194.
Berea, 45.
Berzetho, 45.
Bezek, 44.
Biblical gains from the Surver, 34 .
Birkel el Melti, 189.
Birkel es Sciyideh, 190.
Birket Ismay, 189.
Birket Suf Sâfeh, 189.
Borceos, 48.
Bostra, 79.
Cain, 37.
Calvary, 48, 201.
Cana of Galilee, 46.
Capernaum, 47.
Curmel, 82.

C'inuresh Ziph, 44.
Cities of the llain, 37.
City and Comb of David, 94.
City of David, 327.
Clifl in Haram, supposed, 56.
Conder's, Lieut., R(wn)ts, 158,216 .
Cubit, the, 296 .
Dean Stanley, death of, 210 .
Debir, 40, 4.
Deir Aban, 43.

1) eir esh shebâb, 259.

Dera, 78.
Eisteru Palestine, Survey of, 26.
Ebenezer, 100.
Elinburgh, meeting in, 66.
Egyptian Bronze, 125.
Egyptian Harbour of Tyre, 181.
Ephraim and Manasseh, boundary of, 90.

Elal, 44.
Vilam, 43.
Eleasa, 45.
Eleazar, Tomb of, 40.
Emmmans, 46, 237, 274.
Elam, 323.
Lixudus, Egyptian view of the, 229 .
Exodus, 'Jopograpliy of the, 145 .
Fullow Deer, the, 39.
Gath, 4\%.
Gelse Hemdeyeh, 105.
General Committee, 131.
Gerur, 38.
Gezer, 46.
Gibeh, 1.
Gibcon, 255.
Utideon's Wire Press at Ophrah, 235.
Gilgal, 40.
Hachilah, 4.
Hajr Dithkan, 82.
Hamath Inscriptions, 118.
Hareth, 4t.
Harosheth, 42.
Harrah, el, 73.
11 zor, 40.
Hubron, 266.
"Hebrew Migration," the, 110.
llermon, 82.
Hiding Places in Comam, 235, :323.

Hinnom, Valley of, 103.
Hittite Art, 174.
Hittite Inscriptions, 221.
Hittites, Capital of the, 218.
Hittites, the, 218.
Holland, death of Rev., 244.
Holy Sepulchre, the, 205.
Homs, Lake of, 165.
Homs, 175.
House of Aphrah, 85.
House of Stoning, 48.
Ibleam, 87 .
Idhameh, 77.
Index of Identifications, 49.
Inscription at the Pool of Siloam, 69, 141, 282.
Jacob's Well, 194, 195, 212.
Jam Sûph, 104, 107, 322.
Jannes and Jambres, 311.
Jar Handles, 304.
Jebel Jermûk, 82.
Jebel Qadis, 210.
Jeriyet Aly, 173.
Jerusalem, 187, 272.
Jett, 196.
Jewish Tomb, Ancient, 203.
Jezreel, Valley of, 42.
Job, Pillar of, 83.
Joshua's Tomb, 46.
Jufna, 196.
Kadesh, 163.
Kadesh Barnea, 60, 208.
Kamua el Hirmil, 161.
Kenites, the, 37.
Kefr Haris, 40.
Kirjath Jearim, 43.
Khurbet el Beida, 75.
Khurbet el Haiyeh.
Khurbet Hai.
Khurbet Haiyan.
Khurbet Dar Hayeh.
Khurbet el Lawatin, 187.
Khurbet Umm el Ainud.
Kurn Surtabeh, 84.
Kuryet ei Anab, 43.
Laodicea, 167.
Lejah, the, 75.
Life, Habits, and Customs of tha Fellahin, 110, 297.
Liverpool, Meeting at, 140.
Mahaneh Dan, 43.
Mahrakah, el, 82.
Manning, Rev. Dr., death of, 246.
Makkedale, 40.
Malhah, 82.
Marina, 176.
Manchester, Meeting at, 139.

## Meeting, Jerusalem Chamber, 5.

Megiddo, 45, 86, 232, 319.
Melkarth, Temple of, 183.
Meselieh, 194.
Migdol, 106.
Mizpeh, 91.
Mujedda, 45.
Muristan, 274.
Nablûs, 199.
Nakurah, 193.
Native Customs, 49.
Natives of Palestine, 325.
Neby Mashûk, 83, 186.
Nebo, Mount, 275.
Negeb, the, 37.
Nephtoah, waters of, 41.
Pale Tyrus, 185.
Péretié, M., collection of, 214.
Phinehas, Tomb of, 40.
Pihariroth, 105.
Place of Stoning, 317.
Pool of Siloam, Inscription at, 69, $\mathbf{1 4 1}$, 282.

Prospectus of the Survey of Eastern Palestine, 26.
Ram, er, 196.
Ras el Ain, 188.
Ras es Sherifeh, 101.
Remtha, 78.
Rev. F. W. Holland, death of, 244.
Rock Rimmon, 247.
Safah, es, 75.
Sal, 78.
Scapegoat, the, 38.
Scapegoat, Mountain of the, 205.
Sechu, 44.
sirbonian Bog, 105.
Seirath, 102.
scis, 76.
Sefinet Neby Nuh, 169.
Sela-ham-Mahlekoth, 44.
Seneh and Bozez, 44.
Shabatana, 169.
Shafât, 81 .
Sheikh Iskander, 83.
shen, 101.
shiloh, 81.
sidd, the, 171.
siloam, 197.
Simnabris, 48.
Sodom, 101.
Stanley, death of Dean, 243.
Sisera. defeat of, 42.
Stoning, place of, $48,317$.
sun worship in Syria, 80.
Survey of Eastern Palestine, 26.
sychar, 47.

Tabor, 81.
Tappuah, en, 195.
Tell Asûr, 81.
Tell el Baheireh, 171.
'Tell el Habîsh, 188.
'Tell el Hîr, 106.
Tell, et,
Tell Koteineh, 171.
Tell Neby Mendeh, 165.
Tell er Rama, 101.
Tell Shomarin, 171.
Tillilia, 268.

Tiphsah, 45.
Tomb of David, 97.
Topography of the Exodus, 105.
Tribe Boundaries, 40.
Tripoli, 176.
Tyre, 178.
Umm el Burak.
Usîleh, 77.
Wâdy Qadis, 211.
Wâdy Warrân, 77.
Yekin, 37.
Zephathah, 89.

## THE

## PALESTINE EXPLORATION FUND

## NOTES AND NEWS.

The Report of the Meeting of General Committee held on November 30th, will be found on page 5. The single Resolution, for the discussion of which the meeting was summoned, was carried unamimously. It now remains to give it effect by organising and despatching an expedition to survey Eastern Palestine.

In order to show exactly what is proposed to be done and why, it has been ordered by the Committee that the papers laid before that meeting should be all sent to every subseriber to the Fund, past and present. They are thereupon enclosed with the present number of the Quarterly Statement. The comparative map needs no comment: it shows the difference between a piece of country before and after it has been surveyed. The Prospectus of the new Sarvey will be found to carry on the work of the Society on the lines laid down in the Original Prospectus. The reasons for undertaking the Sursey, the things which have to be done, the things which have to be sought, and the things which may be hoped for, will be found enumerated in the specehes made at the meeting of the Jerusalem Chamber.

The Committee earnestly hope that, while the programme of their new expedition will show their present subseribers that their work of Biblical Illustration is not yet done, former donors and old subscribers will renew their support and carry this Survey also to a successful conclusion. The magnificent map of Western Palestine now before the world is a sufficient pledge and guaruntee of what will be done in the East.

The Quaiterly Statement will, as before, contain reports and letters of the oflicer in command of the expedition.

The Committec have the pleasure of amouncing that they have invited $\mathbf{M}$. Clermont Ganneau, who will shortly become a resident in Palestine, to furnish them regularly with an account of everything that is discovered, attempted, or undertaken in archeological research in the Holy Land. M. Ganneau has accepted this invitation. His first letters will probably appear in the April number of this Journal.

Nothing more has get been received from Jerusalem with regard to the Phoenician inscription found in the Pool of Siloam. II. Ganneau has made out that it consists of at least eight lines. He has also traced about thirty characters, all in the Phœnician character of the Moabite stone.

The drawings and plans for the first volume of the memoirs are now completed. It may be looked for about the end of January. There will be, it is hoped, no such delars in bringing out the other volumes. That of the name lists will be published at the same time, or very shortly, after the first volume of the memoirs. It will be followed most probably, by Colonel Warren's volume on Jerusalem research.

We have received a very interesting and valuable number of the Zeitsch rift of the German Palestine Exploration Suciety. A summary of this number will be published in April.

The appearance of Mr. Oliphant's book on the "Land of Gilead" is happily timed for those whose attention will now be turned to the land east of the Jordan. If anything were needed to show, more clearly than the Prospectus and the Report of the Mecting have shown, the necessity for our Sursey, a perusal of this volume would furnish the last argument. Everywhere we read of bad maps, unknown districts, places where no European has ever been, ruins which hare never been examined, strange people, and wild traditions. The "Land of Gilead," illustrates the remark made by the Dean of Westminster at the late meeting, that East of the Jordan lies a land of mystery.

Another event of the quarter is the appearance of Colonel Warren's new book on "Jerusalem Topography." It is already well known that the author holds views on the subject diametrically opposed to those adrocated by Mr. James Fergusson in his " Cempies of the Jews," and other books on the same subject. The new work is essentially controversial, and as such, will be found a valuable addition to the literature on the sacred sites.

The Rev. II D. Rawnsley writes as follows:-"May I call your attention, and the attention of all interested in your work to the very great need that still
remains unsatisfied, so far as I know, of some authorised list of (1) objects to be sought for; (2) places to be identilied; (3) obserrations to be made; (4) questions to be asked; (5) names to be inquired into, which could be obtainable either at your office, or at the consulates of Cairo, Beirout, and Jerusalem by any or all travellers in the Holy Land. Such a list would of course be varied from year to year, and if with it, these instructions could be given for the taking of temperatures, altitudes, levels, preparation of squeezes, rubbings, plants, and geological specimens for examination at home, the chart or list would be of the greatest service to the amateur but willing agents for such work that each year send out to the East."

The above valuable suggestion will be acted upon as speedily as possible. Such a list with such instructions will be prepared as soon as possible, perhaps in readiness for the spring travellers in Palestine, who are hereby invited to apply for it at the olfice of the Fund. Col. Warren will superintend it.

The second issue of the Great Map is exhausted. The third is being prepared as rapidly as possible.

The promised pamphlet "On Some of the Biblical Gains from the Surrey" is published with this number of the Quarterly Statement.

Mr. Saunders' "Introduction to the New sursey" will be ready in a few weeks.

The Committee are most ansious that the Map should have as wide a cirenlation as possible. The Subseribers to the Fund may greatly assist them by advising the Map to be ordered for public libmries, school and college librarien and institutions.

It is also greatly desired that all those whose contributions have enabled this great work to be completed, may have an opportunity of seeing it. Arrangements have been made with the Rev. James King, of Berwick, for explaining and lecturing on the Map and its uses, during the winter. The Rev. Henry Geary is also ready to give one evening in every week to the Society, provided he be not invited to go too far from London.

The Reduced Map of Modern Western Palestine is promised by the engrarers for Fehruary ; it will be rapidly followed by the two ancient maps, already announced, on the same scale. A book has been opened at the office of the Society for the entry of names. The price is not yet fixed, but it will be as low as possible for subscribers.

The Cheap Edition of "Tent Work in Palestine," has been published by Messis. Bentley and Son. All the small illustrations which were in the Library

Edition, and two of the full-page drawings, will be found in the new Edition which has also been carefully revised by the author. An additional chapler has also been added on the "Future of Palestine." The work will be reqd with greater interest now that the progress of the Survey may be followed on tho Map.

The income of the Fund from all sources, from Sept. 20th, 1880, Dec. $13 t h, 1880$, was $£ 7989 \mathrm{~s} .9 \mathrm{~d}$. The amount in hand at the lust Committoe Meeting was $£ 1,2123$ s. 3 d..

It is suggested to subscribers that the safest and the most convenient mann or of paying subscriptions is through a bank. Many subscribers have adopted this method, which removes the danger of loss or miscarriage, and renders unnecessay $y$ the acknowledgment by official receipt and letter.

Subscribers who do not receive the Quarterly Statement regularly, are asked to send a note to the Secretary. Great care is taken to forward each number to all who are entitled to reccive it, but changes of address and other causes give rise occasionally to omissions.

While desiring to give every publicity to proposed identifications and other theories advanced by ollicers of the Fund and contributors to the pages of the Quaiterly Statement, the Committe wish it to be distinctly understood tiat the se rest solely upon the credit of the respective authors, and that by publishing them in the Quarterly Statement the Committec neither sanction nor adopt them.

## MEETING OF THE PALESTINE EXPloration FUND.

Jerusalem Chamber, Westminster Abbey, Tuesday, November 30th, 1880.

## The Dean of Westminster in the Chair.

The Secretary read the Minutes of the last meeting, and laid before the (hairman, letters of regret at their inability to attend from the Archbishop of York, Lord Talbot De Malahide, the Dean of Lichfield, Rev. Canon Tristram, Rev. H. Hall-Houghton, Mr. W. Morrison, Mr. A. Lloyd Fox, Mr. Lamence Oliphant, Rev. W. F. Birch, Colonel Cooke, C.B., R.E., and many others.

The following is the letter received from Canon Tristram :-
Durham, 27 th November, 1880.
Dear Mr. Besant, - It is with extreme regret that I have to write to tell you that my duties here prevent my carrying out my intention of attending the meeting on Tuesday, to plead the cause of the Exploration of Moab.

I can, from personal observation, confidently state that no part of the country affords such virgin soil for the exploration as the rich and lofy table-land East and North-East of the Dead Sea; nor is any portion likely to produce more important results. With the solitary exception of the fortress of Kerak, the land has known no settled inhabitants since it was swept nearly 1,300 years ago by the Persian destroyer, Chosroes. It is much as he left it. Time has done its work slowly and gently, unaided by man, for the great destroyer is not the Nomad, but the subsequent builder, who employs old material and adapts what he finds to his own use.

Moab is absolutely strewn with ruins above ground, and honeycombed with cisterns. The ruins are not desolate heaps or grass-grown mounds. Pillars, arches, churches, streets, remain only partially damaged, and I have often scrambled over the vaulting which still covers the ancient streets.

The names of the towns remain for the most part in their Semitic form in the vernacular of the wandering tribes. There are ruins like those of Shihan, undoubtedly megalithic, like the older remains of Bashan; there
are many which tell of the Syrian occupation and the flourishing epoch of the Maccabees, while Roman, both pre-Christian, and of the Byzantime period, churches, towers, and basilicas abound everywhere. Here too we find the unique work of Chosroes, alone in its desolation, the marvellous palace of 'Mashita.

I sincerely trust that earnest and zealous support will be given to the proposed enterprise by every lover of the Bible and of Eastern history.

Believe me,
Yours very truly, H. B. TRISTRA M.

The Chairman called upon Mr. Glaisher to propose the Resolution of the day.

Mr. Glaisfer. Mr. Chairman, and friends :
When the completion of the map of Western Palestine was drawing near, and the several memoirs were in a state so advanced that we felt certain of their completion; the attention of the Committee on different occasions was directed to the completion of the Survey of Palestine, taking into consideration the present state of our knowledge with respect to the eastern side of the Jordan. You are well aware that the Americans had unclextaken to make that survey, but when I point out to you the maps that they had sent in to us, of which here are several, and when I tell you that an endeavour to connect the points that were common, revealed discrepancies so large in amount that it was not possible by any amount of coaxing to connect the one with the other, yon will agree with me that it becanne evident that if the eastern side of Palestine was to be surveyed anad explored, the work must be begun de novo, using the maps as reconnaissance maps and no more.

Then the Committee on different occasions met, and this pamphlet (the "Survey of Eastern Palestine,") was prepared, which, I believe, has been sent to every gentleman present, and perhaps under those circumstances I need not read it, but it may be taken as read. This paper shows that the country on the eastern side of the Jordan--Eastern Palestine-is very full of interest indeed. There are many ruins, and the photographs, which may be seen by looking about the room, taken by the Americans, may lead one to the thought that there are many others which they have not visited, that much information is to be gained, and that, if careful explorations could be made of the ruins on the Eastern side of Palestine, many very valuable results would follow. Then the monetary question arose. It is a question which has frequeatly cropped up. It came before us when, ten years ago, we met in this rooma just before we began the Survey of Western Palestine; but we now haz ve large experience that we had not then, and probably the future will be very like the past. I should like, while upon this point, to speak of the subscriptions and donations that we have received. In the year 1872 received $£ 2,441$. The party then took the field, and the next year, fe consequence of that, I believe, the amount was increased to $£ 3,170$; the
next year $£ 3,382$; and in $1875 £: 3,971$. There was an attack made upon the party that year, which prevented our party going out in the year 1876 ; and the consequence was the amount of donations and subscriptions fell $£ 800$. In the year 1877 the party went out again, and the subscriptions rose $£^{2}(0)$, and in 1878 the amount was $£^{\circ} 3,751$. The greatest expenditure in any one year was $£ 2,951$ on the part of the Survey ; but then we had a party at work at home, and a party at work in the field. We had then the invaluable services of Lieutenant Conder, who has made, I may say, a lifelong study of biblical knowledge and of liblical association, leading to invaluable results to the Fund. It is a great pleasure to me to think that he, with his increased knowledge, may be at the service of the Fund, and that if we begin the Survey of Eastern Palestine, I am led to hope that he will be able to take charge of it. I feel confident that nothing will escape his attention, and that he will give that intelligent interpretaition to facts which has always weighed hitherto, and will weigh in future with this Committee. Now, sir, the years of the Survey were 1872, 1873, 1874, and 1875, and as I have told you, in 1875 an attack was made upon the party by the Arabs, so that we had no party in the field in 1876. In 1877, Lieuteuant Kitchener went out and completed the Survey, and in the year 1878 and 1879 , when our funds had decreased, the office work' was done at home. 'The interest of the subscribers never flagged whilst there was a party in the fich, but it must be remembered that while it is important for the party to take the angles carefully, it is quite as important to do the office work at home by computing the sides of the triangles of which they were part, and to lay the results down as we have done upon the map. The map is a splendid piece of work, very accurately performed, and is something that the Executive Committee feel, and I think justly feel, proud of. But we are ambitious. We are anxious to have the other side of the Jordan explored with equal or if possible greater thoroughness.

Now what are the expenses? The working expenses for the years $1872-$ 1877 were $\mathfrak{f x , 6 7 5}$ a year, so that during the five years the expenses were between $\mathfrak{f l} 13,0010$ and $\mathfrak{E l} 4,000$. I believe that for $\mathfrak{x} 13,000$ or $\mathfrak{x} 14,000$ we shall be able to have a map on the other side as accurate as we have it on this. When I was here ten years ago, the map I hold in my hand represented what we knew of the topography of Western Palestine. How great is the difference between our state of knowledge then and our state of knowledge as shown by the large and beautiful map upon the wall!

That which we are most desirons of doing, as we are now free-as we cin give our undivided attention to the work-ats we have trained officers who have their hearts thoroughly in the work, is to see if we cannot complete on the one side of the Jordan that which we have done on the other. Now the plan hitherto adopted has been to keep the party continuously in the field; but it has been suggested by the Committee that perhaps a better plan would be to keep the working party in the field for the best six months of the year, and to have five months at home, doing office and other work, the other month being devoted to the going
and coming. If this plan were adopted the result we might look for, might perhaps be stated thus. Firstly, we should have the maintenance of the party for only seven months in the year ; secondly, we should give the party a beneficial change of air and rest; thirdly, we should enable the work to be got up, and portions tinished off, and probably some put into the engraver's hands; fourthly, it would give the Committee better means of estimating the expenses and inquiring into methods of work. If this plan were not adopted, I do not think the expenses could be less than they were formerly-that is, about $\pm:, 200$-and if our office and all other expenses are taken into account, you will see that we should require between $£ 3,000$ and $£ 4,0,0$ a-year to carry out satisfactorily the objects which we have in view. If, however, the early return of the party were resolved upon, we might perhaps save $£ 400$ or $£ 500$ a-year. These are matters to be considered. Money, of course, is an important element to be regarded, but I cannot think that while the money is economically used, we shall have any trouble in procuring the necessary amount. The past leads me to feel confident that if we do our work steadily, faithfully, and well; gaining information upon biblical points (and looking at this pamphlet it will be seen that there are a very large number of biblical associations of the highest interest, upon which we may hope to gain information), we camot have much trouble or difficulty in procuring the money that we may require. Therefore, sir, without further remark, I would beg to move-That it is now desirable to take, without delay, the Survey of Eastern Palestine, under conditions similar to those which have been proved to be thoroughly successful in the case of Western Palestine. (Cheers.)

Mr. Macgregor. Mr. Chairman, I do not think we require to convince auy person around this table of the importance of the work which it has been proposed should be begun. If this were a meeting of the general public, who may be more or less iguorant of our work, and who would require to have descriptions given, what we might have to say would be very different. The great success which has hitherto been attained must afford canse for mutual congratulation, and I am sure the Dean will feel that it is deserved, especially by those who have worked hard-the Officers and the Committee-those who have gone away and those who have stayed behind. The great success gained should be an incentive to further efforts, because "nothing succeeds like success." Certainly it would never have done to have taken the Eastern side first, but now that we are strong upon the West, and cau point to the results, our progress to the East becomes an absolute necessity.

Thirty years ago I went to Palestine in the ordinary way, and but twenty years afterwards, I went in another way on the water. At that time the maps were very deficient; I had the great privilege of the gift by Captain Warren, now Colonel Warren, of a little photograph of a map that had been made of the Sea of Galilee. This I copied, and put into a book on half-inch scale. That was invaluable of course, especially as it was to be used on the water. I have brought here one of a great
number of maps that I had copied in the British Museum, and this was the best. It was rather old. It is the map of Seetzen in A.D. 1733 , aud is rather amusing to look at. But although that may appear ridiculons now, it was the only thing to be had some time ago, and we shall look back, I hope, in another year or two to the time when we had only those imperfect maps which are now superseded by the splendid map before us.

Our work in Jerusalem will greatly depend, I think, upon the success of the Map and the Menoirs, and I suppose political matters are now sufficiently quiet to hope that this, at any rate, will be allowed, and that Colonel Warren and others will swing down these shafts 90 feet under the ground, and fee! as happy as he used to be when he was suspended there by a rope at the top.

I am very sorry that the Eastern part will be a little impeded by the illness of Mr. Oliphant, who was to have been here to-day, and I am not able at all to plead in his stead, having little of his knowledge of the subject ; but he was so unwell that he was persuaded not to come. His book will, however, be out on the 7th of next month, and from what I have seen and know of it and of him, and from what we have already heard in an indefinite way, it will be sure to be interesting. It will come out at a very happy time for us all, when this work is about to be begun in the Land of Gilead, and I hope that a work of this description will make the place so interesting that the publication will come opportunely for the Fund. There is also another very remarkable work in comnection with the Fund in one sense. The Jexish Chouncle, a well-known paper belonging to the Jews of London, and two or three other newspapers in foreign lands, are turning their attention to the East country, not only because of its general interest, but for purposes of future settlement and cultivation. It is too soon yet to say more than that there is to-day a very strong feeling on the part of many influential persons that something should be done in England which would enable the Jews to go back to Palestine. Where they should go, and by whom they should be maintained, and for what exact purpose, is of course no within our province to declare or to suggest, but it is, I think, within our province to remember that a Map and a completion of the Memoirs of the East might be even more useful to them than the Map of the Western part, seeing that the Western part is on the whole at present not considered so adapted for settlement as are the provinces on the Eastern side of the Jordan.

Now there is one congratulation that I think ought to be made at this particular period of our progress, and that is, that whilst the Committee get some thanks-and the Executive Committee try to deserve some tooI think we ought all to thank our Secretary for the extrowdinary attention he has given, and for the work that he has successfully accomplished (applause). It is only uecessary to see him as we do in the Executive Conmittee to feel that this tribute will be cheerfully accorded to him by the Chairman and the Committee. (Hear, hear.)

It is a striking thought too that in this year, and in this Chamber-the Dean will correct me if I am wrong-the revision of the New Testament is in progress.

The Dean of Whstminstrar. It is completed.
Mr. Macgregor. We have it from the chair that it is now completed. That is a remarkable addition to the wonders of this year. Now the map is published, and the revision is completed, the two will go hand-in-hand, and each will help, the other. Combined they form a picture Bible-a correct picture Bible-and those who know how many picture Bibles there are that are full of mistakes, will be delighted to find that at any rate, as regards the map, it is as correct as it can possibly be made. An erroneous picture Bible is one of the worst things for children to use, and a correct map of Palestine must be one of the best things for students to be guided by. The work that has been done is commended on all sides, and we can only hope that our American friends will resume in some other shape what they have confessedly failed in doing at the present moment. This cannot be for want of will. When we think that the whole of Palestine that is now surveyed, is only the size of Wales, and that the whole of Jerusalem within the walls would go into Hyde Park; it is a wonderful thing if the two great nations of the word, receiving assistance, as they do, from Germany, Sweden, Norway, and other Protestant countries, cannot fimish the work that has been so well begun.

There is one suggestion I would make, and it is only a suggestion. No doubt the Executive will consider it afterwards. I happened to be yesterday with the new Lord Mayor, asking from him the use of the Egyptian Hall, for a meeting on behalf of the momment to the Martyr Tyndale. Now it is a matter for the Committee of the Palestine Exploration Fund to consider whether, having done a grood deal among the literati and the universities, we should not also have a meeting in the city upon this subject under the presidency of his lordship-an earnest Christian man; and we should then be able to go to one of the most powerful communities and which is sometimes called the largest Protestant Church in the world-that is the Wesleyans-those in America being assimilated to, if not actually part of the same body as those who are in England. We may well hope that the Lord Mayor would be as kind in giving us the use of that place and his presidency, as he has been for the other great purpose I have named. I wish all success to the Fund. It is a great privilege to work with such kindly associates; we never have a quarrel, and our Chaiman would keep us in order if we had. (Applause.)

Mr. F. A. Eator. I am afraid, sir, the only excuse I can have for saying a few words, is that I am one of the very few persons who have had the good fortune to visit the countries east of the Jordan. It is now more than eighteen years ago. We were a party of seven, travelling along the beaten track in Western Palestine, when, thanks to a letter of
introduction which two of us had from you, Mr. Chairman, to the Protestant missionary at Nazareth, M. Zeller, our plans were suddenly changed, and under the guidance of that gentleman, we struck eastwards across the Jordan by the Jisr Mejamieh, traversed the Ghor to Pella; thence forded the Yarmuk, and ascended the hot springs of Amatha to Um Keis; rode along the well-wooded slopes of Jebel Ajloon (fiilead) and the fertile plains of Bashan and the Hauran to Mezarib, Deri, and Bozrah of Moab. Near Bozrah, our route lay through the other two subdivisions of the Haurân, the Jebel el Druze, or Ard el Bathaneeyeh, the land of Batanaa, and the el Lejah, the Hebrew Argob and Greek Trachonitis, to Damascus. We paid no backsheesh and we had no escort, but trusted to the hospitality of the Arab and Druse Sheikhs, with whom M. Zeller was well acquainted, and all of whom entertained us right royally. Though our journey was a hurried one and only lasted a fortnight, and though it took us through but a small portion of Eastern Palestine, it was quite enough to show us that though not so rich in Biblical associations as Westem Palestine, Eastern Palestine was infinitely richer in archeological remains. For one monument on the western side there are probably a humbed on the eastern ; nor have they suffered so much at the hands of man. Neither the Crusaders, the Byzantine Greeks, nor the Arabs have played such havoc in the east as in the west. In the Hauran may still be seen those massive stone buildings, the materials of which, however comparatively modern their arrangement and decoration were, it may be reasonably presumed, chiselled in a far more remote antiquity. It is no uncommon thing to see these houses in a complete state of preservation built of huge blocks of black basalt with slabs of the same for the roof, 12 feet long, $1 \frac{?}{2}$ feet wide, and $\frac{i}{2}$ foot thick, and entrance doors also of basalt, hung on the ball and socket principle ; great solid stones of the same material being used as lintels at the top and bottom. I remember seeing some folding-doors of this kind at Dama, in the centre of that wonderful island of rock, the Lejah, which were 10 or 12 feet high, and 8 or 9 inches thick, and which turned in their sockets with the greatest ease. It may, indeed, be said that inexhaustible possibilities await the explorer here; but time, great philological experience, an intimate acquantance with Arabic dialects and with Hebrew, a trained and practised eye, and great care, are absolute essentials towards making a proper use of them.

If I am not detaining the meeting too long Mr. Dean, I should like to read a short extract or two from a letter I have just received from that eminent Semitic scholar, M. Clermont Ganneau. I have only had time to glance over it, but, with your permission, I will roughly give the meeting an idea of a few of the things he says:-
M. Ganneau is quite sure that all the countries on the East of the Jordan, if properly examined, have many surprises in store for the explorer, and that though we may not discover the iron bed of $\mathrm{Og}, \mathrm{King}$ of Bashan, there is every hope of finding some basalt sarcophagus with a royal inscription like that of Eshmunazur in the Louvre. He lays great
stress on what he calls the onomastic traditions of biblical countries, and on the tendency of autochthonous tradition, a tendency very marked in and Semitic races, to think of and to consider as geographical entities those who were more or less connected with the history of the country. As for instance that the name of the modern Belkic is the same as that of Bolak; King of Moab; that Shilidn, where M. de Vogiic found a magnificent basrelief of a king, is the same word as Sihon, the King of the Amorites; the Aujeh, an effluent of the Jordan, as Og the King of Bashan; Ajloon as Eylon, King of Moab ; the town of Shobek as Shobuck, one of Hadarezer's generals; Belc, the old name of Zoar, as Bela (ef. Buluam), the son of Beor, King of Edom; while the name of Lot survives in Koum Loot, the people of Lot, Madueen Loot, the Pentapolis, and Buhr Loot, the Dead Sea. M. Gamean also connects the towns of Rabbath and Zoar or Segor with the two daughters of Lot; to use his own words, "la grande et la petite, l'ainée et la cadette, Behira et Seghira, Rabbethat et Seghirtha," who according to the Judæo-Mussulman tradition gave their names to the two principal towns of Ammon and Moab. Another very important point to which M. Ganneau draws attention is the possibility of finding at Pella monuments relating to the very earliest Christian times. He also directs attention to the topographical value of the milestones which bordered the Trans-Jordanic Roman roads, and the necessity for carefully searching for them; one that he knows of near Ajloon bears a long inscription, wioh the name of the place and the distance in miles.

These are some of M. Gameau's remarks, and they seem to me so valuable as showing what a rich store of interest awaits the proposed expedition, that I trust, sir, you and the meeting will pardon me for having so long detained you.

Mr. Douglas Freshfield. Mr. Chairman and Gentlemen: I have responded to your kind invitation to come here to-day and say a few words about your proposed exploration of the east side of the Jordan, with great pleasure, and the more so because for the last ten years I have had these few words more or less burning within me. It is quite ten years, I think, since Mr. Morrison asked me to come and speak at one of your annual meetings in Willis's Rooms. When I got there I was asked what I should talk about. I said "The east side of the Jordan." "Oh!" said the Society, "that will not do at all, because we have got something else on hand." Well, of course you were perfectly right to do what you had on hand, and to finish it in the way you have done; but I confess at the time I was disappointed, because it seemed to me you were putting off and handing over to the Americaus what was the most important and likely to be the most useful part of all your work-the exploration of the country east of the Jordan. In saying this I should like to guard myself against being thought to slight in any way what has been done already. I think the map before us is one of the most admirable bits of private work I have ever seen, and I have used maps a good deal. I am quite sure, speaking as a member of the Council of the Geographical Society, that when we next award our
annual medals that map will be brought hefore us, and we shall carefully consider amongst others, the claims of its maker or makers to distinction. But, good as this work is, it seems to me that when you get accoss the Jordan your work will be still more valuable. What has been accomplished may be spoken of-roughly only of course-as a work of correction of previous authorities; but when you go to the other side your map will be a creation. The old maps of the eastern side are practically worthless, and this fact may be illustrated by what happened to myself. The first day we left Es Salt we tried to ride over the hills by Van de Velde's mapas I had been accustomed to do in Western Palestine. We immediately lost our way and-the story has a double bearing-in doing so we came upon some ruins which I had never seen deseribed before, and which I am not at all sure have been described since, and that is what you are constantly doing on the eastern side of Jordan. Then during the next two or three days we found rivers two or three miles out of their proper course, and villages on the wrong side of them-Roman roads not marked, or wrongly marked; in short we had the most convincing evidence of how much a good map was wanted.

As to archaology it seems to me that there is scarcely any limit to the new knowledge that you may hope to collect by the identification of sites and the collection of inscriptions. When we get a complete set of photographs (those on the table already show how much may be done in that way) we shall be able to tell whether any remains of primitive architecture really exist under the accumulations of Roman and Arabic civilisations. We shall certainly be able to bring before the eyes of English people what has been partly brought before the French public by the Count de Vogiiés beautiful book-it has often been a source of wonder to me no translation of it has been published in this country-in which there is a picture of a Roman town in the early centuries of our era almost as perfect as you get from Pompeii. Moreover, I think you will find the work not very difficult to carry through. One advantage you will have Suppose the tribes come up and the country is dangerous--though I do not assume this will happen, refuge may be taken in the hills of Jehel Haurin, which will afford, not only a place of retreat, but a sanatarium probably, at all seasons of the year perfectly healthy.

As to photography, I should like to add one remark. It seems to me extremely desirable that, if possible, one member of the expedition should be a good photographer. The other day we took steps at the Geographical Society which may result favourably in promoting that result. We referred it to one of our Committees to make arrangements by which intending travellers could be easily and cheaply instructed in London in photography. We should be very happy if one of the first instructed was a member of the Palestine Exploration Society. I will only add that the gist of what I have meant to say is this-that I think to stop now after your work would be a thousand pities-it would be like leaving off reaping in a field just when you have got to the very thickest part of the crop. (Applause.)

Colonel Warren. Mr. Chairman and Gentlemen :-
The undoubted success attendant upon the sale of the new map, and the demand that has occurred, appears to justify the course which it is nowproposed to pursue of extending our work to the other side of Jordan. As far as I am concerned myself, I should strongly have advocated the continuation of this work, even if we had not the prospect of such a success as it has been, because I think as our work is the elucidation of the Bible, there is no doubt that many persons would have made up any deficiency; but when we find that the public is entirely satisfied with the work, and there is already by the sale of the maps a small profit being made which may be placed to the credit of further work, it is undoubtedly our duty to continue our labour to the end, and not to take our hand from the plough.

When we look at the map before us, we must acknowledge that it is a very beatiful specinen of work. We know that it is extremely accurate, and we must feel and acknowledge that it reflects the greatest credit upon Lieutenants Conder and Kitchener, the accomplished surveyons who have produced it ; and I am sure we must all hail with great gratification the prospect of Lieutenant Conder being employed on this work a second time. It is not only as a surveyor that Lieutenant Conder's services are so valuable; he unites to his professional attainments a knowledge of the people; he is intimately acquainted with their manners and customs; he knows their country, and, last of all, he is a student of the Bible. He knows the nature of the information which is specially wanted, and he can make a shrewd guess as to where things are to be found. I feel assured myself that the success of the expedition will be attained by retaining the services of Lieutenant Conder if that can possibly be arranged. I do not wish to infer in any way that we ought not to throw upon our surveyors the duty of making identifications, etc.; for I think it is their business to collect all the information they can possibly find and bring it home, and let scholars in England form their own deductions. But there is no doubt it is of the greatest advantage to have in the person of the surveyor, an officer like Lieutenant Conder who knows a clue when he sees it, and can follow it up, and who is not likely to let slip any chance matter which may come before him which would lead to good results. When we look upon the east of the Jordan, we find a country there far different to that on the west for surveying purposes. It is not broken up in the same deep woods and valleys as that on the west. It is in a great measure a table-land elevated 3,000 feet above the Mediterranean, and is well watered and well wooded. It is, too, comparatively healthy ; and in fact, in the summer of 1868 , I took my party over to the east side actually to the benefit of their health. I think on that account, the Survey on the east side will be found much more pleasant work, and the triangulation that has taken place on the western side will be found of very great service to those on the east, and there are parts where the ground is level, and a base of veritication may be very accurately measured.

I do not know whether we are all agreed upon the point to which the

Chairman of the Executive Committee alluded with reference to bringing the party home every year; I must say that from a surveyor's point of view, I should rather feel inclined to keep the party out at least one year or eighteen months. I think after that time, some of the party may get jaded or ill, and it may be necessary to bring them home ; but I think the surveyors themselves, after they have been out there the first six months, will feel inclined to go on with the work, and would prohably rather not cone back, because they would be just getting into the very thick of it, is it were, and probably it would be as well for them to go on with it.

The climate on the eastern side is not like that on the west. During some of the summer months over this plateau there is a cool wind blowing, and sometimes for eight or ten days together the country is comparatively mild, and not in any way so unhealthy as the cauldron of the Jordan, or the shore of the Mediterranean.

With regard to the population, some have stated that there is likely to be a difliculty with the Bedouins. For my part, I think the fact that in this country, there are simply Nomadic population, Druses, and Moslems, is a ${ }^{\text {meat }}$ advantage. On the western side in the villages, there are Mussulmen of different kinds, and Christians of several denominations, Jews, Druses, Maronites, etc., and these people are continually intriguing and stopping the surveyor in his work in one way or another; but on the eastern side there are simply the Bedouin who are not fanatical with regard to their religion, and who are very fond of the good word of an Englishman. They have many very good qualities, qualities which Englishmen regard, and I have no doubt that very little difficulty will be found with them.

Again, people are inclined to say that this is not the time to go on with the work on account of the political emplications that are likely to ensue ; but we may ask when were there not similar complications apparent upon the horizon ?-when was not the political horizon lowering in this direction ? and one is tempted to cite the old proverk- "He that observeth the wind shall not sow, and he that regardeth the clouds shall not reap."

I can speak with regard to the numerous ruins which are on the eastern side, especially towards the country of Gilead. There, for many hundreds of years, hirdly any change has taken place ; in fact, scarecly any change, since many of these magnificent old temples were cast to the ground during the earthquakes previous to the Middle Ages. And we must not forget that many of these old temples, which date from the time of the Antonines, are made of old material ; and there are architectural remains and mouldings which point to there having been a separate style of architecture in that country, previous to its occupation by the Romans. I feel certain myself, that when a systematic and prolonged search is made, some very remarkable results will be obtained. I think that the photographs which have been brought back, will in many cases show that there are some very ancient ruins-far more ancient than those of the Romaus in that country, which are still to be brought to light; and my own impression also, is that among these splendid ruins about Mount

Nebo, and in the high places between Mount Nebo, and Rabath Amman inscriptions similar to that of the Moabite stone are likely to be found. It may be said, of course, that the finding of the Moabite stone was an accident ; but we must acknowledge that one accident may lead to another accident: for instance, few can doubt that the recent discovery of that remarkable Phœnician inscription in the Pool of Siloam at Jerusalem, is due in a measure to the eyes of persons having been opened by the discovery of the Moabite stone.

I must congratulate the Committee upon the favourable circumstances under which it will now commence its third, or I may say, fourth expedition. Fourteen years ago, it was a society little known, and without money. Ten years ago it had become very well known, and had considerable credit; at the present time it is not only well known, and its reputation established, but it has a fixed income by subscriptions, which, if supplemented in a small degree-it only requires to be supplemented in a small way-will enable the Committee to carry out the work creditably to the reputation of the Society, and to the satisfaction of the public. (Applause.)

Professor Hayter Lewis. After what has been said by the different speakers of the architectural remains on the east side of the Jordan, and with the photographs about the room to give force to their remarks, I feel that there is really very little for me to add upon the subject. I will, however, call your attention to one or two points which have struck me very forcibly in considering what we should be likely to find on the east bank. There have been made quite recently one or two discoveries which may be regarded as remarkable. We knew of course from Irby and Mangles and others that scattered over the land, in different parts, there existed stone-monuments which you call prehistoric or unhistoric, accordin'g to the nomenclature you may prefer-but I think very few people indeed realized or knew much about them until the publication of Professor Palmer's and Canon Tristram's journeys. Few imagined that, scattered to a large extent through the land, were large monuments, stone circles, etc., just as one sees on the mountains of Wales and the hills of Scotland, the names and dates and everything connected with which are at present entirely unknown ; and we may hope, after careful exploration (for I think few of them have been examined, and none of them have been carefully explored), to find some certain clue to the date, and the purpose for which these curious monuments were erected. The second surprise, I may say, to which I may allude in our time, was the exploration of the Haurân, described in that wonderful book of De Vogiie's to which Mr. Douglas Freshfield has alluded, and which can scarcely be praised too much. So far as it goes it is porfect. But it does not cover, or anything like, the ground we hope to cover, and I have no doubt whatever, that we shall find when the ground comes to be explored, remains which will amply repay in an archeological point of view, the cost, the time and trouble of exploration.

I do not say that it was a discovery, because of course we knew from Burckhardt, who was I think, the first who went there ; and likewise from Cyril Graham and others, that these remains did exist, but it was an exceedingly clondy sort of view that we hat of them. Dr. Porter describe: these cities, and many considered that we had in them the actual cities of Bashan ; we now know them to date very shortly after the Christian era. A remarkable series of monuments, of which I say we had simply the most imperfect description in Burckardt's and other works, have been brought to light. The stone doors have been alluded to by Mr. Eaton, but I think very few persons know that we have one of them in the British Museum. I have been to the Museum over and over again with persons of scientific and archaological knowledge, but I never yet met with any one who had seen it. It is just at the entrance of the Egyptian room, and affords a specimen of the curious work which Mr. Eaton has mentioned.

Then a real discovery in our time, and one of the most valuable kind, was that made by Dr. Tristram in the palace of Chosroes at Mashita. It reveals to us a new style of work. It shows that in a desert-or at least in a place that no one seems to have visited before-we have one of the most magnificent remains of the particular time of Chosroes.

Now these few works that I mention give a sort of insight, I think, as to what we may expect to find when the country is carefully surveyed. At the present moment, to begin with, we have no remains, so far as I an aware, that you can call Phenician architecture. That it was grand we may suppose from the description in the Bible of the work of the architect sent by the Phouicians to do Solomon's work; but except from the sarcophagi I think we are almost thoroughly ignorant of it. I have seen what there are of remains in the museum at Algiers. Of course there is to be seen at that museum a very large collection of Phonician remains; but all may be summed up in one line-a few inscriptions. There is nothing whatever beyond that. There is scarcely an architectural frayment ; in fact, I think I may say that there is not one. At Carthage, I believe it is the sume. But one must certainly hope very strongly that if we begin to excavate under these buried cities we may find some clue to what was the character of the ancient architecture of the Phenicians; and more than that, I do hope that we may discover some clue likewise to what was, I will not say the architecture of the Jews, but the style of work which was practised by them. At present we know scarcely anything. Even the outline and the decoration of these two grand pillars which are described so often as being at the entrance of the Temple are simply matters of guess, and it is just possible that we may find in some of the basreliefs something which will help us to explain the most interesting problem about the Temple. I need scarcely remind any one here of the finding, as I may call it, of the seven-branched candlestick on the Arch of Titus. We all know how many drawings and restorations have been made of that seven-branched candlestick, and how entirely the whole were found to be incorrect when some genius suggested that we might on the Arch of Titus
find a correct representation. This was found, and we know it perfectly agrees with all the descriptions in the Bible, and it does not agree, so far as I am aware, with any representation which had been formed by guess.

I will not detain you any further ; there are other gentlemen who wish to address you, and who will speak with greater knowledge of the country than I can.

Rev. Dr. Ginsberg. Mr. Chairman and Gentlemen: It is with peculiar pleasure that I hear from such an authority as Mr. (ilaisher and from others that we are seriously intending to explore the eastern side of Palestine. I was in that country, as probably some of you know, about six years ago. My experience there was not of the best kind. Probably we ought to thank ourselves for much of the inconvenience which we suffered from.

I have not the slightest doubt that remains are to be found in Moab, and in the whole region round abont there, which will illustrate, not only the geographical and the narrative, but especially the linguistic part of the Bible. I have read some of the inscriptions that have been found. I must say that no inscription has ever been discovered which is of such extraordinary importance to the elucidation of the language of the Old Testament as the Moabite stone. For myself, I am convinced that the nation which dwelt in the place where such a stone has been found, must have been in the habit of erecting such stones to commemorate events; that the erection of such a stone could not have been an isolated example, but that it must have been a regular custom among the people to erect such stones; and therefore, though it was simply by an accident that this stone was discovered, there can hardly be any doubt that if travellers could sojourn in the place quietly, and live with the Arabs as the Arabs live, and not hy their costly style of living, arouse the cupidity of the Arabs for baksheesh or the price of redemption (which was what they expected from us and was the reason why they took us captives) many valuable discoveries might be made. I met the late lamented Mr. Drake and others of this Palestine Exploration Fund, living like Arabs-simply, umpretentiously-and I believe if the same thing is done on the eastern side of the Dead Sea it will be quite as successful generally, and far more successful from a topographical point of view, and from a linguistic point of view, than on the western side. The Moabite stone more nearly approaches to biblical language, than anything I have ever seen. I speak with all humility when I say that any one who knows Helrew would be able to read the inscription upon the Moabite stone, without the aid of a dictionary even. This is the first time we have ever discovered anything in tha work of a Kindred nation which comes so near the language of the Old Testament as the language of the Moabite stone. It will prove of the greatest service to biblical students, and to those who write on grammar and lexicography. Many terms which have come down to us as later Hebrew terms have now been established beyond doubt from the Moabite stone as belonging to an earlier period of the Hebrew language, and of hiblical language ; and a great deal might be done in that way if the Society would only at the
same time take the hint which the Professor opposite me has given to examine into things that exist in museums in Europe. If this Fund were to make it a branch of its work to employ its members, or to ask its friends to look after these things, we should find that discoveries have been made entirely within our reach illustrative of Palestine. Only a few days ago a gentleman engaged in the British Museum, taking casts of coins, brought to me a coin which has been in the Museum for years, and which, if the Palestine Exploration Fund had known of it, would mo doubt have sent sone of its accomplished members to examine ; and on this coin-I submit it to you, Mr. Chairman-we have, as far as I can decipher, Jehu in his carriage. There he is, and the name Jehn in the old Hebrew characters exactly resembling the letters on the Moabite stone, only in fact more perfectly written. You will find Jehu consisting of three etters. On the right-hand side is Yod and $H e$, and on the left-hand side of the figure is the vowel Van, making Jehu. Then you have the chariot; and I have the authority of the gentleman at the head of the numismatic department of the British Museum for saying that is the only winged chariot that has ever been discovered on any coin. Putting the date at the very latest, the period of this coin would be about 400 years before Christ. Now if we were to work on the spot carefully, and if the gentlemen who go there were to put themselves on friendly terms with the Arabs and the Bedouins, who knows how many coins of that or a similar description might be found, for it is well known that the Arabian and the Bedouin ladies wear their coins round their heads as ornameuts; and thus a whole vocabulary, and a whole list of biblical names might be discovered.

Professor Lewis has spoken of the want of knowledge on our part of Phœnician architecture. Here you have a specimen of Phonician coinage, as I suppose it must be taken to be. The gentlemen at the British Museam think the coin must come from Gaza, and here you have a specimen of the way in which they have struck their coinage. The coin itself, as seen in the British Museum, is one of the best things of that period. How many such things await discovery in the unexplored and beautiful country which is to be the scene of the future labours of the Society! The raviuesare, it is true, very rough, but it does not take very long to get from the ravine to the top of the hill; and, though you may in the ravine, experience a tropical climate, the moment you get on the hill, after three or four hours' climb, you are in a cold climate, where you can sojourn for the night, and be recruited for the work of the following day.

I therefore rejoice most heartily to hear that the Society has at last determined to go to work on the eastarn side of the Dead Sea, and I have no doubt that the Society will stick to its resolution, and will manifest its determination and its zeal in a similar way to that manifested by the Society in exploring the western side of Palestine; and I have no doubt that those of you who can advocate the cause of this Society in its exploration of the eastern side of the Dead Sea, will only too gladly help in that
way, and in other ways seek to bring about the accomplishment of this great work.

Professor E. H. Panmer. Mr. Chairman and Gentlemen: Much has been said by the previons speakers as to the important discoveries that we are likely to make on the eastern side of the Jordan in archæology, topography, and inscriptions, and with this I fully agree; but I should like to call your attention to possible discoveries which may be made in "ther directions-I mean in those of etholory and philology generally, hut especially as elucidating the Bible. During my own short sojourn Muab, I came across several very remarkable things. For instance, ole of our own camel men bore the odd name of Fi'ur, a name that dues not exist in Arabic, that certainly is not Mahomedan, but is really letter for letter identical with the name of the old Moabite idol, Baipeor. Again, I constantly heard from the Arabs the word Hareth, which means in ordinary Arahic, a ploughman, but which in Moab is always applied to the hills upon which most, of the Moabite towns are built. In the Bible, we find the capital of Moab called Kir-Hareseth. Hareth in Arabic, and Haresh in Hebrew, are identical in orthography. I leflieve I am right in saying that the name Hareseth some what puzzled the commentators, but if it were read according to the local meaning of the word-the city of the hill, par excellence, we see at once the reason for its appellation, and we also fiud the curious fact of a local Moabite word existing in the colloquial discourse of the Arabs of the present day.

Another curions thing I found there, and which I have mentioned in my account of the country there-the so-called statue of Lot's wife, a curious rock by the shore of the Dead Sea, bearing, when seen from the distance, a curious resemblance to an Arab, woman. This is called by the natives Bint Sheikh Lat-the daughter of Sheikh Lot-and it is a curious fact that in Moab the word Bint, which properly means daughter, is by the Atabs of the present day, nearly always applied to a wife. I do not lay much stress upon that, but it affords a significant comment upon the wellknown story in the Bible of Lot.

Another thing is, that amongst the Arabs, those who have undoubtedly lived in the country for long gencrations, we find many names illustrating the old scripture records; as for instance, in Judges we find that two princes were slain, Oreb and Zeeb. In that very country to the present day, the ruling family of the sheikhs of the Adwan, the elder branch is called Deab, which is exactly the same as the Hebrew name in spelling, and means also "wolves." The other name Oreb in Arabic, Ghorab, is likewise a common Arab tribal name. So I think we may hope to find even among these tribes many things which will shed light upon the seripture history.

What M. Ganneau has mentioned about the comertion between names of places and biblical historical characters also struck me in many instances. I only at this moment remember one-the ruined city of shihan bearing the same name virtually, as sihon the King of Moab. I
hope that when the expedition is sent to these parts its work will not be confined merely to the study of the Jordan district but that the survey may be carried further southward-on the Eastern side of Arabia, where s.) much that is of intense interest lies, and where so many discoveries may, it is to be hoped, be made. Poor Drake and I, when we went through Petrea and worked our way up to Moab that way, came across more than one queer old town cut in the rocks-smaller examples like the large rock-cut city Petra-the Sela of the Bible-the city of the rock. There also in the neighbourhood of Petra lived a tribe of Arabs, or of fellaheen-half Arab, half fellaheen, who are called the Liyd theneh. Their lineaments, their habits, everything about them shows that far from leing of the same stock as the other Arabs, by whom they are surrounded, they are nothing more or less than of Hebrew descent-in all probability a remuant of one of those numerous Hebrew tribes, who, after the dispersion of the Jews which followed the Roman conquest, fled into Arabia, and who played so important a part in the early history of Islam. To move among these people, to get from them their folk-lore, their language, and their idioms, could not fail to throw very great light both upon the language and the manners of the Bible. In the whole of the Eastern side of the Jordan, as Professor Lewis has remarked, we may hope to discover more of those wonderful Persian ruins of which Mashita is a specimen; and I may just note in connection with this subject, that the Arab histories tell us very explicitly that the great palaces of Chosroes on that side of the Jordan were robbed to build the new city of Bagdad ; and I think it would be at least interesting if some of the travellers who go that way were asked to look amongst some of the ruins of the old Kaliphs' palaces to see if there might not be something that may have come from the other side of Jordan, and which may contain not merely relics of Persian civilization, but older material- Phonician and Moabitic work which had been worked up by the Persians, and afterwards stolen and carried off to Bagrdad. I will not detain you longer than to say that I think an expedition to that part of the Jordan cannot fail to be attended with the very greatest success so far as discoveries go, in topography, architecture, archeology, and in philology. As for the difficulty of dealing with the natives, I do not for my own part believe that there exists any at all. I found them perfectly easy to manage when I was there-much more easy to deal with, in fact, than the fellaheen in the villages on the other side. The Arabs have some peculiar customs; for instance, what they call the blood-feud, and the making a man dakheel, that is to say getting from some one a guarantee of your safety which he must answer for with his own blood; and if the traveller does but learn these few things, and deal with the Arabs as they deal with each other, he may go from one end of Arabia to another without ruming the smallest risk of any personal harm; and as for robbery and extortion he need fear very little of that, if, as has been suggested by Dr. Ginsburgh, he only has the good sense not to parade his riches, but goes about in a simple manner. I think that there would be no difficulty whatever in travelling in the country.

I can quite endorse all that has been sad about the healthiness of the place, for I found it was quite possible to get from a very hot valley up into a mountain, and be snowed up there for a fortnight; and surely where one can count upon that elevation, and generally upon some suow, at any rate in winter, one need have very little fear of fever. There is nothing then, either in the country itself, or in the character of the natives, to throw difficulties in the way of the expedition, while the results may, I think, be expected to be even greater than on the other side-greater especially becanse as the comtry has remained comparatively deserted for so long, and has had, comparatively speaking, so few inroads and incursions from other nations that it has remained longer in statu quo than the country on the other side, where a continuous population has always lived, and where there have been so many immigrations and incursions and journeys of people, that Western Palestine was, for so many centuries, the highway between the East and the West.

Lieutenant Conder. Mr. President and Gentlemen : I feel that after so many distinguished gentlemen have spoken, that I have very little to say, especially as I have not been over the Jordan ; but I think perhaps a few words as to the method upon which the survey might be carried out may be of interest. But first I should like to thank the Chaiman of the Executive Committee and the other gentlemen who have spoken, for the very kind way in which they have spoken of my work, and for the appreciation which they have shown of the Map of Palestine. I thank them, but I cannot say that I altogether agree with them. I have very good reason to know that the Map of Palestine is a work that is far from complete. We know that there are many defects in the map from the top to the bottom, and I feel that if I were called upon to write a critique on my work I could write a very scathing one; but at the same time I think that I am right in saying that each and all my companions, including Mr. Drake -whose death we so greatly deplore-Lieutenant Kitchener, Nergeant Black, Sergeant Armstrong, as I know from personal experience, did his work thoroughly conscientiously, striving night and day and at all times to overcome the difficulties of the task, and that it was not for want of good-will and earnest endeavour on our part that the map remains in some particulars deficient. And this, I think, I may safely say with regard to the Map of Western Palestine, that although others may add to it, they will find very little that they will feel called upon to alter. Our object all through was not so much to be absolutely exhaustive, which would have been impossible, as it was to ensure that what we did put down was founded upon thoroughly good anthority. The difficulties that we had to encounter I need hardly detail to the explorers who are present, who know thoroughly well that theoretical expectations at home are not always borne out by practical experience abroad, and who also know that what appears so hopeful and easy before one grees out is found to lve surrounded with every sort of difficulty when one is on the spot. There are difficulties from the climate, difficulties from the suspicions of the
people, difficulties with the tramsport, and difficulties at almost every step you take. We had in the first instance, to overcome our own ignorance of the subject, and secondly, we had to overcome the suspicions of the natives and to make allowance for their extremely untruthful habits. Even in England we know that the Ordnance Survey encountered the greatest difliculty in settling the nomenclature of the maps in a sat isfactory maner, and with these additional difficulties we found it one of the hardest of all the Survey tasks to procure names accurately. For that reason it was made a rule that, however tempting a name might be, it was not to be accepted unless it was proved by the concurrent testimony of more than one person ; and I think we may say that we had the most satisfactory instance of the nature of the nomenclature in the case of Adullam. M. Clermont Gamean, whose discoveries are very well known to you all -who has shown a greater aptitude for the recovery of ancient sites that anyboly else, and whose identifications are probably sounder than those of any one who has been in the country since Robinson discovered the site of Adullam and recognised it under the name of 'Aid el Ma. He gave me that information; and when the tracing of that part came in I listened with great interest to hear whether the name 'Aid el Mâ would turn up. I found that my sergeant had discovered the name on the place indicated, and I went to the place the next day, and I met a group of Mussulmen there; they refused to tell me the name; they told me we knew the name better than they did. After this party were gone we came across the shepherds, who were really the best authorities upon the point, and from whom I again obtained the name. In that case the men who had discovered the name did not know that I knew it ; and yet that name was satisfactorily recovered ; and I think we may say of the majority of important sites, that we obtained the real ancient names which are testified to by more than one person. There is no doubt that we learned a great many lessons in working out the Survey of Western Palestine. We learned the ways of the people, and even in the technical work we learned one or two points; and I hope, if the Survey of Eastern Palestine is accomplished by the party of explorers whom I had the honour of leading, it would probably be more satisfactory as a whole, than the Survey of the West. With regard to the difficulties of the country, and of the mationalities to the east of the Jordan, I think it was Mr. Freshitield who intimated that we should find the Druses very intelligent allies; and we should in the south be able to obtain the assistance of the Adwan Tribe, who are accustomed to Europeans, and who are one of the dominant tribes in the district of Moab. The only country I have not a clear idea about is Mount Gilead, but that is a comparatively small district, and I think there would be very little difficulty in dealing with either of those three great districts which comprise the survey which it is proposed to take. Most of the gentlemen who have spoken hitherto appear to have confined themselves to the consideration of the scientific part of the work. Perhaps I might be allowed to say that it appears to ine that the scientific
side of the work is not that which has obtained the sumport which the Palestine Exploration Society have gained from the public. The reason why the public have supported the work of the l'alestine Exploration Fund appears to me to be the illustration of the Bible. We know that the study of the topography of the country, of its natural products, and indeed the study of Palestine generally, has led to very important illustration of the Bible, and I have no doubt from what I have seen that the feeling on the part of the public that this is the work of the Fund is the reason of the great interest which has been excited; and it is perhaps because it is supposed that on the Eantern side of the Jordan there is less biblical interest, that more importance has been attached to the scientific side of the work. But we must remember that, although only one-tifth of biblical names are associated with places on the East side as compared with the West, yet that the majority of those names on the East are those of unknown sites. Those in the West belonged often to sites that were known before the work commenced, and for that reason there is, I believe, a greater field for identification on the East than on the West. Then too, some of the most interesting and romantic episodes of the Old Testament are connected with the East. We have the pursuit of Gideon to Karkor ; we have the retreat of Datvid to Mahanaim ; we have the wood of Ephraim, where Absalom was killed; we have perhaps half-a-dozen of these histories which are full of toprography, and which require elucidation to a very great extent. We have to find the site of Mahanam; we have to find the site of Ashtaroth Kimnam where the great temple of the two-horned Astarte was situated ; we have to find the site, or at all events verify the position of the site of Succoth where Jacob crossed; we have to find the site of Jegar Sahaduta where his monument was placed, and the memory of which was kept alive in the City of Ramoth. In addition to this, the Eastern portion is very interesting from the New Testament point of view. We may say that dialilee is the land of the New Testament, but we must remember that on the Eastern side is the country of the Gadarenes, and so many places that are connected with the history of Our Lord, and we may say that the Map of Palestine cannot be considered perfect until at all events the Eastern shores of the Sea of Galilee have been lad down. Nthough we may not all have the enthusiasm of M. Ganneau, for which he has ample justification in the work he has done, we may expect that some relies of very early Ebionite Christianity may be discovered in the district of Bashan and on the Eastern shores of the Sea of Galilee and as far down as Pella.

With regard also to the recovery of monuments similar to the Moabite stone, I should like to remark that when I was in Jerusalem, in 1874, the American Consul-General there, who had recently taken a journey through Moab, informed me that he had seen inscribed stones similar to the Moabite stone among the ruins of some of the Moabite cities, so that there is a reason, at all events, to take very great care in exploration in the district surrounding Hesban.

The Dean of Westminster. After the very interesting speeches we
have heard, I am unwilling to occupy your time any longer. I have only to say that when the Palestine Exploration Fund was first set on foot by my friend Mr. Grove, though I sympathised heartily with the proposal, I felt what Mr. Freshfield has expressed as his feeling also, that the point at which every effort ought to be directed, was the exploration of Easten Palestine. Beautiful as that map of Western Palestine is, and great as has been the light which has been cast by the explorations, that light is as nothing compared with the light that can be thrown upon the eastern district of Palestine. Of all the features of interest that struck me when I first went to Palestine-a feature altogether undescribed, and of which I had not the least idea till I went there, of which no book of travel had griven the slightest information-was the constant view of the mountains of Moab, and the great wall of the east of Jordan. Wherever we went, that wall, rising up from the purple chasm which separated us from it, was a beautiful source of mystery and of tantalization, filling us with a sense of ignorance, and with a desire to know what there was beyond it. I feel pleased and delighted beyond measure that that desire is now about to be satistied. True, there are not nearly so many interesting places ; but still there are very many. Once before I mentioned a place, and I think Lieutenant Conder has mentioned it-which I would go any distance to see, and that is the Mahanaim.

I think I need hardly say anything more. Everything has been discussed from so many points of view that there is nothing further to be said. I am sure the Archbishop of York, who is recruiting his health elsewhere, will be very glad to hear of this successful meeting, and I am very glad to have been able to take his place.

There is one remark I should like to make about the photographs. All the photographs of Palestine should be invariably photographs of buildings and of ruins; photographs of landscapes appear to me always nearly worthless. I beg Lieutenant Conder if he has any influence over the photographer who is with him, to induce him to spend all his efforts upon the buildings, and none upon landscape.

The Dean then put the following resolution: "It is now desirable to take without delay the Survey of Eastern Palestine under conditions similar to those which proved to have been successful in the case of Western Palestine."

The Resolution was carried unanimously.
Mr. Maudslay. I must be excused if I ask one word, and that is how we stand with reference to the exploration of the eastern side of the Jordan with regard to the Americans, and the nature of the arrangements by which it is proposed we should carry out what they had undertaken. The public may possibly be under the impression that the Americans have surveyed the country, and I think a few words should be said in this room in explanation as to the character in which we go to the East of the Jordan. Perhaps Mr. Glaisher will clear up this point.

Mr. Glaisher. As Mr. Maudslay says, an arrangement was made that the Americans were to take the eastern side, and we the western side, but
they have not surveyed the country ; the result of their reconnaissances is in fact, this map which I hold in my hand ; and it is now distiuctly understood by them that we are to take up the real survey. Colonel Warren made some reference to the money that we should want, and as I an on my feet, perhaps it would be well that I should state that we are entirely out of debt, and we have at the bankers' more than a thousand pounds. One other remark. We have heard read portions of an interesting letter of Mons. Ganncau. Though it is not quite arranged at present, we hope that Mons. (ximneau will become our monthly correspondent in Palestine; and if he discovers anything there, we have a great hope that we shall soon know the result of his labours.

Rev. F. W. Holland. I have great pleasure in rising to propose a vote of thanks to the Dean of Westminster for kindly presiding upon this occasion, also for allowing us the use of this room. We have very often had to thank the Dean for his kind assistance at our meetings, and in other ways ; and I can only express the hope that he will feel rewarded to-day by the character of this meeting, and that we shall bring our work to a happy conclusion.

Mr. Glaisher. It is my pleasing duty to second that. Ten years ago, in this room, the Dean was here ; the Archbishop was in the chair ; and to see the Dean still taking that same lively interest in Palestine that he expressed then, is a great pleasure, and you may readily know how gratified I feel at performing the duty of seconding this motion.

The Dean of Westminster. I accept your resolution with thanks, and re-echo your wish for the success of the undertating.

The following is the Pamphlet referred to by Mr. (ilaisher (1), (i). It is the Prospectus of the-

## NEW SURVEY OF EASTERN PALESTINE.

Tue following objects were proposed in the original prospentus of the Palestine Exploration Fund, issued in 1865:-
"1. Archaology.-To search below the surface in Jerusalem ; to eximmine the mounds and ruins which lie scattered over the whole country, and to gather from them the buried secrets which may help us better to understand the Sacred History.
"2. Topography.-To complete the survey of Palestine, of which the coast-line is already accurately mapped in the Admiralty charts.
"3. Geology.-Of which we still remain in comparative ignorance."
©4. Nutural Sciences.-Botany, Zoology, Meteorology.-These are at present but very imperfectly known, while the recent investigations of Mr. Tristram, limited as they necessarily were, show that researches are likely to furnish results of no common scientific interest.
"5. Manners and Customs.-To do for the Holy Land what Mr. Lane's - Modern Egyptians' has dore for Egypt-describe in a systematic and exhaustive order, with clear and exact minuteness, the manners, habits, rites, and language of the present inhabitants, with engravings intended, like his, 'not to embellish the parges, but to explain the text.'"

On the conclusion of their excavations at Jerusalem, in the year $18 \pi 0$, the Committee undertook the survey of Western Palestine, a great work in which they have been occupied without interruption for nine years.

This part of the Survey is now happily completed and the Great Map in 26 sheets is already in the hands of subscribers, while the volumes of the memoirs and the reduced maps are well advanced and will very shortly he issued.

These memoirs, as has been already set forth in the Qumerterly Stutement, :mprise not only a detailed description of the comntry, with its ruins, villages, mountains, streams, etc., by the officers in charge of the Expedition; but also separate papers and essays by Colonels Wilson and Warren, Canon Tristram, Mr. Glaisher, Prof. Patmer, Mr. Trelawney Saunders, and others. One of the three reduced maps will show the position of the places mentioned in the Old Testament ; the second will give these of the New, the third will he a modern maly.

The large scale map is generally ackuowledged to be the greatest contribution rendered to the study of the bible since its translation into English : while the accuracy of the information obtained and the short space of time taken to complete and produce it compare favourably with any Government survey. The value of the work is highly appreciated by foreign as well as by English scholars; one of the most venerable of Figlish theologians writes to say that he thamk (ion that he has lived to see it completed.

This map contains the whole of Western Palestine, having for its castern boundary the River Jordan and the Dead Sea.

But Eastern Palestine has yet to be surveyed.
The present condition of our knowledge of this great district resembles very much that of Western Palestine when the Survey was first com-

Surveg of Westerit I'tiestine.

TH:N Reduce 11:14s.

The Gicat
menced. The country has been visited by many travellers, who have described its general features and many of its ruined cities. Arnong these travellers may be mentioned Burckhardt, Seetzen, Wetzstein, Irby and Mangles, Lord Lindsay, De Vogiú, Waddington, De Luynes, Porter, Costigan, Lynch, Molyneux, Robinson, Cyril Graham, Thomson, Tipping, Tristram, MacGregor, Eaton, Zeller, Wilson and Anderson, Warren, Burton, Drake, Palmer, Socin, Steever, Merrill, Klein, Freshfield and Oliphant.

Our own expeditions under Lieut. Warren and those of the American Exploration Society east of Jordan have made reconnaissances which will facilitate the work now proposed.

The country to be surveyed comprises the following districts or provinces:-
I. Bashan, the "level" land, which extends from the southern slopes of Mount Hermon to Gilead on the south, the southern frontier being the River Hieromax, now called the Nahr Yarmak or the Sheriat el Mandhor. Bashan is subdivided into :-
a. Jetur (Iturea), now called Jedur, of which Philip was tetrarch (Luke iii, 1) named after Jetur, the son of Ishmael (Gen. $\mathbf{x x v}, 15,16$ ). It was conquered by the Manassites ( 1 Chron. $v$, 18-23), who lived there until the Captivity. This country coutains the southern and eastern slopes of Hermon and the tableland eastward.
b. The district named after the city of Golan (Gaulanitis) now called Jalân. This is a table-land rising by terraces from the Jordan Valley. The city (Josh. $x x, 8$ ), which gave a name to the district, has yet to be identified. Dr. Porter says that there are a hundred and twenty-seven ruined towns in it, among them the ancient towns of Aphek, Gergesa, Bethsaida, Hippos, Gamala and Ashtaroth.
c. The Hauran (Auranitis), a level land, with the ruins of 150 towns, the buildings of which are still remaining in good preservation, many of them with roofs, doors, and window shutters, all of stone and still in their places. A vast number of Greek and Roman inscriptions have been collected in this district. Those found by MM. de Vogite and Waddington have been published in de Vogié's magnificent work on the architecture and archwology of Central Syria.
d. The Argob or Trachonitis, now called el Lejah, the "place of refuge," which is, correctly, a part of the Hauran. This formed part of
the kingdom of Og (Deut. iii, 4, 5), when it held threescore cities "fenced with high walls." Remains of more than sixty cities have been found here, but it has been but little visited of late, and never completely explored.
e. East of the Hauran is the district of Batamea containing the Hill of Bashan. This comntry is that of the Mathathites (Deut. iii, 14 ; Josh. xii, 5 ; 2 Sam. $\mathrm{x}, 6$; 1 Chron. xix, 7).
II. The land of Gilead, including territory allotted to the tribes of Land of Gile Reuben, Gad, and part of Manasseh, extending southwards as far as the river Arnon. Of this country Canon Tristram writes (" Bible Places," p. 322)-
"The name of Gilead is still preserved in Jebel Jilad, little south of the Jabbok, one of the highest points of the mountain range which rises near 4.000 feet from the Valley of the Jordan beneath it. In all Gilead, whether forest, prairic, or valley, there is a wild grandeur, unequalled in any other part of Palestine. Rising abruptly from the Jordan Valles, its western bluffe are deeply furrowed by the many streams which drain the mountain sides.
"The traveller rides up and down deep concealed glens: sometimes by a track meandering along the banks of a brook, with a dense fringe of oleanders, 'willows by the water-courses,' shading it from the sun and preventing summer evaporation, while they waste their perfume on the desert air without a human inhabitant near. Lovely knolls and dells open out at every turn, gently rising to the wooded plateau above. Then we rise to higher ground and ride through noble forests of oak. Then for a mile or two through luxuriant green corn, or perhaps through a rich forest of scattered olive-trees, left untended and uncared for, with perhaps patches of corn in the open glades.
"No one can fairly judge of Israel's heritage who has not seen the luxuriant exuberance of Gilead, as well as the hard rocks of Judxea, which only yield their abundance to reward constant toil and care. To compare the two is to contrast nakedness and luxuriance. Yet the present state of Gilead is just what Western Palestine was in the days of Abraham. Subsequently the Canaanites must have extensively cleared it, even before the conquest, and while the slopes and terraces were clad with olive-groves, the amount of rainfall was not affected. The terraces have crumbled away ; wars and neglect have destroyed the groves, until it would be difficult to find any two neighbouring districts more strangely contrasted than the cast and west of Jordan. But this is simply caused by the greater amount of rainfall on the east side, attracted by the forests, which have perished off the opposite hills. The area of drainage is about the same on each side. The ravines and wadys are numerous; but few of the streams are perennial on the west-all are so on the east. Every stream draining from Moab and Gilead is filled with fishes and fresh-water shells. I nover found living fresh-water shells but in two streams on the west side."
III. Morab, whose principal cities are Dibon (where the Moabite stone was found), Rabbath Moab, and Kir Haraseth.
"The whole of the country is a table-land, with the ridge nearly 3,000 feet above the sea, and therefore more than 4,000 above the Dend Sea, from which it rises precipitously by a series of terruces so narrow and broken that passage is impossible; and then from the crest, scarcely more than from two to four miles retired from the sea, it gently slopes into the vast Belka, or "plain country," and the boundless widderness beyond. It is deeply ploughed and seamed to its very centre by the stupendous rasines of the Callirohoe (Zerka Ma'in) and the Arnon (Mojib), besides minor wadys."——Tristram's "Bible I'laces," p. 345.

The survey of this country will be conducted on the same system as that of Western Palestine ; that is to say, the officer in command will be instructed :-

1. To produce an accurate map on a scale of one inch to a mile.
2. To draw special plans of important localities, and ruined cities.
3. To make drawings or take photugraphs of buildings, sites, tombs, etc.
4. To collect all the names to be found.
5. To collect geological specimens, antiquities, etc.
6. To make casts, squeezes, photographs, and copies of inscriptions.
7. To collect legends, traditions, and folk-lore.
8. To observe and record manners and customs.
9. To excavate if time and opportunity permit.

Where assistance is required in any of the above divisions it will be given, as in the "Survey of Western Palestine," by gentlemen who have made those subjects their special study.

The following are some of the Biblical events connected with this paut of the country :-

The battles of the "four kings against five" (Gen. xiv, 1-12); the destruction of the Cities of the Plain ; the meeting of Jacob and Laban ; that of Jacob and Esau; Jacol's vision at Mahanaim; the wrestling at Penuel; the conquest of sihon by Moses; the battle of Edrei ; the "Pisgah View ;" the death and burial of Moses; the story of Balak and Balam ; the division of the land among the two and a-half tribes; the establishment of the three Levitical cities; the wars of the Manassites and Gadites with the Hagarites; the pursuit of Gideon; the revolt and victories of Jephthah; the wars of David against Ammon ; the flight of Saul's sons, and that of David; the campaigns of Ahab and his son Joram with their allies, Jehoshaphat and Ahaziah; the wars with Moab; the birth of Elijah; the invasion of Tiglath Pilezar and of Hazael, and the captivity of the tribes.

Here is the River Arnon, the boundary between Moas and the Amorites, on whose banks stood Aroer, and the mysterious city "in the midst of the river." Here are Heshbon the capital of sihom not firr from Jahaz, where that king met with his overthrow; Rabbath Ammon, the one city belonging to the Ammonites, besieged by Joab, and taken by David; Ramoth Gilead, which played so great a part in the wars between the Syrians and the kinglom of Judah; Gadara, whose modern inhabitants, like the demonars of the miracle which associates the city with the New T'estament, dwell in the ancient tombs ; Bethsaida Julias, the scene of the miracle of Mark vi, 31-53; Cesarea Philippi, the norlhernmost point of our Lord's wanderings, where Herod built his temple of white marble; Damascus, with the rivers Pharphar and Abana; the Bozrah of Jerem. xlviii, 24; the river Jabbot, where Esau and Jacob met, the boundary of the Ammonites; Macherus, where John the Baptist was beheaded; Gallirrhoe, whither Herod the Great repaired in hopes of recovery from his disease. On this side are also the great palace of Hyreanus (Araked Imir) ; the minished palace of Chosroes the Second (Mashita); the fortress of Kerak, where Mesha sacrificed his son; and Dibon where the Moabite stone was found. We must not forget, also, that it was on this side that the Christian Church found a refuge during the troubled times of the siege by Titus.

The Committee invite a comparison of the three following maps. The first shows a piece of Western Palestine before the survey; the second, the same piece after the survey; the third, a piece of Eastern Palestine as it can now be mapped. The last mentioned portion selected for illustration is not exceptionally unknown ; it is a piece of the country adjoining the Sea of Galilee.

The following are the places mentioned in the Bible east of Jordan most of which require to be identified :-

| Abana river. | Bazal Meon. | Betonim. |
| :---: | :---: | :---: |
| Abarim. | Batgad. | Busor: |
| Abel Ceramim. | Bajith. | Buzriah. |
| Abel Mizraim. | Biscama. | Bozrah of Edom. |
| Abel Shittim. | Beon. | Cumon. |
| Almon Diblathaim. | Beth Bual Meon. | (asphon. |
| Aphek. | Beth Diblathaim. | D) mascus. |
| Ar Moab. | Beth Gamul. | Dametha. |
| Arnon river. | Beth Marau. | Dibon. |
| A roer. | Beth Jeshimoth. | Dimon. |
| Aslitaroth. | Beth Nimrah. | Edrei. |
| Ashtaroth Karnaim. | Beth Rehob. | Eleatah. |
| Ataroth | Bezer in the Wilder- | En Eulaim. |

Gialeed.
Geshur.
Golan.
Ham.
Hazar Hatticon.
Heshbon.
Hobah.
Horonaim.
Iim.
Ishtol.
Jablok river.
Jabesh Gilead.
Jithez.
Jazer.
Jegar-sahadutha.
Karkor.
Kedemoth.
Kenath Nobah.
Kir of Moab.
Kiriathaim.

Lasha.
Luhith.
Matachah.
Midmen.
Mahanaim.
Maked.
Maon.
Medela.
Mephaath.
Mimitl.
Misgrah.
Mizpeh (ilead.
Mizpeh Moab.
Nebo.
Nitmrim.
Nobah.
Penuel.
Peor.
Pharphar, R.
Pisgah.

Rabbah.
Rabluath Ammon.
Ramath Mizpeh.
Ramoth Gilead.
Rebol.
Rogelim.
Salcal.
Shibmah.
shittim.
Shopham.
succoth.
Traboath.
Taphon.
Tol.
Tophel.
Zareth Shahar.
Zered Brook.
Zoar.

The following are the principal classical and mediaval sites of the country:-
Abila.
Adraa.
Aphnith.
Areopolis.
Arbela.
Batanea.
Bethezoba.
Callimhoe. Canatha.
Capitolias. Dionisia.
Dios.
Dosos.
Essa.
Gamala.
Gerasa.
Hippos.
Julias.
Kerak.
Livias.
Macharus.
Neapolis.
Neballo.
Neve.
Omba.
Pella.
Phatenos.
Phenutus.
Phiala (Lake).
Philadelphat.
Philipupolis.
Regueb.
Rhose.

Rudda.
Sacceat.
Samachu.
Sebe.
selencia.
Sogranna.
Solymat
Tyrus.
Zinat.
Kerka.

As regards the cost, it will probably be at the same rate as that of the previous survey; that is to say, the Committee will have to meet an expenditure of over $t: 3,000$ a-year. The east of the Jordan will be surveyed at a greater speed, owing to the more favourable configuration of the country, thin was possible to the west. The Committee confidently expect that the same support which was given before will be given again, because it is not to be believed that the English-speaking people will rest content while the Holy Land is only half surveyed.

Excayations at the frat of ratiler.

The Survevors of Eastern Palestine will also be instructed to conduct these excavations on the shores of the Sea of Gatilee which were proposed in the Quarterly Statement for October, 1878. The subscriptions which were paid in for the purpose of carrying out the excavations were placar on Deposit account as a special fund. It is hoped that excavations will definitively decide for us the positions of Capernaum, Chorazin, Bethsaida,
and Tarichex. Other questions of interest are connected with Ain-el'Tabigah, the mounds of Genessareth, Irbid, Kerak, Kalat-et-Hasn, the ruins at Khersa, and other mounds and remains on the borders of the lake.

As heretofore, the reports and letters of the officer commanding the

Quarterly State ment. expedition will be published in the (puarterly Statement of the Society, which will be sent post-free to all subscribers.

Subscriptions and donations are received by the Society's Bankers, Coutts and Co., Strand, or the Union Bank of London, Charing Cross Branch. If sent to the Offices of the Fund they should be made payable to the order of the Secretury, and crossed Coutts and Co.

By Order of the Committee,
1, Adam Street, Adelphi December, 1880.

WALTER BESANT, M.A., Sceretary.

## ON SOME OF TIIE

## GAINS TO BIBLICAL ARCH EOLOGY

DUE TO THE NEW SURVEY.

The Survey Map of Palestine, west of Jordan, is now given to the public. Extending over 6,000 square miles, from Dan to Beersheba, its execution in the dield occupied a period of seven years, and more than two years were subsequently spent in preparing the results for publication. The voluminous memoirs which will elucidate the map, and probably fill eight quarto volumes profusely illustrated, are already in the press, and the first instalment will soon be ready for publication.

It is therefore a fitting time for the enguiry, what permanent results of value and of interest to readers of the Bible have been gained by the successful accomplishment of this arduous task?

Geographical discoveries of remarkable interest and value are at once recognisel by those who compare the Survey Map with former maps of Palestine. The Sea of Galilee proves to have a depression nearly 100 feet greater than was formerly supposed. The courses of the main affluents of Jordan on the west are entirely different from those previously shown, The Crocodile River springs from a source formerly unsuspected. Villages have been transposed from one side to the other of great boundary valleys, forty fords of Jordan are now known where only four were previously markel. Ten thousand modern names occur on the map, of which nearly nine-tenths were previously unknown. Important notes as to the geological structure of the country, its physical features, cultivation, soil, climate, and natural products have been collected, and the traditions and customs of its inhabitants have been noted. And from an archaeological point of view our information asto the dates, the positions, and the nature of the existing ruins, as to the character of the peasant language, and as to the manners, customs, and superstitions of the rustic population, has been enormously increased.

As early as the year 1849 the late Canon Williams had pointed out the desirability of making a complete survey of Palestine. It was felt that by this process alone could we hope to obtain an exhanstive acquaintance with the topugraphy of the country, and ensure the examination of those districts which, lying remote from the main lines of travel, remained almost a blank on even the best maps.

The expectations thus expressed have been abundantly justified by the results of the survey, while errors of former trivellers have been corrected by the survey officers. The most important discoveries have been made principally in those districts which were previously almost unknown,
and the close nature of the survey has been such as to justify the hope that but little of permanent interest has been left unexamined above the surface.

The amount of new discovery in the siugle branch of identification may be judged by the attached index of names which Lieutenant Conder, R.E., has at various times proposed for identification, and which are now incorporated in the Memoirs. Roughly speaking, a proportion of two-thirds of the Biblical topography of Western Palestine has now been recovered with some approach to certitude, and of this proportion no less than a third is the direct result of the survey work.

The value of geographical discovery for the verification of the accuracy of scriptural history has lately been exemplified in a striking manuer in the case of the Egyptian Records relating to the Hittites. The veracity of the Old Testament account of the Hittite Princes contemporary with Solomon had been deemed as presenting insuperable difficulties, but the indisputable testimony of the granite records of Thothmes and Rameses has left no doubt as to the contemporary rule of this powerful race in Northern Syria in the times of the Hebrew Judges and Kings. The subject of identification even in the case of obscure sites, or insignificant ruins, obtains, when viewed as part of a systematic study of seriptural topography, an extraordinary value and importance. Few may care to know, for instance, the exact site of Anaharath or Zatanannim, but many will be interested in the determination of the tribe boundaries, in the elucidation of the adventures of David, or of the tragic fate of Sisera, and it is only by a patient devotion to the study of minute details of topography that any striking general conclusions can safely be reached.

That the topography of the Talmud, of the works of Josephus, of the Byzantine pilgrims, and early Christian Fathers, of the crusading and Arab chroniclers, of the Samaritan, and the Egyptian or Assyrian records, have been elucidated in an important degree by the survey discoveries will be a matter more interesting, perhaps, to the antiquarian than to the general reader ; yet each and all of these various records of the history and geography of the Holy Laud are so bound up with the questions of Biblical history and geography, as to render it imperative that they should be exhanstively examined by any explorer anxious to arrive at sound conclusions as to Bible sites. The fruits of such research will tind a place in the survey memoirs, and the present paper is only intended as a sketch of the most interesting results of direct Biblical importance which have been founded upon these extended inquiries.

There is another peculiarity with regard to Bibli al geography which lends additional interest and importance to the subject. Palestine is a little country, the length of which might be traversed by rail m six hours and its breadth in less than two. The six hundred Bible sites which are to be found within its limits are thus on an average to be sought within an area of 10 square miles a piece. When David Hed farthest from saul he was yet not more than 40 miles from Bethlehem, nor more than 50 from

Gibeah where Saul abode. Most of the famous deeds of Samson took place in a district containing an area of less than 40 square miles. Jerusalem itself covered at the height of its prosperity not more than 330 acres, including 30 acres of the Temple enclosure. The closeness of the topography while on the one hand rendering its recovery more difficult, lends on the other a wonderful vividness and reality to the ancient episodes of Hebrew history. At Hebron we may almost trace each step of Abner's way from the Well of Sirah to his doom at the city gate. By Michmash we may gaze on the very rock up which Jonathan climbed. At Shechem we may stand on the brink of Jacob's well, in the very foot prints of Christ. We are not content to know that Capernaum was north of Tiberias, and insist on fixing the exact spot now disputed by sites only abont $2 \frac{3}{2}$ miles distant one from the other. Fierce controversies arise between those who place Cana 4 miles north of the traditional site and those who support the latter view. Topography, in short, takes the place in Palestine of geography, and for this reason a plan rather than a matp is required.

Of the character of the proposed identifications, their reasons, and comparative probability, the Appendix will give the reader some idea. It is proposed here briefly to run over the most interesting questions on which the trigonometrical survey has thrown new light, and for this purpose it will be most convenient to follow the sequence of the Seripture narrative rather than to adopt any geographical arragement, especially as the episodes of Bible history are as a rule each confined to some well marked district of the Holy Land.

Commencing, then, with the immigration of Abraham from beyond Euphrates, the first topographical question which arises is that of the exact position of the Royal Canaanite city of Ai. (Sheet XVII.)

The situation of this ancient town, afterwards entirely destroyed by Joshua, is minutely described in the Bible. It was "beside" Bethel (Joshua xii, 9), and the Hebrew has here the force of "close to," which appears fatal to the claims of various sites south and east of Michmash (or more than 6 miles from Bethel) which have been proposed. Ai lay: also east of Bethel (Joshua viii, 9) with a ravine to the north (verse 11) and a desert to the east (verse 15), while to the west was a place fitted for the ambush which the Israelites set. These indications were so definite that but little doubt could exist as to the approximate situation of the town, Travellers visited and described a ruin called et Tell, "the mound," which seems first to have been pointed out by Vandevelde, and the somewhat fanciful conjecture was advanced that this place derived its name from the fact that Joshua made of Ai "a heap ( $T$ 'ell in the Hebrew) for ever." (Joshua viii, 28.)

To this view there were, however, objections. There is no certain indication that the hillock of et Tell was ever the site of a city, and the expression "for ever" should be taken rather as an indication of the early date of the Book of Joshua, for Ai reappears as a town in the later Jewish Books. (Nehemiah xi. 31; Isaiah x, 28.) Fortunately the survey party were able to suggest a better explanation through the discovery of the
ancient ruins of I/aiybin immediately south of et Tell. The name recalls the Aina of Josephus (equivalent to Ai, Ant. v. i, 9) and the existence of large rock-hewn reservoirs with tombs and cisterns proves the site to be of importance and antiquity. To the north is a rugged ravine, to the east the desolate desert of Bethaven. To the west is Bethel, 2 miles distant, and between the two sites is the open ravine called "the valley of the city," where unseen, yet close at hand, the ambush may have lain concealed beneath the low cliffs or among the olive groves after creeping across from the northern valley behind the rough rocky swell which runs out to the mound of et Tell.

It was from the flat ridge which rises between Bethel and Ai that Abraham and Lot looked down on the Cities of the Plain and on the "circle" of Jordan, and the view from this point over the desert ranges and the Jordan valley to Nebo and Moab is still striking and picturesque.

As regards the position of these famous cities which Josephus believed to have lain beneath the waters of the Dead Sea, but which modern students place in the Jericho Plain or in the corresponding basin (Ghor es Seisebân) east of Jordan, the survey results were rather of negative than of positive value. A rery close and careful examination of the ground showed that no traces of the sites of any towns oceur between Jericho and the Dead Sea shore, the remaining ruins belonging only to medieval monastic establishments, and that no springs suitable for the supply of even small villages exist, or probably ever existed, in this district. Thus, although an apparently successful attempt has been made by Dr. Selah Merrill to recover the site of Zoar, our information as to the other four cities the destruction of which is described in the Book of Genesis (chapter xix) remains indecisive. Lieutenant Conder has, however, pointed ont that the term "plain" (Ciccar) is applied in the Bible to the Jordan valley as far north as Succoth, which renders it not improbable that Admah, one of the lost cities, is identical with Adam, a city of Jordan (Joshua iii, 11), the name of which still survives at the Damich ford east of Shechem. (Sheet XV.)

Among the nations inhabiting Palestine in the time of Abraham the Kenites-a tribe as yet unidentified-are mentioned (Gen. xv, 19). They inhabited a strong fortress in the southern part of the country and survived until the time of David. Lientenant Conder proposes to identify this site with the town of Cain which Vindevelde found in the present ruin of Yekim. This affords an interesting illustration of the Old Testament narrative. Yekin perched on the edge of a steep cliff dominating the desert platean west of the Dead Sea, is one of the most conspicuous objects against the sky-line looking from the east. To Balaam, on the summit of Nebo, it was in full view, and the words of his prophecy thus receive fresh force and significance, "strong is thy dwelling place, and thou puttest thy nest in a rock." (Sheet XXI.)

The history of the late Patriarchs Isatac, Jacob, and his sons is mainly connected with the district called Negeb or "Dry" in the Bible Beersheba, Gerar, Rehoboth, aud the unknown sites of Esek and Sitnat, are all to be found in this part of the country. The reason of this choice
of country is plainly shown by the survey. The high hills of Menron, with their steep, rocky valleys, rich soil, and momerous springs, are suitable for agriculture and the growth of the olive and the vine; the low challyy hilland the healthy beewheba plateau form a pastoral district stil! capable of supporting large flocks and herds. The Hittite mountains mound Kirjath Arba (or Hebron) were alreardy inhabited by an acricultural population in the time of Dhathan, and the nomadie: Helrews fonnd a suitathe home in the pasture lands of the Philistines and Amalekites in the "dry district," of which the distinctive chanacter remains unchangend. Where the Patriarchs once spread their tents the ereat tribes of the Azazimeh and Hentijereh now pasture their flocks; and in the monataina of the sous of Heth the modern Fellahin tead an agricultural life.

The site of (ferar was disconered before the survey, but was visited by the party from (iazal. There is little to desmide herond a sigantic mound on the side of a deep hoonl watercourse in the midst of rolling phans.

The question of most interest was that of rediscovering the wells which Lsatuc dur atgan in the valley of Gecan after those mate hy A hratham had been filled in iny the Philistines. (Vien。xav, 18.) Nos great masonry wells such ats those of Leershebr were discovered; amb, indeed, at Heersheba itself the survey party were able to show that the masonry noce thought to have been the wonk of Abraham dates only from drab times. It was ascomainel, lowever, that as strons underground stream flowa doma the great valley which, rising near Hebron, rums sonthwards to Fiequshablat and thence westwath to the seat, passing ly the site of Gerar. The Ababs camping round this latter site are in the habit of making excavations in the hed of the valley, from which the water wells up, and whichare called by the Helmew name IHefo, wo "pit." If the wells dug by Almaham were of this description they might easily have been filled in by the Philistines and reopened ly lanae; while the loss of the sites of Esek and Sitnah is on the vame supprosition maturally explained.

The later hooks of the lentateuch comtain but little information roncerning the topongraphy of Dabentine pooper: A few notes of interest may, however, be hene given in connection with the survey.

According to the Law of Moses the smapergat was set free in the widdemess (Levit. xvi, (1), but at a later period an evasion or modification of this command was introduced ly the dews; the grat was conducted to a monntain maned Tauk situated at a distance of ten sablath dayss journey, or about 63 English miles from Jernsalem. At this phace the Judeain desert was supposed to commence, and the man in whose charge the groat was sent out, while setting hira free, was instructed to push the unhapy beast down the slope of the mountain side, which was so steep as to ensure the death of the groat, whose hones were broken by the fall. The reason of this harbarous custom was that on one occasion the seapegoat returned to Jerusalem after heing set frem, which wats considered such an evil omen that its recurence was pro vented for the future by the death of the goat, as described in the tratct Yoma of the Mishma.

The distance given between Trak and Jerusalem seems to indicate a
lofty hill top now called el Muntar, " the watch-tower," which dominates the desert west of Jericho. An ancient road Jeads from Jerusalem to this point, and beside the road is an ancient well preserving the name Tauk in the Arab form Sath. The eastern slope of the hill is steep, and falls unbroken to the stony valley beneath. The goat, dashed on the rocks, in its fall must inevitably have beeu destroyed, while the mountain may well claim to be considered the eutrance to the dreary desert which stretches beneath its summit. (Sheet XVIII.)

Another discovery of some interest was the identification by the survey party of one of the species of deer mentioned in the Pentateuch. In the English version the Hebrew word lakhor is rendered "fallow deer," but this interpretation has not been accepted by modern scholars. It now proves that the roeluck as well as the fallow deer is to be found in the Carmel thickets, and it has been ascertained that the old Hebrew name Fakhmor is still applied by the natives to the former species-the English roebuck.

The researches of Egyptologists have thrown considerable light on the condition of Palestine and Syria during the time of the Hebrew bondage in Egypt and during the time of the Judges. The records of the great conquerors Thothmes III and Rameses II give long lists of places situated in the Holy Land and in the country of the Hittites. The reason why the children of Isracl entered Palestine from the east after their long sojourn in the Sinaitic desert appears to have been that the Egyptian (rovernment was then firmly established in the Plain of Sharon. This agrees with the Bible account of the Philistine immigration into the southern plains from Egypt, and in this, as in so many other instances, the records of the Egyptian monuments fully coincide with the history of the Old Testament.

Attempts have been made by Mariette, Brugsch, Rougé, Chabas, and other Egyptologists to identify the towns mentioned in the records of Egyptian conquests in Palestine. Many have been recovered with certainty, but it was not until the survey had been completed that it becane possible to study the sulbject exhaustively. Many existing ancient sites not montioned in the Bible are found to agree exactly with the Egyptian lists, and the probable correctness of the identifications thus obtained is evinced by the ease with which the lists are shown to preserve a proper consecutive order, while the districts occur along the very line of march which we know, from other inscriptions, to have been followed by Thothmes and Rameses. The number of identifications proposed within the country covered by the survey may also be contrasted with our almost entire ignorance of the topography of the Hittite towns lying north of Damascus, of which scarcely six are known out of a totai of over 100 noticed on the monuments.

The Book of Joshua is the central focus of Biblical topography, and the elucidation of this Book has been materially advanced by the survey. Several important cities before unknown have now been tixed with considerable certitude, and the boundaries of the tribes have been traced in a satisfactory manner.

The survey officers were able to confirm entirely the discoveries of M. Clermont Ganneau respecting the sites of Adullam and Gezer, and to these important towns they add the identification of Hazor and Debir, with a large number of less famous names. The site of ailgal, discovered east of Jericho by the German traveller Merr Schokke was tixed by the surveyors, who found the name Jiljalieh still surviving. The site of Makkedah fixed by Colonel Warren, R.E., at the present village el Mughar, "the caves," has been adopted by the surveyors, who found that at this site only of all the possible sites for Makkedah in the Philistine plain do caves (see Joshua $x, 22$ ) still exist. The position also agrees well with the identification of the towns Gederoth, Beth-Dagon, and Namah mentioned in the same group with Makkedah. (Sheet XVI.)

The site of Joshui's tomb has long been sought, the identification with the rock sepulchre at Tibneh, north-east of Lydda, being unsatisfactory for several reasons. Joshua was buried at a place called Timnath Heres, in Mount Ephraim, and there is a remarkable consent of Jewish, Samaritan, and Christian tradition, traceable from the fourth century downwards, which points to a village called Kofr Maris, south of Shechem, as representing the burial place of Joshua. Lieutenant Conder ascertained that this tradition is still extant among the Samaritans, and although it appears little understood by the peasintry, a sacred shrine exists outside the village of Kefr Hâris to which the name Ncby Lush'a (no doubt a corruption of Yehusha, or Joshua), is applied. Ancient tradition also places the tomb of Nun at this same village, and a second sacred place called Neby Nin was found close to the supposed site of the tomb of Joshua.

The Priests Eleazar and Phinehas, the successors of Aaron, were also buried in Mount Ephraim. The traditional site was sought in vain by the great American explorer Robinson, but the surveyors were more fortunate, and have visited and minutely described the tombs which according to Jewish, Samaritan, and Christian tradition alike, are said to ke those of the sons of Aaron. The moumment of Phinehas appears to be of great antiquity, but that of Eleazar has been rebuilt. They are both close to the village of Awertah, which the Samaritans identify with the Biblical Gibeah Phinehas. (Joshua xxiv, 33.) (Sheets XIV and XI.)

There is no room in a paper like the present to go very deeply into the question of the boundaries of the tribes. Several important survey discoveries have been cordially accepted by students of the subject, and several very important modifications have resulted from the survey in the lines of the borders as formerly laid down. The general results of the new investigation appear to be as follows:-

1st. The boundaries are shown to be almost entirely natural-rivers, ravines, ridges, and the watershed lines of the country.

2nd. To many of the tribes were assigned distinct districts of the country. Issachar had the great plain, Zebulon the low hills north of it. The sons of Joseph held the wild central mountains, and Naphtali those of Upper Galilee. Dan and Asher occupied the rich Shephelah (or lowland) and maritime plain. Simeon inhabited the desert, while Judah, holding the
largest share of territory, had both mountain and Shephelah plain and desert in its portion.

3rd. The enumeration of towns follows always an order roughly consecutive, and all those of one district are mentioned together.

4th. The proportion of territory to population is calculated to vary exactly in accordance with the fertility of the district. Taking as a basis the tribe populations (Numbers xxvi), it appears that the ancient populalations must have been most dense exactly in those districts in which the greatest number of ancient ruins is now found, and which are still most thickly inhabited.

Among the most important discoveries concerning the tribe boundaries are the following : the waters of Nephtoah (Joshua $x v, 9$ ) are now placed at the pools of solomon (so called), besides which the spring 'Atan, the Talmudic Etam, or Nephtoah, still exists. Formerly they were identified with the spring near Lifta west of Jerusalem, probably Eleph of Benjamin ; but this theory renders the topography very confused, whereas the new proposal when joined to the new identification of Kirjath Jearim makes the boundary line of Judah follow a natural watershed.

On the north-west border of Benjamin, Aarotth Adar (ed Darieh), and Archi (' $A \operatorname{in} \operatorname{Arih}$ ) have been recovered in exact accordance with the words of the Bible (Joshua xviii, 13), which define the position of the former with the greatest minuteness. The course of the brook Kanah, (Wady Kanah) has now for the first time been correctly laid down, thus fixing the boundaries of Ephraim and Mamasseh ; and the discovery of Rabbith and other sites has for the first time defined the border of Issachar. Many new identifications are proposed for the towns of Dan and Asher, and a group of places belonging to Naphtali has been fixed in an apparently satisfactory manner in the plateau immediately west of the Sea of Galilee.

Let us now pass to the elucidation which has been effected, through the survey, of the episodical histories of the Book of Judges, -the adventures of Caleb, Sisera, Gideon, and Samson.

The site of the city Debir, for the comquest of which the valiant Othniel was rewarded by the hand of Achsah, (aleb's daughter, had long been sought in vain. Many towns of the group surrounding it had leen identified. It was known to stand in the Negeb, or "dry," comutry south of Hebron, and that certain springs should be found not far off. The name signifies "back," suggesting that the city stow on a ridge, and Lieutenant Conder was the first to point out the probable identity with the ancient village Dhateriyeh ("of the back "), standing in a conspicuous position among ancient tombs and quarries cluse to the other towns of the group, while, at a short distance to the north, a valley was discovered full of springs, some on the hill side, some in the bed of the ravine, answering in a most satisfactory manner to the "upper and lower springs" for which Achsah besought her father. (Judges i, 15.) (Sheet XXV.)

The topography of the Scriptural episode of the defeat and death of Sisera has been as yet very little understood. The scene of the battle has
often been placed on the south-west of the great Esdraelon plain, and the defeated general has been supposed to have fled a distance of 35 miles over the high mountains of Upper Galilee. The scene may, however, be now confined to a very small area (see Judges iv).

The forces of the Hebrews under Barak were assembled on the slopes of Mount Tabor, and the conflict took place on the plain south-west of the mountain near Endor. (Psalm lxxxiii, 10.) The pursuit of the main body was westwards towards Kishon, and as far as Harosheth (el Harithiyeh) evidently through the platins, because chariots are mentioned. Thus the battle was almost exactly identical in locality with the famous battle of Tabor, in which Kleber repulsed the Turks, driving them into the treacherous quagmires, which now, as in 1799 , or as in the time of Sisera, nearly 24 centuries earlier, fringe the course of the apparently insignificant stream of Kishon. (Sheets VI and VIII.)

The flight of Sisera himself took an opposite direction to the plain of Zaanaim. The Jewish commentators have made it clear that this name should be translated not "by Zaanaim" but Litzataaim, "the marshes," and the occurrence of the same name in a group) of towns west of the Sea of Galilee seems to show pretty conclusively that the neighbourhood of Bessutm, with its marshy springs east of Tabor, is intended. The Kedesh of the passage is probably a site so called south of Tiberias, and the tent of Heber the Kenite would thus have been spread on the open plateau within 10 miles of the site of the battle.

Among the graphic episodes of Hebrew history there is, perhaps, none more picturesque than that relating to Gideon's victory over the Midianites. The general scene is known, the Valley of Jezreel, now Wady Jâad ; but the details of the minute topography are still obscured through the loss of many sites east of Jordan. Beth-Shittah, Zererath, and Tabbath, Bethbarah, Pennel, Nobah, Jogbehah, and Karkor (Judges vii, 22; viii, 11) are still unknown, and it is only possible to say that the pursuit extended from some point below Jezreel to the mountains east of Jericho.

The survey throws light on the position of Abel Meholah, and Succoth is identified at Tell Der'ala. Suggestions may also be offered for the situation of the famous "Spring of Trembling" (Lin Harod), where Gideon selected his band, and light may be thrown on the curious notice of a Mount Gilead, west of Jordan, in the same comnection.

It is clear from the account given by Josephus that Harod is to be sought not far from Jordan, and Lieutenant Conder has suggested that the name 'Ain el Jem'aîn, "Spring of the two Companies," applying to an abundant stream at the foot of the eastern slope of Mount (iillooi, may retain a trace of the memory of Gideon's famous selection of three hundred tried men, who, as able to satisfy their thirst by water taken in the palm of the hand, were indicated as fitter to endure the trial of a long and rapid pursuit than the remaining multitude who drank more freely.

As regards the name Gilead (Judges vii, 3), it has been found that from an early period the name Jalud or Jelden has applied to the stream flowing down the Valley of Jezreel, and it is suggested that the name Gilead,
applying according to the passare above cited to a mountain near this stream is the true Hebrew form of the modern Arab Jalad and of the Jelden which is mentioned in Egyptian documents.

The history of Simson has been elucidated to a certain degree by the addition of the probable site of Etam to those already known, viz., 'Timnalh, Sorek, Voreah, and Eshtaol.

There were several places in the south of Palestine named Etam ("The Eagle's nest"), but that which became the hiding place of Samson is described as it "rock" or "cliff." (Judges xv, 11.) The new identification is with the village of licit 'Ata', standing on a conspicuous and rugged knoll of rock above a deep valley. Under the village is a long tunnel, to which a Hebrew name signifying "Cave of Refuge" still applies, and it is proposed to recognize in this curious cavern, close to the principal spring, the cleft (wrongly rendered "top") of the Rock Etam into which the Hebrew hero descended when hiding from his enemies. (Sheet XVII.)

The site of Ramoth Lehistill remains doubtful, but, with this exception, the scenes of Samson's life are now grouped round the vicinity of Zoreah, his native home, and at this village the site of Samson's tomb, according to mediaval Jewish tradition, has been recovered at the shrine of the Prophet Samat, to which certain confused traditions still attach, in which the principal episoles of Samson's career may be recognized.

A site long sought in connection with the history of Samson, and also with the succeeding epis de of the Danite conquest of Laish, is that of the Mahanch Dan, or "Camping place of Dam," which was "behind" (i.c., west of) Kirjath Jearim (Judges xviii, 12), and near Zoreah and Eshtand. These indications could not ba reconciled with the site usmally proposed for Kirjath Jearim. It appeared probable that the wide corn valley east of Samson's home was the camping ground in question, but this is eight miles from Kimiet el 'Anab, where Dr. Rolinson places the famous city Kirjath Jearim, the resting place for so many years of the Ark.

It has now been pointed out that this latter identification rests on no surer basis than a fifth century trudition of foreign origin, and we are left free to seck the "Town of Thickets" elsewhere. The survey identification points to a ruin on a thickly covered ridge amonust eopses and thickets, to which the name 'Erme still applies, corresponding to the latest form Arim, which trok the place of the original Yarim, or Jearim. (Ezra ii, 25.) This ruin is distant only three miles from the great valley towards which it looks down. It lies close to the border of the lower hills and the high Judean mountains, and it shows evidence of having been an ancient site.

Close to the same vicinity the survey party fixed the situation of Deir Aban, "The Convent of the Stone," which St. Jerome identifies with the site of Ebenezer, "The Stone of Help," a name so familiar to our ears ias that of the monument raised by Samuel to commemorate the great victory over the Philistines (1 Samuel vii, 12), and probably marking the final limit of the pursuit.

The situation of the site seems to rouder the traditional view not im-
probably correct, for the village stamds at the mouth of the great valley, down which undoubtedly the Philistine hosts were driven, and just at the border which, until the time of Solomon, appears to have divided the land of the Philistines from the territory actually occupied by the sons of .Judah. (Sheet XVII.)

The history of Saul is elucidated by the survey in the recovery of Bezek, the mustering place of Israel. (1 Samuel xi, 8.) Jerome and Eusebius place this site, which is known to have been near the centre of the country, at a certain distance from Shechem on the road to Beisin. At this exact distance on the ancient road the ruin $I b z i k$ occurs on the survey, and this is a case which, if we take into consideration Mr. Grove's argument on the subject before this discovery had been made, may fairly be considered to be past dispute the recovery of a long lost site. (Sheet XII.)

The exact site of the great cliff.s Seneh and Bozez, which Jonathan elimbed with his ammour bearer ( 1 Sammel xiv, 4), has been pointed out by the surveyors through the aid of a remarkably exact deseription by .Josephus of the site of the Philistine. camp. The name seneh, "thorn bush," given at a later period to the intervening valley (as noticed by . Oosephis) is still recognizable in the present Arab name of the same splendid gorge Wady Sumeinutt, or "The Valley of the Little Thorntree." The name Bozez, or "shining," is explained by the fact that it is that of the northern cliff crowned by a mound of white chalky marl, presenting a shining and conspicuous aspect, contrasting strongly during the daytime with the dark shadow of the southern precipice.

The fixing of this famous spot depends to a certain extent on the right allocation of Gibeah (of Saul or of Benjamin), a site which Mr. Robinson transferred to the old beacon platform called 'Tel el Tul. There is not here space for the arguments connected with this question, but it may be noted that the survey shows that Tell el Fall camot have been the site of an ancient town.

The romantic adventures of David during the time of his exile and wanderings have received much important illustration from the results of the survey. Elab, Sechu, Adullam, Gath, Hareth, Hachilab, Sela-hamMahlekoth, and Choresh Ziph are now pointed outwith some degree of certainty. The capital of the Cherethites ( Samuel xxx, 14) is known and the site of Nob is fairly fixed. Visiting the ruins of the "hold " of Adullam (Sid-el-Ma), first identified by M. Clermont Ganneau, the surveyors found a cave close to the ruins of the ancient town, a cave sufficiently large to have been the habitation of David while his band were garrisoning the hold or fortress. Not many miles away lies the broad corn vale where the shepherd boy slew the giant with one of the smooth pebbles which still fill the bed of the winter torrent flowing through the valley. The various hiding places to which the future King of Israel retired occur in consecutive order, each south of the other, each further from his native town, each in a country more widely desolate, more difficult of access than that sumomming the preceding strongholde. The probable site of the "Cliff of Divisions," Sela-ham-Mahlekoth, is the present

Wâdy Malâky south of Hachilah (el Kolah), and close to the site of Maon (M'ain). Here, in full sight of the hunter, but protected by the mighty precipices of the gorge, David was rescued by the sudden Philistine invasion which compelled Saul to retreat just as the prey appeared to be within his grasp. (1 Samuel xxiii, 26.)

Among the most vexed questions of the later episode of David's flight before Adsolom was that of the site of Bahurim ( 2 Samuel xvi, 5), where the spies lay hid in the cistern covered by the corn. (2 Samuel xvii, 7.) It has been assumed that David's flight across Olivet was directed along the road leading by liethany, but Bahurim belonged to Benjamin, and was identified by the Jews of the fourth century (see the Targum of Jonathan) with the later Almon, or Alemeth, lying beside the ancient road which leads across the saddle north of the principal summit of the Mount of Olives. Lieutenant Conder proposes to accept this explanation, for the site of Almon ('A/mit) is sufficiently near to the "top of the hill" to render its identity with Bahurim possible, while the existence of numerous rock-cut cisterns with narrow mouths illustrates the incident of the concealment of Jonathan and Ahimaaz, who "came to a man's house in Bahurim which had a well in his court, whither they went down, and a woman took and spread a covering over the well's mouth and spread ground corn thereon, and the thing was not known." (Sheet XVII.)

Among the illustrations of later Jewish history springing from the survey, we may notice the discovery of winepresses at Jezreel where no vines at present exist; the probable identification of Tirzah (Teiâsir), where the Kings of Israel were buried, and the indication of a possible site for Megiddo at the important ruin Mujedd'a. The topography of the apochryphal Book of Judith is now shown to be quite possible, and the famous city Bethulia has been located in a position answering every known requisite at the modern village of Mithilia. A curious but important distinction may now be made between Tipsah or Thapsacus, on Euphrates, and the Tiphsah where Menahem so cruely avenged himself on rebellious subjects. (2 Kings xv, 16.) At a time when the King of Israel was a tributary of the Assyrian monareh it seemed highly improbable that Hebrew conquests should have extended to Euphrates, and an ancient ruin called 'Tafseh still existing south of shechem seems more probably the site of the rebellious city, which refused to submit to the usurper Menahem after his conquest of Samaria and Tirzah. (Sheet XIV.)

The victories and defeats of Judas Maccabeus are in like manner illustrated by recent discovery. The site of the great battle in which he lost his life has been varionsly placed near Ashdod, and north of Jerusalem. The identification of Eleasa (Ilasa), Berea (Bireh), Berzetho (Bir ez Zeit), and Mount Azotus near the last, now show that the position which he occupied was originally intended to intercept the retreat of Bacchides by an advance from Modin-the native town of the Hasmoneans-on the narrow pass through which the road from Samaria to Jerusalem leads in the vicinity of 'Ain el Haramiyeh. (Sheet XVII.)

The site of the famous battle of Adasa in like manner is found at a spot where the two main lines of arlvance on Jerusalem from the north join one another; and the first campaign of Judas, as is now clearly evident, consisted in the defence of the three main passes leading from the north-west, the west, and south-west to the Holy City.

Turning from the Old Testament history to the study of the topography of the Gospels, it will be found that the survey of Palestine has not been without important results in illustration of the life of Christ. New information has been collected as to Bethabara, Emmaus, Enon, Sychar, Antipatris, Capernaum, Cinn, and Calvary.

Bethabara, "the house of the passage," was a place east of, but from its name and the fact that it was a place of baptism probably close to, the River Jordan. The ancient MSS. in many cases read Bathania (Bashan) for Bethabarat and though this may be considered to give some indication of the district intended by the Evangelist, there is sound authority in favour of the present reading, Bethabara.

This place, which we often speak of as the site of the Baptism of Christ, is noticed in only one passage as the scene of events succeeding the Temptation. Cana of Galilee was apparently at the distance of not more than it day's march (20 miles) from Bethabara, and this circumstance has given rise to much cavil on the part of commentators, who, assuming that the traditional site of Bethabara was indisputably the correct one, have argued the impossibility of a journey of some 80 miles or more having been accomplished by Christ in a single day. This objection the surveyors have removed in the discovery of the Jordan ford to which the name 'Abara still clings, just as the name of the city Adam also still survives at the lower ford of Damich. The newly discovered ford is only some 20 miles from the most probable site of Cana (Kefr. K"enna), and leads over to the lands of Bashan, the Bathania of the time of Christ. Sheet IX.)

The identification of Emmaus is another instance of the importance of minute examination of the gromen. The district where the supposed site is found was fairly well known, but the ruin hidden in a well-watered valley among gardens of lemon and orange had not previously been exphored. It was generally recomized by scholars that the Emmans, where Christ supped with two Disciples, could not be the same as the famous Emmans Nicopolis where Judas conquered the Greeks.

The latter city was 160 stadia from Jerusalem, but the village Emmaus, where Herod's soldiers were settled, was both according to St. Luke and also according to Josephus, only 60 stadia distant from the capital, The name Emmaus is a corruption of the Hebrew Khammuth, a "hot spring," applied to medicinal springs, even when not of very high temperature, as at Emmaus Nicopolis. The ruin which has now been found at nearly the exact distance (bostadia) from Jerusalem, is called Ghamasa, thus representing the valgar promunciation of the Hebrew original. A ncient rock-cut sepulchres and a causeway mark the site as being of considerable antiquity, and the vicinity is still remarkable for its fine
supply of spring water. Among the numerous sites proposed for Emmans there is none which has so many arguments in its favour as has the new discovery of the survey party. (Sheet XVII.)

With respect to Fnon and Sychar, the Surveyors have only confirmed the views advocated by Dr. Robinson and Canon Williams. The existence of "much water" and of open ground suitable for the assembly of a crowd has now been pointed out in the vicinity of the village Salim or Salem, and of the ruin 'Ainan or Enon.

Of the numerous sites previously proposed there is no other which unites every requisite of name and water supply. Other Anons exist far from any Salem, and other Salems in water districts where no name Fnon is found ; but in the Great Wady Far'ah, which, starting at Shechem, formed the north boundary of Judea, in the Jordan valley, we find a site which appears to satisfy every requirement and to agree well with the new identification of Bethabara. (Sheet XII.)

As regards Sychar, Canon Williams has argued in favour of the village 'Askar, close to Jacob's well-a hamlet apparently overlooked by Robinson. The survey investigations have shown that the ancient Samaritan name of this village closely approached to the Hehrew Sychar, and the error first made by the crusaders, who confounded sychar with Shechem, and which has subsequently been adopted by Dr. Robinson, in spite of the evidence of the early travellers of the fourth to the seventh centuries, and which has found its way into the pages of Canon Farrar's Life of Christ, may now be corrected through the explorations which prove the antiquity and ancient name of the village 'Askar near Jacob's well. (Sheet XI.)

Antipatris, long since supposed to have stood at the great mound of Râs el 'Ain, is now proved to have been se situated through careful measurement to surrounding places and through comparison of these distances with those recorded by ancient pilgrims. As regards Bethsaida the evidence is purely negative, no trace of the name of the supposed Galilean Bethsaida having been found. The theory that two Bethsaidas existed on the shores of the Sea of Galilee was originated by the learned Reland. and has been adopted by many anthorities. Lientenant Conder, however, agrees with Renan and Robinson in supposing that only one site of that name existed, namely, the village afterwards named Julias, east of the Jordan and not far from its mouth.

As regards Capernaum, the authorities are still divided into two parties. Lieutenant Conder and Lieutenant Kitchener agree with Robinson, Renan, and many others in placing. this city at the ruin Minyeh (the "town of the Minim" or Christian heretics who are called in the Talmud "Sons of Capernaum"). Colonel Wilson, R.F., has, however, clearly shown that from the fourth century down, Tell Hum has been the traditional site of this town, and assumes that the Christian tradition is correct. Much still remains to be done to elucidate this subject ; careful levels along a line of aqueducts are required, and excavations at Minyeh are very desirable.

A site which, though not scriptural, was of much importance for the understanding of the topography of the Sea of Galilee, was recovered by Lieutenant Kitchener in the modern Simn-en-Nabrat, the ancient Sinnabris. This discovery supports the geneally received identification of the important town of Tarichea (Kerak), which owing to a miseonception has been phaced on recent maps north instead of south of Tiberias.

The question of the boundaries of Samaria in the time of Clurist is one not a little important to the understanding of His journeys through Peras. By the recovery of Anuath ('Aina), Borceos (Berkit), Antipatris, BethRima, and other places, we have been able for the first time to lay down the line of the border between Judea and Samaria with considerable aceuracy of detail, and to show the necessity of the journey across Jordan in passing from Galilee to Jerusalem. (Mark x, 1.)

Without entering into the famous controsersy is to the site of Galvary, it should be noticed that an important piece of novel information bearing on the question has been collected during the course of the survey. The phace of execation used by the Jews before the destruction of Jerusalem, and called in the Tahmud Beth-has-sekilah, or the "house of stoning," is still shown by their modern descendants outside the Danascus gate north of the city. To Christians it is known as the cliff of Jeremiahis grotto, in consequence of a tradition which is only traceable as far back as the fifteenth century. The fact that a precipice is mentioned (in the Talmudic account of the punishment of stoning) as existing at the phace of execution appears to contirm the trantion. This spot has according to modern anthorities always been outside derusalem, and some travellers think they have observed a skull-like formation in the hill-top, above the cave such as the early fathers ofteu attribute to Colgotha. That Christ was executed according to Roman custom rather than the . Jewish is certain ; but there is no reason to suppose that ferusalem possessed two places of execution at the time-the conservatism of the east would indeed point to an opposite conchsion. If the Jewish tradition be trustworthy we see in the site thus recovered an identification which possesses in a high degree a claim on our attention, as one of the most important that can be expected in Palestine.

The discoveries thus far described have been mainly topographical, as must be naturally expected from the character of the work undertaken. The survey party, however, enjoyed unusual opportunites for the study of the mamers and customs of the native peasantry and of the Bedawin. in districts where a Frank had sometimes never been seen before; and from this intimate intercourse many interesting results were obtained in illustration of the manners and customs of the lower classes as described in the Bible. A detailed account of many of these discoveries will be found in the last chapters of "Tent Work in Palestine," published by the Committee, which are devoted to the description of various nationalities to be found in Syria.

The antiquity of the native peasant stock is evidenced both by their. language and by the peculiarities of their religion. Their pronunciation of
many letters is archaic, and approaches much closer to the Aramaic or to the Hebrew than to modern Arabic. There are also many pure Hebrew words in use among the Fellahin which are unintelligible to the inhabitants of towns who use the modern Arabic words instead. The worship of Mukams or "Shrines" among the peasantry is also intimately connected with the old worship of trees and high phaces by the Camanites, although the traditions attaching to these sacered places are traceable to crusading, Byzantine or Moslem origin as well as in other cases to an older indigenous source.

In manners, customs, and dress the peasantry recall the incidental notices of the same population in pre-Christian times. The "round tires like the moon," against which Isaiah declaimed, are still wom by the women of Samaria. Like Jezebel, they still paint their faces; like Elijah, the men still gird up their loins. The "corner of the field" is still left for the poor, and a tithe of corn for the Levite (or Derwish). The harvest customs and methods of tillage are unchanged; the olives are stili beaten down with a rod. These are but single instances of the numerous seriptural expressions which are now illustrated by the customs of the Syrian peasantry. The nomadic life of the early patriarchs is in the same way illustrated by the manners of the Bedawin of the deserts, and, as above stated, the settled and pustoral districts retain the same relative positionas in earlier times.

Such, briefly sketched, are a few of the principal Biblical gains aceruing from the Survey. Until the voluminous memois have been placed before the public little idea will be gained of the amoment of information and minuteness of detail which has been oltatined. Many of the traditions of the country are carefully registered with the archeological remains and the natural features of the land, and the aid of all standard works, from Josephus downwards, has been called in requisition to explain by historical connections the origin and date of every monument. Though discoveries may still remain to be made in Palestine, we are pobably justified at least in saying that no such complete acoont exists of auy other Asiatic country ans is now obtained for the Holy Land.

## INDEX OF LIEUT. CONDER'S IDENTIFICATIUNS.

## N.B.-The Roman Numerals I, II, \&c., refer to the Sheets of the Map.

1. Abel Meholah, I Kings iv, 12. Jerome (Onomasticon s.v., Abel Manlia) places this 10 miles south of Scythopolis "in Aulone" (i.e., the Jordan Valley) which indicates the present 'Ain Helcteh. (XII.)
2. Abez, Joshua xix, 20. Probably the present ruin el Beidu, at the north end of the plain of Esdraelon. The Arabic exactly corresponds to the Hebrew with the same meaning, "white." (VIII.)
3. Achshaph, Joshua xix, 25. Wrongly placed by Robinson nex Banias, probably the present village el Yesif, north-east of Acre.

It is often mentioned in Egyptian records, and the proposed site agrees both with these and with the Biblical indications of situattion. (III.)
4. Adami, Joshua xix, 33. The present ruin Admah, on the platean southwest of the sea of Calilee, in a satisfactory position with relation to towns noticed in the context. (IX.)
5. Adase, see p. 15. (XVII.)
6. Adullam, see p. 14. (XXI.)
7. denon, see p. 17. (XII.)
8. Ai, see p. 4. (XVII.)
9. Amad, Joshua xix, 26. Apparently the ruin called el'Amid, north of Acre, in correct relative position. (III.)
10. Anab, Joshua xv, 50. The ruin' Amab, west of edh Dhaheriyeh, incorrectly fixed by Robinson at Deir esh Shems, east of the same. (XXV.)
11. Anaharath, Joshna xix, 19. The village en Védrah, in correct relative position to other towns of Issachar. (IX.)
iŋ. Anem, 1 Chronicles vi, 73. The village' Anin, in the hills west of the plain of Esdraelon, in a satisfactory position within the border of Manasseh. (VIII.)
13 Aner, I Chroniclesvi, 70. Possibly the present village 'Allar, in the hills south-west of the plain of Esdraton.
14. Arab, Joshua xv, 32. The present ruin er Rabiyeh in suitatble relative situation. (XXI.)
1\%. Archi, see p. 10. (XVII.)
16. Ataroth Adar, see P. 10. (XVII.)
17. Bualuth, Joshua xix, 4; 1 Kings ix, 18 ; VIII Ant. vi, 1. Probably the present village Bela'in, in a suitable position west of Bethhoron and commanding the main road to Jerusalem. (XTV.)
18. Baal Shalishe, 2 Kings iv, 42. Probably the present villarge Kefo. Thilth, in suitable situation in the tervitory of Ephraim on the lower hills. The Arabic Thilth is derived from the Hebrew Shuelish ("three"). (XIV.)
19. Buhurim, see p. 14. (XVII.)
20. Berea, see p. 15. (XVII.)
21. Beten, Joshua xix. 25. Is identified by Eusebins (Onomasticon s.v., Batnai), with a village, Beth Beten, 8 miles east of Acre. This seems to indicate the village el Baneh. (IV.)
22. Bethabura, see p. 16. (IX).
23. Beth Iagon. Joshua xix, 27. Probably the present ruin T'ell D'ank, in correct relative position near the month of the river Belus. (Compare Dagon or Docus, near Jericho, now 'Ain Dok). (V.)
24. Beth Shemesk (of Issachar), Joshua xix, 22. Possibly the ruined site 'Ain esh S'hemsigeh, in the Jordan Valley. (IX.)
2.). Bethutice, see p. 15. (VIII.)
26. Betomestham (Judith iv, 6). The present ruin Massin. (VIII.)
27. Bezek, Judges i, 5. Probably the ruin Bezkak, south of Lydda. (XIII.)
28. Bezek, I Samuel ii, 8. See p. 13. (XII.)
29. Calvary, see p. 18. (XVII.)
30. Charashim (Valley), 1 Chronicles iv, 14, mentioned in connection with Lod and Ono (Nehemiah xi, 35). The nane survives at hhurbet Mirsha, on the bank of the great valley east of Lydda. (XVII.)
31. Chezib, Gen. xxxviii, 5; Joshua xv, 4t. The name appears to linger at the spring ' Aim Fezbeh, near Beit Nettif, in a satisfactory position in relation to other towns of the same group. Jerome (Onomasticon s.v.) makes Chasbi a ruined site near Adullam, which agrees. (XXI.)
32. Choba or C'hobai, Judith iv, 4. The Peutinger Tables place Coabis 12 miles south of Scythopolis. This points to the ruin called el Mckhobly, on the ancient road from shechem. The name has - the meaning "hiding place." (XII.)
33. Chozeba. 1 Chronicles iv, 22. Possibly the ruin Kuieziba, north-east of Hebron. (XXI.)
34. Darnath ("low ground"), Joshua xv, 49. Probably the village Idlmah in the low hills. The position appears suitable. (XXI.)
35. Debir, see p. 10. (XXV.)
36. Dibluth, Ezekiah vi, 14. Apparently the village Dibl, in Upper Galilee, unless it be an error for Riblah. (IV.)
37. Ebenezer, see p. 13. . (XVII.)
38. Eddei, Joshua xix, 37. Apparently the present village l"ater. The relative position is suitable, and the letters ' I and D often interchanged. (IV.)
39. Eleasa, see p. 15.
40. Lleph, Joshua xviii, 2S. The present village Lifte, west of Jerusalem The situation agrees with the boundary of Judah. See p. 10 .
41. Elon, Joshua xix, 43. Probably the present village, Beit Ella. The relative situation is satisfactory. (XIV.)
42. Elon Beth Hencen ("plain of B. Hanan"), I Kings iv, 9. Probably the village Beit' inam, in the low hills east of Lydda. The situation agrees with the context. (XVII.)
43. Emmaus, see p. 16. (XVII.)
44. Eltekeh, Joshua xix, 44. Apparently Beit Likid, in the territory of Dan. In the list of the victories of Semnacherib (Assyrian Discoveries, pp. 302-305), the "plains of Eltekeh" are mentioned with towns of Dan. This agrees with the situation of the modern village. (XVII.)
45. Enam, Joshua xv, 34. Possibly the ruin'Allm, in the low hills sonthwest of Jerusalem. The relative situation appears satisfactory. The change of N to L and M to N is not unusual. (XVII.)
46. Engannim (of Judah), Joshua xv, 34. Apparently the present ruin (Imm Itna. The relative situation is satisfactory. (XVI.)
47. Enhceldah, Joshua xix, 21. Probably the present ruin Kefr Adan, southwest of the Plain of Esdraelon. The situation appears probable. (VIII.)
45. Eskean, Joshua xv, 52. Possibly the ruin es Simia, near Dumah (Domeh), south of Hebron. The situation is satisfactory, and the site ancient. (XXI.)
49. Esora, Judith ir, 4. Probably the village 'Asireh, north of Shechem. The situation is suitable. (XI.)
50. Etam, 2 Chronicles xi, 6. The present ruin 'Aitun, south-west of Hebron. The situation agrees with the context. (XX.)
51. Etam (Rock). See p. 13. (XVII.)
52. Ether, Joshua xv, 42. Probably the ruin el'Atr, near Beit Jibrin, on the west. The situation appears satisfactory. (XX.)
5.3. Gullim, 1 Samuel xxv, 44; Isaiah x, 30. Possibly the village Beit Jala near Bethlehem. (XVIL.)
54. Gederah, Joshna xv, 36. (Mentioned in the Onomasticon, s.v. Gedor, ats 10 miles from Eleutheropolis, on the roul to Diospolis), the important ruin of Jedireh. The situation appeans to agree with the context. (XVI.)
55. Gederah (of Benjamin), 1 Chronicles xii, 4. The present ruin Jedûreh, north of Jerusalem. (XVII.)
56. Gederoth, Joshua xv, 41. Probably from its situation the present village Katrah, near Yebnath, as proposed also by Colonel Warren, R.E. (XVI.)
57. Giezer, see p. 8. (XVI.)
58. Gibbethon, Joshua xix, 44. Probably the present village Kibbiuh, at the foot of the hills near Lyddio. The situation agrees with the context. (XIV.)
59. Gibeth, Joshua xviii, 28. The present ruin Jibice, in the territory of Beujamin. (XVII.)
(i). Gibeah-hu-Elohim, I Samuel x, 5 ; and I Samuel XV, 3. See p. 14.
(i1. Gibeah I'kinehus. See ]. 9. (XII.)
(i2. ('illead Mount. See p. 12. (IX.)
(i3. Gillyal. See p. 8. (XVIII.)
64. Giloh, Joshua xv, 5l. Probably the ruin Jalk in the Hebron Mountains. The situation appears to agree with the context. (XXI.)
(65. Hechilah (Hill). See p. 14. (XXI.)
66. Itcmmon, Joshua xix, 28. Apparently the ruin Hima, south-east of Tyre. The situation appears to be satisfactory. (III.)
67. Henmethon, Joshua xix, 14. On the boundary of Zebulon and Naphstali. The present village Kefr' 'Anân. (VI.)
i8. Haphraim, Joshua xix, 19. In the Onomasticon, s.v., the village Aftarea is placed 6 miles north of Legio (el-Leijan); this fixes it at the ancient ruined site el Farrigeh, which appears to be a suitabie position for the Biblical town. (VIII.)
(69. Jlureth. See p. 14, now Khards. (X.XI.)
71. Marod. See p. 12. (IX.)
71. Huzor, Joshua xi, 1. See p. 8, Hadirch. (IV.)
72. Muzor, Nehemiah xi, 33. Evidently the ruin Muzzar north of Jerusalem. (XVII.)
73. Horem, Joshua xix, 38. Apparently the ruin Hârah. The situation seems possible. (IV.)
74. Hozah, Joshua xix, 29. Apparently the present ruin Ozziygh, on the coast south of Tyre. The situation is satisfactory, and the changes of ' $A$ in for Kheth and of Zain for $I$ 'zadi, are both recognized. (III.)
7.. Ijon ("ruin"), $]$ Kings xv, 20. Possibly Khiyatm, in the Merj' Ayun, west of Banias. The name survives in the latter title, but the former may be a corruption and represent the exact site. (II.)
76. Irpeel, Joshua xviii, 27. Probably the village Rafût, north of Jerusalem. The name is derived from a similar root, and the situation is satisfactory. (XVII.)
77. Jabneel, Joshua xix, 33. A town of Naphtali stated in the Jerusalem Talmud (Megillah i, 1) to have been called at a later period Caphar Yama. This indicates the ruin Semma, and the situation agrees with that of the other towns in this group. (VI.)
78. Janouh, 2 Kings xv, 29. The present village lanah in the hills south-east of Tyre. The situation appears satisfactory as within the territory of Naphtali. There is a second Yanalt further south. (II.)
79. Janum, Joshua xv, 53. Probably the village Beni Naim, east of Hebron. The situation appears to agree with the context. (XXI.)
80. Jeshankh, 2 Chronicles xiii, 19. The situation points to th iedentity of this site with the ancient village 'Ain Sinia. (XIV.)
81. Jeshua, Nehemiah xi, 26. Probably the present ruin S'awi, east of Beersheba. The situation is relatively satisfactory. (XXV.)
82. Jethlah, Joshua xix, 42. Probably the ruin Beit TU!, in the low hills west of Jerusalem. The sitnation appears probable. (XVII.)
83. Joktheel, Joshua xv, 38. Belonging to a group of which little is yet known. Possibly the large ruin Kutlanch, south of Gezer. The words are from similar roots. (XVI.)
84. Kedesh (in Issachar), I Chronicles vi, 72. Possibly the ancient site Tell Abu Kudeis near Lejjun. (VIII.)
85. Kibzaim, Joshua xxi, 22. The name is radically identical with that of Tell Abu Kabus, near Bethel. The situation is not impossible. (XVII.)
86. Firjath, Joshua xviii, 28. The present Kuriet el 'Auab is more generally known to the natives as Kurieh. The situation agrees well for Kirjath of Benjamin, but not for Kirjath Jearim. (XVII.)
87. Kirjuth Jeurim. See p. 13. (XVI.I.)
88. Lachish, Joshua x, 3. (In the Onomasticon, s.v., this city is placed 7 Roman miles south of Eleutheropolis (B. Jibriu). The site of Tell el Hesy nearly agrees with this, and is more satisfactory than Umm Lakis proposed by Robinson. The identification supposes the change of Caph to Kheth, of which we have an accepted instance in the case of Michmash. (XX.)
89. Lahmam, Joshua xv, 40. Possibly the ruins el Lahm, near Beit Jibrin. The situation appears satisfactory, the site is ancient. (XX.)
90. Lasharon, Joshua xii, 18. Apparently in Lower Galilee. Possibly the ruin Sarona, west of the Sea of Galilee. Jerome (Onomasticon, s.v.) says that the plain east of Tabor was called Sharon in his time. (VL.)

1. Luz, Judges i, 26. Possibly the ruin Lueizeh, west of Banias, on the border of the Hittite country. (II.)
2. Maurath, Joshua xv, 59. Probably from its relative position the present village Beit C'mmar (the Bethamari of the Onomasticon). (XXI.)
3. Madmamah, Joshua xv, 31. Possibly the ruin L'mm Deimneh, north of Beersheba. The situation appears satisfactory. (XXIV.)
4. Madon, Joshua xi, 1. Apparently in Lower Galilee, perhaps the ruin Mudin close to Hattín. (VI.)
5. Nahaneh Dan, see p. 13. (XVII.)
6. Makikedah, see p. 9. (XVI.)
7. Manahath, 1 Chronicles viii, 6. Possibly the village Mâlhah, southwest of Jerusalem, which appears to be the Manocho of Joshua xv, 60 (inserted passage in LXX). The change of L for N is common.
8. Maraluh, Joshua xix, 11. According to the description of the boundary of Zebulon, this would occupy about the position of the present village Malal. The $L$ and $R$ are easily convertible. (VIII.)
9. Mearah, Joshua xiii, 4. Apparently Mogheiriyeh, north of Sidon.
10. Megiddo, see p. 15. (IX.)
11. Meronoth, 1 Chronicles xxvii, 30. Possibly the ruin Marrina, in the Hebron hills. (XXI.)
12. Misheal, Joshua xix, 26. Probably the ruin Maisleh, near Acre. The situation is suitable for a town of Asher. (III.)
13. Mozah, Joshua xviii, 26. According to the Jerusalem Tahmud, was called Kolonia. A ruin called Beit Mizzeh exists near Kolonia, west of Jerusalem, in a suitable situation. (XVII.)
14. Naamah, Joshua xv, 41. Probably Na'aneh, south of Ramleh, as proposed by Colonel Warren, R.E. The situation is suitable. (XVI.)
15. Nahallal, Joshua xix, 15. According to the Jerusalem Talmud (Megilla i, 1) this place was called, at a later period, Mahlul. This seems to indicate the village 'Ain Mahil, in a suitable position. (VI.)
16. Nebo, Ezra ii, 29. Perhaps Nuba, south of Jerusalem. (XXI.)
17. Neiel (Han-N'aial), Joshua xix, 27. The ruin $Y^{\prime}$ anin is found in the required position. The change in the position of the guttural and of N for L is not unusual. (V.)
18. Nekeb, Joshua xix, 33. The Jerusalem Talmud (Megilla i, 1) gives the later name of this site as Siadetha. This points to the ruin Seiyada on the plateau west of the Sea of Galilee, a position agreeing with the context. (VI.)
19. Nephtoah, Joshua xv, 9 (a spring). The Talmud of Babylon (Yoma 31a) identifies this with the En Etam, whence an aqueduct led to the Temple. This indicates 'Ain' $\mathbf{A t}$ an, south of Bethlehem. See p. 10. (XVII.)
20. Ophrah, Judges vi, 11. Probably Ferata, near Shechem, the ancient name of which was Ophrah (see Samaritan Chronicle). (XI.)
21. Pirathon, Judges xii, 15, and Pharathoni (I Macc. ix, 50).

Possibly Fer'on, west of Shechem. The loss of the 'T is not unusual, and the present name retains the guttural. (XI.)
112. Rubbuk, Joshua xv, 60. Possibly the ruin Rubba, west of Beit Jibrin. (XXI.)
113. Rubbith, Joshua xix, 20. The present village Raba, south-east of the phain of Esdraelon, appears to be in a suitable position. (XII.)
114. Rakkon ("shore"), Joshua xix, 46. The situation of Tell er Rakkeit appears suitable, north of Jaffa, near the mouth of the river Aujeh (probably Mejarkon). (XIII.)

- 115. Surid, Joshua xix, 10. The Syriac version reads Asdod, and the LXX reads Seddouk (Vat. MS.). The original may be thought to have been Sadid, in which case Tell Shudud occupies a very probable position for this site (compare Maralah). (VIII.)

116. Secacah, Joshua xv, 61. In the Judean desert. Possibly the ruin Sikkeh, east of Bethany. (XVII.)
117. Sechu, see p. 14. (XVII.)
118. Seneh (Rock), see p. 14. (XVII.)
119. Shauraim, Joshua xv, 36. The ruin S"aireh, west of Jerusalem, occupies a suitable position. (XVII.)
120. Shamir, Joshua xv, 48. Probably the ruin Sômerah, west of Dhaheríyeh, the situation being suitable to the context. (XXIV.)
121. Sharuhen, Joshua xix, 6. Probably Tell esh Sheri'uh. The position is suitable, and the conversion of the guttural Kheth to 'Ain is of constant occurrence, as is also the loss of the final $\mathbf{N}$. (XXIV.)
122. Sorek (Valley). The name Surik was found applying to a ruin north of this valley, as mentioned in the Onomasticon. (XVII.)
123. Thimnatica, Joshua xix, 43. Generally identified with Timnah of Judah, appears more probably to be Tibneh, north-east of Lydda, on the border of Dan. (XIV.)
124. Timnath Hercs, see p. 9. (XIV.)
125. Tiphsah, see p. 15. (XIV.)
126. Tirzah, see p. 15. (XII.)
127. Ummah, Joshua xix, 30. The ruin 'Alma occupies a suitable position in the territory of Asher. The L represents the Hebrew M and the guttural is preserved. (III.)
128. Uzzen Sherah, 1 Chronicles vii, 24. Mentioned with Bethhoron. Possibly Beit Siru, south-west of the site of Bethhoron. (XVII.)
129. Zaanaim, see p. 11. (VI.)
130. Zartanah, 1 Kings iv, 12. Mentioned as "beneath Jezreel." Probably the large site of Tell Sârem, near Beisân. (IX.)
131. Zereda, 1 Kings xi, 26. In Mount Ephraim. Probably the present Surdch, west of Bethel. (XIV.)
132. $Z_{i z}\left(\mathrm{Ha}_{\mathrm{a}} \mathrm{Ziz}\right.$ ) (ascent of), 2 Chronicles $\mathrm{xx}, 16$. Probably connected with the name Hazezon Tamar, for Engedi, Genesis xiv, 7; 2 Chronicles xx, 2. The name Masâsah was found to apply to the plateau north-west of Engedi. (XXII.)

This list contains 132 names. Out of about (62) topographical names mentioned in the Bible in Western Palestine, about 4.30 have now been identified (or about two-thirds). Out of these 130) a total of 182, as above shown (or about a third), are thus due to the Surver.

On the other hand, out of about 200 names of the places in the Sinaitic Desert, or in the country east of Jordan, 70 only are known, including the latest identifications of the American survey and of Lientenant Conder (Hamblook to the Bible), being a proportion of little over one-third. Many important sites, such as Mahanaim, Jabesh Gilead, \&e., remain still to be recovered east of Iordan.

## SUPPOSED CLIFE IN THE HARAM.

Cossidmable importance has been attached to the question whether the rock on the western slope of the Temple Hill may be supposed to fall with an uniform slope, or whether beneath the surface and within the west wall of the Ifaram, a cliff exists hidden by the filling-in which forms the present interior plateau.

In discussing the paper which I had the honour to read to the Royal Institute of British Architects, on and December, 1878 (see "Transactions R.I.B.A." No. 3, p. 41), Mr. James Fergusson said :-
"So far as I can make out, and I believe I may state that Colonel Wison entirely agrees with me in this: the rock rives gradually, though irregularly, from the valley of Jehoshaphat to a ridge terminating westwards in something very like a cliff, where I believe the tower of Antonia to have been, and just behind the Holy of IHolies of the Temple where 1 place it."

This passage explains the reason why importance is held to attach to the question, for if no such cliff should exist, then the 'lemple as restored by Mr. Fergusson must have rested on foundations of great depth, or on vaults as yet undiscovered, and not described by any ancient author.

The difference of opinion as to this cliff is also shown in the plans pulbished in the Palestine Exploration Fund Quarterly Statement for 1880, 1p. 9 and 20, where Colonel Wilson shows the rock as rising much more lapidly than according to Colonel Warren's section would be the case.

As regards these plans it may be noted in passing that a slight misipprehension occurs in the Editor's note, p. 97, by which 1 am supposed to loe responsible for the first-mentioned plan, and am said to differ from both of the above-mentioned authorities respecting the lie of the rock in this part of the Harm. My plan, constructed in 1873, was taken from Colonel Wiaren's "Recovery of Jenusalem," p. 298, so far as the contours within
the West Haram Wall are concerned, and any discrepancies in the lithograph would have been corrected had not the proof unfortmately failed to reach me before publication.

The main reason for supposing the existence of a cliff in this part of the mountain is a geological one. The strata beneath the Haram, as in other parts of Jerusalem and its vicinity, having a dip of about 10 degrees E.S.E., as described in the "Ordance Survey Notes" (p. 3), sn that a "crag and tail" formation, as it is termed, might be formed by the beds as exposed on the hill-sides; the "crag" or cliff" being always on the west, and the "tail" or gentle slope on the east.

Cliftis, due to this position of the strata, occur towards the bottom of the western slope of Olivet, and are commonly found in Palestine in places where the hard crystalline lower beds are visible.

A closer inspection of the geological question seems to me, however, to be less favourable to the theory, and a few words are necessary to explain the problem more clearly.

The Mount of Olives consists mainly of soft chalky beds, the tntal thickness of which is given by Colonel Wilson at 291 feet, out of a height of some 400 feet from the present Kedron bed to the summit of the hill. The lower strata of the chalky beds are referred by LiArtet to the Upper Cretaceous Period, while near the summit of the mountain, separated by bands of fint, oceur beds belonging to the Nummulitic or Middle Focene period. Beneath the white chalk occurs a havd limestone, contatining fossils and flints, with a total thickness of 71 feet; and beneath this, again, for a depth of 40 feet, the soft white Malaki beds, whence the best building stone is obtained; while, lower still, occurs the havd Dolomitic limestone, without flints or fossils, which extends lower than the Kedron bed.

According to these measurements the levels of the beds on the western slope of Olivet are as below:-

| Soft white chalk, bottom of bed | $\ldots$. | $\ldots$ | $\ldots$ | 2,350 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Fossiliferous limestone | ... | $\ldots$. | $\ldots$. | $\ldots$ | 2,279 |
| Soft white limestone | $\ldots$. | $\ldots .$. | $\ldots$. | $\ldots$. | 2,239 |

On turning to the Ordnance Survey Map $\left(\frac{1}{2500}\right)$, it will be observed that the level of the top of the cliffs in which the so-called Tombs of Absalom, St. James, etc., are cut, is shown as 2,235, or about the level of the junction between the hard underlying Dolomite and the soft chalky Malaki beds.

Above this level no cliffs occur. The Malaki has been worn by deundation to an even slope, and the soft chalk beds higher up the mountain present in the same manner an uniform slope instead of a cliff. The action of demudation has in short effaced the "cragg and tail" formation which may have resulted from the original upheaval.

These observations may now be applied to the Temple Hill. The top formation within the Haram is the Mezzeh or fossiliferous limestone, and the cisterns are cut in the Malati beneath it. Colonel Wilson describes the beds ats dipping $15^{\circ} \mathrm{N}$. and S , and about $10^{\circ} \mathrm{E}$. and W . ("Ordnance Survey Notes," pp, 31-833). Near the north-west angle the Mezzeh heds have been removed to a depth of some 30 feet (compare Ordnance Sinvey Map and." Notes," p. 31). The Sakhrah consists of Mezzeh (p. 34), and near Tanks $12,13,14$, there is only one bed of Mezzeh above the Mataki (p.31), the surface level being 2.40 .

The Mezzeh and the Malaki both belong to the Neocomian series, and are conformable with one another. The thickness of the Malaki where covered by the harder stratum is therefore most probably the same on the Temple Hill as on Olivet, viz, $\ddagger 0$ feet.

From these data may be constructed sections to a natural seale with the following result as to the levels of the beds on the west side of the Haram:-

East and west section, through Sakh- East and west section at Proruh
Bottom of Mezzeh, 2,435 ft. above sea
Bottom of Malaki, 2,390 phet's Gate. 2,370 feet above sea.
Thickness of Dolomite above )" 2,330 " valley bed $\} 40$ feet 10 feet

These sections depend on the levels of the Sakhrah and the Tanks 12,13 , and 14 ; but if they were based on the observations in the northwest angle the level of the Dolomite junction with the Malaki would be made yet lower.

The levels near the Bâb es Silsileh, where Mr. Fergusson places Antonia, are as given below, on the same construction as the preceding :-

| Bottom of Mezzeh | $\ldots .$. | $\ldots$ | ... | 2,380 | feet above sea. |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Bottom of Malaki | $\ldots .$. | $\ldots$. | $\ldots$. | 2,340 | , |

Thickness of Dolomite above bottom $2,3 \pm 0$ " of valley
....
10 feet
Now, as we know that the action of denudation on the Malaki and Mezzeh beds produces uniform slopes, and that cliffs are found only where the Dolomite comes to the surface-as observed on Olivet-we might expect a cliff near the base of the Haram Wall, and a gradual slope above it, where the soft chalky Malaki beds occur. The maximum height of the cliff would be only 40 feet (west of the Sakhah), its top being 50 feet below the Sacred Rock. But at the points where Mr. Fergusson places Antonia and the Holy of Holies, the cliffs would be apparently only 10 feet high, and their tops respectively 90 feet and 100 feet below the Sakhrah. Thus if the dip of the strata is uniform, the mean height of cliff would be only about 20 feet, its top being 70 feet below the mean surface, and 100 fect below the Sakhah. The existence of such a cliff would consequently have little bearing on the question of foundations.

## Georogical Sections tifrocgif Haram. Natural Scale.



Section east and west through Gakhrah.


Section east and west through P'rophet's Gate.


Section due south from Siakhrah.
Several indications may be noted as confirming this view with reapect to the unseen portion of the Temple Hill.

1st. The tanks and gatleries ruming in from the West Haram Wall, are lined with masomry, whereas, further east, where the rock is higher, thoy are simply cemented over the rough rock. This seems to indicate that the Western Tanks are not rock-cot, but only built in the made earth, and that the rock is consequently lower than the floms of these galleries.

2nd. It seems reasomable to supmose that had such at diff as is conjectured to exist on the west side of the Hamm actually oesured, the West Haram Wall would have been built upon it, rather than in the valley bed to the west of it.

3rd. Colonel Warren's shafts along the south wall indicate a gradual fall of the rock outside the Harm, and no clifl wats found towards the west.

4th. In Tank No. 24 (the only one towards the west where a rock floor has been found), the rock falls westwards at an angle of $30^{\circ}$, which if continued would strike the level of the Tymoram bed within the West Haram Wall, without necessitating any cliff or steeper dip.

This curious question has perhaps attained to greater importance than really belongs to it, for the top of the supposed clifif, if it existed, would be at least 50 feet lower than the Sakhrah, and 70 feet below the Barack Scarp, but the problem has a controversial interest, and the objection briefly stated to the cliff theory is that the action of denadation on
soft chalky limestone would render the preservation of a cliff highty improbable.

Edinburgh, Oct. 20th, 1880. (! R. (.

## NOTE ON KADESH BARNEA.

Tue recovery of the site of Kadesh Barnea is the most interesting question of the topography of the Sinaitic Desert, and any indication leading to a clearer understanding of the question will be of some value.

In the account of the sonthern boundary of Palestine (Numbers xxxio, 4 ; Josh. $x v, 3$ ), this site is noticed next to the Mateh Akrabbim, and the next points to the west are named Hezron and Adar, or according to the earlier passage Hazar Addar.

The Mataleh Akrabbim has been recognised to be some part of the ascent from the southern shores of the Dead Sea, towards the platean of the Negeb, and although the name has not been recovered, the great feature called Wady Fikreh appears to answer to the "Ascent of Scorpions" (Maaleh Akrabbim) and to the later Acrabbatene (1 Macc. v, 12 ; Ant. 812 Ant. V III), where Judas Maccabeus defeated the Idumeans.

It is curious that the identification of Hearon should have escaped even careful writers, but so fir as I am aware, and so far as can be grathered from Mr. Grove's articles in Smith's "Dictionary to the Bible," this site has not been recornised as yet.

The name Hezron is derived from the same root with Hazor, signifying "an enclosure," and the Arabic equivalent is properly speaking Mudêreh, having the same meaning and spelt with the Dad, which is one of the two Arabic equivalents of the Hebrew Tzadi, represented by the Z in Hazor (more correctly Khatzor), the other equivalent being the Arabic sud.

There are two cases in which the name Hazor is similarly preserved in Arabic, one being 'Ain Hadireh, representing the Hazeroth (phural of Hazor) which was one of the Israelite camps (Num. xxxiii, 17); the other being the Royal Hazor of Galilee, the name of which still survives, as discovered by the Survey Party, in the present Merj Hadireh, west of the Waters of Merom.

We should, therefore, expect Hezron to appear in modern Arabic under the form Hadîreh (plural Hadiir), and on consulting the map it will be found that the prominent ridge north of the head of Wady Fikreh and west of the main route from Petra to Beersheba is called Jebel Madireh. (See Murray's Map, or the map opposite p. 238 of C'onder's "Handbook to the Bible.")

If this identification be accepted, agreeing as it does very completely with the boundary line as usually laid down, then the site of Kadesh Barnea should be sought to the east of Jebal Hadireh, probably on the main route which ascends by the well-known pass of the Nukb es Safa, which Robinson strove to show to have been the Zephath of Judges i, 17, and the Hormah of Deut. i, 44. It is, however, by no means certain that the Hormah ("destruction") of the latter passage, is the same place,
while Zephath if identical with Zephathah (2 Chron. xiv, 10), is to be sought much further north near Mareshah.*

This identification of Hearon would appear to be fatal to the claims of 'Ain Kades as representing Kadesh, and there are, on the other hand, many indications which seem to place Kadesh Barnea on the route from Petra to the vicinity of Tell el Mill (Malathat), Arad (Tell 'Arâd) and Hebron.
(1.) Kadesh lay between the deserts of Paran and Zin (Num. xiii, 26 and xxx, 1), whereas 'Ain Kades must have been in the Desert of Shurthe most western desert district, extending from Beersheha towards Egypt. Shur is translated Khalusa by Rabbinical writers, in reference to the important town of that name (now Khalisa, the Roman Elusa) northeast of 'Ain Kades.
(2.) Kadesh was on the border of Edom (Num. xx, 16), as was also Mount Hor (verse 23), whence the vicinity of Kadesh Barneat to Petra might be inferrel, and indeed the Targum of Onkelos translates the name Kadesh by "Valley of Rekem" (or of Petaia).
(3.) Kadesh was evidently not far west of the Dead Sea, as its name occurs second on the border line as described from the Salt Sear west wards.
(4.) After the defeat of Isracl at Kadesh by the Amalekites, the pursuit extended to Seir (Deut. i, 44), or the ridge of Mount Hor.
(5.) The King of Arad attacked Isatel (Num. xxi, 1), which agrees with the supposition that they were advancing from Mome Hor towards Palentine by the great route which leads up the Nukb es Sufa towards Tell Armin.
(6.) The Israelites joumeyed from Ezion (ieber-at the head of the Gulf of Akalah to Kadesh, and thence to Mount Hor (Num. xxxiii, 35-37), their most probable route thus lying up the Arabah, which is both the easiest and the best-watered line of march towards the Palestine hills.

It is evident from a comparison of two accounts that Kadesh lay at the foot of a pass from the highlimds. The Amalekites "came down" (Num. xiv, 45) from the "mountain" in which they dwelt (Dent. i, 44), and the site should thas perhaps be sought further north than the 'Ain el Weibeh of Robinson, or at the foot of the Nukb es Sufa, cast of Jebel Hadireh on the main route. I may perhaps venture to suggest that Jebel Maderah, facing the Nukb es Sufa on the south, may represent Adar near Hezron (Josh. xv, 3). A visit to this pass would be of great interest, and the names Kadesh (Kudes), Mishpat (Miskufat), and Meribah (Neribeh or Umm Riaba) should all be songht for below the pass of es Sufa near the junction of Wady Fikreh with Wady el Yemen.

* The valley (Gia) of Zeplathah is mentioned (2 Chron. xiv, 10) as "at Mareshah." On the survey a ruin called Sifieh will be found $2 \frac{1}{2}$ miles north-cast of Mer'ash (Sheet XX), close to the narrow valley above whech stands Deir Nakhkhash. The name Scifieh ("Shining,") is rudically the same as Zephathah, and has the same meaning, and it seems clear that the "Ravine (gia) of Zephathah," is thus identical with the narrow valley below this ruin.


## THE

## PALESTINE EXPLORATION FUND

## NOTES AND NEWS.

## DEPARTURE OF THE NEW EXPEDITION.

Tar preparations for the new expedition to the East of the Jordan have oscupied the Committee since the beginning of the year. The Secretary of State for War has granted the services of Lieutenants Conder and Mantell, of the Royal Engineers, for this special service. The Society are fortunate in securing for their new Sursey the experience and skill of the officer who executed so large a part of the former work. Licutenant Mantell is a young officer who has gained great distinction during his Woolwich course. Permission has been also accorded to Pensioners (formerly Sergeants) Black and Armstrong to serve upon the Survey, and to draw their pensions while in Palestine. Thus the New Surrey will not only be carried out by the same officer who did most of the work on the western side of the Jordan, but the same two surveyors, Black and Armstrong, who measured the base line and began the triangulation in December 1871 will also begin the new work. At a mecting of the Committee called for the purpose on March 15, 1881, the officers received their final instructions, and started the same evening to carry out the next portion of the great work of the Society,-the Survey of the Holy Land. The two Surveyors followed a week later. The good wishes of all who read this announcement must be with them. They have begun a work which is full of peril and anxiety; it is for their friends at home to see that ithey are at least supplied with the necessary funds.

The total cost of the expedition, including the printing and circulation of Lieutenant Conder's reports, \&c., will amount to about $£ 3,500$ or $£ 4,000$ a year. It has been proposed that the Honorary Secretaries of the various towns where there is a branch of the Society shall invite their people to raise a certain sum yearly. The whole amount is a comparatively small one, and there should be no difficulty in getting it together. The carlier in the year subscriptions are paid the more convenient it will be for the Committee. In the present appeal for assistance,
the Committee do not, as before, ask their friends to give in faith, because they have now their great and splendid map to show as an earnest of the future. What has been done for Western Palestine shall be done, if possible, for the East.

Letters and reports from Lieutenant Conder may be expected about the middle of April. In order to meet the wishes of a great many subseribers, paragraphs of intelligence will be sent to all the principal papers.
M. Clermont-Ganneau, who arrived in Jaffa in February, had proposed to visit Jerusalem immediately on his arrival in order to examine the newly found inscription in the Pool of Siloam ; but he has unfortunately been laid up with an attack of fever, therefore we have not yet received any of his promised letters.

Professor Sayce, however, has sent the translation of part of it to the Athencum. His reading will be found on p. 72, together with a fac-simile of the copy sent by Dr. Chaplin to the Committee.

A remarkable illustration of the destruction of ancient monuments which sets in with every improvement in Syria, is illustrated by the "note" from the Rev. H. D. Rawnsley, published on p. 124. The Temple of Kades is now pulled down and destroyed. The ruins which have survived the violence of Romans, Jews, Christians, Saracens, and Crusaders, are gone to make foundations for a cotton store. The Temple and the sarcophagi are figured and described in the first volume of the " Memoirs."

Mr. Willinm Dickson, F.R.S.E., hns accepted the post of Honorary Secretary, with the Rev. Lindsay Alexander, D.D., and Mr. T. P. Johnston, for Edinburgh. Mr. W. J. Janson (the Close, Croydon), has accepted the post of Honorary Secretary at Croydon. The Rev. W. Walmsley has undertaken to act with the Rev. Canon Hornby at Bury.

It is matter of great regret that so many delays have occurred in the issue of the next edition of the map and of the Memoirs. As regards the former it will be delivered to those who are waiting for it in the course of a fortnight beginning about April 25th. The first volume of the Memoirs will be ready at the same time. It is also hoped to get out the next two volumes, namely, that of the Name Lists, and that of Special Papers by the end of May. The reduced map is also nearly completed, and the first edition will be ready for issue about the end of April. The price to subscribers, by application to the Central Ofice only, will be $6 s .6 d$. To the general public the price will be $1 \because s .6 d$.

The income of the fund from all sources from December 13, 1880, to March 16 th, 1881, was $£ 1,22910 s .9 d$. The amount in the hands of the Committeo at their meeting of the 15 th, was $£ 1,80015 \mathrm{~s}$.

Mr. Saunders's "Introduction to the Survey of Western Palestine" is now completed, and will be published immediately. Its history has been already told. Mr. Saunders was asked to write a pamphlet on the Physical Geography of Western Palestine from the Great Map. He undertook the work, which, it is unnecessary to explain, had been impossible before for want of such a map. But the pamphlet became a book, and the description has swollen into a detailed examination of the country, which is the most important result yet obtained from the Survey. It was intended to present the pamphlet to all those who asked for it. The book will be sent free, therefore, to all who up to this date (April 4th) have asked for it, but to no others.

It is most desirable on all accounts that the Map and Memoirs should have as wide a circulation as possible. The Subscribers to the Fund may greatly assist in this object by advising that they be placed in public libraries, school and college libraries, and institutions.

It it also greatly desired that all those whose contributions have enabled this great work to be completed, may have an opportunity of seeing it, Arrangements have been made with the Rev. James King, of Berwick, for explaining and lecturing on the Map and its uses. The Rer. Henry Geary is also ready to give one evening in every week to the Societs, provided he be not invited to go too far from London. The Rev. Horrocks Cocks, Egham, has also kindly offered services in lecturing on the work of the Society.

A Cheap Edition of "Tent Work in Pulestine," has been published by Messrs. Bentley and Son. All the small illustrations which were in the Librory Edition, and two of the full-page drawings, will be found in the new Edition, which has been carefully revised by the author. An additional chapter has also been added on the "Future of Palestine." The work will be read with greater interest now that the progress of the Survey may be followed on the Map.

It is suggested to subscribers that the safest and the most convenient manner of paying subscriptions is through a bank. Many subscribers have adopted this method, which removes the danger of lnss or miscarriage, and renders unnecessary the acknowledgment by official receipt and letter.

Subscribers who do not receive the Quarterly Statement regularly, are asked to send a note to the Secretary. Great care is taken to forward each number to all who are entitled to receive it, but changes of address and other causes give rise occasionally to omissions.

While desiring to give every publicity to proposed identificntions and other theories advanced by oflicers of the Fund and contributors to the pages of the Quarterly Statement, the Committee wish it to be distinctly understood that these rest solely upon the credit of the respective authors, and that by publishing them in the Quarterly Statement the Committee neither sanction nor adopt them.

## MEETING IN EDINtburgif.

A very crowded meeting was held in the Masonic Mall, George Street, Fdinhurgh, on Tuesday, Webrnary 22, on the Proposed Survey of Eastern Patestine. The Chair was taken by Sir James Gardiner Baird, and among those who were present were:-

The Rev. Dr. Main, Moderator of the Free Church; Principal Rainy, Bishop ('otterill, Rev. 1)r. Teape, Rev. Dr. A. Thomson, Rev. Professur Blaikie, Rev. Dr. R. Macdonald, Rev. Dr. Taylor, Rey. Dr. Robertson, Rev. Professor J)uns, Rev, J)r. Goold, Rev. Dr. Cazenove, Rev. Dr. Lindsay Alexander, Rer. Dr. Wylie, Rer. Alex. Whyte, M.A.; Rev. T. B. Johnstone; Rev. W. Turner, Rev. C. G. Scott, Rev. Thomas Brown, Professor Maclagan, Dr. Rubert Young, Charles Cowan of Westerlea, John Scott Moncrieff, William Dickson, Surgeon-General Fraser, C.B.; John Rogerson, Merchiston Castle; John M'Candlish, John Mnller of Leithen, Edward Caird of Fimant, James Sime, Craigmount ; '1. B. Johnston, Jown Cowan, Beeslack, William Ferguson of Kinmundy, W. F. Burnley, D. G. Thomson, John Drybrough, Colonel loung, R. P. Simpson, and others. There was a good attendance of the public.
1)r. Main having openel the meeting with prayer,

The Chmmas intimated that apologies for absence had been received from Sir John 1). Wauchope, Mr. Macfe of Dreghorn, Rev. Principal Cairns, Rev. 1)r. Horatins Bonar, Professor Grainges Stewart, General Nepean Smith, Mr. Stuart Grey of Kiafams, Mr, O. F. Barbour, and others.

Dr. Lininsay Abranimer, one of the Honormy Secretaries of the Palestine Dixploration liund, after reading a letter of apology for absence from $\operatorname{Sir}$ R. Christison, explained that the meeting lad heen convened by the Committee of the fand to enable hicutenant Conder to explain what he had ulready done, and what he hoped to do in his future explorations. The fund had been successful in securing the services of the officers of the Royal Engineers in their Survey of Palestine, and how satisfactorily they had done their work they well knew. They now possessed a full and accurate map of Palestine-of that part lying to the west of the Jordan. In referring to Licutenant Conder's share in that work and the eminent qualifications he possessed for it, Dr. Alexander remarked that he had been suceessful in identifying more than 100 places which were mentioned in the Bible, but of which hitherto we had known nothing but the names. He hoped Lieutenant Conder would receive a hearty entombsement to go forward with his work, and conter on his new enterprise, knowing that he had the sympathies of the Edinburgh public with him. (Applause.)

Lieutenant Conder, who was received with applanse, said that he desired to say something in illustration of the work already done and the expectations they had for the future. The credentials he brought consisted of the map of Palestine before them. It took seven years in exceution-four years in the field and three in Fingland - and showed the whole of Palestine from Inan to Beersheba, west of the Jordan. It might appenr to those who did not study the historical beoks of the Bible, neither interesting nor important that a large ecale map of Palestine
should be made, but every student knew that there was a very great deal of minute topography in the Bible which it was most necessary to investigate, and the Survey afforded a guarantee that every corner of the country had been seen and explored by one of the officers. The object for which it was determined that the Survey should be undertaken was mainly this, that although many travellers had gone through the country they always followed the same route, and it had been desired that every part of the Land should be explored with equal care and caution. One result of what had already been done was, that they were now able to lay down the tribal boundaries west of the Jordan with an amount of aceuracy which formerly would have been quite impossible. The comparative sizes of the districts allotted to each of the tribes had thus been calculated, and when the population was compared with the areas, they found that the ancient population of Palestine must have been much the same as now. The populous parts of the Bible were the populous parts still; the thinly-populated Bible districts were the sparsely-peopled districts now. Where the population had been thick, there were enormous quantities of ruins and ancient sites. They had identified 140 towns on the west of Palestinetowns in regard to which no question had been raised as to their identification. There were others which were still open for reconsideration-but as to all the important sites in the Bible there was now no doubt about them. 620 towns were mentioned in the Bible ; 430 of these had been fixed. and of these 140 had been identified by the survey. To the east of the Jordan there were about 200 Bible sites, and of these only 70 were yet known. The work still to be overtaken was important, and though it was said to have a greater scientific interest and less Biblical interest than the west, there were many important Biblical incidents and places associated with the east - the flight of the Midianites, the flight of David from Jerusalem, the wood of Ephraim, Ashtaroth, Penuel (which took its name from the vision of Jacob), and many other Old Testament sites, of which they knew nothing as yet. The survey of the east of Jordan would include an area of 5,000 square miles; it was expected to occupy three seasons in the field, and probably two years to work out at home, so that in the course of five years they hoped to have the companion survey of Palestine east of the Jordan. But the question of topography was not the only one that came within the limits of their explorations. He referred to the probability of obtaining ancient inseriptions on stones, and a great deal of interest and light might be thrown on Bible times by a greater knowledge of the habits, customs, and language of the present inhabitants of the country. They had found during their past survey so much in common between the present peasantry and the ancient Canaanites that they expected even greater results to the cast of Jordan, where the tribes were less under Jewish control.

The Rer. Alexander Whyte, Free St. George's, moved "that this meeting cordially approve of the resolution of the Palestine Exploration Fund Committee that the survey of Eastern Palestine be proceeded with without delay, and they resolve that efforts be mude to increase the interest taken and the contributions to the fund in this city." Mr. Whyte pointed out that great and raluable results had already been gained, but that the work, was little more than half finished, and it would be a shame to stop until all that country had been surveyed. He had been astonished to find that all the operations of the fund had been carried on at so small a cost as $£ 3,000$ a year; and he hoped that after this meeting
the contributions from Edinburgh would bulk more largely than they had ever done before.

The Rev. Dr. Andrew Thomson seconded the motion, which was adopted.
The Rev. Dr. Cazenove moved that the thanks of the meeting bo given to Lieutenant Conder for his interesting and instructive address, with a respectful expression of our earnest wishes for his welfare, safety, and success in the important work to which he has again been called. (Applause.)

Principal Rainy seconded the motion, urging the community of Edinburgh to take a practical and creditable interest in the work by giving pecuniary support to the Society, and enabling them in a suitable manner and with suitable energy to carry it through. It was a work in which every Christian of every name could and ought to join together as with one heart and one soul. (Applause.)

Lieutenant Conder having briefly replied, thanks were awarded, on the motion of Mr. Johm Miller, to Sir James Baird for presiding, and the meeting separated.

Other meetings have been held at Croydon, when the Rev. Itenry Geary delivered an address on the new Map; and at Eolton, where the Rer. James King spoke on the general work of the Society. Meetings are also arranged for Romsey, Curdiff, Winchester, and other places.

## THE INSCRIPTION AT TIIE POOL OF SILOAM.

In the month of August last year the Committee received from Jernsalem an amomement of the discovery of an inscription in the passage leading from the Pool of Siloan to the Virgin's Fountain. A squeeze accompanied the letter, but this was imperfect, and only a few letters here and there could be madeont. The Committee immediately authorized Dr. Chaplin to draw upon them for such money as might be necessary to get the water lowered, and a better copy taken. This work was entrusted to Herr Schick, but it was not until Jamary that he succeeded in procuring it copy of the inscription; this was not a squeeze, but a so-called fict-simile, in other words it had been copied from the rock by the light of a candle. Tracings were made of the fuc-simile and sent to various scholars, but no one ventured from such sleuder materials to attempt a reading. Meanwhile M. Clermont-Gannean, who hat heen appointed French Consid at Jaffa, started for that place early in February with the intention of proceeding immediately to Jerusalem for the examination of the inscription. Unfortmately he has been laid up with illness. Another and an improved transcript of the inscription arrived on the lst of March, which was also copied and circulated, but with no result. This second copy is jublished with this number.

Professor Sayce, however, has been able to examine and copy the inscription on the spot, and has sent an important letter on the subject to the Athenerm, a portion of which (hy permission of the proprietors) we extract.

## I.

An accident which befel me in Cyprus has brought me unexpectedly to Jerusalem, and given me the opportunity of examining the inseription lately discovered in the conduit of the Pool of Siloam by Herr Schick. The inscription is the most important yet found in Palestine, as it belongs to the period of the kings, and is written in the oldest known characters of the Phenician alphabet. As the readers of the Athencum are already aware, the inscription is incised on the lower part of a tablet formed by catting the rock wall of the conduit to the depth of alout an inch. It is engraved on the east side of a rock-hewn passage, through which the water is conducted from the north into the Pool, and about twenty-five paces from its entrance.

I have paid two visits to the inscription, and succeeded in copying the greater portion of it. The task of copying, however, is a difficult one. The water flows past the foot of the inscription to a depth of over four
INSCRIPTION FOUND AT THE POOL OF SILOAM.
inches，and in order to copy it I have had to sit in the water in a cramped position for more than an hour at a time，making out the letters，which are filled with silica，by the dim light of a candle．Had it not been for the kind offices of my companion，Mr．John Slater，who held the candle for me while I copied the characters，I should have found the work even more troublesome than I actually did．

The upper part of the tablet is smouth and plain，though a graffito of three lines is scratched upon one part of it．Whether this is in any in－ telligible system of writing I cannot say；some of the letters look like cursive Greek，but at the beginning of two of the lines the Aiabic eiphers 1843 seem to occur．The lower part of the tablet is occupied by the ancient inscription，which consists of six lines of about thirty－five letters each． The letters are of a considerable size，and must originally have been very clear．Now，however，in consequence of the silex with which they are filled，the difficulty of obtaining sufficient light to see them，and the friction of the water，it is by no means easy to make them out．On the left side a fracture of the rock has caused the loss of several of the characters in the first three lines．Below the inscription comes an orna－ mental finish in the shape of two triangles，which rest upon their apices， with an angle between them similarly resting unon its apex．

The forms of the charaters are identical with those of the Moubite Stone， and the words are similarly divided from one another by proints．One of the characters，which occurs at least three times，is new to me；I conjec－ ture that it may represent the missing teth of Mesha＇s inscription．＇The first line begrins with the word הコアコ（ $\rightarrow$ ）；then follow，after two words


 The fourth line begins with the word 7 g ；then come，after a few doubt－

 Has ity ．．．．．．．The sixth line has been so much injured by the friction of the water that the only words in it which I can make out with certainty are 4 ） 4 ．I can find $n 0$ words in the inscription for Jerusalem， Judah，or ling（ $\mathbf{D}^{2}-\infty$ ），nor any proper names．But the forms of the letters prove that it camont be later than the time of Hevekiah，and the ＂three cubits＂mentioned in the seeond line，as well as the＂thousand cubits＂of line 5，will probably afforl a che to the meaning of the inscription． It is clrar from the word クフォコン in the fifth line that the constructor of the conduit speaks in the first person．

F＇ebmary T， 1881.

## II.

The weather detained me at Jerusalem a day longer than I had intended to be there, and I accordingly gid another visit to the inscription about which I have already written. It was well that I did so, as it enabled me both to comrect my previous copies and to fill in some of the lacunat in them. In fact, I may say that I now have as perfect a copy of the inscription as can well be obtained ; very little of it is missing, except where a fracture of the rock has occurred on the left hand side of the first three lines. I hope to place my copy, along with a translation of it, at the disposal of the Palestiue Exploration Fund upon my return to England.

Meanwhile I must correct some of the statements I made in my previous letter. The more perfect copy I now possess shows that the inseription is not in Hebrew, as I imagined, but in Phomician. The Phoenician relative pronoun $\mathbb{H}$ occurs more than once, and there are other peculiarities in the language which indicate that the author was a mative of the Phonician coast. Un the other hand, as I have already stated, the forms of most of the letters are identical with those of the Moabite Stone, though there are two, or perhaps three, which seem to bestill more archatic than those of Mesha's inscription. I do not see, therefore, how the inscription can be dated so late iss the time of Hezekiah and his suceessors, when the destruction of the kinglom of Israel renewed the intercourse between Judah and Phonicia, which had been broken off by the revolt of the ten tribes. Consequently I have little hesitation in assigning it to the age of Solomon, or possibly of David (2 Sam. v. 11), when Phonician workmen were employed in the construction of the public buildings at Jesusalem. In this case it will be the earliest specimen of Phonician writing which we possess. Of course it is just possible that the inscription may be of yet older origin, and lee composed in the dialect of the Jebusites ; but this is in the highest degree improbable.

The iuscription is merely a record by the master mason of the excavation of the condrit in which it is found, and which leads from Saint Mary's Pool to the Poot of silem, a distance of 586 yards. I was wrong in stating that it was written in the first person, as the word which I read


## 

"And the waters flowed from iheir outlet to the lower pool for a distance of a thousand cubits." The inscription will be of greater value to the topographer than to the historian, as it contains the names neither of royal nor of other personages. Mr. John Slater and myself attempted to walk up the conduit as far as its exit in Saint Mary's Pool, as had ahready beend done loy Rohinson and others, since we thought that a second inseription might be discovered in some other part of it, now that the level of the
water ruming through the rocky chamel has been so much reduced by Mr. Schick; but we were stopped half-way by the lowness of the roof, which would have obliged us to crawl on all fours though a deep deposit of soft mud.
A. H. Sayce.

Februery 26, 1881.

## ELLHARRAH.

By Cyril Graham.
In the few remarks which I wish to make on the subject of the proposed explotation of those regions which either lie beyond Jordan or eastwards to the north of it, I shall confine myself to the country with which I am best acquainted, the Haurân, old Bashan cut ofl from the great prairie which extends to the Euphrates, and the singular district known to the Arabs as el-Harrah, with the ridge of hills es-Saffih, which I helieve never were visited by a European before me.

The summits of es-Safah can be seen distinctly on a clear day from the Antilebanon, and were represented until 1857 as two conical tells or hills in the most recent of maps in the book of the then most recent of explorers, Professor Porter.

My journey revealed the fact that they were merely the highest points of a range which extended over mayy miles. Like the Lejah, indeed, it seems to be a duplicate of that womderful upheaval; it is entirely volcanic, and I well remember sir Roderick Murchison telling me that both the Lejah and the Safah were monstrosities of Geology.

An account of my travels will be found in the "Journal of the Royad Geographical society" of 1858 , and rough copies of the inseriptions to which I am going to allude presently, in a number of the "Deutsche Morgenlandische (iesellschaft," 1857 , and in the annual volume of our own Royal Asiatic Society for 1859.

I do not suppose, nor do I wish, that the resmmption of our work should commence with Bashan and its wide outlying countries. Gilead, and Moab, more accessible, should be at first thoroughly explored, and every relic, whether of architectural structure, or of tablets or iuscriptions on the stones lying in situ should be carefully drawn and copied ; and in the case of the latter it is of the utmost importance to philologists, and therefore to the object we have in view, to obtain rubbings or impressions from them. I need scarcely remind those who are as well acquainted as I am with the difficulty of a mere copying of unknown symbols, how tedions such a process is, and how uncertain must be the results after all the labour which has been bestowed upon it.

Amongst the places to which I think attention should be given in this southern section of our work, I pre-eminently place Kerak. Its history
from the times of the Judges, and its peculiar position, which defied the attacks of armed enemies, rendered it always a place of high strategical importance. The Crusaders considered its capture one of their greatest exploits; but neither the kings of Judah nor of Edom, the invalers from the other side of the desert who annexed all the country to the west of the Jordan, or Anushirvâu, or the Saracens, or the Franks seem for any length of time to have been its absolute masters.

Still less is this the case with the present nominal owners of Moab. A firmîn of the Sultan at Kerak is and has been for many a long day a worthless bit of paper, and I am ready to suppose that such as it is, the autonomy of Kerak is one of the oldest in the world. To gain access to this inhospitable crag, black mail must be paid, and to prosecute deliberate researches there, a liberal fund must always be at the disposal of our explorers. I do not mean to say that money should be as lavishly expended as it was by M. de Saulcy ; but we must be prepared, in order to ensure the safety and success of our schemes, to advance a larger sum for Bakhshish than that which was found necessary in our attempts on this side Jordan.
2. Then come Pisgah and Nebo, the sites of which seem little doubtful. Good observations taken from the summit, whence Moses viewed the Promised Land, would naturally be of inestimable value.
3. Heshbon and the whole tract running up to Un el Jemâl, Beth Gamul, standing alone in the plain with its walls and its towers, and its streets, and its houses, with their stone doors and windows still nearly perfect.

This place, and numbers of others I could mention, such as Um erRumin, Um el-Kotein, were included in the Arabian kingdom of the Dynasty of el-Hareth, the founder of which, the Aretas of the Acts of the Apostles, was ruling there at the time of the conversion of St. Paul. And it has long been my opinion that it was in this then densely peopled Arabia, that the Apostle spent his two years in active work, preaching the Gospel, and not in solitude and contemplation in the Petraean Desert.* At all events, history tells us that almost from the begioning these elHareth were Christians ; they are known to Arabian Chroniclers as the Christian Dynasty, and it is not too much to assume that a large number of the suljects may have adopted the creed of their masters. The Saracenic invasion, which drove everything before it, must have scattered inhabitants of these outlying and exposed districts. We have a valuable catalogue by an Arakian geographer of the names of places both to the east and west of Jordan, but the list ends with Bozrah and Salkah and the Jebel Haurân, so that it is not unlikely that Um el-Jemal and its neighbouring towns, and indeed all that region south and east of Salkah, had become abandoned by the end of the 7th century. If this is so, the discovery which I made of crosses painted in red upon many of the houses in Um el-Jemal may attest the fact of the introduction there of Christianity

[^0]at a very early period; and indeed when I saw them I could not help saying to myself that perhaps I might have before me the marks of the first fruits of the labours of the greatest of Missionaries. However that may be, this branch of the whole subject connected with the Exploration of the East deserves our careful attention.

In the northern country Golan-el Jaulan-should be thoroughly ransacked. It is easily traversed, and hundreds of ruins, with the Semitic names attached, either to the debbris, or if there are none, to the tells, which represent bygone towns, will yield us a fruitful harvest.

The Lejah Argob would employ our energies for, I must say, an indefinite period; but while one party is examining this, the inverse of our pleasing ideal of an oasis, another might be collecting relics from the Jevel Haturin.

Were our funds unlimited, I could imagine another expedition working simultaneonsly with that to Bashan, in the districts to which 1 first referred, the Harrah and the Safah. Nearly every stone in certain localities there is inscribed. At one place in which I passed the night, I might say that every stone was trying to tell a story of the past. The basaltic lumps or blocks which crop out of the soil, or with which it is absolutely oversmead, are at intervals covered with rough pictures of beasts and other objects with a cursive character surrounding them. I never shall forget my first introduction to these curious emblems. After a ride chiefly by nights, for the days had to be spent in some hollow so as to escape the olservation of two hostile tribes of Arahs, one to the north, the other to the south of us-ruming the gauntlet of them in fact-my attention, on rounding the southern extremity of es Safîh, was attracted by a stone which had scratched upon it the representation of a palm tree, and what was evidently a legend of some kind.

I searched in vain for other indications of a like nature, and resumed my way, "coasting" the long island of basalt. Presently I came to another solitary inscribed stone, aud at an equal interval upon at third. I should here remark that a line, evidently artificial, in other words a clearing, existed through this wildemess of black boulders, and from its bearings I came to the conclusion, that I was possibly on the old highway which the world pursued between Bosrah and Tadmor in the palny days of those great cities, and that my solitary stones were "mile-stones." 'Towards nightfall I reached aruined town known to the nomads as Khirbet-el-Beida-the White Ruin.

The houses were of basalt as in the Hauran, with stone doors and windows, but it derived its name from a structure of white marble, or quasi marble, the calcareons limestone which is derived from the hills about Tadmon. It is called es-Serai, the Palace, and like everything else in that part of the world, its erection is ascribed by folklore to Chosroes, Anushirvin, or to Timurlenk!

The building was rapidly falling into decay, not from the assaults of man, but from generations and generations of summers and winters. A fine hunting scene was sculptured on one face of it, greyhounds
attacking a lion and a panther, which reminded me of an Assyrian tablet; and I found other stone lions about the place. The legend concerning the Kirbet-el-Beida I think I gave in the number quoted of the Royal Geographical Society.

To the north of this second Argob lies Seis or Seyis, where there is water; but for this very reason, I could not then approach it, for the wells were occupied by our enemies. I therefore struck eastwards and south-eastwards, and came, to my unexpressible delight, upon inscriptions without end. One of the most interesting spots which I visited is enNemareh, where lived once upon a time, a lady and princess celebrated in Arab song as Nimret bint en-Namur, Tigress, daughter of the Tigers.

Although what I have related is on record, the materials are so old ind so scattered, that I venture to think that I am doing service in recalling to the recollection of those who have read my papers, and in placing before those-- the large majority of our members who have never heard of them or thought much perhaps of such outlying districts as the Harrah and the Safah-the fact that after we shall have explored Moab, Gilead, Golan, and Bashan. another field of such an expanse will present itself as to tempt us in our enthusiasm to attack Tadmor, the Euphrates, and ultimately the Nejd.

The character on the stones represents one of those many cursive Semitic writings which are to be found in a form more or less varied anywhere between Yemen and the "Great River."

The story of Job, so wonderfully and graphically told, belongs to the Haurân. Local tradition makes him native and Sheikh of ancient Kenath, now Kenawat. His friend Bildad the Shuhite came from Suweidah, three or four hours' ride from that plare; whilst the name of Teman still subsists, the probable birthplace or residence of Eliphaz the Temanite.

One of the greatest of geographers, the late Karl Ritter, who was one of the first to investigate my researches, went so far as to surgest to me, that the "Sabeaus" mentioned in the book of Job might be the Arabs of the Safâh.

Since my time, Wetzstein, de Vogiié, Waddington, and a few others have thrown a certain amount of light on this north-eastern country.

Their works, especially those of M. de Vogiié, are of high value, and should be carefully consulted by any officer who on our behalf may enter those regions.

## TIFE OLD CTTY OF ADRAIA (DERA) AND THF ROMAN ROAD FROM GERASA TO BOS'TRA.

By the President of Quefn's College, Belbist.

A shont extract from a journal written during a tour east of the Jordan, in the year 187.4, may be interesting to the readers of the Quarterly Statement, in view of the proposed Survey of that country. So far as I know, no other traveller has followed my route from Gerasa to Dera and Bostrin. It is on the very outskirts of settled habitation, and not always safe. My escort consisted of the Sheikh of Suf, his brother and one or two retainers; and we encountered no difficulty.

Leaving Gerasa, we rode over a low rocky ridge, thinly sprinkled with ilex, and then up a glen which gradually narrowed into a ravine. Traces of a Roman road were visible here and there cut in the rock. About five miles from Gerasa we reached the top of the pass, and had a splendid view southward, down the glen to the valley of the Jabbok, and north-east down another glen towards the great plain of Arabia. We entered the latter glen, still following the Roman roat, having worded viders on eath side, and occasionally a few patches of cultivated ground. We sitw several ruins, but no modern habitations. The calls of shepherds, and the tinkling of bells were heard amid the hills, and a monted Arah appeared at intervals on some commanding spot, as if watching our little caravan. As we descended, the glen opened, the forest became less dense, flocks and herds were seen on the pastures, and a few husbandmen were at work in the fields.

At length we emerged from Wady Warrin, for such is the name of this beautiful valley, and entered the open plain-a vast expanse of rich pasture land, extending on the east and south to the horizon, while on the west it rises by an easy slope to the wooded hills of Gilead. A short distance to our right lay the ruins of Kubab, a small village apparently once fortified ; or it may perhaps have been one of those walled caravanserais which one so frequently meets with on the borders of Arabia. Around its wells and watering-troughs were collected the vast flocks of the Bene Hassan Arabs, whose tents we satw in a circlet out on the plain. The ground along the foot, and on the lower slopes of the hills, is extensively cultivated by them.

We rode northward, still in the line of the old rom, passing a Roman milestone beside a heap of ruins. Traces of villages, now deserted, were visible everywhere. Two, near the road, named Ithamah and Usileh, were marked by large green mounds honeycomhed with caves. I observed in this region that most of the villages are, at least in part, subterranean, the houses being excavated in the calcareous rock, with nothing above ground to mark their site except mounds of rubbish. One cilled Sâl,
heside which we encamped a fortnight later, when on our way to (ximdara, had a population of some forty families, all 'Troglodytes.

Two hours' smart riding from Wady Warrân brought us to Remtha, a populous village built on a little isolated hill in the midst of a cultivated plain of unsurpassed fertility. Here also wore large numbers of caves, some used as dwellings, others as gramaries. We now ascended a low hlak ridge, as sur from the Gilead ramge, and had from the top a marnificent view of the plain of Hauran, bounded on the east by the mountain range of Bashan, and on the north by Hermon. I was greatly struck with the change which had passed over that whole region since my previous visit in 18.5: then mosit of it was desolate, now it was almost contirely under cultivation. Signs of industry and growing prosperity were every. where visible. In a few minutes more we entered Derch, having been just seven hours and a-half in riding from Gerasa.

The ruins of this strange old city I estimated as about two miles in circuit. They cover a semicircle, romed the are of which sweeps Wady Zedy, a glen from in to ( 50 feet deep, with steep, and worasionally procipitous hanks, and a little stream flowing through it. It is a simgular fact that while the rock in the sides of the glen is either white limestone or conglomerate, the buidings are composed, like those in almost all the other towns of Bashan, of black basalt. The present village, which contained some 50 or 60 families at the time of my visit, occupies but a fraction of the old site. Most of the inhabited houses are modern; built, however, of old materials, with flat stone roofs rudely constructed, and oncasionally stome doms. There are many other honses, in fact long lines of them, evidently mum more ancient, hut now ahmost completely covered over by the accumulation of ruins and rubbish. Dera is in this respect in part a buried city. I entered one or two of those cavelike houses, and found them similar in plan and style to those I had seen in other ohd cities of Bathan -massive watls, constracted of romghly hewn hockis of hasalt, stone doors of the same material, and rofs formed of
 fround, as is evident from the position of the doors ; but it is probable that there were other dwellings near them excavated in the soft rock. We fomm it danseroms riding ower the site, as portions of the ohd roofs are apt to wive way mater the homes' feet.* bxatration here might throw some light on the architecture and antiguities of Bashan. But I hera is mot the only town in which some of the ohd honses are now horited. I have seen honses in Boarah, Suwedeh, Nejranh, and other places, contombed under heaps of ruins.

In the centre of the town is a large building with an open court

* When at Dera I heard nothing of an "underground city" such as is deseribed by Wetzatein in his Reiseforicht. There are certainly many caves, as there are at most other towns and villages in this region, which were used in part as dwellings, and in part as granaries. But Dera is one of those ancient pites which would well repay excaration.
surrounded by rude choisters. On one side is an old church or mosque, the roof of which is supported by six ranges of short columns and piens, all evidently taken from more ancient structures. I saw on some of the stones and shafts, Phoenician letters rudely cut, as if masons' marks, and I also found some imperfect Greek inscriptions bearing dates of the Bostrian era.

At the western end of the town, is a large reservoir, partly hewn in the rock, and partly lined with fine masonry, apparently Roman. Beside it are the remains of baths. The water was brought to it by an aqueduct from the fountains of Dilly, about 15 miles to the north, and appears to have been conveyed across the glen through air-tight pipes or perforated stones. Another aqueduct, also apparently of Romau origin, brought water into the town from the east, but I did not follow it to its source. On Smith's map an aqueduct is represented as running from Dera across the phain by Remetha and sal towards Un Keis (Ciadata). Of this I saw no traces whatever, and from the nature of the ground I do not believe an aqueduct could be carried along that line. In the bed of the glen to the east of the town is a well, beside which are some ancient remains, including a sarcophagus of basalt, ornamented with rude sculptures.

Dera I believe to be, not the Edrei of the Bible, the capital of the giant Og, but the Adraha of the Roman Itineraries, which is located by the Peutinger Tables, 16 miles from Capitolias, and 24 from Bostra. It became an episcopal city of the province of Arabia, and its bishop Uranius was present at the first Council of Constantinople, A.D. 337.

From Dera we took a straight course to Bostra, partly to trace the old Roman road, and partly to examine a section of the country which, so far as I knew, had been hitherto unexplored. We encountered no difficulty, although on the very outskirts of settled life. The Roman road was visible from the moment we crossed the glen, and we followed its course to the gate of Bostra, to which it runs in nearly a straight line. The ancient pavement is in places perfect; and the road crossed the Zedy by a Roman bridge of a single arch, in excellent preservation, with the ruts of chariot wheels several inches deep on its pavement. Villages, some in ruins, some partially inhabited, dotted the whole country to the right and left; and large sections of the soil were under cultivation. We saw husbaudmen, and shepherds, and yokes of oxen in the fields; while atway on the southern horizon we also saw the black tents of the Bedawin. We halted for a time at Ghusam, at large village with old and massive houses. The gate admitting to an ancient court-yard wass still perfect. It was of stone and double, each leaf measuring 7 feet 2 inches high, 3 feet wide, and 8 inches thick; and it was so well baldanced on its pivots above and below, that a man was able to shut and open it with ease.

Not the least interesting part of the Survey of Eastern Palestine will be the tracing of the Roman roads, and the exploration of the strange old cities. I venture to predict that some most remarkable discoveries will be made in the new Survey.

## SUN WORSHIP IN SYRIA. By C. R. Conder, R.E.

Tre subject of the aboriginal superstition of the Syrian tribes is one of great interest but of some difficulty, as many remains and objects supposed by travellers to be relics of Sun-worship have been found to be very modern, while millstones and oil-rollers have often been mistaken for solar emblems, and ruined limekilns for Sun Temples.

Nevertheless we know for certain that the astronomical worship of Babylon, of the Hittites, Phoenicians, and Egyptians, was also the Canaanite creed : that Saturn or Moloch was worshipped as a Sun God by human sacrifices; that the licentious rites of Ashtoreth or the Veuus Pandemos were observed even in Jerusalem ; and that Thammuz, the Syriam Adonis, was annually mourned both on Lebannn and in Judea. We know that the shrines of these divinities, both at Jerusalem and also at Bethel and on Carmel, stood side by side with the altars of Jehovah; and we should therefore naturally expect that some traces of this idolatrous worship should still exist in Palestine.

Taking then in order the chief centres of Baal worship we must commence first with Bethlehem, where St. Jerome assures us the rites of Thammuz were practised in his own time. Here we still find a sacred grotto which early tradition (not however supported by anything in the four Gospels) has now consecrated as the cradle of Christ. It must not be forgotten that the Sacred Cave forms a very important feature of the ritual of sun-worship, and the comnection with the legend of Thammuz can hardly be accidental. Not only was the cave of Mithrah an essential feature of the rejoicings of the Dies Nutalis Invicti Solis, but the Cbapel of Moloch (mentioned ly Kimehi in commenting on Mishna Simhed vii, 7) seems to have been a similar subterranean sanctuary; while the idea of the sun issuing from a cave is traced back even earlier than the Babylonian times to the Accadian name for the winter solstice month, "the Cavern of the Dawn." The peculiar rites which are celebrated at the Latin Christmas ceremony at Bethlehem-like the Holy Fire issuing from the Cave-tomb at Jerusalem- have striking affinities with the ritual of Mithra; and we shall find that throughout Syria the Sacred Cave almost always oceurs in connection with Sun Temples.

At Jerusalem itself the Temples of Ashtoreth and Chemosh (Venus and Saturn) stood on 'Olivet in Solomon's time ; and the rounded summit of this mountain still supports a round building in a round court covering the sacred footprint now said to lave been that of Christ. Beneath this sanctuary there is a sacred vault or cave called Rahibat Bint /lasan by the Arabs, the Cave of Huldah among the Jews, or of St. Pelagia among the Christians-in each case a female deity. The site thus chosen for the Ascension does not agree with the words of St. Luke (xxiv, 50) where the event is recorded as having occurred near Bethany; and it is perhaps more probahle that the old sun Temple of Chemosh stood on this hill-top. The
modern name of Olivet is et Tor-a Chaldee word from a root cognate with Tgur (" a rock ") and not to be confused with Thor, a bull. Tor is the term applied to rounded or isolated hill-tops throughout Palestine, as for instance at Gerizim and Tabor, and most of these Tors are still, and have from remote antiquity been, sacred mountains. The sacred footprint is moreover not an invention of mediaval monks, but a common feature of Indian nature worship (see note below). In Jernsalem we have another sacred rock with a sacred footprint, namely, the Sakhrah with the Kadam on Neby or "prophet's footprint," which in the 12th century was called the footprint of Christ. Here also we find a sacred cave; and in the Aksa mosque is another footprint, namely the K'adam Sidna 'Asia, which bas been described in its present position since 600 A.D.

North of Jerusalem we find the site now generally recognised as Nob; namely, the village of Shafat, where Jewish tradition states that the Tabernacle once stood (see Mishma Zebakhim xiv). The name Nob is radically identical with Neby, and also with Nebo the Assyrian Mercury. This deity was symbolised by a stone or a stone-heap, and he was one of the gods of the pre-Islamite Arabs, who worshipped stones (boetuli or stoneheaps) as representing Allah and sacred trees (the" Asherah or "grove" of the (anamites) as symbolic of Allat the female deity The worship of Mercury included the throwing of stones on a heap as mentioned in the Talmud (Sinned vi, 7) and also by classic authors ; and it is of interest to point out that there is a most remarkable natural monument such ats was understood by the name Zikr or Ed-a high conical rock peak (as noticed under the title Khurbet es Som'a, "ruin of the heap," in the Memoir to sheet 17) immediately east of the road to Jerusalem at Sh'afat.

Pethel was also a centre of idolatrous worship side by side with the "School of the Prophets." The Altar of the Golden Calf stood here, as well as the cairn which Jacob raised and anointed. Colonel Wilson was, I believe, the first to point out the curious circle of stones immediately north of the village (see P. E. F. Photograph) which though much decayed reminds one irresistibly of the rude stone temples of our own country.

At Shiloh we find no marks of Sun worship, but the lofty mountain called T'ell 'Asur north of Bethel is no doubt the old Baal Hazor or "Baal of the enclosure," an ancient circle of stones now destroyed. 'Iraces of a similar circle were observed south-east of Jenin, and a rude stone momment described in the Memoir (sheet ix, Deir Cihuzaleh) has every appearance of being an ancient altar. A second altar west of the great plain at $A b w^{2} \mathrm{~d} m r^{r}$ is built of undressed stones, and beside it is a sacred tree and tomb and a cave with steps leading down.

As we approach Galilee we find other centres on Tabor and Carmel. The ancient Tabor ("umbilicus") is the modern Jebel et 'Oor; Josephus

Note.-I should mention that I am indebted for this piece of information to General Forlong, whose learned work on ancient religions is shortly to be published, and who has directed my attention to the question of Syrian idolatry generally, and given me much valuable assistance in understanding it.
calls it Italbyrium, and another momntain of that name in Rhodes was consecrated to Jupiter. It is thus perhaps that the scene of the Transtiguration has been shifted from its proper site near Baniats to the sacred mountain of Tabor: On C'armel we find the altar of Baal beside the ruined altar of Jehovah in the time of Elijah. The great peak of el Mahrakah (" the place of Sacrifice") at the south-east end of Carmel is still revered by the Cammelite Monks and by the Druses of Esfia, and appears to have been the place visited by Julian the Apostate when he sacrificed to the God Carmel, who had no temple but only an altar. The peak is adminably adapted for a sanctuary of the Sun God, and stands up conspicuonsly, being visible from near daffil in fine weather. Beneath is a sacred tree beside a well.

It is very remarkable that the tomb of Joseph is flanked by two pillar-like altar's, on which sacrifices are still offered by fire. Such pillar-like altars are known to have belonged to the ritual of sun or fireworship, like the fire towers of the Guebres; and it might be surgesested that the extraordinary conical mounds at Malhah near Jerusalem, one of which is 30 feet high, and 20 feet diameter at the top, and even the great conical hillock of 'Tell el Fol, structures for which no date and no grood explanation has yet been offered, may be remains of ancient altars or sacred beacons. In Galilee we find the sacrifice of articles by fire still observed by the Jews at the tomb of Ban. Jochai, on the side of Jebel Jomme, the highest mountain of the district, and at saered cave occuss close by. of the made cromlechs discovered by Lieutenant Kitchener in this district, one is called Hajr ed Dremm, "the stone of blood," no doubt from a tradition of sacrifices there offered.

Many simed stones occm throughout the comntry, as the Hujo Dabkam, near Mar Sabra, the traditions concerning which were collected by Mr. Drake, and the Majr Sidnce 'Aisce on the side of the conical mountain called Neby Duhy, and the Itajurct en AVusitra, or "Christian's Stone" above Tiberias, now connected with a monkish tradition. Nor must we forget the Meshahed (bretuli Edoth or "Witnesses") which pious: pilgrims erect whenever they come within sight of a famous shrine. The Survey Cairns were occasionally thought to be sacred structures, as at Jeb'a, where the Dervish volunteered to "pray for the pillar in the day of our journey." Among the ancient Arabs such stones were at once the bodies of divinities, and also altars on which their victims were offered.

The great centre of suu worship was, however, apparently on Hermon, and the numerous temples which were built on this holy mountain, as late as the 2ud century A.D., were found by Colonel Warren to face the rising sun, seen to such advantage from the summit.

On the top of Hermon is a platean, and from this rises a sort of peak or natural altar, round which a circle of masony has been built, while a small pit is sunk in the top of the rock. There was no temple actually on the summit, though a small one remains outside the circle on the south. On the north is a sacred cave with a flight of steps. Other caves
lower down the mountain are used by the Druses for the retreat of their initiated, and the Druses are known to preserve the rites of the Gnostics, to whom sun worship was familiar.

At Tyre, on an isolated hillock, stands the fane of Neby M'ashak, " the beloved of women," no doubt the ancient Adonis or Melkarth, and the tradition of this local sun god is preserved in the annual festival of St. Mekhlar, observed in this city, when his votaries descend to fish for the purple-shell or Chilzon, which is mythically connected with the history of the Tyrian Hercules, or Melkarth.

The great shrine of Venus and Adonis at Apheka, lately described by Mr. Lawrence Oliphant, was destroyed by Constantine ; but many practices belonging to this worship survive among the Nuseiriyeh and Ism'aileh, who worship the sun, moon, and elements in the northern Lebanon, and even human sacrifice is said by the Maronites to be one of their customs; arelic of the human sacrifices of Baal, Moloch, or Saturn among the Canaanites and Phonicians, and a certain indication of sun worship. In connection with this question, it is curious to note how persistent this tradition of secret human sacrifice is in the Levant. Gibbon describes the charges of this kind brought by pagans against the early Christians, and St. Epiphanius gives a detailed account of the "Perfect Passover" of the early Gnostics-the sacrifice of a child. The same charge was brought against the Templars in the 13 th century, and it is yet a common imputation against the Jew in the East, as is shown by the following passage in one of the Sultan's proclamatious quoted by Mr. Oliphant.
"We cannot permit the Jewish nation (whose innocence of the crime alleged against them is evident) to be vexed and tormented upon accusations which have not the least foundation in truth," viz., "that they were accustomed to sacrifice a human being, to make use of his blood at their feast of the Passover."

East of Jordan some traces of the worship of Ashtoreth should be found at her famous shrine. Mr. Oliphant has already described the curious pillar of Job, which had never been visited since the 5th century ; but I believe no explanation has been offered of the occurrence of solitary pillars, as for instance, north of Acre, and near Baalbek. There seems every probability that they are columns on which the hermits who imitated St. Simeon Stylites used to seat themselves-a practice much older than Christianity, and directly connected with the worship of the Sun's creative power. Many of these hermits lived in the 5th century in Syria, more especially near Aleppo, where are the ruins of the great Cathedral of St. Simeon. Similar practices are recognisable among the Hermits, who by contemplating their own stomachs (like the Therapeutæ, or the Indian Fakirs) at length beheld the sacred "Light of Tabor."

It is not too much to say that every isolated round or conical mountain top in Palestine, was once a seat of sun-worship. Thus at Sheikh 1skander, west of the Plain of Esdraelon, on a conical volcanic peak, we find the shrine of a prophet, who is described as contemporary with Abraham, and as having rams' horns like the sun-god Jupiter Ammon

Neby Duhy is a similar conical peak north-east of the last, and has a domed shrine on the top. The legend attached states that the bones of the saint were carried there by his dog, which reminds us of the Parsee veneration of dogs (the companions of Mithra), who to the horror of Greek writers were permitted to devour the bodies of the most noble among the Persian fire-worshippers.

The translation of bones or relics is a common Moslem tradition. Thus on Ebal we have the sacred shrine of the 'Amàd ed Dín, "pillar of the faith," and near it the sacred cave of Sitti Islamineh, who gives her name to the mountain, and whose bones were carried through the air to this spot from Damascus.

The remarkable mountain near Jericho with its natural conical top called 'Esh el Ghurab, or " Raven's Nest," is specially described in "Tent Work," chap. xiii, as having been supposed by the Crusaders to be the Mountain of the Temptation, a tradition still extant among the Bedawin. This curious but impossible legend may perhaps have its origin in an ancient sun-myth, connected with the hill, and adopted by the Byzantine Monks.

The conical form of the summit of the Kurn Sartabeh (the Jewish beacon station where a fire was lighted on the appearance of the new moon is also very remarkable. It might almost be cited in favour of the identification of this place with the "witness" altar of Ed, which I proposed in 1874, and to which the main objection lies in the opinion of Josephus that Ed was East of Jordan.

The cone is 270 feet high, the sides sloping at about $35^{\circ}$. There is an oval surrounding the building on the summit, and formed by a mound of stones rudely heaped up. This measures 90 feet E and W. by 260 N . and S . The central building is a platform or foundation built in 10 courses of large drafted stones (possibly crusading work). Towards the north of the platform we found traces of burning, showing that a beacon had once been lighted here. The sides of the cone are artificially trimmed from the natural rock. To the east is a terrace with caves, an aqueduct collected surface drainage and carried the water to rocky reservoirs just beneath the peak. The general effect is that of an ancient Sun Temple which has been converted later into a small fortress.

The shrines on every mountain, and under every green tree, have been already described in "Tent Work." The prophets called Belân, Baliân, and B'alin, are perhaps the modern representatives of the ancient Baalim, and a male and female saint are constantly worshipped, as were Baal and Ashtoreth in slurines near to one another, many of which have sacred caves beneath.

Neby Turfini again possibly takes his name from the Teraphim, or "serpent images" such as those that Rachel stole from her father Laban.

Those who are interested in ancient superstitions may find this short enumeration of facts of some value, and the subject (in spite of the difficulty of collecting reliable information) is one which deserves to be further pursued.

## NOTES ON DISPUTED POINTS.

House of Aphrah (בית עעפרה).-Mr. W. F. Birch treats this name (Micah i, 10) as that of a town, which he proposes to identify with Beit 'Affeh.

I would submit that there are several objections to this view. First, that there is no radical connection between the Hebrew and the Arabic. Secondly, that the occurrence of the Hebrew particle in the sentence (Beth (i Aphrah) scems scarcely to agree with the supposition that we have to deal with a topographical name, Beth Aphrah. The verse contains a pun on the noun Aphrah and the verb עפר "to roll"; as does verse 14, on the name Achzib and the verb "to lie." The topographical value of the passage seems to be small, as the names Zaanan, etc., occur in other places, where the indications are better as to their relative positions. It may be noted that if Aphrah were really a town, a possible site might be found at the important ruin of Beit Fîr ("House of the Mouse") Fâr representing the ancient Aphrah ("Gazelle") with the loss of the initial guttural -of which there are occasional instances; but this is at lest only a conjecture, as the identification with Beit 'Affeh must apparently also be considered.

Gath.-Mr. Trelawney Saunders adduces in support of his view that ( (ath was in the south of Philistia, the passage where Samuel is said to have recovered the cities of Israel from Ekron even unto Gath (1 Sam vii, 14); but against this it may be argued that Gath and Ekron occur frequently next one another in topographical lists.*

The question which is thus raised is one of considerable interest, namely, whether the Jews ever possessed any land in Philistia proper.

In the Book of Joshua, three of the five great Philistine cities (Ekrou,

* Mr. Trelawney Saunders appears to think that there is a philological disagreement between Professor Palmer and myself. If this were the case, I should no doubt be wrong, but we both stated that the Arabic for Gath was Jett; and I believe Professor Palmer would be the last to urge that a place called Jenneta was Gath, unless strong reasons could be adduced to prove the corruption of the word.

Mr. Saunders is scarcely correct in stating that Shaaraim was a town of Simeon, and thercfore objecting to $\mathbb{S}^{\prime}$ aireh. Shaaraim is attributed to Judah, and occurs with Adullam, Socoh, \&e., in the Shephelah (Josh. xv, 36), in a position exactly agreeing with that of S'aireh.

It is true that the name stands in one passage ( 1 Chron. iv, 31) for the Sharuhen of Simeon (Josh. xix, 6), but the nomenclature of the list in Chronicles is well known to be very corrupt.

The route Mr. Saunders indicates for the defeated Philistines is even longer than that which I wrongly supposed him to mean.

A pursuit and a return of more than 60 miles must have intervened before the Children of Israel got back to spoil the tents ( $1 \mathrm{Sam} . \mathrm{xvii}, 53$ ). This would have occupied two or three days. It would have been remarkable if anything remained to be spoiled after this interval.

Ashdod, Gaza) are allotted, "with their villages," to Judah, but there is no enumeration of these villages, and the detailed enumeration of the towns of Judah is confined to the mountains amd the Shephelah.

In the time of Joshuis first campaign there is no mention of the conquest of Ekron, Ashdod, Gaza, Ascalon, or Gath, or of any town in the Sudeh or plain of Philistia, save Eglon and Lachish, close to the Shephelah hills.

In Judges (i, 19) we read that Judah "drove out the inhathitants of the mountain but could not drive out the inhabitants of the Valley (Emek) hecause they had chariots of iron." Ekron, Ascalon, and Gaza were, however, conquered it this time (verse 18), though apparently soon after lost.

In the time of Rameses II, all Philistia appears to have been under Egyptian rule ; and the Philistines were of Egyptian extraction. In the days of Samuel, Saul, and David, the contests with the Philistines occumed in the Shephelah and on the border of the Judean Momitains.

Jusephus also makes use of the remarkable expression - " that mountain where the tribe of Judah ended"; and even Adullam is once spoken of ( 1 Sam. xxii, 5) as beyond the horder of Judah. The frontier of Rehoboam was drawn from Zorah and Azekah to Gath, including the fortified towns
 that Philistiat was excludel fien bis kimatom, ant hy the fimme of thaz the shepthelah also havi heen entirely lust, while: the expeditions of the Hasmmathas into Philistia wote mere raids, with mily thmperay results.

It would seem then that Philistia never was conquered by Julah, and if this he the case, the cities recovered to Judah by Samuel hetween Gath and Ekron would probably be those enmmerated in .Joshua $x$ s, 41 , on the border between Philistia and the Shephelah, and riear the site of Samuel's victory in the Valley of Sorek. The recovery is noted as the result of that victory not as entailing a further campaign (c.f. Ant. VI,,$~ B)$; and if the above conchasion be accepted, the passage quoted by Mr. Trelawney Siunders does not place Gath in the south.

Mr. Saunders suggests that "accepting Lieutenant Conder's interpretation of Abu Gheith as Father of Rain, the designation suggests an attribute of mystic power, and so may be carried back to some incoherent traditional remembrance of (ioliah."

According to Freytag's Dictionary my translation is correct. I am not aware of any tradition comecting Goliah with the rain, but there are many traditions of Moslem Derwishes who were, and are, supposed to be able to give or withhold rain, and the name is probably quite modern. Inquiries on the spot might be interesting.

Megiddo. - The suggestion that the name Jukutte? may be a compution of Megiddo is open to the objection that only the M is common to the two names, and, which is more important, that the $I$ ' in the Arabic word is the Hebrew *or strong $t$, which is not interchangeable with the Daleth.

Mr. Trelawney Saunders also follows Robinson in an assumption which
seems to be contrary to two passarges in Scripture, viz, in supposing that the stream which springs near. Lejjon is the ancient Kishon, and thus muconsciously begs the question of the identity of the "Waters of Megiddo " with the River Kishon.

Now Barak encamped on Tabor before defeating Sisera (Judges iv, 12), and the Canamites advanced on that position. "I will drow unto thee to the River Kishon, Sisera" (verse 7). In the Psalms also (Pwhm Ixxiiii, 9) we read "as to Sisera, as to Jabin, at the brook of Kishon: which perished at Endor," which is close to Trabor on the south.

It thus seems clear that the name Kishon applied not to the affluent from Lejjin, but to the stream from the spuings of el Mujahiyeh ("the place of bursting forth ") west of Tabor.

Mr. Saunders says, " it seems impossible to separate Megiddo from the Kishon." If this were the case, then the site of Lejjon could not be that of Megiddo according to the biblical definition of the Kishon.

Rohinson's identification of Megiddo with Lejjon rests mainly on the proximity of 'Iatnach, a town often mentioned with Megiddo in the Bible. It camot be too clearly stated that the only connection between the names Legio (Lejjom) and Megiddo is found in Jerome's paraphase of the term Bikath Meariddon by the "Campus Legionis." Megiddo is mentioned with Bethshean Jeareel and other places in the Jordan Valley (separate towns of the tribe of Manasseh) as well as with Taanach, and there is $n 0$ real foundation for the assumption that the Valley of Megiddon was the Plain of Esdraelon, for the term Bikuth (rendered Valley in the A. V.) is also used in the Bible of the Jordan Valley (1)ent. xxxiv, 3; Zech, xii, 11), and on the edge of the broad Bikath of Bethshan the important ruin of Majedda with its springs and streams now stands.

Mr. Henderson has quoted in defence of my theory, the translation given by Irrugsch of a passage in the "Travels of a Mohar" (for the quatation of the Poem of Pentaur as including the statement that Megiddo was near Bethshean appears to be an oversight. The Pentaur Epic refers to the wars of Ramoses Miamun against the Hittites). This translation is more favomable than that of Chabas, and was not previonsly known to me.

In support of the Mrjedued site, another argument may be drawn from the account of the tlight of Ahaziah from Jezreel (2 Kings ix, 27), "he fled in the direction of Beth-hag-gan" and was slain "at Maaleh Crur, which is by (or near) Ibleam, and he fled to Megiddo and died there."

Dr. Thomson many years since proposed to recognise Ibleam in the ruined site of Febla which gives its name to a long valley south-east of Tabor. On the plain east of Tabor also, fifteen miles from Jezreel, is the ruined village of Beit Jemn ("house of the garden"), exactly representiag the Hebrew Beth-hag-gan, rendered "garden house " in the A. V., and the road from Jerreel past 'Tabor and past the head of Wâdy Yebla, towards Beit Jem, leads over a rolling platean where a chariot might easily be driven. After crossing the bed of the Teareel Valley it ascends gradually towards en N'anmh (Anaharath), and on this Maalele or ascent stands the ruin Kara, a word derived from the
root Kitr, which is cognate to Jur or Gur, all having the meaning of " hollow." This ruin, possibly representing Gur, is $2 \frac{1}{4}$ miles north-east from Jezreel, and five miles west of the ruin Yebla. We thus appear to recover the names Gur Ibleam and Beth-hag-gan in connection with some other north-east of Jezreel, and this is much in favour of the Mujedda' site, because an easy chariot road leads from Kíara south-east, crossing the upper part of W. Jalod, and thence skirting the foot of Gilboa to Mujedda'.

I have hazarded the suggestion that the Kings of Judah used the Jordan Valley as their highway to the north; that, instead of toiling over the hostile mountains of Ephraim they marched up to assist the Isratite monarchs by the chariot road from Jericho, and advanced to oppose Necho by the same route. Megiddo would thus seem to have been their outpost on this route, and Ahaziah's retreat to it is intelligible, whereas the reason of his flying first south to Jenin, and theu back north to Lejjûn has never appeared intelligible.

In order to render this interesting subject more clear, the following points are recapitulated as those which seem most to require consideration.

1. There is no known connection between the ruin Lejjun (Legio) and the site of Megiddo, either by name, by measured distance, or by tradition.
2. It is purely an assumption that the plain of Esdraelon is the Valley of Megiddon.
3. It is an assumption which contradicts Scripture that the stream from Lejjun is the ancient Kishon.
4. It is a pure assumption (and a very misleading one) that the "Waters of Megiddo " were the Kishon river.
5. The mention of Taanach in connection with Megiddo should not outweigh the notice of Bethshean, Ibleam, Endor, Zartanah and other places east of Jezreel, also mentioned with Megiddo (see Palestine Exploration Fund Quarterly Statement, January, 1877, p. 16).
6. The Egyptian records, so far as they elucidate the subject, are favourable to the Mujedda' site.
7. The ruin Mujedda' is ancient, well watered, situated in a plain on an important high-road; and here only has a name closely approaching to the Hebrew Megiddo been found.
8. The topography of Ahaziah's flight may be explained in easy accordance with the situation of Mujedda?

I am fiar from supposing this question to be settled, but it seems that the Mujedda' site has claims to attention which recommend it to such careful critics as Mr. Henderson has proved himself to be; and that it should not be condemned merely becanse the assumptions of Dr. Robinson are taken as of equal value with his sounder arguments. The Lejjûn site rests on a more flimsy argument than perhaps that which fixes any other important biblical site, for we have positively not a single statement of the identity of Legio with Megiddo by any ancient authority. It is a vague conjecture, and not an identificatiou at all.

Gibeah of Sicul. In this case also we have to contend with an assump, tion of Dr. Robinson's. 'There is no connection either by name or distance between Tell el Fal (probaby a comption of the Hebrew Ophel or "tumulus") and Gibeah; and after many visits to the site I entirely failed to find any traces of a town or village. Toll ol $F^{\prime} a l$ is an isolated monument (probably a beacon) and not a city at all.

In writing on this question Mr. Birch concludes that the Gibeah where the Levite's concubine was killed was not Geba of Benjamin, but a distinct city. It is, however, worthy of notice that a confusion is here introduced by the authorised version which in two cases reads Gibeah where the Hebrew has Geba. This has already been pointed out by Mr. Grove :-
"That they may do when they come to Giveah (yב⿰訁 ) of Benjamin, according to all the folly they have wrought in Israel (Judges $\mathrm{xx}, 10$ ), and again :-
"The liers in wait came forth out of their places, even out of the meadows of Gibeah (yב ג Man literally "from the cave of Geba," . Tudges $\mathrm{xx}, 3.3$ ) ; this shows that linguistically no distinction was made between Gibeah and Geba, just as the word is now spelt indifferently debe' and ocbuik.

Josephus places Gabooth Saule at the Valley of Thoms; and if he refers to Wady Suweinit ("valley of the little thom tree"), this favours the identification with . Icba'.

That Gibeah of Saul was a district having its capital at Geba would seem to follow from the following passages :-
"The uttermost part of Gibeah, under a pomegranate tree which is in Migron" (1 Sam. xiv, 2), Migron being near Ai, probably a district name or that of a matural feature (c.f. Istiah $x, 28$ ).
"Saul abode in Gibeah, under a tree in Ramah" (1 Sam. xxii, 6) Ramah being south of W. Suweinit and west of Jeba'.
C. R. C.

## NHW IDENTIFICATIONS.

Beit Aula has generally been identified with Bethul, but is too far in the hills. The suggestion of Beit Leyi for Bethul leaves Beit Aula for Holon (Joshua xv, 51), which fits far better topographically.

Zephathath (2 Chron. xiv, 10) is probably the present Safieh. See foot note to the note on Kadesh Barnea.
C. R. C.

## THE BOUNDARY OF EPHRAIM AND MANASSEH.

In writing on this subject, Mr. Trelawney Saunders accepts in the main the line proposed by Mr. Kerr (Quarterly Statement, 1877, p. 41) which I have adopted in the "Handbook to the Bible" (p. 264), being convinced of the justness of Mr. Kerr's arguments.

Mr. Saunders, however, proposes a slight modification near the Mukhnah, carrying the line some two miles further north than I should do.

Mr. Saunders also proposes two new identifications, one for Asher, the other for En Tappuah (Joshua xvii, 7) ; both of these appear to be open to very serious objections, and had Mr. Saunders been in possession of facts recorded in the Survey Memoirs he would, I think, have hesitated in proposing these identifications.

> OSHECHEM

> MANASSEH


As regards Asher, Mr. Saunders says (Quarterly Statement, 1880, p. 226)-
"On turning to the new map to discover Asher-ham-Michmethah that lieth before Shechem, there will be found the ruin El Azeir (Asher) in the Plain of Mukhnah (Michmethah) just outside Shechem, on the high-road to Jerusalem, and on the south side of Wady Kânal. The identification of Miemethah with the Plain of Mukhnah is suggested by Lieutenant Conder in his 'Handbook to the Bible,' p. 264, but he takes no notice of el Azeir except to insert it on the map."

So far, however, is this from being the case, that a careful account of el 'Azeir will be found in the "Survey Memoins," while the place is described in "Tent Work" (chap. ii, p. 42, new edition) and mentioned in the "Handbook to the Bible," p. 256. The word is the common corruption of the Hebrew proper name Eleazar, and has only the $R$ in common with Asher. The site is the well known tomb of Eleazar, the high-priest, son of Aaron, venerated by Jew, Samaritan, Moslem, and Christian alike, and mentioned by travellers from a very early period. A few ruins surround the monument, but the place is not the site of a town. It may also be noted that it is not in sight of Shechem at all, as implied in the Bible respecting Michmethah.

Such being the case, there is no reason to enter into the question whether the site would suit Asher, or whether Mr. Saunders is justified in making the word an adjective-preceding as it does the article. Gesenius renders Micmethah "hiding place," and it is not impossible that the word Asher is a copyist's error, reduplicating the word buys (" which") that follows Micmethah in the Hebrew.

The second suggestion of Mr. Trelawney Saunders refers to En Tappuah, which he proposes as identical with the ruin Tafsah. The identification tempted me greatly when first considering this question, but the philological objection is too strong, for the introduction of the $\operatorname{Sin}$ (representing the Hebrew Samech) could not well be accounted for. There is, moreover, a more probable identification for this site, namely, Tiphsah ( 2 Kings xv, 16), noticed in connection with Tirzah and Samaria, as rebelling against Menahem, for it is impossible to suppose that in this passage the Thapsacus on Euphrates is intended.

Mr. Trelawney Saunders argues that the main line of W. Jerra' should be considered the Brook Kanah rather than the affluent W. Yasúf, but this must remain a question of opinion, because the name Kânah only now applies to the lower part of the great valley below the confluence of these two heads.

The important passage respecting this question (Joshua xvii, 7) reads thus:-
"The border went along on the south (" right hand" in A.V.) unto Yeshebi En Tappuah," rendered " Tassib and the spring Taphthoth" in the LXX. The A.V. rendering, "unto the inhabitants of En Tappuah," is so unusual and unmeaning, that it is only natural to conclude that the LXX translators were right in treating Yesheb as a proper name.

Now the confusion of F and B is a well known Samaritan vulgarism, and there is nothing impossible therefore in the identification of Yesheb with Yasaf, especially as there are five springs in the vicinity, one of which may have been the ancient En Tappuah or "apple spring."

It appears to me necessary to carry the border thus far south, because of the special definition "on the south" as above noticed: for Mr. Trelawney Saunders' line runs almost east from Taanath Shiloh, as will be seen on the detached diagram.

This interesting question might perhaps be still settled by a very careful investigation of the names of springs in the two valleys; for ancient names still stick occasionally to the springs. Inquiries have, however, been made in 1877 without result.

12th November, 1880.
C. R. C.

## MIZPEH.

Palestine is the place for panics. Seized with sudden terror, Philistines, Syrians, Romans, in turn left their fortifications and fled; now at the rustling of a few leaves even Britons forsake the choicest identifications. Let those who stay behind divide the spoil.

Dr. Robinson was "inclined to regard Neby Samwil as the probable site of Mizpeh," where Sarnuel prayed and fought; judged Issael and proclaimed Saul king. It was exceedingly delightful thus to connect the most conspicuous land-mark of Southern Palestine with that grand Hebrew prophet. Afterwards an unaccountable doubt supervened and then, like a flock of sheep, away went half-a-dozen shrewd writer: leaving the enthusiastic ones wavering, nor did the stampede reach only to Sha'fat or Scopus, but even beyond Beth-car.

Probably we may not rally the fugitives, but at all events let us try to re-occupy Mizpeh.

The following conditions have to be satisfied :-
(1.) Mizpeh was in Benjamin. Josh. xviii, 25, 26, "Gibeon, and Ramah, and Beeroth, and Mizpeh, and Chephirah, and Mozah." In Neh. iii, 7, the men of Gibeon and Mizpah are classed together. Both these indications very well suit Neby Samwîl, about a mile south of Gibeon.
(2.) The name (siguifying a "watchtower") implies that it was situated on an elevated spot. Here Neby Samwil has no worthy rival.
(3.) It was fortified along with Geba by King Asa, apparently to protect his northern frontier against the kingdom of Israel.

Lieut. Conder ("Tent Work," ii, 119) says of Neby Samwil :-_" The very difficult approach, the magnificent panoramic view, and the numerous springs, would have indicated the place as a fitting position for a fortress, flanking the two main north roads to Jerusalem."
(4.) It must be visible from Jerusalem according to 1 Macc. iii, 46, "The Israelites came to Maspha over against (катévavtı) Jerusalem; for in Maspha was the place where they prayed aforetime in Israel " (evidently identical with the Mizpeh of 1 Sam. vii, 6,$16 ; x, 17$ ). As in the New Testament we have in Mark xi, 2, кaтย́vàтı answering to ámévavtı in Matt. xxi, 2 , in the expression "the village over against you," we conclude the words are interchangeable. As again in 1 Macc. vi, 32, Judas is said to have pitched in Bethzachariats (ánévavrı) "over against the king's camp" at Bethsura, seventy furlongs distant (Jos. Ant. xii, ix, 4), there is no force in the objection that кaтévavtı in 1 Macc. iii, 46, is not satisfied by the position of Neby Samwil ; for this hill is but forty furlongs from Jerusalem and also in sight. This (4) condition is most important, since while admitting such positions as Scopus, Sh'afât, and even Tuleil el Fal, it excludes (I believe) all the district to the north-west of Jerusalem except Neby Samwil. This must be borne in mind in considering the next point.
(5.) The story of Gedaliah (Jer. xli). It is urged against Neby Samwil that as Ishmael went out of Mizpeh to meet the fourscore pilgrims going to the house of the Lord, therefore that city must have been close to the great north road from Jerusalem, and so could not have been at Neby Samwil. From such an eminence, however, a band of pilgrims like this would have been visible a long way off, so as to give Ishmael time to meet them ; and next Josephus ventures to say (probably with truth) that they were bringing gifts to Gedaliah.
(6.) Ishmael carrying captive the people in Mizpah departs "to go over (what? - the Jordan ?) to the Ammonites ;" the loyal Jews, however, went to fight with him, "and found him by the great waters that are in Gibeon." Some writers are pleased to adopt the version of Josephus, who foolishly substitutes Hebron for Gibeon. But I would here ask two questions:(1.) Who would think of going from Gibeon to Rablath Ammon round by the southern end of the Dead Sea? Such a route is almost as absurd as the theory which sends Jacob's body to Hebron round by the north end of that sea, through taking "beyond Jordan" in Gen. 1, 10, in a different sense from the same Hebrew words (A.V. "on the other side Jordan ") in Deut. xi. 30, sce "Land and the Book," p. 580 ; "Handbook," p. 238. (2.) And next, why are the Hebrew and LXX readings to be rejected in favour of such an inaccurate writer as Josephus?

Ishmael in going from Mizpah to the Ammonites doubtless went by a route which naturally led him near the waters which are on the eastern side of Gibeon. Accordingly we conclude that neither Sh'afat nor Scopus, nor yet Tuleil el Ful, could have been Mizpah, since the way from each of these places to the Ammonites would lead him directly away from Gibeon. As therefore the only place suiting both the conditions $3,4,5$, and 6 is Neby Samwil, we unhesitatingly assert that the only spot where Mizpeh could possibly have been was on the hill now called Neby Samwil.

A few other points may be noticed:-
A. Asa made a (great) pit at Mizpah (Jer. xli, 9) and Dr. Robinson observes that the rock at Neby Samwil is soft. It is quite possible that by searching this underground cistern might even now be found.
B. It is a natural and (I believe) correct assumption to take this Mizpeh to be the one mentioned in Judg. xx. Jephtha's victory and the expression "Shiloh in the laud of Canaan" are in the Bible Dict. used as points in favour of the eastern Mizpeh. Jephtha, however, was born after the events in $J u d g$. $x x$, and the same expressionis used in Josh. xxii, 9, while in both cases Gilead is also named.
C. Lieutenant Conder's explanation ("Handbook," p. 277) that Nob and Mizpeh are identical, becomes impossible, as Colonel Wilson has shown that Nob could not have been at Neby Samwil. In the same place the notion is broached that the Tabernacle was at Mizpeh, because the words" before the Lord" are used in 1 Sam. vii, 6. The expression, however, does not necessarily imply this. David's covenant with Jonathan in the wood of Ziph and his anointing at Hebron were also made" before the Lord," but surely neither the Tabernacle nor the Ark was there at the time.
W. F. Birch.

## THE CITY AND TOMB OF DAVID.

Valuable as is Lieutenant Conder's Survey work, he is, I believe, radically wrong on Jerusalem. Theories proposed by him, however, may not improbably be accepted by some, as well-established facts, so that it is necessary for me to point out how his fire (Quarterly Statement, 1880, p. 228) utterly fails to touch my position, viz, that the City of David was on Ophel (so called) i.c., on the eastern hill south of the Temple. I will take his shots one by one.

1. I objected to his position for the Tomb of David, as being beyond the limits of Zion. He replies (Quarterly Statement, 1880, p. 228), "I am not aware of any direct statement in the Bible to the effect that the Kings were buried on Zion. The Kings were buried in the City of David." But the Bible twice states that the City of David was Zion. (1 Kings viii, 1 ; 2Chron. v, 2. "The City of David which is Zion"). I have already stated ( 168 ) that " in the historical passages of the Bible the stronghold of Zion and Zion are identically the same place-both are said to be the City of David." But to prevent further mistakes on this point the passages shall be here given fully.

These four passages with the two given above, make it the A B C of Jerusalem topography, that, Zion, and the stronghold (of Zion) and the City of David are all one and the same place. If this does not tally with Josephus, then so much the worse for that arch-error-mouger.
2. Lieutenant Conder thinks it "improbable that the City of David was on Ophel, for several reasons," viz.: (1.) That this identification is contrary to the account of Josephus; but as he does not give particulars, it is not clear to what he refers. (2.) That the wall on Ophel was not one enclosing, but one outside the City of David. (2 Chron. xxxiii, 14.) What is the point of this? Surely it was quite possible to build a second wall outside the enclosing wall of the City of David; for it is quite unnecessary to suppose that the City of David occupied the whole of the Ophel spur.
(3.) That Millo was according to the LXX the same as Akra, and was in the City of David, so that I must either place Akra on Ophel or discard this ideutification of the LXX. That the Akra of the Maccabees and Josephus was solely and entirely on Ophel is just what I have all along been earnestly contending for ((quarterly Statement, 1878, p. 185; 1880, p. 168). The City of David being fortified was called the Akra (1 Mace. i, 3:3), and so Millo itself being a (considerable ! ) part of the former might easily in the LXX be translated "Akra."
3. I may reply that when Josephus is at variance with the Bible, the only satisfuctory plan is to discard him altogether, and not make a
compromise between truth and error, from which have arisen almost all the difficulties about Jerusalem.
4. Josiah was buried in his own sepulchre ( 2 Kings xxiii, 30), and yet in the sepulchres of his futhers. (2 Chron. xxxv, 24.) Therefore Asa and Ahaziah equally with Jehoshaphat and others may have been buried in the sepulchres of the Kings, although each was buried in his own sepulchre. N.B.-To speak more exactly: Asa was "buried in his own sepulchres (plural) which he had made for himself in the City of David" (2 Chron. xvi, 14). If Lieutenant Conder hat carefully verified this refereuce of his, he would have altered the sight for the next shot, and so not gone so wide of the mark.
5. Of course the fact that the Royal tombs called (Neh. iii, 16) "the sepulchres of David" existed on Ophel is the very centre of my position. But the case of Asa just cited shows that it is only wasting powder and shot to argue that "as the word is used in the plural (לר) (ク), and David himself can only have occupied one sepulchre, we are forced to understand this expression as elliptical, and as meaning "sepulchres of the Honse of David." Clinging to an unsound theory, like blindly following Josephus, has evidently forced Lieutenant Conder into strange expedients, (1) to overlook "sepulchres" in his reference to Asa, (2) to fiud it difficulty in the Hebrew plual, so as (3) to make" the sepulchres of David" to be necessarily elliptical for "the sepulchres of the House of David," even while Asa made sepulchres (plural) for himself.

The words of Nehemiah must be taken to mean the place where David was huried, unless some better argument than this can be alleged against the identification (see below, 9 ).
6. As the Royal sepulchres on Ophel are apparently those of David, since no elliptical expression is required, I take them to be identical with "the Royal cemetery (or rather catacombs) in the city of David," since the cemetery itself is described as "the field of the burial which belonged to the Kings" (2 Chron. xxvi, 23). In this were (1) the system of catacombs, called "the sepulchres of David," or " of the (grood) Kings," (2) the sepulchre of Uzziah, (3) the sepulchres of Jehoram, Toash, and Ahaz. I consider, however, that Lieutenant Conder is quite correct in maintaining that Uzziah was buried on Ophel, and when I add a refereuce which he has omitted, viz., 2 Kings, xv, 7, "they buried him (i.e. Azariah = Uzziah) with his fathers in the City of David,"-then from Lieutenant Conder's premise, that "Uzziah was buried on Ophel," followed by the Bible's premise that "Uzaiah was buried in the City of Datvid," we draw the inevitable logical conclusion-that "the City of Javid must have been on Ophel," and my position is proved, and his own theory disproved by Lieutenant Conder himself. Leaving him to revise his premise we come to the next point.
7. Solomon's palace no doubt stood on Ophel (so called). It is not however clear to me whether or not it embraced the "House of David (2 Chron. viii, 11) within the City of David, which house I am inclined to think was called Millo."

The two passages quoted by Lientenant Conder certainly do not show that it was not in the City of David, for they both refer, not to Solomon's palace, but to the house which he built for Phareoh's daughter. (1 Kings vii, 8.) "His house . . . Solomon made also an house for Pharaoh's datughter."
8. Be it however that Solomon's palace was altogether outside the City of David, yet how is the conclusion to be drawn that " the tombs in the City of David cannot therefore, it would seem, have existed on the Ophel Spur"? This can only be on the groundless assumption that Solomon's palace occupied so much of Ophel as to leave no room for the City of David, while we know next to nothing of the size of either place.
9. "The House of David" (Neh. xii, 37) I believe to be the place where he lived, but on the admission that it means his tomb, Lieutenant Conder must again beg the point that it is an elliptical expression for the sepulchres of the house ( $?=$ sons) of David, if we are to understand that, though it was the tomb of David, he was not buried in it.
10. If by "in the Fort of Zion, in the City of David," Lientenant Conder means which was in the city of David, this is an error, as the two are identical as shown by 1 , in spite of Josephus.
11. Lieutenant Conder ("Handbook," 33is) takes Cihon in the valley (Nachal) to be En-rogel, how then does he propose to draw a wall "westwards to " it instead of on its western side ( $\mathcal{\sim}$ Chron. xxxiii, 14) ?
12. I found it difficult (Quarterly Statement, 1880, p. 167) in regard to the House of David, to imagine how Lientenant Conder could avoid placing it on Ophel; for I never anticipated the dash which would make it to be a place with which David had nothing to do either alive or dead. The next two shots seem enough to burst the gun. Let me show the fallacies.
13. "Solomon's palace was on Ophel. It was not in the City of David. Therefore the City of David was not on Ophel." Answer. There was room on Ophel both for Solomon's palace and for the City of David, just as there is room in Westminster for the Abbey and for the Houses of Parliament.
14. "Manasseh built a wall on Ophel. This wall was not in the City of David. Therefore the C'ity of David was not on Ophel." Answer. The walls of the (ity of David were not so low down the Ophel hill as to leave no room for building another wall outside them.
15. "Millo was in the City of David. Millo, according to the Jews (who? Josephus or LXX ?) was Akra. Therefore Millo was not Ophel." (on Ophel). I have admitted that Millo might fairly be called Akra by the LAX, but as I challenge any one to show that either 1 Mace. on Josephas phaces Akra anywhere else than on Ophel, I camot for a moment admit the conclusion, "Therefore Millon was not (om) Ophel." The true position of the C'ity of David is discossed in another paper.

My theory, whether ingenious or not, I believe to be true, and only for the sake of truth have I thus merilessly pursued a friend through all the
errors which an excessive veneration of Josephus has chiefly produced, Strange as it may seem, Sion, Moriah, Akra, Ophel and Millo-are all names applied to one ridge. Be it observed, however, that the Hebrew Zion of the historical books is identical with the Greek Akra ; Millo is part of Sion i.e, of Akra; Ophel really was not the name of a kill, but of a certain part of it, a locality apparently near the south-east corner of the Haram ; while lastly Mount Moriah, the part of the eastern hill on which the Temple stood-is only mentioned onee in the Bible, for the term commonly used by the Jews was " the Mountain of the House," which is equivalent to the Mount Zion of the first book of the Maccabees. The only other decided hill which I believe could fairly be reckoned into the Jerusalem of Nehemiah was the south-west hill, that of the upper city, and this is called in the Bible "the hill (Gibeah) of Jerusilem" (Isaiah, x, 32; see also $x x x i, 4$; lit. "against the hill").

W. F. Birch.

## IT IS REQUIRED TO FIND THE ENTRANCE TO THE TOMB OF DAVID.

(1.) It is here assumed (as I think it may be demonstrated) that the City of I)avid was on the eastern hill, south of the Temple. The following points are also assumed (though all are not at present capable of proof, while all (to me) seem highly probable) vis, that :-
(2.) The Tomb was within the City of David, facing from west to south.
(3.) The pool of Siloah (Neh. iii, 15) was in the Tyropeon between the south wall of the Haram and the present (so called) pool of Siloam.
(4.) The stairs of the City of David (Neh. iii, 15) were near the pool and ascended some part of the west side of Ophel (so called).
(5.) The entrance to the Tomb was in a vertical face of rock, as is common in Jewish tombs.
(6.) The entrance was not covered over when Herod built the S. W. corner of the Haram Area.
(7.) It was in the great malaki bed, 40 feet thick, mentioned by Colonel Wilson.

To economise labour and expense it is desirable to ascertain how the malaki bed lies south of the Haram. Excatation must decide this; but excavation may be guided by the following considerations.

Colonel Wilson (Ordnance Notes) says (31) the upper beds of missie dip $10^{\circ}$ to east, and $15^{\circ}$ to south.
(34 p.) The rock has a dip of $12^{\circ}$ in a direction $85^{\circ}$ east of north.
(3 p.) Strata near Jerusalem dip to E.S.E. at about $10^{\circ}$.

No doubt Colonel Wilson means these data to be taken for the matuki as well as for the misse, as Lieutenant ("onder adopts them in Querterty Stutement. 1881, 1p. $57,58$.

As however any dip of from $10^{\circ}$ to $15^{\circ}$ would canse the mataki on the eastern hill to bury itself, while as a matter of fact it keeps for a lomg distance near the surface, the datat of (oblonel Wilson seem (to me) to fail (o) help) us in endeavoming to find the position of the malaki on the old rock surface of the western side of (ophel (so called).

Assming therefore a miform slope in the malaki and a miform thicknoss, the awerage of the dip to south seams to be nothing like $10^{2}$ (i., $17 \cdot 3(648$ feet in 100 feet) still less any further approach to 150 (i.e. 25-881! feet in I(N) feet) hut mather (so far as I can make out) about 7 feet in $1(x)$ feet at the most.

This conclusion is arrived at thas:-


The top of the mataki (which is excavated near the Damascus Ciate, Ordn. Notes, p. (i3) may be said to the about 2, anto feet ahove the sea, and the aqueduct, 1,250 feet distant from that proint and near the N. TV. of the Haram, is at a level of 2, 409 feet (erumerterly Stutement, 1880, p. 360), and the passiges in the malutionear the Triple Gate (Ordn. Notes, p. T6) are about 2, 3 fio feet above the seat
(u) Therefore we have a foll from A to B (i.e, in 1,250 feet) of 91 feet.
(b) and (l) and " but at a dip, of $10^{\circ}$ we " but at a dip, of $10^{\circ}$ we ought to "have (wee above a) in-
(ie) A fall of $\frac{1250}{100} \times 17 \frac{1}{3}=0 r^{\circ}$ of more than 210 feet, and in





It is uncertain where the wall crossel the Tyropaenn (see Quurter?

 within the walls, amel, therefore in man th fimb rom for the panl of sibath within the walls (may it nut hatw heon withont!) the pmint II where rld intersects $(\mathbb{K}$ is apparently makmenn the phan ats far buth tai is fuan

ticable for it to have been. The crossing wall however may have been further south, even ats far as $J$, in which case the area to be searched is reduced possibly even to $\mathrm{D}_{2} \mathrm{E} \mathrm{F}_{2}$.

Thus so contracted may probably become the possible area of malaki to be searched for David's tomb, that one is forced to contemplate the prossibility of its not having been made after all in the malaki bed.

That the line of Robinson's arch cannot have been that of the statis of the City of David seems to me impossible on account of the aqueduct " L " (see above). Nor can I think that Herod covered David's 'Tomb by his addition at the south-west comer of the Haram.

As the malaki falls to the east, and as it is not proposed to question the accuracy of Col. Wilson's statement that the passages underground at the Triple Gate are cut in the malaki, it seems we must allow that the malaki crops up at that grate, and thence southwards is for some unknown distance the surface rock on the top of the natural rock-ridge of Ophel so called.

Still assuming that the fall of the malaki is uniform, we must (as the Ophel hill falls very rapidly south of the Triple Gate) conclude that at 600 ft . south of the Haram wall, the malaki has arready come to an end.


I question however whether it reaches as far as 500 ft . (ass in plan), and of this length, the last 100 or 150 ft . would be too thin a layer to be
probably nsed for a tomb. In like manner in the previons plan, it is neces-
 sine it is not likely that the 'romb would be excarated near the top of the malaki bed, lest the roof of mataki should not be sufticiently strong.
'The solerp ( (purnterly Statement, 1879, p. 175) neems, however, to offer a short cut. Ten pounds spent by Mr. Sohick would (I thme) settle the question as to whether a wall ever stood at the top of it. If no city wall (wer did, then (I believe) the face of the scarp (if bared) would reveal the entrance to a, if not to the romal tomb. The cost might perhaps be tono.
N.B.-The discovery of the wall crossing the Tyropatan would be valuable on its own accomnt, and would not, I imagine, be a difficult matter.

The same may be said of the consequent diseovery of the stairs of the (Sity of David, and of the Pool (of Siloah), and these would show that we were on the right track for the 'Tomb of David, and would (prolvally) vastly reduce the area of malaki to be searched by giving us the right positions. of D E or $\mathrm{D}_{2} \mathrm{~F}_{2}$
W. F. Birchi.

## HBEN-E/SER

As sparks of tupngraphical truth are likely to be elicited by the collision
 Samwîl will he attacked by those who disapprove of it. Confident that this is the real position of Mirpeh, we next turn to the Survey Map to search for the other places maned in 1 Simn vii, 11,12 , viz, Bethear, Shen, and Eheneger. Mizpeh witnessed a trying hour for penitent Israel when the Philistines drew near to battle as Sammel was erying to God: the smoke of the bumt offering was still going up to heaven, when suddenls the black clouds burst in a terrific thmaterstom over the heads of the unfortunate invaders. They reeled, turned, and soon before the well
 towards Vesin, nor did the pursuit along Whaly Beit Hanina cease unti they cane under Ain Karim.

Let us stand in imagination upon the octagon tower at Neby Samwil and survey this most interesting scene of Simmel's victory.

There, due south of us, just three miles off on the high ground, we seer








I hope the New Expedition will accept the omen, and begrin its valuable
work by taking a photograph of so deeply interesting a spot. And then if every person and place bearing this world-wide mame will either take a copy or subscribe to the Palestine Exploration Fund, enough money will he at the disposal of the Committee to enable them to discover the sepulchre of David (on Ophel soculled) in "the city of Darid, which is Zion." 'Thus will the great Zion controversy come to a happy end, in the complete identification of "the first three mighty" plates of religions fance, Bethel, Elvenezer, and Zion.

Shen, lit. Ha-Shen, easily assumes the form Deir (Convent); Yesin (Survey Map) ; or Dair Yeseen (Fimn).

Ain hidrim. In (queterly Shetement, 1878, p. 198, it is suggested that this may be Kirjath Jearim. For Bethoar lieut. Conder proposed Khurbet Hasan in 1876. Ain Kirim, 1878, but rejects both in 1879 (" Handhook," p. 4里) 。

Aphek, where the Philistines encamped near Elenezer (1 Sam. iv, 1), is siad to mean a fortress, and so identifies itself ly reason of distunce, charerter, and nome, with "the fortress-like village" of Kŭstŭl, "inn ancient 'Castellum' of the Roman conquerors." A neighbouring spring called Ain el Foka, might also be taken to preserve the ancient name of Aphek, if "Foka" (upper") did not frequently oceur elsewhere on the map.

Ebenezer. The only previous site proposed (so far as I know) is Deir Abân (M. Gamean, 1877 , p. 150.), advocated by Lieut. Conder, 1876, p. 149, and "Tent Wurk," ii, 333. It is, however, twelve miles distant, as the crow flies, from Neloy Samwil, and far more by Widy Surâr.

As the stone was set up between Mizpeh and Mashen, while in this line Wady Beit Mamnina is but two miles distant from Neby Samwîl, the choice for a position for Ehenezer is very limited.

A reference to the map will show that there is a dechivity ruming towards Lifta, on some part of which Ebenezer must have stood, since it is absurd to suppose that it was in the narrow raviue to the west. ( 1 Sam. iv, 1 ; v, l.) Aphek is the present Kŭstŭl.

Samuel's name might easily be comnected with Ebenezer (just ats Lieutenant Conder's is with the cairn on Ras es Sherifeh (Quarterly Statement, 1880 , p. 105), and the place being called Khurbet Samwil would casily lead to the height alrove being called Neby Samwil, suggesting the present traditions. The recovery of this celebrated site seems to me to witness to the great value and excellence of the Survey work.

W. F. Birch.

Soctom. After placing Zone at Tell esh Shathan, I have no choice left
 walk towards the south. It is a gratuitous supposition to think that Zoar was nearer to the hills than Solom. The narrative also requires that there should be but a short distance between the two places.

Seirath (Judg. iii, 26). The name apparently still survives in Umm Sirah and Wâdy Umm Sirah, about three miles north-west of Ain es Sultîn.
W. I. B.

## VALLEY OF HINNOM.

I propose to reconsider Colonel Warren's theory of extending the Valley of Hinnom up the Kedron ravine to the east side of the city. The Dean of Westminster has endorsed it ("Recovery of Jerusalem," p. xiv), and called special attention to its importance. M. Gannean, in 1870, advocated the same theory on finding a rock (Zehweleh) close to the Virgin's Fount, which he identified with the rock Zoheleth, and the fountain En Rogel. Other writers have also affirmed that the valleys of Kedron and Hinnom are identical; so that the theory would seem to have received some considerable endorsement ; and Colonel Warren has reaffirmed it receutly in his "Underground Researches" in the following words: "I have shown that the Valley of Hinnom is to the east of the city," p. 19.

It thus appears, a passage in Jeremiah has led eminent ituthorities astray, and that east gate has been accepted as a correct translation in chap. xix, 2.
"Goforth into the Valley of Hinnom, which is by the entry of the east gate." Jer. six, 2.
This word would be as correctly translated west as east, and would be incorrect in either case, as the following comparison will prove.
"Entry of the (haresoth), cast gate." Jeremiah xix, 2.
"Bcfore the (haresath), sun went down." Judges xir, 18.
If it indicates sun-rising in the first case, it indicates sun-setting in the other case; and hence means west in the one case, and cust in the other, which is an absurdity.

The actual truth is simple enough. The word is used in the Bible to represent the nun as god of day, whether in the east, or west; and, therefore, the words shor haresoih (Jeremiah xix, 2) ought to have been translated by the simple title, sun-gate. It is the idolatrous and Moabitish name for the god of day, whether rising or setting. Hence, we read that one of the five Egyptian cities was called in the language of Canam $=$ City of the Sun, or Sun City (Isaiah xix, 18). And in another place, we read: "He commandeth 0 = the sum, and it riseth not (Job ix, 7). The Hebrew root-word is huras, and in Arabic, harasha. The feminine plural form is haresoth, as given in the disputed passage.

A careful consideration of the whole chapter (Jeremiah xix), will make it self-evident that the prophet was not seut to the east gate of thie Temple Area, but to some gate at the south of the Temple Hill, and of the Ophel. Here are all the controlling passages. Let us examine them.
"Go forth unto the Valley of Himom, by the entry of the (haresoth) east gate, and proclaim there the words that I shall tell thee." Jeremiah xix, 2.
What definite locality is meant by the word there? no one can doubt it answers for the preceding words "Valley of Hinnom." But what place in the Valley of Himnom is definitely meant; is it east, west, or south of the Temple Area! The two passages we now cite, which follow the above, will give a definite answer to this problem.
"Behold the days come, saith the Lord, that this place shall no more be called Tophet." Ver. 6.
"Then came Jeremiah from Tophet, whither the Lord had sent him to prophesy." Ver. 14.
These are the controlling passages: surely no one will pretend to sity that Tophet was at the entry of the east gate of the Temple Area, and yet Tophet was the exact spot where Jeremiah was sent to, and the place where he delivered the prophecy he was sent to deliver.

Tophet was south of the Ophel Hill somewhere; we need not discuss its exact place. No description of Pophet will apply to the eastern side of the city, or eastern front of the Temple Area along the Kedron ravine, especially Isaiah xxx, 3:3; 2 Kings xxiii, 10 ; Jeremiah vii, 31, 32 ; xix, 6, ll-14. Whatever place is meant by the haresoth, or sun-gate, in the passage in question which has led to this theory, Tophet was the place intended, and no other is meant ; and Tophet is said to have been "by the entry" of this gate.

Whoever supposes that Tophet was placed by the entry of the east gate of the Temple Area must also be prepared to admit that Josiah, when he defiled Tophet (2 Kings xxiii, 10 ; Isaiah xxx, 33; 2 Chronicles xxxiv, 4), made a permanent place of detilement in front of the east gate of the Temple Area somewhere in the Kedron Valley; such in fact as ever afterwards became the only physical type of Hell known to a Jew. Such an abomination at the eastern front of the Sacred and Holy Place, and in sight of the worshippers, and under the very walls and foundations of the Holy Courts, is too horrible to contemplate, and woukd never have been permitted; and hence such an interpretation and theory as make this word haresoth-gate to mean east-gate of the Holy Sanctuary is utterly inadmissible. The objection is fatal to any such supposition.

It is much more reasonable to suppose that the prophet was desired to go to the south gate leading to Tophet, where the idolatrous people were probably assembled, in front of all the places devoted to Moabitish wickedness-to Tophet at the entry of this south gate, where the sun was probably then being worshipped. And in such a case, what would be more natural than for the Moabitish name of the sum as the god of day, to be given to this southern gate, and to be branded for the time being with the Muabitish name of the sun, then being worshipped at the "entry of the sun-gate? not that shor haresoth was its permanent name, but the locally descriptive name given to it for the time being, to be in acord
with the idolatry groing on there, and the prophecy delivered by Jeremiah?

Colonel Warren says: "the Arahic accounts speak of the Kedron as the Wady (iehimom." ("Recovery of Jerusalen," po3.3.) This is true. But the name is asainst the theory. The Kedron is a true ravine, atud the Amates call it the Wady Kedron; when speaking of it east of the Temple Area, and indepembent of its relation to the valley south of the Temple Hill. But ll'ully Cex-Himom means ravine of the Valley Himmom, which is technically correct, for Kedron is the ravine or wâly which runs through the valley in front of the Ophel Hill, and of the Pool siloam. If the word uhtly was equivalent to velloy, they would say Wâdy Hinnom, hut never Wady Gehinmom, which is what they do say: 'They never apply the word gui to the ravine, and say (ie-Kedron, as they say GeHinnom ; yet they say Wady Kedron, hut never Wady Hinnom. These
 may not be too long.

Strathroy, Ont.,
Comada.

## S. Beswick.

## 

## By Grevilie J. Chester, B.A. (Member of the Royal Archaological Institute).

The importance and interest of this subject will, it is hoped, be deemed whlicient exanse for my making a few observations upon Liontenant Conder's paper in the puucrterly Statement of October, 1880.

In his first section Mr. Conder sums up his arguments based upon the "xtension of land due to the ammal depmet of mud upm the Moditeratarean
 Sormmise existel at all in the eatly historic period of the Exmbus. The
 lation alpmats alsa likely in time to beconne, and the fact puinted out by Mr. Greville Chester that the Gelseh (i.e., Moment ('inims) is memely a meat.


Now in mepert to this statement I hatse toremank that while I thally
 byy repmet of my jommey to the blace in question, and while I consider
 probably latal-zephon, as in its muin fecutures at highly pownathe one: haw

 wamaks alreaty quoted as destitute of ally solid foumblation in fact whatenever. While fully admitting the alvance of land into the sea he the
processes of deposit and silting up on the const to the Wext of Gelse Hemdeyeh (the presumed Pi-hawiroth), I an convinced by personal observation that such operations or processes are not in progress at the present time to the Eiast of that point, and I am strongly disposed to doubt whether they coer were. In fact, whether from a reflux from the Eistward set of the tides from the mouths of the Nile or from some other natural canse, the tendency of the Mediterranean from Gelse. Hemdeyeh to El Gelse, and thence to the Eastern end of Serbonis is not to deposit but to encroack. The low Gelse of Hemdeyeh has been shom of its ancient proportions by the set of the marine currents, and some of the ancient fortitications which crown its low elevation have been undermined by the waves and have fallen upons the beach. I have no sort of doubt that the Ras once extemded further seawards than it does at present. This is indicated by the existence of an ancient well shaft in the face of the present cliff; and the existing stone walls of fortitication which are adapted to a sea frontage were in all prohability built as a kind of hreakwater when a purtion of the formerly existing town had been swept away. It is Worthy of remark that the sea itself even for some miles West of Gelse Hemdeyeh has ceased to be muddy as it breaks on the shore, and all alongr the strip, from one end to the other of the Serbonian Lake, the water of the Meditermaean is as bright and clear as it ever is when the bottom is formed of sand. But further, the highest portion of the sand-dume of el Gelse (Baal-zephon) itself has apparently been bisected by the waves, and even when the sea is perfectly calm, as it was on the day of my visit, it is all one can do to pass between the sea and the headiand. Driven by a north wind, the waves would doubtless impinge upon the cliff. And here arain there is not deposition but encroachment. In short 1 am convinced that if the Serbonian Bog had any existence at all in ancient times it must have existed upon its present site, and upon none other. It could not, as Lieutenant Conder fondly imagines, have been situated to the South of its present area and since have disappeared, because the hills of the Gebel, which, in places, are of considerable elevation, dip right down into the Iake. In othor words there is nom for the Serbonian Lake between the Mediternarem and the Gebed in any other position than that which it ocenpries at present.
II. The hypothesis advanced by Mn: Conder at the begriming of his thind section seems scarcely faily put, for he assumes too much, and much indeed which is contrary to fact. He says, "If the distances implied by Brugsch are impossible, and the supposed route along the sandspit was not only an mmecessary detour, but impossible, because no such spit then existed," \&e, p. 2333. Now "the supposed route," atong the sand-spit was not, and Mr. Conder has not even attempted to show that it wats, "an mnecessary detonu." I believe, on the contrary, and the testimony of Shesk Aradeh and his Bedaween confinm my belief, that the const-route from Egrypt to Syria to the North is as short, and even shorter than that through the Desert to the South of Lake Serbonis, and it is only marely used at the present day by the Arab passers-by between

Egypt and Syria, from the impossibility of calculating beforehand whether or no a passage across the inlet at the spot called El Saranit at the Eastern end of the Lake could be effected at the required time, for when the sea is rough the transit is impossible.

I camnot understand why Lieutenant Conder should assume that "no such spit then existed," if by the word "spit" he means the strip of sand along which I journeyed between the Sea and the Lake. If the strip of sand which forms the Northern shore of Serbonis did not exist, then Serbonis would not be a lake at all, but a portion of the open Mediterranean, and I have already given sufficient reasons for concluding that the "great Serbonian Bog" could have had no other position than that it at present occupies.

My reasons for suggesting that Tell el Hir is the site of the Migdol of Exodus and the Magdolon of the Greeks, are that at that point I found not only the remains of a city of large extent and evidently of considerable importance in aucient times, but that at the same place I found a massive square tower of crude brick, the remains, evidently, of a strong and important frontier fortress. The Tel es Semat of Dr. Brugsch and several maps, I failed to find at all, and I am altogether at a luss to know why the Bedaween unamimously denied the existence of a Tel bearing any such a name. Mr. Conder jumps to the conclusion that it is an Arabic name, and translates it "Hillock of Acacias," but acacia trees do not grow in the Desert, and Dr. Brugsch claims the name as ancient Egyptian, aud the place as having been in the XVIIIth dynasty the most Northern point of Egypt. He states that King Amenophis IV summoned workmen from the city of Elephantine to Samout, from one end, that is, of his empire, to the other. A similar collocation of places is mentioned in Ezek. xxix, 10, and xax, 6 , where the rendering of the A. V. "from the tower of Syene even unto the border of Ethiopia," is sheer nonsense, but is corrected in the equally authoritative margin, "from Migdol to Syene." It is worthy of note that there are several places in Egypt bearing names similar to Samout, of which the large town of Samanhood is a good example. Upon what authority, for he advances none, Mr. Conder says, p. 234, "The Baal-zephon of Brugsch has been proved an impossible identification," I am altogether at a loss to imagine. Who has "proved" it? On the contrary, such a competent scholau as Professor Sayce considers the identification to be nearly certain, and where, if not at Mount Casins, could such a name and place as Baal-zephon be looked for? It is a curions fact, and worthy of note in passing, that a more northeru Baal-zephon, now Jebel el Akra in Northern Syria, had also its ancient shrine succeeded by a Temple of Zeus Kasios.

And here I would state that although I discovered by personal inspection that Dr. Brugsch's Isthmus from the Gelse to the mainlind has no existence in fact, and proved that the Serbonian Lake, being a mere brine pit with a shifting bottom, and consequently without either a lacustrine or marine vegetation, neither is nor could have been the Jam saph, I am yet strongly inclined to believe that, omitting minor
details, Dr. Brugsch's proposed route of the Israelites from Sân is, in the main, the truest and most probable one yet proposed as far as Mount Casius. At that point, however, as I showed in my former paper, I part company with Brugsch Bey. The Israclites could not have crossed the Lake Serbonis by a non-existent Isthmus!

What course, then, supposing them to have reached El Gelse, could the flying people have pursued, when ordered by Divine intimation to desist from their direct route into Phonicia, by the way or road of the Philistines? And here a point meets us of considerable importance. It is remarkable that throughout the direct narrative there is mo mention of a Jam Soph, or Sea of Reeds, at all. The Jum, the Scu alone is spoken of. The Israelites were commanded to encamp not by the Nee of Reeds, but by the Sea, which can scarcely be understood of any other body of water than the Meditermatan, cf. Exol. xiv, 2. Again we are told that the Egyptians with all the horses and chariots of Pharah overtook the Israelites encamping by the Sea, beside Pi-hariroth, before, or over-against, Baal-zephon, Exod. xiv, 9. Moses, again, stretched forth his hand over the Seu, and the Lord caused the Sea to go back by a strong East wind, and made the Sea dry land and the waters were divided. And the children of Israel went into the midst of the Sec, and the waters were a wall unto them on their right hand and on their left, Exod. xiv, 29. And the Eqyptians pursued and went in after them (upon the track made by the division of the waters) to the midst of the Sea. Then, when the chariots "drave heavily" and the Eqgptians, convinced that the Lorl fought against them, had tumed to Hlight, the Lord said unto Moses, "Stretch out thine hand over the Sea that the waters may come again upon the Egyptians, upon their chariots, upon their horsemen." And Moses stretched forth his hand over the sece, and the Nea returned to his strength when the morning appeared, and the Egyptians fled against it, and the Lord overthrew the Egyptians in the midst of the Sece. And the waters returned and covered the chariots and the horsemen, all the host of Pharah that came into the Sere after them, there remained not so much as one of them, Exod. xiv, 23-28. Now it is surely a remarkable circumstance that in all this direct narrative not one word is said about any Jam Suph or Sea of Reeds. The Sea is alone spoken of, and that in a manner suitable to the physical features of the region between the Gelse Hemdeyeh, the presmed Pi-hariroth, and El Gelse, Mount Casius, the presumed Bial-zephon. It is not until we come to the Song of Moses in the next chapter that any mention is made of a Jam saph $h$ at all, and this, coupled with the fact that the term Jam Suph is unquestionably applied in other passages to the Gulf of Akabah, cf. Exod. xxiii, 31 ; Judges xi, 16, may surely aronse the suspicion that the term Jam Saph (translated Red Sea in Exod. xv, 4) may have crept into the sacred text of the triumphant poem sung by Moses and the Beni-Israel without due authority. If this indeed be so, the way would seem comparatively clear. The Iswelites advancing from Zoan Rameses, through Succoth, the booth or tent-country of the Nomad settlers, and passing Etham (possibly Tel Defneh) and Migdol (Tel el Hir), would
have encamped before Pi-hariroth (Gelse Hemdeyeh) between Migdol and the sea, with the height of Baal-zephon bounding their view in the dim distance in front. At this point, with nothing but the narrow strip of land between the "Gulfs" of Serbonis and the Mediterramean in front, and with the wild desert behind-truly "entangled in the land"-they would have been overtaken by the King of Egypt and the Egyptian host. These last, it appears, halted to rest, probably from the fatigue of the hurried pursuit, and to prepare for their attack upon the host whom they felt they had, as it were, driven into a corner, and who could not escape them. Then began the passage of the host of Israel between the waters upon the narrow strip of land, which by the action of a strong east wind all night was wider than usual ; and consequently easier for the passage of the sons of Isracl, who" went into the midst of the sea upon dry ground, and the waters were a wall unto them on their right hand (the side of Serbonis) and on their left (the side of the Mediteramean), Exod. xiv, 22. When morning dawned the Egyptians first seem to have found that their prey was escaping them, and they too adventured in pursuit upon the sandy strip between the waters. But the Lord Jehovah fought against the Egyptians, and at the stretching forth of the arm of the Hebrew leader over the sea, the Lord "blew with His wind" and the sea returned to his strength and the waters returned and overwhelmed the chariots which already had drave heavily in the shifting sands, and overthrew the Egyptians in the midst of the sea, so that there remained not so much ats one of them; and, looking back, Isralel saw the corpses of the Egyptians upon the sea-shore.

Now if this be a fair comparison and adaptation of the saced narrative to the physical features in the neighbourhood of the Mediterranean and Lake Serbonis, it will be seen how well the former is suited to the latter, and how admirably constituted the district in question must have been for the escape of the one host, and for the destruction of the other. When too there is audded to these considerations the extreme impobalility that the Israelites, whose object it was to get out of Egypt and out of reach of the Egyptian people as soon as possible, would have taken a Southerly course from Zoan, and passed through or skirted along Egyptian territory in the direction of Suez, and beyond that taken a ronte close to the Egyptian Establishments and garrison at Saribet el Kadim in the socalled Sinaitic Peninsula, it will appear almost certain that the route advocated by Dr. Brugsch and traversed by myself is the actual one pursued by the people of Istael. It is surely far more than a mere comedence that on the direct road between Zoan Rameses and Phonicia an occasionally wave-swept track should be found with the waters on the right hand and upon the left! When, however, their pursuers had been eugulphed and they saw their dead hodies strewn upon the sea-shore, what wats the most probable course taken ly the fugitives! Here it must be adimitted that great doubts and difficulties mitervene. If the Iswaelites had reached Mount (asius (Baal-zephon), the only place on the strip of sand which affords space for a numerous host, they could not,
when relieved of their immediate fears of pursuit, have crossed over directly to the main-land, because there is at that point no isthmus or tongue of land across the lake. Nor, in all probability, would they have continned their onward route along the strip, and crossed at its Northern extremity, even if at that time there were no inlet from the sea, for that course would have been directly in the teeth of the Divine intimation that they were not to follow the way or road of the Phenicians. They would be therefore compelled to retrace their steps along the strip again left dry by the retmon of the Meditermanen to its usual level by the action of a wind blowing across the Lake, as far as Pi-hariroth, or rather a little beyond it, and then, doubling round the eud of serbonis they may have turned in a south or South-easterly direction into the Desert of shur.

In what direction would they then in all probability have turned their steps ? Mr. Philip Smith has suggested to me that in three days (if indeed this expression may not be around rather than a certan number) the lsmadites would have reached the Bitter Lakes, which he woukd identify with the Marah of Exodus. This view, however, seems to me to be open to two objections. Some at any rate of the Hebrew host must be supposed to have known that the lakes were bitter beforehand, and consequently the fugitives would ruther have avoided them than directed their steps towards them. And, secondly, the position of the Bitter lakes is such that the host in advancing from Pi-hariroth would have had to skint the hostile Egyptian territory all the way, if indeed the Lakes were not in Egyptian territory itself. The so-called Scrapemm near Ismailia, where lare Egyptian remains have been discovered, are no great distance from the Bitter Lakes, and the latter would have been on the direct route to Sarabet el Kidim and the other Egyptian stations of the so-called Sinatic Peninsula. The object of the Ismaelites being to aroid the Egyptians, they would surely have given thrm and their country as wide a berth as possible. It seems, therefore, for more likely that on leaving Pi-hariroth they should have taken a South-easterly, rather than a southerly course into the desert, and it is in that rather than in any other direction, I take it, that the key to the diflicult question of the route of the Isatelites should be sought for and will be found.

In conchasion, I venture to add a few notes which may serve to illustrate the general question.

One of the principal French maps of Lower Egypt marks the Lake Serbonis as Lac desséché. Whether this was the result of an actual survey of the Lake I am very much inclined to doubt; I doubt also whether even when the inlet at El Sammit at the Northern end was closed the Lake was ever entirely dry. The rush of water into the Lake at this point at the present time, described by me as "likea mill-rate" seems to prove not only the immense amount of evaporation incident to a body of water some tifty miles in length and bordered by the burning sands of the desert, but also that the lake is at a lower level than the closely neighbouring Mediterramean. Now if this be so another fact demands consideration: The strip
of sand between the waters is so narrow and of such an easily permeated material-loose sand with here and there detached slabs of conglomerate formed of shells and sand, bound together by the decomposition of the lime in the shells by moisture-that one cannot doubt that water is supplied to the Lake by infiltration from the Mediterramean, as well as by natural inlets. Now if this be the case, the lake wonld never be dry, never merit the term desséché ; although it might at times be rather a bor than a lake.

Investigators of the route taken by the Israelites after the ratastrophe which overtook theil pursuers, will henceforth have to take into account the argmments of the anonymons author of "The Mehrew Mirration from Egypt," who endeavours, and that with considerable force, to prove that Mount Sinai is not in the "Siniatic" Peninsula at all, but in the neighbourhood of Mount Hor. In this connection T may state that the range of mountains to the South of Serbmis called by the Bedaween Haleh (?Halal) were described to me by the Suarka Sheik Aradeh as possessing springs, and abounding in fine pasturage. If then the Ismelites were on the way from Pi-hariroth to Mount Hor, they might have passed through . Tebel Haleh, and would there have found sufficient pasturage for their flocks and herds, which they could scarcely have done amidst the arid and burning defiles of the tract generally received as Sinai. This point, and the exact meaning of the expression $\operatorname{Yam} S \mathrm{~S}_{\mathrm{ph}}$ in connection with the Wilderness in the later Sacred Books, deserve careful investigation.

Note.-The sketch map which accompanied my previous paper on my journey from Sîn to El Arîsh makes no pretensions to minute accuracy, and is intended only as a rough approximation to the places indicated.

## life, habits, And customs of the fellahin of Palestine.* By Rev. F. A. Klein. <br> (From the Zeitschoift of the German Palestine Exploration Society.)

The present inhabitants of Palestine (that is to say the sons of the soil, may be divided into three tolerably distinct classes:
I. The inhabitants of the large towns (madani, pl. madanije.)
II. The villagers (fellīh, pl. fellakin, peasants, agriculturists, from fulch, he cultivates, tills the land).
III. The Bedawin (beduwi, dwellers in the desert), who consider them-

* IIer F. A. Klein (the discoverer of the Moabite stone) no longer lives in Palestine, but he had 26 yeara' experience of life in the Holy Land, and in his position of pastor of the Protestant Arab community - which he held for five years in Nazareth and the rest of the time at Jerusalem-he found many opportunities of holding fan iliar intercourse with the Fellahin.
selves the veritable Aralos, and proudly call themselves (and are sometimes called) el 'arab.

In their language, dress and the style of their dwellings, as well as in their customs and genemal mode of life, these three classes are suficiently distinct, one from another, to enable those who have any knowledge of them to distinguish almost at the first glance or after hearing them speak a few words, the Fellation from the Madanje, and both from the Beduwin.

Of course there are individuals of each class, in whom one finds modifications with regard to intelligence, civilization and mode of life. And between particular towns, villages or 'Bedawin tribes, we find more or less difference of character, language and dress. The Nübuluser, for instance, is the representative of a somewhat silly and ignorant type, and his way of making the sch into s (saying sems for schems-sun) and his drawling pronunciation of the final syllables (ane mā suftōōos instead of ana mé schuftösch) gives rise to many jokes at his expense. Again the characteristic of the people of Jaffa is, that they throw themselves heart and soul into trade; money-making is their religion. The poor of Jerusalem are dawatschoje, the technical term for those who pray for the preservation of the Sultan and his 'Kingdom. In the holy places many high masses are celebrated both by Mahometans and Christians. Most of the Christians who are not attached to religious communities have become poor, and with a few notable exceptions, have lost all feelings of honow or independence of spirit, and seem to have no energy for earnest work. With regard to the villagers many are proverbial thieves and impostors as, for instance, the inhabitants of Bethany and Lifta, near Jerusalem ; others are restless and quarelsome like the people of Râm Allah; others again are complete blockheads like those of Beit Jala, both of which places are near Jerusalem. At Jifneh we find a village with quiet, honest, industrious people, and quite near at Râm Allah are a set of cheats, thieves, and robbers-who give the police and magistrates no end of trouble. Again at Bethlehem we find a particularly industrious, intelligent class of people who are both ingenious and enterprising, whilst scarcely half an hour's journey carries us to Beit Jala, where they are dull and boorish, and show plainly by their mode of speaking that they are of a rougher stock than the more polished Bethlehemites. The Nazarenes are fine, high-spirited people, with very independent natures ; there you hear more vigorons language, with the gutturals more clearly sounded, than anywhere else in Palestine.

With respect to, the Belawin, the tribe of Bene Sakr look with sovereign contempt on the tribe of Tamireh and also on the Ghawarineh of the Jordan Valley, partly hecanse they are somewhat deficient in the manly feeling and courage which they themselves possess, but more especially because they do a certain amount of agricultural work, and this the true Bedawin consider it real degradation.

Although, as we have already said, the three classes may be pretty
distinctly divided from one another, there are many places which combine more than one element. Thus there are some towns in which, although a civilized mode of life prevails, you will find so large an admixture of the Fellahin element that you can only describe it as half a town, half $n$ Fellahin domain. Gaza belongs to this category. On the other hand, in many of the large and prosperous villages like Bethlehem or Nazareth(which in spite of its 5,000 inhabitants is only a large village of the Fellahin class) we find a good many of the higher elements of metropolitan civilization, and in such places the mode of life is very different to that of the Mahometan or poorer villages.

As a mixture of Fellahin and Bedawin, we may mention the people beyond Jordan in Jebel Ajlinn and in the Belka, amongst whom with a little of the town and Fellahin clement one finds, both in language and customs, a great deal that is of Bedawin origin. Especially in Kerak, for there nearly all the Christian families live in tents ail through the summer. It is only during the winter that they return to their dwellings and live like Fellahin. The women of this part of the country, whether Christian or Mahometan, are scarcely distinguishable from those of the Bedawin.

The town people naturally consider that they have reached the ne plus ultra of civilization, and pity the stupid, boorish Fellah. The very name has become a term of reproach, and is used to describe a stupid, uneducated man. The Fellah accepts his position quite good humouredly and acknowledges his want of polish; his naive excuse for any mistakes or stupid tricks is simply : Mäni felläh? Am I not a Fellāh? But the true Bedawi luoks down upon both Townsfolk and Fellahin; springing on his noble steed he feels himself one of the lords of creation, and gazing from his tent over the wide-spreading plain, he asserts his superiority over these miserable dwellers in houses.

The Fellahin villages vary according to the wealth of their iuhabitants and the building materials which the neighbourhood can produce. In the mountain districts most of the houses are of stone, which is easily obtainable. In well-to-do villages you often see a number of tine buildings, with large yards for the cattle, which are enclosed by strong, high walls : The dwellings are large and lofty with thick walls, and the vaulted rooms rest on very massive pillars; the builder cares little for beauty of style or even symmetry, his one idea is strength and durability; one seldom finds neat edges, good arches or correct angles; it seems that the love of the beantiful is no more developed in the present inhabitants of Palestine than it was amongst the ancient Hehrews. Nevertheless, in the richer villages, especially in the Nâbulus mountains, one often comes across houses, belonging to Sheikhs or other persous of importance, which are built with a certain amount of taste, and have balconies, galleries and flat roofs, and well decorated doors and windows. Proverbs and the date of building (turich) are placed over the door, or somewhere on the walls; great sums are often spent on their erection, and a Sheikh's house has more the appearance of an impregnable fortress than
of an ordinary dwelling place. Such buildings were a necessity in the old days when their inmates were exposed to constant feuds between the different villages, and were always subject to sudden attacks. When the people are poor, they erect four walls of roughly cut stone built with mortar or perhaps only clay. These are roofed with trunks of trees, branches and faggots, over which they put a layer of earth about a foot deep and well stamped down. The whole is then overlaid with a mixture of clay and straw which soon hardens in the sun: the roof is sloped to allow the rain to run off. As a rule such a roof is strengthened before the winter with a cylinder. Where this precaution is neglected the rain soaks through to the layer of earth and makes it so heavy that should the supporting rafters be at all rotten, the whole roof falls through. After a long spell of rainy weather this not unfrequently happens and causes bad accidents. In the villages near the sea, where planks can easily be got, the upper rooms and roofs are often built of wood, and are made waterproof by a facing of cement, a mixture of lime, ashes and small flints.

In the great plains (round Gaza, Jafa and 'Akko) the Fellahin build their houses, or rather huts, of sun-dried bricks.

As a rule the villages are built either on the summit or slope of a hill, so that they may remain dry in the rainy season, during which many of the plains become impassable bogs, and also to protect them from the attacks of the Bedawin, who are far more formidable enemies on the plains than among the hills.

Except where natural surroundings of vineyards, olives or palm trees lend them a little beauty, the villages are very ugly and unromantic looking; no red tiles or green shutters-no cupolas or minarets break the monotony of the endless flat roofs. There are nothing but grey, meaningless houses which either look ruinous or else unfinished. The best buildings even have not so much as a parapet. The covering of cement makes them look like dull blocks of stone surmounted by mounds of earth, on which the grass grows in early spring, and on which sometimes one sees a goat grazing. The buildings are so much the colour of the surrounding ground that in the distance it is difficult to tell whether you are looking at a village or at a group of rocks. Perhaps the most wretched looking of all the villages are those on the great plains, which are built of bricks or even of mud. If, as sometimes happens, such a village is deserted by its inhabitants, a couple of centuries or less suffices to sweep away all trace of it, and unless it has contained wells or a large mill stone, there would be nothing left to testify to its former existence. This may be one reason why the sites of many places mentioned in the Bible can no longer be found. The Fellah cares little for light or air in his dwelling. He has no windows, for he could scarcely protect himself against the cold, rain, and sharp winds which windows would admit, seeing that the village carpenter (if one there be) has not mastered the mysteries of window sashes, and even finds a good deal of difficulty in putting up an ordinary door. Still the chief reason why the Fellah contents himself with so little air is from a fear of
night attacks, and from the necessity of being able to turn his house into a little fort in the event of a village war or of hostile assults. In many villages (as for instance at Râm Allah) it is customary to steal to an enemy's honse at night and shoot through any hole that can be found, in the hope that although the shot may not take effect, it will at all events startle and frighten the family. Provided the inmates do not sleep in a line with such an opening, these nightly visits cause more alarm than injury. By day the door is always open, it is against etiquette to close it, as they think it gives an impression that something is going on of which they are ashamed, or that they want to prevent the entrance of guests. Nor has the Fellah any need of much light unless he happens to be a weaver or shoemaker (and of these there are but few), for his life is passed in the open air ; either in the vineyards and fig gardens, or in the market-place or the thrashing floor, taking a siesta in the sun, smoking his pipe and discussing the news of the day with his favourite comrades. If he gets too hot or finds it wearisome, he goes to the inn (madüfe) which is sometimes town hall, casino and church (for the Mussulmen) all in one. He loves this out-door life, and only uses his close and unventilated dwelling as a safe place for his night's rest. Most of the houses have only one story, but well-to-do people, and especially the sheikhs, think a great deal of au upper floos where they can receive honoured guests, and where the host can remain with them and not be disturbed by the curiosity of callers or chance listeners. The walls are decorated and the floor cemented, and it is altogether better than the ground floor, to which not only all sorts of people, but even the cattle, have entrance. In the better houses there is generally a small terrace on the upper story, which is finished with a parapet (called as hazir in Nazareth and also umhawwata) on which one has a good view and fresh air ; it is a pleasant resting place after the heat of the day. In the plains even the poorest huts have (lightly built) upper floors constructed of branches, mats, and leaves, where the inmates take refuge during the summer from the suffocating heat and from the vermin which make the lower stories almost uninhabitable. The stone which is most in use for building, everywhere except in the plains, is a kind of limestone, of which there are several varieties. The ka'keute, a rather soft yellowish stone, is easy to work and call almost be cut with a knife when newly broken; it hardens on exposure to the air, but is not durable, for it very easily breaks. On account of its lightness it is often employed in building upper stories to lessen the weight on the foundations, and also as a facing to doors and windows whenever decorations are required. A much more durable stone is the malaki, it is harder to work than ka'kute, but it keeps its colour well and is of a good pure white ; the Fellahin generally use it for their better houses. The jehüt or Jew's stone is exceedingly hard, and has been but little used for building purposes ; during the list few years, however, owing to a scarcity of material, it has been utilized in and about Jerusalem. Like the softer kinds it is cut in blocks, and the stonemasons of Bethlehem by the use of good tools and constant practice, have acquired a particular reputation for hewing it. It must have
been used in former times, for it is found in some of the oldest ruins, though only in unhewn blocks or in a very rough state. Round about Nazareth they use a porons limestone called uari-firestone, on account of its not splitting when exposed to heat. It is therefore much employed in building ovens. They have also a very porous, light stone called 'akkäd. And latterly the mizzz hïlu (also a limestone) has been much used in Bethlehem and other parts; it is a beatiful stone but very hard to work. In the regions of the Jordan and around the lake of Tiberias and the Dead Sea, black basaltic stone is often used and this gives the villages rather a melancholy aspect. If there are any ruins in the neighbourhood the people gladly make use of them so that one often sees ancient capitals and portions of pillars set into the modern buildings. They make their mortar of lime mixed with sifted earth; but for cottages or huts, clay is thought sufficient. The first consideration in building a house is making the foundations secure ; if possible they must be on a rock and for this purpose they uot unfrequently dig as far below the ground as the house is high above it in order to give it a firm basis.
'This is a very necessary precaution ; not only do the heavily built buildings require something to rest on, but the heavy rains in the winter bring a furce of water that sinks into the ground for several feet and softens everything: a foundation only of earth would soon give way, and the building collapse.

The erection of a new house is always a great event in the village; the man about to buidd it thinks of nothing else. As soon as the plans are drawn and the foundations commenced, he sits down beside his architect, foreman, and buider (one and the same person) and calmly smoking his pipe, follows the whole process with the greatest interest, occasionally signifying his approval by giving advice or urging on the work. When it is a Sheikh's or some other village potentate's house which is being built, the celebrities of the place, priests, elders, etc., join him in order to show their interest in the important event. On these oceasions there is a great deal of chatter, smoking, and drinking of coffee ; the builder is praised or advised; the boys, girls, and women run about with baskets and little wooden trays carrying away rubbish and returning with mortar. An overseer, armed with a stick, marches round and brings up the idlers, giving them gentle reminders with his cane. After a long spell of work, or when the heat is very oppressive, their energy sometimes fails; they then enliven themselves with a song. Some one starts them by singing a few bars, and then they all join in, the subject is often very nonsensical, but when it refers to the splendid backsheesh or the good feast which they expect at the completion of the work, it always causes great merriment. The builder, as long as the work is in progress, is a person of great importance, and is treated with the greatest respect by his employer, even if this latter is a Mussulman, and the builder a Christian. A cup of black coffee is frequently offered him, to keep him in a good humour during the heat of the day, and this attention always pleases him. It is astonishing to notice how the Arab labourer will work from sumrise to sunset.
exposed to the most fearful heat, only resting an hour and a half at midday, and taking scarcely any nowishment save the cup of black collee, which he considers the best of all refreshments when hot and tired.

When the house has progressed as far as the roof, that is to say when the side walls are up, and the framework and first covering of the roof is ready, all the village assembles to assist at its completion. Then follows much ruming to and fro and screaming and singing enongh to drive any one wild. Some prepare the mortar ; the boys, girls, and women hand it to the builder, and men bring up the stones. The builder places stone after stone, filling them in with mortar, and gasping with hurry and excitement; the children yell, the mensing choruses and the women join in the zaghorit, until the solemn moment arrives when the last stone is about to be put on. Then the builder panses and prepares to complete the work in a becoming mamer, a youth with a loud voice amnounces that the crowning point has been reached.

The buikler then makes a sign to the owner that all is finished, and this latter covens him with a mantle of honour (a black and silver embroidered (abei) and hands him his backsheesh. After which the whole company falls: to and devour a feast of meat, rice, and bread, and then depart highly delighted with their work and its reward. I have often witnessed such scenes in Nazareth and the neighbouring villages. Where the people are lucky enough to possess a newspaper or journal, a leating article enlarges upon the important event, and hands it down to posterity.

Every well arranged house possesses a bakehouse, for with the Arabs bread is really the staff of life. If the poor people have only corn enough (or even dura, a kind of millet) to make their bread, they consider themselves well off. All other food, even meal, they regard as a sort of regetable, which they can do without. Many honses have their own bakehouse, but sometimes one has to auswer for several families. It is generally a hut built of stone and clay, and scarcely high enough to stand upright in. The most impretant part of the oven is a platter or tray made of clay; it measures about 20 inches across; its surface is covered with small flints, and it has a closely fitting cover of the same material with a long handle. When they are about to bake, the cover is put on, and a lot of dried manure is heaped above it and set fire to ; after a few hours, the whole thing is thoroughly heated; the ashes are then removed, the cover raised, and the dough laid upon the glowing, flints in thin layers (something like pancakes), which very soon bake. When the baking is over the shelf is again covered up, the ashes are replaced, and more fuel is added so that the oven may be kept hot. As the bakehouse is generally warm, a Fellah often creeps in in cold weather to wam himself or to take a nap. It matters not to him that his clothes become somewhat scented by the odours of the peculiar fuel. He cares as little for that as he does for the jeers of his superions. A little while ago during very cold weather, a mother put one of her young children into a bakehouse to wam it. She laid it on a mat and left it, but when she returned to fetch it, she found it dead and half baked, as the oven had become too hot.

Each of the larger villages are divided into quarters (heriet); these are named either from their position or after the chief families* who inhabit them. (El-hüret el-fokit, the upper part; el-hïret et-suhtur, the lower part.) For instance, in the village of Rom Allah there is the hivet eschschatore, the quarter of the Schakara; and keret el-hudude, quarter of the Hadade. Different families inhahiting the same village often have feuds which last for yeurs, and whilst they continue all communication is cut off between the different quarters. Each side has its own inn, and if, as, for instance, in a Christian village, the church happens to be in the A quarter which is at emmity with the B quarter, perhaps for years no inhabitant of the latter will attend the service. If after a long time the quarrel is not made up, the quarter B will start a priest of their own, and perhaps build a church ; this, I know, happened at Saijibeh (Ophra?) and thus all commmication is cut off between the opposing parties. A common imn is generally a sign that the village is at peace, whereas two or three denote internal troubles. The vilages only possess two pullic buildings, one for religious purposes, the church or mosque, and one for worldly use, viz, the madaffe, mazul, or inn.

In many villages there is the tomb of some holy man, which is called a mation; it is generally a little building with ir cupola, and is surrounded by a few shady trees. In Mahometan villages the inn is often used as the mosque, and there you may not only find shelter and food and converse with the neighbours about local or political events, but you may also join in the prayers of the priests. The market-place (sukh) or Fruit Market in large villages, or the bazars in smaller ones, are also places of resort where people meet to discuss the news of the day, and where the Fellah kills a portion of the time which so often hangs heavily on his hands. The internal amangements of the Fellahin dwellings are very primitive. The room is divided into two parts, one of which is occupied by the cattle (oxen, donkeys and fowls), and the other, which is reached by a few steps, forms the living room of the family, On this principle the Fellah, when he closes his door at night, has all his possessions under one roof, and can more easily protect them. 'The living room has a cemented floor, and ats the cattle are not admitted, it can be kept fairly clean. If a guest arrives the wife or danghter of the house has only to give the floor a hasty sweep and lay down a straw mat, or in the better families a carpet on which the visitor takes his seat. After a while when one has become accustomed to the dim light one feels curious to see how this strange reception room is furnished; a ghance, howerex, sufites to show us that it contatins mothing comfortahbe or artistic. There are perhaps several corm-bins, which the women make out of clay and straw. They open at the top for the grain to be shot in, and how down there is atmall hoke, stopped with a peas, themeth which the daily portion is taken out.

These bins generally stand a little out from the wall, leaving a useful
space for lumber and rubbish, which also forms a retreat for the female portions of the family. In one corner stands a large water butt called, like the bins, a chabije, and made in the same manner; the water is ladled out with a little pitcher which also serves as a drinking mug. Where there is an attempt at anything a little more artistic, they have a little black earthenware mug ornamented with red designs, and made with a curved spout, from which (those who are experienced) allow the water to fall in a stream down their throat without touching it with their lips. We must not forget to mention another very important article, namely, the mill. For heating the room and for cooking or coffee roasting there is a sort of fireplace, without any proper aperture for letting out the smoke, which has to find its way through a small hole in the wall, after having blinded and nearly stifled the immates. The chief advantage of this method of warming is that the walls of the room require neither paper nor paint, but soon acquire a fine brown or black surface. Over the fireplace or from some projection hangs a simple irou lamp* which is kept burning all through the night; only the very poorest of the Arabs sleep in darkness. The saying "Poor fellow! he sleeps in darkuess," is equivalent to "Poor wretch, he hasn't a farthing to buy oil with!" A many-coloured chest contains the family wardrobe and the women's jewels, and is also the safest place for the bestowal of money, papers, and other valuables. Although most of them are now provided with a simple apparatus which causes a bell to ring if the lock be turned, it not unfrequently happens that thieves carry off these valuable chests by means of a night raid. A few iron and wooden vessels $\dagger$ are used for cooking utensils. A round mat, often very prettily made of red and black straw, and the work of the women, serves as table, tablecloth and dish; an iron pot, or in some villages a leather bottle or pail is used for fetching water.

Such are the simple necessities of the Fellah's life, and having them he lives contentedly and happily in his native land.
(To be continued).

## THE ORDERS FOR MUSICAL SERVICES AT HAMATH.

Many thousands of stones, or tablets of metal, inscribed with catalogues of Royal hecatombs or humble pious names have come down to us from Egypt, Palestiue, Greece, and Rome; but the four stone offerings from Hamath difter from them in many ways. These four tablets I can translate, and 1 affirm them to contain orders for musical services. When the

* (Sirädsch).
$\dagger$ Batije, pl. bawāti.
- 


translations first came out they were rejected in many quarters without examination, not because they fail in adequate proof, but because their contents are novel. If these stones had contained an order to sacrifice a hundred oxen at the expense of some Royal Sargon or Xerxes, well and good; the proof is ample. If, however, the democratic Hittites, to whom even the great Rameses II paid tribute of corn in his old age, and to whom we owe the Exodus of the Jews, are proved by these stones to have delighted in musical services, then the cry roes round, it is nought, it is nought. One woald have thought that the evident visible existence of these four stones, new in kind, would have aroused an eager curiosity among the learned in such things, and that I should not have been left alone for eight years, wherein, so far as I know, not a single workman in the world besides myself has deciphered even one letter. The preliminary knowledge, however, requisite to judge intelligently what I have done is, after all, only that of a moderate amount of Hebrew, with its relations to Chaldee, and I should suppose that among the subscribers to the Palestine Exploration Fund there may be, say, two hundred labourers who are competent. It is for them that I now write.

Turning, then, to the two plates accompanying this letterpress, the student of the Hittite dialect will have to satisfy himself in the first place that what we may call the squeeze plate and the transliteration plate differ merely in arrangement. The squeeze plate is taken from the plaster cast in the British Museum. The transliteration plate is an enlargement of the squeeze plate, in which the letters are spread out and turned about wheu necessary, so that each line shall be read, as in English, from the left hand side to the right. I object most strongly to the encumbering of scholars with a fresh, heavy, and unnecessary burden, by writing the new language from right to left. There is not the slightest necessity for our doing so, for the examination of the squeeze plate shows us clearly that we have at present an option given us between the two methods of writing. The first line in it begins, we see, from the right, the second from the left, and the third from the right again. The Greeks in former days availed themselves freely of either of these systems ; and experience, in later days, has taught them the advantage of the method I propose to follow in expounding the Hittite.

After satisfying himself that the manipulation has been a fair one, the student may take it upon trust that there are four of these squeeze plates now made known to us, which differ a little amoug each other. They differ not only in the names of those who offered up the stones, but in the localities from whence the offerents came up to offer, and in the state of preservation in which they have been found, and in the greater or less degree of carelessness of the masons who manufactured the stone offerings, and who obliterated or enlarged words here and there. I must, however, say for the masons that they seem to have been very much more conscientious than the similar class of men in Egypt, whose gross carelessness is disgraceful in reproducing portions of the Book of the Dead, paid for, no doubt, as genuine.

This may be a good place to call attention to the fact that this squeeze plate now published is not said to be a copy from a squeeze, but from squeezes. The meaning of this is that incomplete parts among the four stones have been consciously supplemented in each case by taking parts from the other three. If this had not been done the result would have been to compel us in each case to argue from an incomplete inscription. It will be found by-and-bye, when the types are ready, which I am told are being manufactured, that something of this sort will of necessity have been done in picking out model types. The fittest among them will survive, but not as the perfectly exact model of the mason's work. The matter here mentioned is of no grammatical importance, but practically I find I have left a person named Sahidi-Jah as the name of the offerent from a place called Iban, whereas the man who came from Iban was T'sadahi.Tav. The portion of the plate which would have given us the locality of Sahidi-Jah is unfortunately lost. The grammar is clearly not affected by this.

Let us then suppose our student with this hitherto unpublished transliteration plate before him. Take the first word, which looks as if it consisted of seven letters, that is to say, seven to the eye, but perhaps including a mute. For reasons which weigh with me I propose that the transliteration of these letters is to be given as $a-g a n n-h u$. There is of course some reason why I suppose it to be a-gann-hu. Some five or six years ago I remember being impressed with a notion that the stones belonged to a Chantry or Fane for sacred music. This impression found itself a place in the pages of the "Athenrum." Later on it led me to examine divers Hebrew words expressive of music. The result was that I turned to Isaiah xxvii, ver. 2, "In that day sing ye unto her a vineyard of red wine." The word for "sing ye" is here given us as gann-u. The $g$ is not the gamma but the hard or guttural "ain" which is often mute. Now the decipherer, following the Newtonian method, is privileged to form one hypothesis for each of the unknown symbols or letters before him, even as Newton formed one hypothesis about the apple. It must be understood that Newton did not form a second hypothesis about the moon, but calculated a result about the moon's motion, which turned out to be right. Even so the intelligent student will observe exactly in the middle of the third line in the transliteration plate that I have made two hypotheses by naming two letters as " $d$ " and " $i_{\text {." }}$ He will agree therefore that when he comes to the last word but one on the plate it is not as an hypothesis, but as a result, that he there sees the word " $d i$," which in Chaldee means "of." Unless he understands this he may as well shut up the book ; and if he does understand it, he will be entitled to say that on the hypothesis made in the middle of the plate about " $d$ " and " $i$," a not inconsiderable amount of probability is given to the word at the end of the plate being " di." The number of coincidences of this sort, where the allowable hypotheses produce most suitable results, is very large throughout all the inscriptions. I have merely taken this simple case as an example. Considering that all man's knowledge is acquired in this way,

the way, namely, of hypothesis and suitable result, it is to be hoped that Orientalists may some day become conscions of the fact. In comparing the two words, the gamu of Isaiah xxvii and the hypothetical a-gam-hu of the plate, I admit that we are not yet in the region of strong probabilities; all that we are yet entitled to say is that the certain existence of gamm is a sufficient inducement to us to hypothecate $\alpha$-gann-hu.

If I supposed the language of the offering to be Hebrew I should be in a difficulty, for the aphel conjugation of verbs, which gives a causative meaning, is very little if at all used in Hebrew, but in Chaldee it is frequent. Causality in Chaldee is expressed by affixing the letter " $u$," so that in order to say "cause ye a soug," or "start ye the music," we change the gem by using the Newtonian method. By the hypothesis of the first letter being an " $a$," a result is obtained that the coujugation of the verb is aphel or causative.

The recognition of the initial aleph as a sign of causation is very encouraging, and augments considerably the probability that the transliteration of a-gann-hu is correct; but unless we can also explain the " $h$ " in the final " $h u$, ," I should admit that the explanation of the aleph is in itself not enough, and might reasonably be held to be a mere chance coincidence. I said, however, above, that there are four of these stones. Let us then compare them with each other. Here let me say that in the fourth stone the masons were extremely pressed for room, so, instead of chipping out the word a-gann-hu they abbreviated it into merely an "ag." This admits, so far as I can see, of only one explanation, viz, that the word being thoroughly well known its abbreviation was also thoroughly well known. Just as "mem" in English would go occasionally for "memorandum," so " ag" in masons' Hittite went occasionally for $a-y a m-h u$. Now the word $a-g a m-h u$ being a causative imperative second person plural, supposed by me to mean "cause ye" or "start ye" the song, is followed by what looks like another imperative second person plural, viz., S' $c-k h u k-u$, supposed by me to mean "play ye" from the same root as is found in the name of the Patriarch Isaak. And now for the triumph. Even in the document in which the masons have been so cramped for room, instead of writing $S e-k h u k-u$, they have written Se-khuk-hu, the same final form as a-genn-hu. Three explanations may be offered for the appearance of "hu" final for the imperative plural instead of " $u$ " final. Either it is an archaism, in which case the stone containing it may be older than the others, or it may be carelessness in the masons, or the symbol for the " $u$ " carries a breathing with it. It is quite within the normal order of things that in such an investigation difficulties of this kind should appear, and until more material is to hand, I do not of course suppose I shall be able to force conviction. To have found already the formative symbols for causation, and the imperative plural second person in the first two words, together with the roots for to sing and to play, is good progress. Having then probably before us the words "start ye the song, play ye," we have to see whether
the third word will fit into its place. Some such word as "harmonies" would be very suitable. The word should be an accusative case after the verb play ye. A Chaldee word, if we can fairly find it, would be far more suitable than a Hebrew one, because the causative symbol we have already found is only causative in Chaldee, not in Hebrew. Casting, then, our eyes upon the third word we recognize a letter concerning which we have already in the first word made our hypothesis, that it is " $n$." We see, in fact, a probable " $n$ " twice given with a new letter between. Memory at once recalls to us the heading to the psalms of David giving us at once a clue to a word most suitable, both in meaning and form, viz, the word "Neginah." Neginah is, however, Hebrew, and it must be understood that the word in the plate does not read as Neginah, but as Neginvati, which includes the possessive pronoun ";" and would mean in Chaldee "my harmonies." For the sense then nothing could be more appropriate, "start ye the song, play ye my harmonies."

The importance of understanding the foundation on which $I$ am resting my transliterations is such that I will stop a little to build up the material I have been using in a somewhat different shape.

It does not admit of any doubt at all that in languages akin to Hebrew there are three words, viz., "ganah" to sing, "sakhak" to play, and "nagan" to strike or play an instrument. There is also (in Chaldee) a way of expressing causation, also of expressing command (imperative), also of expressing plural command, also of expressing possession. Now, so far as 1 have as yet gone I have made twelve hypotheses. Let it be supposed (I have stid) that the first letter is, by hypothesis, an " $a$," the second an "ain, the third an " $u$," the fourth another " $u$," and so on. Is not the probability, thousands to one against the twelve hypotheses having produced three words expressive of music? Is it not thousands to one against their expressing causation, command, \&c.? True it is that, instead of Newton's one hypothesis about the fall of the apple, there are twelve,--ibout twelve letters ; but then, instead of Newton's one result about the motion of the moon there are many results, such is the meaning of three kindred musical words, and the expression of causation, command, possession, \&c. I can very well anticipate that many verbal and other mistakes may be pointed out in what I have done, but nothing, surely, can be said against my method, nor its main results. As an instance of this I may mention here that an objection may be made as to the position of the " $i$ " both in the word negincuti and in a similar word to come, viz., nesuhati. In both cases this small letter may have been packed into a corner by the masons for their own convenience. Certian it is that the Egyptians at any rate were very careless when engraving well known words.

The probability that the first three words are the record of an order for a musical service may be differently estimated by different people. For myself I feel so confident that I look about me at once to see what I think the next words would probably be, so as to keep in comection with the first three. A musical service being ordered, then it is natural to suppose that the purpose or object for which it is ordered would now be
mentioned. If so, the word required here is "al" or " $c l$," "for the purpose of," or "with the object of." Then, after the symbol marked " $l$ " in the plate we want some such word as "rapa" to heal. We want it also to be future ; and we have to remember that one of the signs of the future is very peculiar, viz, that an additional letter " $n$ " called the epenthetic num should be inserted between the verb and the pronominal suffix. It is astonishing what a number of peculiarities are required in this sixth word. The cause or agent here is the music, and the effect is the induced power of cure in the sacred college. The conjugation is again in aphel, expressive of causation in Chaldee. The first part of the verb is "irpinn," and if the word were in Hebrew, it would be in the Hophal form of "tarpan." The musical agent is feminine, as irpin is, and the expected cure is in the future tense.

The six words now analysed form a sentence. The offerent, who is willing to incur the expense of manufacturing and building in this stone, requests therein the authorities to perform a musical service. The services are called his services (viz., the offerent's services or harmonies), as being paid for by him, and inherent in these services the ritualistic offerent recognises the power of cure. But whether this work of cure was on body or soul I know not, as the word rapa is used in either sense.

A new sentence now begins with a word which ends with $t-k$. In other words it ends with a feminine suffix second person. Consequently we are not left to hypothesis in saying that the word contains seven letters, concerning three of which we have already made hypotheses, so that we may still make four. I have therefore marked in the plate four letters, $a, k, u$, and $r$. The word would therefore be asakura-t-k, "Thy fee is." The root sakar, from which the name of the Patriarch Issachar is derived, means to bargain. It may be said that it is not fair to put asakur and sakai as the same root, but the practice of putting in an aleph before a word beginning with a sibilant is not uncommon in dialects akin to Chaldee. Thus we have asman equals zeman for time; sabta for ashbata sabbath, and so on. It may be said also that the introduction of the " $t$ " before the final letter $k$ proves the noun to be $\pi$ feminine, whereas it is masculine ; but the nom is a participial one which lends itself easily to the formation of a feminine form.

Nasuhati Sahidi-Jah, "the gift of me Sahidi-Jah," compare Daniel vii, 15, "The spirit of me Daniel." In these two words there are thirteen letters, but eleven of them have already been made available in the previous hypotheses. Let the reader pause here a little to consider what is implied by such a statement. Newton proved gravity by one hypothesis, one calculation, aud one correct result. Here I prove these two words to be Chaldee by two hypotheses, thirteen calculations, and thirteen correct results. The two hypotheses are that a certain two letters are " $s$ " and " $h$." The calculations are the putting thirteen letters into their places, and the results are found by looking into the Chaldee Lexicon, wherein we read "the gift of me Sahidi-Jah." The fact that the word Sahidi-Jah has a meaning of its own, one which can now be read
quite independently of any context, is a large iddition to our wealth of proof. Sahid means witness, Sahidi means my witness, and Sahidi-oJah means Jah is my witness.

As I admitted early in this paper that I was not yet in the region of strong probabilities, so now I claim that by accumulatice heaps of correct results any further proofs are quite unnecessary. In the whole of the rest of the plate there are but two unknown letters to be found, and any one who has followed me so far will I hope be satisfied that the ending is the product of the beginning. It is not necessary to analyze word for word so easy a sentence as "Minneh Hilulat l Bahalahi di Iban," the meaning of which is "from whence come praises to his Gods of Iban."

Dunbar I. Heathe.

Esher, Surrey.

## NOTE.

On reaching Kades in May 1879, we were disgusted to find that the marble sarcophagi and the Temple ruins, were being broken up and demolished, to fill the yawning trenches that the Fellahin navvies hod dug for the foundations of a Sugar Factory.

It appeared that a Damascus merchant was speculating in sugar, so the Fellahin said : in cotton, so the Dragoman affirmed; had bought the village, and, wishing to run up buildings cheaply, was going to utilise such marble as he found in the ruins near. We bargained with backsheesh, that at any rate the as yet unbroken sarcophagi should be buried in the trench as they were, and then enquired for antiqua.

Fifteen feet below the ground had that day been dug up a silver coin so bright and fresh it might have hut just left the mint. "Of TyreTyre, the holy and unsullied one"-so ran the motto. Bearing on one side the Roman Eagle, the Roman Prefect's initials, and the date corresponding to 46 b.c., and on the other, the powerful, though rather heavy face of the Sidonian Hercules Melkarth.* In the evening, a Mograbi builder, from the Moorish colony we had passed some four miles to the south, near Hazor, came to the tent, and said he knew of a god, that had been found in the same cotton and sugar factory foundation trench a few days before, but it was very small, and at the village four miles away. I told him to bring it early next morning, and at 4 A.M. he was squatting in the lusk and cold, hugging his god and waiting our

[^1]bargaining. The bargaining might have been for the whole village, factory, temple and all, so vehement were the protestations of the worth of the god in question. All the villagers and masons joined in, words waxed high, and terms could not be come to. We said we could not do business that day, packed up and slowly rode off, looking as if we were not at all interested in the little bronze we were leaving. But the season was late; there would be no more travellers this year, and the Moor could not let this chance of a windfall pass.

As we rode away, cries were raised, and all the village rum after us to lay the curio at the Khawaja's feet, and humbly take whatever was offered. So for a few francs this little Egyptian ram-headed, Pshentcapped, Sceptre head, or Staff head was brought from Kiudesh. How it

was brought there is a problem ; was it in battle, or in royal progress, in peace or in war? Whether it ever did service in the Temple, or at Court, whether it is bronze, or, as is more probable, a mixture of bronze and gold, the Chrysocalcon, that was in old time the king of metals, is unascertained. All that is known about it, is that as far as the Pritish Museum collection of Egyptian brouzes goes it is pronounced unique.
H. D. Rawnsley.

## THE

## PALESTINE EXPLORATION FUND

## NOTES AND NEWS.

The new expedition has been commenced by several discoveries of rery great interest. The first is that of Kadesh, the sacred city of the Hittites, a nation which at present occupies a good deal of attention among those engaged in the antiquities of the Holy Land. It was found by Lieutenant Conder, who had formed a theory as to its locality from previous study in England, and was rewarded by recovering the site not far from where he had placed it. The identification seems, up to the present, to be generally accepted.

After his journcy to the Orontes, and on the arrival of his surveyors, Messrs. Black and Armstrong, Lieutenurt Conder began his preparations for Eastern Palestinc. Unfortunately he found that the disturbed state of the country would prevent the carrying out of his original design, which was to begin the Survey in the North. He therefore changed his plans, and now proposes to begin it in the South. He has accordingly ridden through Western Palestine from Beyrout to Jerusalem, where he was at the date of the last letter received.

On his way he paid a visit to Tyre. Here he found acurious tomb, apparently of great antiquity, close to the modern cemetery of the town. In accordance with the Oriental conservatism, this may, he says, be also the site of the ancient cemetery of Tyre. He also examined the question of the Egyptian harbour, and other doubtful points in Tyrian Topography. At Khurbet Umm el Amud he was able to trace the plan of the ruined temple. At Jerusalem he has lighted on a discovery which may prove of overwhelming interest. Those who have read his "Tent Work" wilh remember his theory that the crucifixion may have taken place, not on the traditional site, but on the north of the city at the place still called "the Place of Stoning," namely, a small hill above "Jeremiah Grotto." The neighbourhood in the time of Mejred Deen was called el Saluara, and was then an ill-omened place associated in the Moslem mind with death and judgment.

The hill itself, seen from one point of view, is singularly like a skull. It is also a spot which, from its commanding position, would seem well fitted for a place of punishment, because it commands the city, and anything done upon it can be seen from the city walls. Immediately west of the knoll, Licutenant Conder has found a most remarkable Jewish tomb, which he describes at length. It belongs to the later Jewish period ; it is not apparently a Christian tomb; no other Jewish sepulchre has ever been found so near the ramparts, and ${ }_{c}^{\text {the }}$ discorerer asks the question-Can this be in truth the Tomb in the Garden?

We are indebted to the Rev. C. W. Bardsley for an account of his discovery at Jacob's Well. If the chapel which formerly stood over the well was of early Christian period, the stone mouth described and figured by him is probably no other than that of St. John ir, 6.

The commentary on the inscription at the Pool of Siloam, now reprinted at p. 141, was issued as a separate pamphlet on June 10th. We have to thank Professor Sayce for presenting it to the readers of the Quarterly Statement. The Rev. Isaac Taylor has sent us some notes upon Professor Sayce's reading.

There is also a paper on the same subject in the Zeitschrift of the German Society, but unfortunately of little value, because the writer had only the imperfect transcript published by us last April.

The paper on Ain Qadis, by the Rev. H. Clay Trumbull, of Philadelphia, seems to clear up a great mystery. It is now forty years since Dr. Rowlands described in most glowing terms a fountain called Ain Qadis, which he identified with Kadesh. No one has hitherto succeeded in reconciling his description with any fountain near the place pointed out by him. Mr. Trumbull has, however, rediscovered the place, which, whether it is on the actual site of Kadesh or not, is certainly a spot where Isracl could have rested "many days."

The Germans are conducting excarations on Mount Ophel, under the direction of Herr Guthe. Lieutenant Conder, under the understanding that he was not to anticipato IIerr Guthe's announcements, was taken over the works.
31. Clermont Ganneau is recovering from his long attack of fever, and has resumed his archæological researches, which are at present confined to the neighbourhood of Jaffa. He hopes to send an account of certain discoveries recently made for the next Quarterly Statement.

The first volume of the "Memoirs" has now been issued. The rolumes of "Specinl Papers" and "Name Lists" will be sent out some time this month. The second and third volumes of "Memoirs" are in the press, and will be issued as soon
as possible. The volume of "Jerusalem Work," which will be illustrated by a large portfolio full of plans, will be sent out about the beginning of nest year.

A new edition of the Great Map has been prepared by Mr . Stanford, and is now ready. The supporters of the Society will confer a great benefit on the cause of Palestine research by getting this map taken by libraries, schools, colleges, and public institutions.

The reduced map (modern) will be ready for printing in August, and will be issued as soon as possible. Mr. Saunders's Introduction to the Survey will also be issued in the course of the quarter. The two ancient maps should be ready in the autumn.

The General Committee has been strengthened by the names of the Bishop of Liverpool, Mr. W. Adams, Mr. W. Dickson, Mr. Douglas Freshfield, Mr. Oliver Heywood, Rev. Prof. Sayce, Rev. William Wright, and Colonel Yule.

We are informed by Mr. Kershaw, the Librarian of Lambeth Palace, that the Archbishop of Canterbury is anxious to let it be known among the Members of this Society that he desires to increase the usefulness of the library by rendering it more accessible for purposes of study and the loan of books. A collection of modern works on the history and antiquities of Palestine has been formed in the library ; many Greek versions of the Scriptures, commentaries and other Biblical MSS. are here treasured, and here will be found the collection of the late Professor Carlyle, consisting of MSS. brought from the East, of great value to Oriental and critical scholars.

Arrangements can now be made for lectures on the Surrey and its Biblical Gains. The Rev. Henry Gray, and the Rev. James King will continue to give their services to the Society during the next winter.

The income of the Fund from all sources from March 16th, 1881, to June 21 st, was $£ 1,07311 s .4 d$. The amount in the Bank at the meeting of General Committee of June 21st, was $£ 1,0689 s$. The sum required before the end of the year is about $£ 2,000$.

A Cheap Edition of "Tent Work in Palestine," has been published by Messrs. Bentley and Son. All the small illustrations which were in the Library Edition, and two of the full-page drawings, will be found in the new Edition, which has been carefully revised by the author. An additional chapter has also been added on the "Future of Palestine." The work will be read with greater interest now that the progress of the Survey may be followed on the Map.

It is suggested to subscribers that the safest and the most convenient manner of paying subscriptions is through a bank. Many subscribers have adopted this
method, which remores the danger of loss or miscorriage, and renders unnecessary the acknowledgment by official receipt and letter.

Subscribers who do not receive the Quarterly Statement regularly, are asked to send a note to the Secretary. Great care is taken to forward each number to all who are entitled to receire it, but changes of address and other causce give rise occasionally to omissions.

While desiring to give every publicity to proposed identifications and other theories adranced by officers of the Fund and contributors to the pages of the Quarterly Statement, the Committee wish it to be distinctly understood that these rest solely upon the credit of the respective authors, and that by publishing them in the Quarterly Statement the Committee neither sanction nor adopt them.

## MEETING OF THE GENERAL COMMITTEE.

Tue Annual Meeting of the General Committee was held at the Office of the Society on Tuesday, June 21st, at 4 o'clock.

The Chair was taken by Mr. James Glaisher, F.R.S.
The Charman informed the Committee that he held in his hand many letters regretting inability to attend, including one from Sir Moses Montefiore, who forwarded a cheque for $£ 10$ (the second donation this year) for the funds of the Society. The Secretary then read the Report of the Executive Committee for the last year, which was as follows :-
"My Lords and Gentlemen,
"Your Committee elected at the last General Meeting, held on March 16th, 1880 , have, on resigning their trust, to render to you an account of their administration during the last year.
" 1 . The Committee have held thirty-two meetings since their last* election.
" 2 . The subjects which have occupied their attention have been the following :-
"I. The publication of the Map, and "Memoirs."
"The first edition of the Map was ready in May, 1880 : a second edition followed in the autumn. These two editions were prepared by the Ordnance Survey Department, Southampton. The plates were then placed in the hands of Mr. Stanford, by whom a third edition has been issued. The whole number printed has been 800 , of which 699 have beeu sent out to subscribers, three have been used for office purposes, 17 have been given away, and the rest have been taken by the agent. A fourth edition is now ready.
"The first volume of the "Memoirs" is now ready, and has been issued to subscribers.
"The uext two volumes, viz, the "Special Papers," and the "Name Lists," are very nearly ready, and will be sent out next month.
" II. The Reduced Map.
"The plates of this map have been completed, and have been sent back for certain additions. The map will be ready for printing in a few weeks. The following testimony from a recent traveller in Palestine, the Rev. A. G. Girdlestone, to the value of the small map, will be interesting :-
"' I desire to thank the Committee for having kindly placed at my disposal in January an advance proof of their reduced map. And I cannot do so without testifying to its great utility for travellers. I had special opportunities for testing it, as I walked by its aid from Jaffa to Jericho right across the country, and from Hebron to Banias, through nearly, its whole length. I was frequently without any other means of finding the way, and it proved invaluable. Its great advantage was most manifest when we walked beyond its limits and lost its aid. I walked through large portions of Moab and Gilead, east of Jordan, and found the existing map nearly useless. And similarly in passing northwards from Banias, we sorely missed its aid.'
"III. The publication of the reduced map in two forms, adapted to the geography of the Old and New Testament.
"It was found that many of the subscribers were disappointed at the prospect of receiving only a modern map of the country. But as the Committee could not, as a body, make identifications and lay down boundaries, it was thought best to eutrust the work to a geographer. Mr. Trelawney Saunders accepted the invitation of the Committee to undertake these maps. They are now far advanced, and will it is hoped be ready in the autumn. The Society will therefore jossess four maps of Western Palestine, viz, the great map on the scale of one inch to the mile, the rednced map of Modern Palestine three-eighths that scale, and the two reduced maps on the same scale of Ancient Palestine.
"IV. Mr. Saunders lias also written for the Committee a work entitled an 'Introduction to the Survey of Western Palestine.' This geographical account of the comntry is based upon the water basins, and is therefore withheld until these have been laid down for the engraver.
"V. The expedition to survey the East of the Jordan. This expedition, necessary for the completion of the Survey of Palestine, was first formally considered at a meeting of the Committee held on October 19th, 1880. A meeting of the General Committee was convened on November 30th in order to discuss the proposed suvey. This was held by permission of the Dean of Westminster in the Jerusalem Chamber. The chair was taken by the Dean, and the meeting was addressed by Mr. Glaisher, Mr. Macgregor, Mr. Douglas Freshifield, Colonel Warren, Mr. Eaton, Rev. Dr. Ginsburg, Professor Palmer, Professor Hayter Lewis, Lieutenant Conder, and the Chairman. The following resolution was unanimously adopted :-
"" That it is now desirable to undertake without delay the Survey of Eastern Palestine, under conditions similar to those which proved to have been thoroughly successful in the case of Western Palestine.'
"A prospectus wats therefore drawn up, showing what is the present state of our knowledge, what is required to be done, and the means by which the Society propose to perform the work.
"The Prospectus was sent to all former supporters of the Fund, with results which have been, so far, encouraging; that is to say, although the Committee hardly hope to reach the sum they asked for the first year, it has been proved that a great deal of interest has been aroused in the project, and the Committee have felt justified in sending. out their party.
"They have been so fortumate as to obtain the services of Lieutenant. C. R. Conder, R.E., the officer who was in command during the greater part of the former survey, and of Lieutenant Mantell, R.E. They have also received permission from the War Office to engage the services of Messrs. Black and Armstrong, formerly of the Royal Engineers, who were with Captain Stewart at the commencement of the survey in the year 1872. The expedition started in April, and have already done some preliminary work on the western side, including the very interesting recovery of the ancient sacred city of the Hittites, Kades on the Orontes. The general instructions to the officers in command are as follows:-
"1. To produce an accurate map on a scale of one inch to a mile.
"2. To draw special plans of important localities and ruined cities.
"3. To make drawings or take photographs of buildings, sites, tombs, \&c.
" 4 . To collect all the names to be found.
" 5 . To collect geological specimens, antiquities, \&c.
${ }^{6} 6$. To make casts, squeezes, photographs, and copies of inscriptions.
"7. To collect legends, traditions, and folk-lore.
" 8 . To observe and record manners and customs.
" 9 . To excavate if time and opportunity permit.
"VI. Meetings in support of the new survey have been held at Edinburgh, Manchester, Belfast, Liverpool, Hull, Bolton, Cardiff, Winchester, Romney, Newport, Abergavenny, and other places.
"The Committee have next to ask that a vote of thanks be passed (1) to the Rev. Professor Sayce for placing at their disposal his valuable reading of the ancient inscription recently found at the Pool of Siloam; (2) to the Rev. C. W. Barclay for sending to them a drawing of the ancient mouths of Jacob's Well, which he succeeded in uncovering ; (3) to Mr. Laurence Oliphant for valuable advice and information in the present state of Eastern Palestine ; (4) to the Royal Geographical Society for a grant of 1002 . towards the purchase of instruments; (5) to the Rev. Greville Chester, the Rev. Dr. Porter, Mr. St. Chad Boscawen, M. C. Clermont Ganneau, the Rev. W. F. Birch, Mr. Trelawney Saunders, and Mr. Dunbar Heath for papers communicated to the Quaiterly Statement; (6) to the Rev. Dr. Porter, Mr. William Adams, the Rev. W. F. Birch, the Rev. J. L. Carrick, Mr. William Dickson, Mr. George Monk, and all those who have promoted the success of meetings in aid of the Society ; (7) to Miss Peache, the Rev. H. Hall Houghton, Miss Wakeham, Mr. E. Gotto, Mr. F. Story, Mrs. Wolff, Mr. Burns, Rev. C. Watson, Mr. Fordham, Professor Pusey, Mr. C. F. Fellows, Rev. F. E. Wigram, Rev. M. T. Farrer, Mr. Ormerod, Mr. Budgett, the Dean of Lincoln, Sir Moses Montefiore, Rev. Canon France Hayhurst, Mr. Oliver Heywood, Miss Borrer, Mr. Dykes, Miss Buxton, Lady Tite, Lord Clermont, Mr. Herbert Dalton, Rev. W. II. Walford, Miss Bridges, Mr. Eustace Grubbe, Miss Ward, Mr. Lloyd, Miss Edwards, Sir Charles Wilson, Mr. S. Montagu, Mr. Cyril Graham, Mr. F. D. Mocatta, Rev. Joseph Lyon, Messrs. Rothschild \& Co., Mr. A. F. Govett, Sir Julian Goldsmid, Mr. Lewis Biden, Messrs. Sassoon \& Co., Mr. Nathaniel Montefiore, the Bishop of Lichfield, Mr. G. Raphael, Mr. E. Trimmer, Mr. E. L. Raphael, Captain Burke, Mr. Middleton, Mr. Bevan, and Mr. Dent for donations varying from $100 l$. to $5 \%$; and (8) to all Honorary Secretaries and others who have given their assistance for nothing.
"VII. The Committee have to regret the loss by death during the last twelve months of-

> M. de Saulcy.
> Lord Stratford de Redcliffe. Mr. George Wood.
"VIII. In accordance with the powers conferred upon them at the General Meeting of Tuesday, March 29th, Mr. Liawrence Oliphant and Mr. Van de Velde have been invited to join the: General Committee, and have accepted the invitation.
＂IX．The following is the Balance Sheet of the year 1880 ：－

| － |  | 心－ | $\infty$ |
| :---: | :---: | :---: | :---: |
| $4^{+5}$ |  | ＋ | $\infty$ |
| 48 | Rびざい |  | 骨 |



| ช | Nめサ○か○か | $\infty$ |
| :---: | :---: | :---: |
| $\stackrel{\circ}{\circ}$ |  | $\infty$ |
| Q | 管管过 | ¢ |


| $\begin{aligned} & \text { で }=1 \\ & \text { sin } \end{aligned}$ | ：：：：： |
| :---: | :---: |
| 氏i: | ：：：：： |


1880.
Jan 1.

๗゙
©
®．
Examined and found correct，
W．MORRISON．
"The Society, therefore, commenced the operations of the year with a balance, deducting the unpaid accuunts, of $1,100 l$. ; the subscriptions received up to the present date are 1,6381 . ; the current expenses are about 300l. a month ; the balauce in hand at this date is $1,068 l$. 9 s. Of this sum about 2001 . is due for instruments and outfits.
" X . It was with a feeling of deep responsibility that the Committee decided on sending out the expedition to the East of the Jordan. The heavy expenses which it will entail for four years at least have not yet been fully guaranteed by an increase in the number of amual subscribers. Al the same time so great is the interest shown in the enterprise, that up to the present time a larger amount of subscriptions have been sent in than during the whole of the last year. It is therefore reasomalle to hope that the money will be found, as in the preceding Survey, by the voluntary efforts of the subscribers. The sum of 2,0000 . is asked for before the end of the year, and the Committee will gratefully receive promises of assistance towards that amount.
"XI. The Committee have to express their satisfaction at the appointment of M. Clermont Ganneau to an official post in Palestine, where his great knowledge and archæological zeal will no doubt enable him to make valuable discoveries.
"The Committee have now to resign into your hands the trust committed to them at the last meeting."

This report was adopted unanimously.
It was proposed by Professor Donaldson, and seconded by Lord Talbot de Malahide, that the Exe utive Committee be re-elected for the ensuing year.

This was carried unanimously.
It was proposed by Mr. Henry Maudslay, and seconded by Mr. William Simpson, that the following gentlemen be invited to join the Geueral Committee :-

The Bishop of Liverpool. Sir Albert Sassoun, C.S.I.<br>Mr. William Adams.<br>Mr. Douglas Freshfield<br>Mr. William Dickson, F.R.S.E.<br>Rev. Professor Sayce.<br>Mr. W. Aldis Wright.<br>Mr. Oliver Heywood. Mr. E. Thomas. Rev. William Wright.<br>Colonel Yule, C.B., R.E.

The Charman then called the attention of the General Committee to the signal services rendered to the Society during the last twelve months by Colonel Warren, C.M.G., R.E. It was resolved unanimously that a special vote of thanks be passed to Colonel Warren in acknowledgment of those services.

After a vote of thanks to the Chairman, the Meeting was adjouned.

## MeEting IN THE QUEEN'S COLLEGE, BELFAST.

On the 23 rd April a large company, at the invitation of the Rev. Dr. Porter, President of the Queen's College, assembled in his own house, in the college buildings, for the purpose of hearing from him something of what had been done towards the exploration of Palestine, and what was in contemplation by the new Survey undertaken by the Roval Engineers of England. The company was received by the President in one of the large rooms of his private residence. The new ordnance maps of Palestine, and many objects of interest belonging to the country, were on view, and attracted considerable attention. Amongst those present were : -The Lord Bishop of Ossory, the Mayor (Mr. E. P. Cowan, J.P.) ; Mr. Wm. Ewart, M.P. ; Mr.' E. J. Harland, J.P. (chairman of the Harbour Commissioners) ; Mr. James Musgrave. J.P. ; Mr. John R. Musgrave, J.P. ; Mr. James Torrens, J. P. ; Mr. Samuel Lowther, M.P. ; Mr. F. D. Ward, 'J.P.; Mr. Thomas Sinclair, J.P.; Mr. S. (. Fenton, J.P.; Rev. Dr. Busby, Rev. Dr. M'Kay (president of the Methodist College), Dr. Parker (headmaster do.); Rev. Dr. Meneely, Rev. Dr. Bellis, Dr. Steen, Professor Watts, Professor Wallace, Professor Kileen, Professor Leitch, Rev. Dr. Murphy, Professor Nesbitt, Professor Everett, Dr. Hodges, Rev. Thomas Welland, Rev. Charles Seaver, Rev. Richard Irvine, Rev. M. Clarendon, Rev. Hugh Hanna, Rev. Thomas Mamilton, Rev. J. H. Moore, Rev. George Shaw, Mr. Otto Jaffé, Mr. John Jaffé, Mr. R. W. Corry, Mr. Quartus Ewart, Mr. H. Matier, Mr. Gilass, Mr. S. Wallace, Mr. W. L. Finlay, Mr. Wm. M'Neill, Mr. Chas. Thomson, Mr. W. Young, Mr. E. H. Clarke, Elmwood; Mr. Alex. Jate, County Surveyor for Antrim, \&c. There was also a large number of ladies present.

Rev. Dr. Porter delivered a short address. He said the reason he appeared before them was to give some information relative to a country in which they all took an interest, and more particularly to tell them something regarding recent explorations. Every one would admit that the religious element was one that entered largely into everything comnected with Palestine. In that country they had three important religions, each of which had exercised a paramount influence upon the destinies of mankind. First, there was the Jewish religion, next in succession the Christian religion, and then the Mahometan. The most sacred shrines of these three forms of religion were to be found in Palestine. With the exception of the shrine at Mecca, there was none more highly venerated than the site of the ancient temple, and the burying-place of the patriarch Abraham. The ancient house of Israel looked upon this land-and rightly so-as the land of their fathers, and that great people also looked forward to that land as the place of their future hopes and aspirations. He was delighted to see some representatives of that ancient and historic race present there
in their midst that afternoon. "With regrad to the Christian religion, and its connection with Palestine, he need say but little, as many places there were held sacred by every section of the Christian Church. They had only to mention the names of Jerusalem, Bethlehem, Bethany, Nazareth, or the Jordan to call forth affection and sympathy, as they were places round which they cling, and ever must cling. Palestine was interesting historically. Some of the carliest chapters of the world's history opened up. before them in connection with that country. After referring to some of the early events mentioned in the Bible comnected with this land, the speaker went on to refer to the Canaanitish tribes who, he said, had been discovered to possess a literature, and a language of their own. The Hittites exercised more than an ordinary influence, and he believed they were the inventors of the alphabet that had been ascribed to the Phonicians. All the places throughout Palestine had an important bearing on Roman history. The physical aspect of the country was also of great interest to the student, the surface formation being the most mique in the word. After explaining the position and physical bearings of the River Tordan, the president referred to the architectural wonders of the country. He called attention to the huge stones which were used in many of the buildings, and the dificulties that must have been experienced in getting them placed. He himself hat seen some specimens which were computed to weigh some 1,250 tons. These would be difficult to manage; but he supposed if Mr. Harland had them down at the Queen's Island, he could find some means of lifting them. Some very large stones were placed 100 feet from the ground, and as there were some engineers present that eveming, perhips they couk explain the process by which they were got to that position. Palestine wat the mother of commerce. Tyre and sidon were great cities; they were the London and Liverpool of the world then; and perhaps Beyrout might be compared to Belfast. These cities did a great timber trade, but he conld not say whether any of it had found a place in the composition of the White Star Line. They werealso famous for manufactures and arts. Linen may have found a place there -that linen which was perfected by the looms of Belfast, of which trade Mr. Ewart might be regarded as the representative. Such being some of the objects of interest presented in Palestine, he would ask what was being done at present to develop, them, or give the public more knowledge of what the land possessed. The exploration scheme had done a great deal, it had thrown a flood of light upon its archroological and physical qualities, and other matters of great interest in that wonderful country. Great changes had recently taken place. The ordnance survey of Jerusalem had been executed just as thoroughly as that of any part of our own country, and that by the Royal Engineers. It was gratifying to find the attention of the Government being drawn to this Swrey, and these men giving their time to such an important work. The Americans tried to survey a portion of the land, but they disputed amongst themselves, and the company was broken up. As to what would be done in future, he might say that a meeting was held recently, under the chairmanship of the Dean
of Westminster, who had taken a deep interest in the work from the first, and it was proposed now to proceed to the comntry east of the Jordan. The surveying party had the assistance of Lieutenant Conder, of the Royal Engineers, and as the staff was an efficient one, and as they intended to work there for three or four years, much good, no doubt, would be the result. The speaker, during the course of an interesting aldress, grave a graphic account of his experience in the East, which wats listened to with much pleasure.

The Mayor rose, and said-Ladies and gentlemen, I have been asked to perform a duty which I have great pleasure in fulfilling. I feel sure it will meet with your approval, when I say that I have been asked to move a vote of thanks to Dr. Porter for his great kindness to-day in bringing us here to listen to such an interesting and instructive lecture as he has been pleased to deliver. It will require no words of mine to secure for this proposition a hearty reception. We all owe a deep debt of obligation to Dr. Porter for giving us the opportunity of examining his most excellent maps, and for the information he has given about past explorations in Palestine, and also about that which is to come. I need not detain you, and I must say it gives me the greatest pleasure to move this resolution.

Mr. Ewart, M.P., seconded the resolution. He said-I merely rise to express the great pleasure it hats given me to be present on this occasion. We all feel under a deep debt of gratitude to Professor Porter for the very learned and excellent lecture he has given us regarding it most important part of the world. (Hear.) I can speak for myself, and say that it has made an impression on me that I will never forget, and it hass stirred up a wish within me more than ever that I might have an opportunity before I die of visiting the country.

The Lord Bishop of Ossonr, who was cordially received, said-As it stranger, and as one who is present by mere accident, I may say that it has given me the greatest possible pleasure to listen to such a lecture as Dr. Porter has just delivered. It contained a vast deal of information, and was conveyed in a lucid and happy manner. There are two things that make me personally interested in this subject. One of these is that I was at a period of my life an engineer, and that long before I ever dreamt of being a parson, and at a time surely when I never thought of being a hishop. I know the work pretty well, and I must say it could not be committed to better hands than the Royal Engineers of England. The other reason is that I know a little of Oriental literature, although I have not travelled in the East; but I hope that my feet shall yet stand within the gates of Jerusalem. (Hear, hear.) I have no doubt that the vote of thanks that has been moved and seconded, will be carried most warmly.

## MEETING IN MANCHESTER.

On the evening of June 17 th, 1881 , a meeting was held in the large room of the Association Hall, Peter Street, in this city, in aid of the Palestine Exploration Fund. The chair was ocuppied by Mr. Oliver Heywood, and amongst those present on the platform were Lieutenant-Colonel Warren, the Venerable Archdeacon Anson, the Venerable Archdeacon Birch, the Rev. Canon Stowell, Mr. H. B. Jackson, and the Rev. W. F. Birch (the Hon. Secretary). A letter of apology having been read from Professor Greenwood (Principal of Owens College), the Rev. W. F. Birch read a statement of the amount suloseribed to the fund in Manchester. In 1875 it was resolved to make an effort to maise $\mathscr{L}^{5} 00$ in Manchester for the fund, and that sum was raised within a year. In the following year $\mathfrak{t} 100 \mathrm{ls} .7 \mathrm{~d}$. was subscribed; in 1877, $\mathfrak{t 1 0 1}$; in 1878 , $\mathfrak{f l} 1013 \mathrm{~s} .6 \mathrm{~d}$. ; in 1879 the amount fell to $£ 7668.6 d$. ; in 1880 to $\mathscr{E}^{6} 6612 \mathrm{~s} .6 \mathrm{~d}$. That money had been subscribed by not more than 200 people in Manchester. There were other gentlemen who sent their subscriptions directly to London, but it was felt that in a great place like Manchester, a much larger sum than $e^{6} 66$ onght to be retmined for the important object with which the fund was started.

The Chamann said he thought the Society had a right to hope and expect that larger contributions will come from this district than heretofore. It was with a sense of disappointment that he listened to the statement of the Hon. Secretary that during five successive years, the subscriptions, not large to begin with, had been steadily diminishing, while the work which was being done had been steadily progressing. It was impossible to carry out great undertakings without considerable funds, and those who were invited to give considerable contributions not unnaturally liked to know what was being done and had been done. Until the Society was established in 1865, there had been no really systematic investigation and research of Jerusalem and the Holy Land; but since then, under great dificulties, and with great zeal and perseverance, systematic investigation had been groing on. We knew infinitely more of Palestine now than we did 15 years ago, both of the toporraphy and the geography of Jerusalem buried 60 feet below its rubbish, and of the character of the country and of its natural history. It was under those circumstances that the Society asked for help. It was between 15 and 16 years since Sir Charles Wilson first began his survey, which was followed within two or three years afterwards by the interesting investigations which Lieutenant-Colonel Warren himself began and perseveringly carried on for upwards of three years, in and under Jerusalem; and since that time Lieutenant Conder, Lieutenant Kitchener, Mr. C. F. Tyrwhitt Drake, and others had been pursuing the work in different directions.

Lieutenant-Colonel Warrex then gave an interesting sketch of the results of the work carried on under the auspices of the Palestine

Exploration Fund, in which he was assisted by several maps and diagrams. It was at first proposed that the Survey of Eastern Palestine should be undertaken by our American cousins, but after a recognaisance of the eastern side had been made that plan fell through, and the work now devolved upon the Exploration Fund, aided by a number of Americans.

On the motion of the Venerable the Archdeacon of Minchester, seconded by Mr. H. B. Jackson, a hearty vote of thanks was accorded to Lieutenant-Colonel Warren for his address, and it was resolved to raise $£ 100$ a year for five years, in Manchester, towards the fund for the Survey of the Eastern portion of Palestine.

A vote of thanks to the Chairman for presiding brought the meeting to a close.

## MEETING AT LIVERPOOL.

A crowned meeting was held on the evening of June 18th, 1881. The Lord Bishop was in the chair. Lieutenant-Colonel Warren aldressed the meeting in support of an explanation of the work of the Society. It was resolved to establish a local branch in Liverpool, and to raise $£ 100$ a year for the support of the Society. The Venerable Archdeacon Bardsley accepted the post of Honorary Secretary.

Meetings have also been held at Romsey, March 28th, and Southampton, March 29th, addressed by the Rev. Henry Geary and Colonel Warren at Abergavenny, May 3rd; Cardiff, May 4th : Newport, May 5th, and Ledbury, May 6th, addressed by the Rev. James King.











6. HID $9 \propto$

# THE ANCIENT HEBREW INSCRIPTION DISCOVERED AT THE POOL OF SILOAM IN JERUSALEM. 

## I.

By the Rev. A. H. Sayce.

In June, 1880, an important discovery was accidentally made at the Pool of Siloam on the southern side of Jerusalem. One of the pupils of Mr. Schick, a German architect long settled in Jerusalem, was playiug here with some other lads, and while wading up a chamel cut in the rock which leads into the pool slipped and fell (into the water. On rising to the surface he noticed what looked like letters on the rocky-wall of the chamel. He told Mr. Schick of what he had seen, and the latter accordingly visited the spot as soon as possible.

The chamel in question is an ancient conduit which conveys the water of the Virgin's Pool (Birket Sitti Maryam) on the eastern side of the city to the so-called Pool of Siloam. It is cut through the rock, and so forms a subterranean passage through the southern spur of the hill on which the Mosque of Omar stands. The Pool of Siloam lies on the eastern side of the ancient valley of Tyropoon, at a considerable depth below the summit of the Temple hill. The passage connecting the two pools has been explored by Robinson, Tobler, Colonel Warren, and others. Ac.ording to Colonel Warren, its length is 1,708 feet ( $569 \frac{1}{3}$ yards), * though the listance from the one pool to the other in a direct line is only 368 yards. The passage, however, is not straight ; it winds considerably, and there are several culs de sac in its course, from which we may infer that the engineering knowledge of its excavators was not sufficient to prevent them from missing their way. As we shall see, the newly found inscription shows that the passage was excavated from both ends, the workmen meeting in the middle, like the excavators of the Mont Cenis Tumnel. The height varies greatly, but the width is pretty uniform. I attempted to walk up it from its lower or Siloam end, along with my companion Mr. J. Slater, but after proceeding some distance the roof became so low that, in order to proceed it would have been necessary to crawl on all fours through a thick deposit of black mud, and this, as we had no suitable dresses, we declined to do. However, I made my way sufficiently far to acquaint myself fully with the mode in which the channel had been constructed.

* Robinson makes it about 586 yards.

The roof is flat rather than arched, but the floor is hollowed into a groove, to admit the passage of the water, so that the general form of the conduit is that of an inverted sugrar-loaf, thus $\mathcal{O}$. In some places I observed water trickling through fissures in the rocky wall of the chamel, and here and there deposits of black mud had found their way into it through similar breaks in the rock. The whole bed of the chamel, however, was covered with a layer of soft mud from half-a-foot to a foot and a half in depth. The walls of the conduit, like the roof, are for the most part left rough; but now and then I came across small portions which had apparently been smouthed, as well as hollows or niches in the face of thew all.

The inscription discovered by Mr. Schick is in a niche of this kind, at the lower end of the conduit, and about 19 feet from the place where it opens out into the Pool of Siloam. The conduit is here from 20 inches to 2 feet in breadth, and the niche in which it is engraved is 27 inches long by 26 wide, the niche itself being cut in the rock-wall of the channel in the form of a square tablet, to a depth of an inch and a-half, and made smooth to receive the inscription. It is on the right-hand side of the conduit as one enters it from the Pool, and consequently on the eastern wall of the tumel. The upper part of the tablet or niche has been left plain, though a graffito has been scratched across it, which is probably of late date. The lower part alone is occupied with the inscription, which consists of six lines, and an ornamental finish has been added below the middle of the last line in the shape of two triangles, which rest upon their apices, with a similarly inverted angle between them. On the left sideof the tablet the rock is unfortunately fractured, resulting in the loss of several characters in the first four lines. According to the Rev. W. 'T'. Pilter's measurements, the upright lines of the characters in the first line are about half-in-inch in length, those in the second line about ${ }^{3}$ ths of an inch, while in the remaining lines they average $\frac{g}{g}$ ths of an inch. In the wall immediately opposite the tablet a triangular niche has been cutMr. Schick suggests that it was intended to hold the lamp of the workman employed in engraving the inscription. At the time the inscription was found, the greater part of it was below the level of the water which flows from the Pool of the Virgin into the Pool of Siloam. This will explain why it was not seen by former explorers of the conduit. The passage of the water has filled the characters with a deposit of lime which makes it difficult to real them, and in the last line the letters are almost entirely smoothed away by the friction of the water. Before the inscription could be copied it was first necessary that the level of the water should be lowered. This was done at the expense of the Palestine Exploration Fund, the Committee, immediately after hearing (in August) of the discovery, having authorized Dr. Chaplin to draw upon them for the money necessary for the work.* At the same time Mr. Schick was asked to take a better copy of the inscription than the one which had been sent to

[^2]England. This he did in January, but as he was unacquainted with Phoenician epigraphy his success was not great, and the copy could not be read. A second copy, which arrived in England on the 1st of March, and was published in the last Quarterly Statement of the Fund (April 1881), provế equally unintelligible.

Meanwhile, I had succeeded in taking what I believe to be the most perfect copy of the inscription that can well be obtained. An accident I met with in Cyprus brought me unexpectedly to Jerusilem at the beginning of last February, and one of my first occupations there was to call on Mr. Schick, and enquire about his discovery. He showed me his copy of the inscription-the same facsimile as that forwarded to London in January -and explained to me the difficulties he had laboured under in attempting to make it. I saw at once that it contained characters of the early Phenician alphabet, and accordingly started as soon as I could for the conduit where it was found, in company with another gentleman, Mr. J. Slater.

Mr. Schick had not exaggerated the difficulties which stood in the way of making an accurate transcript of the inscription. The last line of it was only just above the level of the water, which, though reduced very considerably below its former level, was still from 4 to 6 inches deep, and flowed with a steady and rapid current. In this it was necessary to sit in order to copy the concluding lines of the inscription, and the cramped position necessitated by the narrowness of the space was very fatiguing to the limbs after an hour or two's work. As there was no light so far up the conduit, the characters could only be seen by the dim light of a candle. This Mr. Slater was good enough to hold for me,-conduct the nore beroic in that he suffered severely from the mosquitoes with which the conduit swarmed. As the letters were filled with lime, they could be distinguished only by tracing the white marks of the lime upon the darker surface of the smooth rock. Besides the letters, however, every accidental scratch and flaw in the stone was equally filled with lime, thus making it inpossible for any one unacquainted with Phoenician palwography to take a correct facsimile of the inscription.

The copy of the inscription here published is the result of three separate visits to the spot where it was found. It was only by repeated observation that the actual forms of some of the characters became clear to me, and it will be seen that there are several which still remain doubtful. Since my return to England, I have received another copy of the inscription, made independently of my own, by the Rev. W. T. Pilter, which the author has been kind enough to send me. The commentary will show of what service a comparison of this with my own copy has been to me. I understand from Mr. Pilter, that Dr. Guthe, the head of
but this seems not to be quite correct. Dr. Kautzsch has been in such a hurry to vindicate the German Palestine Association, that he supposes Mr. Schick's copy of the inscription, published in the Quarterly Statement, to be mine.

the German Palestine Exploration Society, who has lately arrived at Jerusalem, is having the whole conduit cleared out, in order to discover whether a second inscription is visible at the other end.

The inscription is the oldest Hebrew record of the kind yet discovered. The word $\mathbb{W}$ which occurs thrice in it made me at one time believe that it was a Phonician monument, $\mathbb{U}$ weing the Phœonician relative pronoun. M. Halévy,* however, pointed out that שN must be only a defective spelling of the Hebrew שישיש, -which, by the way, throws light on the derivation of the Phoenician relative pro-noun,-and since the language of the inscription is in all other respects that of Biblical Hebrew, including an example of waw conversive, that characteristic peculiarity of Hebrew idiom, no doubt can now remain as to its true nature. It is an early contemporaneous specimen of the language of the Old Testament, written in that ancient form of the Phoenician alphabet already known to us from the Moabite Stone and a few legends on seals.

The form of the alphabet, however, belongs to an even older period than that of the Moabite Stone. While the words are divided from one another by single points, and the opening sentences by double points, as on the Moabite Stone, and while, too, the majority of the letters have exactly the same

[^3]forms as those represented on the monument of King Mesha, three of the latter, wau, zxyin, and twarlhe, are more archatic in shape than the corresponding letters in the Moabite inscription. The zayin was first identified by Dr. Neubauer, and, like the tsuchê, presents us with a form from which the forms found on the Moabite Stone and in later inscriptions are derived by dropping the loop, and in the case of the tsadhe by yet further modifications. ( 6, Moabite $\& ; \Delta$, Moabite $k$ ). The form of waw, though older than that of the Moabite alphabet, nevertheless resembles that of the early Helrew seals, as well ats of the Nimroud lion weights (8th century B.c.) The koph, again, resembles that of the ancient Hebrew legends rather than that of the Moabite and early Phonician texts. So, also, does the beth with the long horizontal line at its base. On the other hand, the daleth, caph, lamed and tau are those of the Moabite Stone, not of the Hebrew seals, but the long rounded "tail" of the caph, mom, mun and pe remind us more of the Hebrew than of the Moabite inscriptions. The kheth, too, has three horizontal bars instead of only two as on the Moabite Stone. On the whole, the Siloam inseription presents us with a form of the Phenician alphabet considerably older than any previously known, and more closely resembing that of the Moabite Stone than any other, although the early form of the wave found in it, which was lost in the Moabite alphabet, long survived in the more conservative alphabet of the Jews. An interesting specimen of the alphabet of the ancient Hebrew seals will be found in the last number of the Journal of the German Oriental Society (xxxiv, 4), bearing the inscription "Belonging to Abd-Yahu (Obadiah) servant of the king." As it was brought from the neighbouhood of Diarbekr, it may have formed part of the booty carried away from Tudiea by Sargon or Sennacherib. I may add that the form of the zayin in the Siloam inscription supports De Rouge's attempt to derive the Phouician alphabet from the hieratic form of the Egyptian alphabet during the periokl of the Hyksos; though as much cannot be said of the woun and tsadhe.

Palseographically, therefore, the age of the newly-found inscription is greater than that of the Moabite Stone. Now a glance at the map will show that the Moabites must have obtained their alphabet, not directly from Phonicia, but through either Judah or the southern half of the Kingdom of Israt, more probably the latter. As it is difficult to suppose that a more archaic form of the alphabet was in use at Jerusalem than at Samaria during the same period, it would follow that the alphabet of the Siloam inseription, and therefore the inseription itself, would be more ancient than the inscription of Mesha, that is to say, than the ninth century B.C. We may accordingly assign it to the age of Solomon, when great public works were being constructed at Jerusalem, more especially in the neighbourhood of the Tyropoon valley. At all events, the historical records of the Old Testament do not warrant our assuming that further works of the kind were constructed at Jerusalem until we come to the time of Hezekiah, who "stopped the upper watercourse of Gihon, and
brought it straight down to the west side of the city of David." (2 Chron. 32, 30.) This could not be the conduit of Siloam, as the city of David lay on the western side of the Tyropeon. Isaiah refers to this work of Hezekiah when he tells the rulers of Jerusalem that they had "gathered together the waters of the lower pool" (ברכה) and had " made also a ditch (or reservoir) between the two walls for the waters of the old pool" (ברכה.) (Isaiah xxii, 9, 11 ; see vii, 3.) The palrographical evidence of the inscription, however, is wholly against our assigning it to so late a period as the time of Hezekiah; and this is the only evidence that is at present procurable.

The seal brought from the neighbuurhood of Diarbekr affords further evidence in this direction. The king, whose servant the owner calls himself, would be the king of either Judah (or Samaria) or of Assyria, and we are therefore justified in dating it as least as early as the seventh century b.c. This brings us near the period of Hezekiah. But, as we have seen, the alphabet of Siloam is older than that of the seal.* The construction of a tunnel like that which connects the Pools of the Virgin and Siloam implies both skill and wealth, such as would be more consistent with the epoch of Solomon than with any other in the history of the kingdom of Judah. So far as we know, Phonician workmen were not afterwards employed by the kings of Judah, and it may be doubted whether any native Jew possessed the engineering ability displayed, as the inscription seems to show, in the excavation of the conduit. Dr. Neubauer has pointed out to me that the work must have been begun at both ends simultaneously, the workmen finally meeting in the middle, like the excavators of the Mont Cenis tumnel. This will account for the culs de sac met with in the passage. It was no wonder that one of the workmen, perhaps the chief engineer himself, recorded the successful completion of the undertaking in writing. The only difficulty is to explain why the upper half of the tablet in which the inscription is engraved is left smooth, the lower half alone being occupied with the inscription. I can ooly suggest that a historical record of the work was intended to be inscribed in the unengraved portion of the tablet, but that for some reason or other the intention was never carried out, while the existing inscription itself, being merely the composition of a private individual, was engraved in a place where it would be permanently concealed by the water.

The size and clearness of the letters show that writing was no very unusual accomplishment in Jerusalem at the period when the inscription was engraved. At the same time, some of the letters have duplicate forms, which equally seem to show that it was in a somewhat unfixed state. Aleph has two forms, one of which is identical with the form found on the Hebrew coins, while the other is the form of the Moabite

[^4]and Phœenician inscriptions: zayin, also, has two forms, the loop appearing ou the left hand side in one of them, on the right hand side in the other; so, too, perhaps, have waw and mem, though I do not feel absolutely certain about the form $\gamma$ and $\%$. I can throw no light on the curious ornament which serves as a finis to the inscription.

Historically, the inscription gives us no information beyond the mere record of the cutting of the conduit. Topographically, also, our gains from it are small. We learn that the Pool of Siloam was known as the B'rechah, or "Pool," and if my reading is right the Birâh, or "Castle," mentioned in Neh. ii, 8 , and vii, 2 , already existed on the 'Temple area. Josephus calls the latter the Bripıs (Antiq. 15, 11, 4), and it stood not very far from the modern gate of St. Stephen and the Virgin's Pool. In the Roman period it was known as the Tower of Autonia. M. Halévy, however, has very ingeniously suggested that the mention of the 'eleph ammah or "thousand cubits," in the fifth line may throw light upon two passages of the Old Testament, Josh. xviii, 28, and Zech. ix, 7. In the first the rendering of the A. V. should be corrected into "And Tsela", the Eleph and the Jebusi, that is Jerusilem," which would mean that Jerusalem consisted of the three quarters of Tsela', Eleph, and Jebusi, the latter being the Jebusite stronghold, captured by David, to the west of the Temple hitl. In the second passage a slight alteration of the purctuation (reading wor for fon would make the sense clear, and give us "he shall be as Eleph in Judah, even Ekrou as Jebusi." If M. Halévy is right, the "thousand" cubits of the conduit gave its name to the rocky height, through which it was cut, so that the southern part of the Temple hill, facing Jebusi or the "City of David" was known as Eleph or "The Eleph.,"*

Metrologically the inscription seems to fix the length of the Hebrew cubit, or 'ammah, the tunuel which, according to Colonel Warren, is 1,708 feet in length, being said to be a thousand cubits long. In this case the cubic would equal 20t inches. But it must be remembered that a thousand is a round number, and should not be pressed too closely.

For philology and epigraphy the value of the inscription is very great. It not only gives us the Phonician alphabet in a more archaic form than any previously known, but it brings before us the Hebrew language as it was actually spoken in the age of the kings. The Hebrew scholar cannot but be struck lyy what may be termed the biblical character of the language. The very idioms to which he has been accustomed in the Old Testament reappear in this ancient record. At the same time it offers more than one peculiarity. Unless my reading is wrong, we have in the
 ever, is presented by the first word of the last line, which, although in the construct state, ends with he instead of tau. It would therefore appear that the engraver carried the tendency to reduce a final th to $h$ even

[^5]further than the classical Hebrew of the Bible. He has also written $\boldsymbol{N}$ to express the vowel $a$ in two instances which cannot be paralleled in Biblical Hebrew, במאהתי in line 5, and תאחה in line 6. The same scriptio plena shows itself in מרציא (line 5), though on the other hand אשׁ word is interesting as its suggests the etymology of the Phenician relative pronoun אשׁ $\boldsymbol{\sim}$. Other peculiarities of the inscription will be the use of the Hithpael of דכבה in the peculiar sense of "eagerly working at," and the employment of a word unknown to Biblical Hebrew, which terminates with $\boldsymbol{T}$; (line 3).*

But the chief interest of the inscription lies in the indication it affords of the extent to which writing was known and practised among the Jews in the early age to which it belongs. It thus confirms the testimony of those Old Testament scriptures which claim to have been written during the oldest period of the Jewish State. And its evidence will have to be considered in future enquiries as to the epoch at which the Phoenician alphabet was first introduced amoug the Hebrew people. Above all, its discovery leads us to hope that other Hebrew inscriptions of an ancient date are yet to be found in Jerusalem itself. "Underground Jerusalem" has been as yet but little explored, and if we way tind a record of the kind in a spot which is easily accessible, and has been not unfrequently visited, what discoveries may we not expect to make hereafter when the Temple area can be thoroughly investigated, and the subterranean watercourses of the capital of the Jewish monarchy laid open to view.

## Translitrration of the Inscription in the Hebrew Square Character.

1 הן . (ה) בקבה : רזדו . היה . (ע ?) בר . המקבבה : בערד (החצ)


 חכו . בירה בא
 אל . . (ג) רזן • רילמו

6

[^6]
## Translation.

Behold the excavation ! Now this is the further side (or the history) of the tunnel. While the excavators were lifting up the pick, each towards his neighbour, and while there were yet three cubits to the mouth (of the tunnel) the excavators were hewing. Each came to his neighbour at a measure's length (?) . . . . in the rock on high ; and they worked eagerly at (the) castle they had excavated (3); the excavators worked eagerly each to meet the other, pick to pick. And the waters flowed from their outlet to the Pool for a distance of a thousand cubits, from the lower part (i) of the tumnel (which) they excavated at the head of the excavation here."

## Commentary.

Line 1. The sense obviously requires $\boldsymbol{j}$, for which there is just room. I had conjectured that this word ought to be read when I received Mr. Pilter's copy. In this he has two characters which are clearly followed by a point. His copy, however, shows no trace of a $a$ before the next word, though without it the grammar would be awkward, and I have therefore veutured to supply the missing letter. I was unable myself to make out the first letters of this line.

I read בקבה; Mr. Pilter's copy has מקבה, in which case we had better translate"tunnel" rather than "excavation" The verb means "to bore" and is therefore well fitted to denote the construction of a tunnel. In Assyrian it is used of the construction of watercourses. For a similar signification of מקבתת in Hebrew see Is. li, 1. מקבה should not be rendered "hammer" as in the A. V. (1 Kings 6, 7 ; Is. xliv, 12 ; Jer. x, 4), but "boriug-tool" as is plain from this inseription. The name of Macchabæus, therefore, even supposing it were writteu and not as it is, would not mean "the hammer."

The character which precedes בר is unfortunately doubtful. My first copy gave $p$, but קברך is used in Hebrew only of graves, not of excavations generally. In my third copy I made the character $ה$; ,הבר, however, for הבור would give but poor sense, aud the grammar would be awkward. Mr. Pilter's copy has $\boldsymbol{N}$, like the facsimile published by the Palestine Exploration Fund in their last Quarterly Statement; this is obviously impossible. Dr. Neubauer has suggested 7, which would give the meaning required, and agree with the Biblical style. I wish I could adopt it withont misgiving, but my copies agree in delineating a loop rather than an angle, and I am therefore inclined to read yy, supposing the sense to be that the lower end of the tunnel where the inscription is engraved had been the further side of the, excavation, which was begun first at the other end.

After בערד comes a fracture of the rock, and it is possible that more letters ought to be supplied than those with which I have conjes.
turally filled up the lacuna．After $工$ there is not room for more than two letters，and is spelt defectively without $\boldsymbol{\eta}$ in line 4.

I believe my restoration of העלו is certain．The last letter is clear； the preceding one，though much obliterated，can only be a 3 ，and before that comes a small triangular cake of lime which is too small to represent a daleth，and can therefore only be y．The sense given by העלו is just that which is wanted．

Line 2．גרזן must signify＂a pick＂here，not an＂axe．＂This will be also its meaning in 1 Kings vi， 7.

For the Biblical idiom אהיש אל רעו，＂each to the other，＂see Judges vi， $29 ; 1$ Sam．x，11，\＆c．The old form רעו is found in Jer．vi， 21. M．Halevy was the first to notice that $\mathbb{N}$ is a defective spelling of שישיש．It is similar to the defective spelling of The spelling throws light on the etymology of the Phœnician relative pronoun ש゙N， which will have originally meant＂man，＂and accordingly had no connection with the Hebrew relative $\boldsymbol{N}$ ，which originally signified ＂place．＂Over the first letter of רעו is a mark，which does not seem to be a mere accidental scratch，but which I cannot explain．

Instead of אמחה we ought to have had In the last line，however， the engraver has made the final letter of a feminine noun in the construct state $\boldsymbol{\pi}$ instead of $\Omega$ ，and it would therefore seem that the tendency of Hebrew to change final thinto $h$ had i：his case gone considerably further than in the classical language of the Old Testament．If so，the inscription will afford us an interesting specimen of the local dialect of Jerusalem．

We may notice that the article is expressed in writing in לדבה， in contradistinction to בצר in the following line．

After the break in this line，caused by the fracture of the rock，we have，according to my copy，the lower part of a letter which is either a $\square$ ， ${ }^{9}$ 个，or $a^{7} 7$ ；then a point ；then the remains of a character which may be either $\mathbb{N}$ or $\boldsymbol{p}$ ，and then space for two letters，one of which I have copied very doubtfully as $\Omega$ ．The other copies give no help．As the sense requires the third pers．pl．of a verb，I supply the final 7 ，and read conjecturally 1קי，＂they hewed off．＂See Hab．ii，10．The seuse shows that we have to supply $\boldsymbol{N}$ before the final $\boldsymbol{w}$ ．

Line 3．Here my copies would make the first character במדה， however，and the word which follows it，are extremely puzzling．The three last letters of the second word are certain，and are among the clearest characters in the whole inscription．Yet the only Hebrew root with which they can be brought into connection is 7ri，＂to seethe．＂It is curious that Mr．Pilter＇s copy has מרד מדו instead of＂unleavened bread，＂which reminds us of the use of the hiphil of tin Gen．xxv，29， in the sense of preparing food．But neither the context nor the grammar． agree with this reading，whereas my מדרה suits the passage well．Of the uext word I can make nothing ；the last three characters，as I have said，
are certain, and the first seems certainly . At all events that is the reading of all my three copies, as well as of Mr. Pilter's copy.

For the construction of תמה, see Numb. xxiii, 3 ; Judg. ix, 48.
Dr. Neubauer is clearly right in suggesting קמקוֹ, written defectively for קופד.

The verb which follows is certified by its recurrence in the next line. In the latter line, the second letter has to be supplied, which I suppose to be the $\Omega$ of Hithpael, though Dr. Neubauer suggests (with less probability,
 "desire eagerly;" here the Hithpael would have the sense of "working eagerly at" a thing.

If my reading is right, בירד would be the castle at the northeastern corner of the Temple area, near the Virgin's Pool, which is mentioned in Neh. ii, 8 ; vii, 2, and is called Bápes by Josephus ("Antiq.," 15, 11, 4), the Antonia of the Romans. In this case, the word would not be a late one, as is usually assumed. The omission of the article may be explained by the use of the word as a proper name. In 1 Chron. xxix, 1, 19, Birah is used for the whole 'Temple. Mr. Pilter's copy has בירחה instead of , ביפדה, but this is untranslateable.

Line 4. The first word of this line is difficult both to read and to construe. My copies have $1 \square \pi(\Omega)$ הן , which is also the reading of Mr. Schick's facsimile ; but I cannot translate it. Mr. Pilter, however, reads. . he seems to read only one $h \hat{e}$, and this reading, with much hesitation, I have ventured to adopt.

It is, however, very probable that Dr. Neubaner is right in making , ב־ a compound of the preposition then reading with the translation: "And they worked eagerly in the . . . . at a hole."
 notice that לקרקת is written defectively.

The waw conversive of $\ddagger$ Ø of the inscription. It may be added that M. Stanislas Guyard has lately pointed out the existence of a "true" waw conversive in Assyrian ("Recueil de Travaux relatifs à la Philologie et à l'Archéologie égyptiennes et assyriennes," ii, 4, p. 135, note 5).

The scriptio plena of ארצרצ is remarkable. In Biblical Hebrew we


ברכה is the common Biblical term for the " pools" or "reservoirs" which existed at Jerusalem and elsewhere. We may observe that the Pool of Siloatm is called "the B'rechâ" par excellence, as though it were the chief reservoir at the time the inscription was made.

ב I explain as a compound of the preposition and the noun מהת M, a scriptio plena of the Biblical the Bible the
word is used only of time, but it properly means "extension," and the temporal use of it is derived from the local one.

Throughout the inscription is written in its uncontracted form. This cannot be regarded as an Aramaism, but, on the contrary, as a mark of antiquity, like the use of מארתי in a local sense.

Line 6. The first word of line 6 is certainly תאחהT. The sense seems to require some word parallel in meaning to מרציא. I can think only of תחתח, 'aleph being written as in and he taking the place of tau, as in the GTN of the second line. But I must confess that the meaning of "lower part" would be more suitable to the Siloam end of the tunnel than to the other, to which it refers. It may, however, signify the grooved chamel in the floor of the conduit, through which the water flows.

The next word is read המקובה by Dr. Neubauer, doubtless correctly.
 in Biblical Hebrew, מחצב taking its place. The participle is used of the quarrymen who cut the stone for Solomon's temple in 1 Kings v, 15 ( Heb . v. 29).

הt is used adverbially, as in Dan. x, 17. I could see no point between it and enclitic.

Additional Note.-Since the above was written, Dr. Neubauer has made two happy suggestions, which not only explain the difficult passage in line 3, but are also of great topographical importance. He proposes to make the first letter of בירהה the preposition as in בשער, and to regard ירדi as a geographical name Yerah. The translation will accordingly be : "They worked eagerly at the excavation in Yerah." Now Yerah at once reminds us of the famous passage in Gen. xxii, 14, where Dr. Neubauer's suggestion justifies us in the rendering, "of which it is said to-day, in the mount of the Lord Yerah." Here the name is identified with the Templemount, that is, with the very part of Jerusalem in which the tunnel was excavated. But more than this, Yerah is the same word as Yeru, and Yeru forms the first part of Jerusalem. Since Melchizedek is called King of Salem, it is possible that the western portion of Jerusalem was originally known as Salem, the Temple-mount being Yerah or Yeru, the enclosure of the two sites within oue wall giving rise to the compound name Jerusalem. It is noticeable that the punctuators make the latter word a dual. Dr. Neubauer's other suggestion is equally attractive. He would read מצדה ירזדה and render "to Motsah of Yeru-ziddah." Motsah was a place belonging to Benjamin, and near Jerusalem, according to Josh. xviii, 26, and my copy shows that the character I have read as daleth is not formed like the other daleths of the inscription, but like the left hand part of the tsadhé. With Yeru-ziddah, I would venture to compare the still unexplained name of Bezetha, on the north-east side of Jerusalem. Bezetha might very well represent Beth-Zidtha.

Dr. Neubauer has also drawn my attention to Is. viii, 6: "Forasmuch as this people refuseth the waters of Shiloah that go softly," where we should rather render "despiseth." The passage looks ins if Ahaz had made a conduit for the rapid passage of the waters of Siloah, while the people ironically said of them that they went only softly. In this case the tunnel in which the inscription has been found would have been either coustructed or repaired by Ahaz.

After the above had been revised, I read the article of Dr. Kautzsch on the Inscription in the last number of the Zeitschrift des deutschen. Palaestinu-l'ereins (iv. 1, 2), but learned nothing from it. A "copy" of the Inscription is published, which is as incorrect as that published in the last Quarterly Statement of the "Palestine Exploration Fund," and Dr. Kautzsch's readings based upon it are naturally worthless, as is also, for the same reason, his supposition that the Inscription is not older than the age of Hezokiah.

## II

## POSTSCRIPT.

A FEW words may be added by way of supplement and correction to the above. In the first place, an important argument on behalf of its antiquity may be drawn from the fact that the modern Pool of Siloam is called in it simply "the Pool." This implies that no other artificial reservoir of the kind existed at the time in Jerusalem. We are thus referred to an earlier epoch than the age of Isaiah, who mentions no less than four reservoirs, "the upper pool" (Is. vii, 3), "the lower pool" (Is. xxii, 9), "the old pool" (Is. xxii, 11), and the newly made "ditch," or more properly "tank" (ib.). The latter, I fancy, was the reservoir still existing to the south of the Pool of Siloam, which I am inclined to ideutify with " the old pool." The Pool of Siloam is called "the pool of Siloah by the king's garden," in Neh. iii, 15, and "the king's pool," in Neh. ii, 14, a designation which seems to show that it had been constructed by some famous sovereign. We know of none before the time of Ahaz and Hezekiah who could have executed the work, except either David or Solomon. As no other artificial reservoir appears to have existed in Jerusalem when the inscription was engraved, it is more probable that the reservoir was made shortly after the conquest of Jebuisi by David, and the encirclement of the new capital by a single wall, than when the Temple was actually being built.

It is difficult to suppose that the reservoir existed before the conduit which supplied it with water from "the dragon well," as it is termed in Neh. ii. 13. I believe, therefore, that the reference in 1s. viii, 6-" forasmuch as this people refuseth the waters of Shiloah that go softly,"-must be to the reparation of the tunnel by Ahaz, not to its original excavation. Ahaz had cleared out the passage, and so allowed the water to flow rapidly
through it ; his disuffected subjects ironically declared that it went only slowly.

The two culs de sac found in the courluit, occur, according to Colonel Warren's measurements, at a distance of 900 feet from its outlet into the Pool of Siluam. The two false cuttings "go in for about 2 feet each" on either side of the tunnel. Here, therefore, must have been the place in the middle of the conduit where the two bodies of workmen met, to find that they had not followed exactly the same line, but that the ends of their two tunnels overlapped each other. A passage was accordingly cut from the one to the other, the space between the two turning out to be not more than the average breadth of the conduit itself.

Since the publication of my pamphlet, I have received a letter from Mr. Pilter, in answer to my questions about certain doubtful characters in the inscriptions. Another visit to the inscription for the purpose of specially studying the doubtful letters I had indicated, has had the following result. In the first line the reading דבר is settled, the first character of the work being ummistakably a daleth, not an 'ayin. We must therefore translate "This is the history of the excavation." It is further clear that the inscription was originally intended to commence with the words "Behold the excavation," and that the smooth upper part of the tablet was inteutionally left uninscribed.

In the third line Mr. Pilter reads מצצ. We may therefore look upon the reading Motsah Yeru-siddah as fairly certain, since my copies leave no doubt that the point follows the $T$, and does not precede it, while the doubtful letter can well be a resh. At the end of the line Mr. Pilter still reads בימה. I believe, however, that I distinctly saw בירה.

At the beginning of line 4, Mr. Pilter finds נקבה . חתב, the first word being "clear." This is very satisfactory, and does away with the necessity of assuming the difficult hithyael form. Mr. Pilter adds that some of the letters are no longer so clear and distinct as they were; "perhaps Dr. Guthe's repeated washings of the stones to get rid of our candle-grease, and make his own gypsum cast, have washed away some of the lime deposited, which was so useful to us."

A. H. Sayce.

III.

## The Date of the Siloam Inscription.

Professor Sayce has, I believe, overlooked certain considerations which bear on the date to be assigued to the Siloam inscription.

On p. 145, he gives it as his opinion that it represents an earlier stage of the Semitic alphabet than the Moabite Stone, and he assigns it with some confidence to the time of Solomon. On p. 152, however, with his usual candour, he draws attention to an historical argument of great weight, brought forward by Dr. Neubauer, which would bring the date down to the reigu of Ahaz. But the palæographical evidence, he argues, is "wholly" in favour of the earlier date.

On the other hand, I think that it may be maintained that the palæographical probabilites, as well as the historical evidence, are in favour of the later date.

The Moabite stone belongs to the begiuning of the 9th century b.c. If the Siloam inscription is of the time of Solomon, it would belong to the beginning of the loth century, if to the time of Ahaz to the middle of the 8th. Here theu is a very definite issue. To the practised eye of the palæographer, there ought to be no great difficulty in deciding whether the inscription is either a century older, or more than a century later than the reign of Mesha.

The sole argument urged by Professor Sayce in favour of the earlier date is that three of the Siloam letters, tsadhe, wav, and zayin, seem to him of more archaic forms than on the Moabite Stone. At the same time he admits that several other letters belong to the more recent type which is used in the legends on the aucient Hebrew seals.

Now even if we admit the assumption as to the antiquity of the forms of the three letters, the conclusion by no means follows. It may be laid down as a palæographic canon, that the date of an inscription is to be determined by reference to the most recent rather than to the most archaic forms which it contains. The presence of one or two late forms is decisive evidence of the late date of a whole inscription, while the presence of one or two early forms is of no very great significance, as they can be accounted for as local survivals. For example, in Athemian inscriptions of the 5 th century, we find the archaic form of the lambda, v , whereas the new form $A$ has already made its appearance in the Greek alphabet in the 7th century, as is evidenced by the Abu Simbel inscription. The old form of the lambda at Athens is clearly a mere survival, and it would be preposterous on such a ground to argue that an inscription such as the Erechtheum survey must be antedated by three centuries, and assigned to a time earlier than the reign of Psammetichus. But this is in fact what Professor Sayce has done, when he ante-dates his inscription on the sole evidence of two or three letters which seem to exhibit exceptionally early forms.

It must be contended that such a mode of argument is illegitimate, and
that the Siloam inscription, like all other inscriptions, must have its date determined by reference to the age of the most recent of the forms which it exhibits.

Now at least half of the Siloam letters appear in forms which are unmistakably later than those on the Moabite Stone. The curvature to the left of the tails of the tailed letters, viz., beth, kaph, mim, num, and pe is more pronounced than on the Moabite Stone. Here we see in operation one of the chief causes which ultimately transformed the old semitic alphabet. The cheth with three bars is also later than the Moabite form with two bars, and so is q'oph, whose head is partly opened, while the earlier form is completely closed.

But an argmont to which still greater weight must be assigned is derived from the variant forms in which the letters aleph, waw, mim, and resh are written. The old Moabite forms of these four letters are used in the Siloam inscription side by side with the later forms, which subsequently supplanted them. These letters establish decisively the fact that the Siloan alphabet is a transition alphabet, belonging to a period intermediate between the Moabite alphabet of the 9 th century, and the newer forms by which in the 6th century they were replaced.

Referring to the Siloam alphabet given by Professor Sayce on p. 144, the first aleph is the form on the Moabite Stone, while the second is the 6 th century form which is found in the Geball and the Nora inscriptions, and also on the early Hebrew shekels, which are ascribed by de Saulcy and Lenormant to the times of Ezra aud Nehemiah. Again, the first form of resh approximates to the Moabite form, while the second is later. The same is the case with waw. The second form in Professor Sayce's table is Moabite, while the first, instead of being earlier, as Professor Sayce alleges, is decisively later, as is proved by its being used on the early shekels of the time of Ezra.

The two forms of mim, however, yield an argument so conclusive that they would by themselves suffice to settle the controversy. We actually have in the Siloam inscription, side by side, the two forms of this letter which are commonly used as the most convenient test to distinguish between the first and second epochs of the Semitic alphabet. The earlier, or zigzag form, is essentially the same as the Moabite form, and occurs twelve times. In the form which it had daring the second epoch, with the horizontal bar and the cross stroke, the letter occurs twice, in lines 3 and 5. Now this later form is not found on the Moabite Stone, or in the earlier Phœnician inscriptions, or on the Assyrian Lion weights which belong to the beginning of the 8th century. On the other hand, it is found on the Eshmunazar sarcophagus, in the Gebal inscription, in the second Sidonian, and many other inscriptions from the Gth century downwards. On the Assyrian contract tablets, however, which belong to the 7th century, it is usually found, but occasionally approximates to the earlier form. Now in the Siloam inscription, the Moabite, or 9 th century form appears twelve times, and the Sidonian or 6th century form appears twice. In the 7 th century, as we learn from
the contract tablets, the old form had nearly disappeared: while at the time when the Siloam inscription was engraved, the new form was just beginning to come in. The evidence furnished by this letter alone might enable us with considerable confidence to assign the siloam inseription to the middle of the 8th century, the exact date of the reign of Ahaz.

Professor Sayce bases his sole argument for the early date on the assumption that the forms of the three letters, waw, zayin and tsadhe are older than those on the Moabite Stone. Even if this were the case, his conclusion would by no means follow, the later forms of mim and other letters affording decisive proof that the more archaic forms must be regarded only as survivals.

But I cannot even admit that the forms of these three letters have the antiquity that is claimed for them. Much, no doubt, may be said in favour of the archaism of the forms of tsadhe and zayin, but with regard to waw, the very form which Professor Sayce considers to be so ancient is actually the later Hebrew form, exactly as found ou the shekels of the time of Eara, and manifestly the transition form from which the Asmonean letter was obtained. Both zayin and tsudhe are letters of comparatively rare occurrence, and the evidence as to their history is therefore scanty. The letter zayin does not happen to be met with on any of the early shekels, but the looped form, which Professor Sayce considers to be so early, is found on the coinage of Bar Cochba, which was inuitated from the earlier shekels, and has actually been transmitted to the modern Samaritan alphabet.

As to the very peculiar shape of tsadhe, it seems impossible that it can have been the parent of the Moabite form, but on the other hand it can be connected without much difficulty with the form on one of the early shekels. On the whole, it may be affirmed that the weight of the evidence tends to show that Professor Sayce's three archaic letters are merely local Hebrew forms, and decidedly posterior to the Moabite letters.

The conclusion, therefore, is that out of the twenty letters in the Siloam inscription eleven or twelve exhihit forms later than the Moabite Stone, that not one is decisively ealier, and that even if this were the case, it would not affect the argument. Indeed, if it were not for the early forms of he and lamed, it would not be impossible to bring the inscription down almost to the time of the Captivity. The palxographic probabilities tend, however, very strongly to support the ingenious conjecture of Dr. Neubater that the conduit was excavated in the reign of Ahaz, that is about the middle of the 8th century.

It may be noted in conclusion that the Siloam inscription throws valuable light on the date and afthliation of the South Semitic alphabets. The peculiar double-looped form of tsadhe connects itself with the doublelooped forms of this letter, which characterize the South Semitic alphabets, c.g., the Himyaritic 日, the Harra $\boldsymbol{\theta}$, and the Thugga 8. So again the looped zayin is connected with the Himyaritic form of the letter ※ which is also looped.

Isaac Taylor.

## LIEUTENANT CONDER'S REPORTS.

## I.

Beyrout, 22nd April, 1881.
Having reached Beyrout on the 29th March, and being unable to commence actual operations until the arrival of our men, stores, and instruments, which were not due for a month, we cast about for some useful occupation of the time which must thus of necessity intervene-the month of April being one of the best in the year for field operations. Our projected field of action in the Hauran was for the moment closed, in consequence of difficulties between the Turks and the Druzes; while the time necessary for travelling to the Sea of Galilee, and for making any really useful explorations on its shores, would have been so long as to interfere with our other plans. We therefore determined to devote a fortnight to the investigation of a question which is probably of greater antiquarian interest than any other, of those as yet unsettled in Northern Syria, namely, the recovery and exploration of the sacred southern capital of the Hittites-the famous city of Kadesh on the Orontes.

For this purpose we hired horses and tents, and armed with a circular letter from the Waly at Damascus, kindly obtained by the Consul (Mr. Jago), we left Beyrout on the lst of April-the third day after our disembarkation-and journeying across the Lebanon to Zahleh and Baalbek, pushed northwards to the lake and town of Homs, returning by the pass between Lebanon and the Anseiriyeh mountains to Tripoli, where we were canght by the equinoctial gales, and whence, after the delay of two days due to the storm, we returned to Beyrout' on the 17th April. The expedition was more successful in its results than we had hoped, and Lieutenant Mantell was not less of opinion than I am myself disposed to be, that the discovery of the true site of Kadesh-a city as old as the time of Moses at least-has been the reward of our investigations.

## Baalbek.

We were detained for two days at Baalbek awaiting the Wallys letter ; and our studies were, I hope, not without interest. Several inscriptions in the temple-fortress are enumerated by M . Waddington, and others were shown to me in 1873 by Mr. Wright; but one which we lit upon, in a small ruined chamber behind the northern apse of the basilica of Theodosius in the great court, is possibly unknown. It is written in long narrow letters rudely painted in red on white plaster, and has been partly obliterated by the fall of the plaster. The form of the letters seems to indicate Byzantine origin, and the inscription seems probahly to be of the date of the erection of this basilica ( 379 to 395 A.D.). It occupies a space of 1 foot 9 inches by 3 feet 3 inches, but there are traces of other letters to the right. On the left no further letters can have existed, the inscription
being close to the south-west corner of the vault, near the ground. After carefully cleaning tha plaster the following letters becime clearly visible :

| ПРОСН |  |
| :---: | :---: |
| N . | . P . A . |
| TONPY | - ENDYA |
| POCA | MBAN 2 NФWCKAIAN |
|  | OYПРОФАIӨY. O |

I have not the means at hand for attempting to decipher this text, although several words, including the $\pi \rho o \sigma \lambda a \mu \beta a \nu \omega \nu$ ф $\omega$ s of the fourth line, are easily legible. It may be noted that the peculiar form of the $\Omega$ (which resembles a $W$ ), is observable in another inscription at Baalbek, namely, in the round temple which was dedicated in later times by the Christians to St. Barbara. Here, on the stones of the interior, is painted a red cross on a white ground in a yellow circle, with the inscription tovt $\omega \nu$ ikn, the form of the $\Omega$ being that of a W. There are many other crosses cut on this building, and also on the bases of the columns in the Temple of the Sum, or smaller temple. It is curious to observe that the basilica of Theodosius has its apses at the west end, showing that the practice of orientation was not invariably adopted until after the close of the fourth century-a conclusion which agrees with the direction of Constantine's basilica at Jerusalem.

The basilica of Theodosius is built on the same central line with the great temple, of which only the six pillars remain. Lieutenant Mantell took careful azimuth and altitude observations, which determine the bearing of this line as $77^{\circ}$ east of true north. The sun rises on this line on April 28th and August 14th (as nearly as can be determined), and sets on February 24th and October 17th.

It may be remarked that the mourning for the sun-god Thammuz occurred in the sixth month of the Jewish year on the fifth day (Ezek, viii, 1-14), or about the middle of August-as nearly as can be reckoned considering the periodical intercalation of the Veadar month. This mourning was succeeded by a joyful feast three days later. Possibly the orientation of the Sun Temple may have some connection with the rising of the sum on this line on the 14 th August. It is also noticeable that the Jebel Sumnin appears on the west framed by the pillars of the great temple, the centre line of which passes about $3^{\circ}$ to the left of the apparent summit. Whether this be designedly so arranged, or is merely accidental, seems doubtful.

The inscriptions on the bases of the two columns of the portico at Baalbek, attributing the erection of this sanctuary, built in honour "of all the gods of Heliopolis," to Antoninus Pius, and to Julia Domna, wife of Septimus Severus, and daughter of Bassianus, priest of the sun at Emesa (Homs), are well known. In the southern vanlt, by which the great platform is usually reached, there is, on one of the keystones, a bust of Hercules in high relief, with the inscription DIVISIO MOSCI, as recorded by M. Waddington. In the southern parallel vault are inscriptions shown to
me in 1873 by Mr . W. Wright, also on keystones of the arched roof; the first, on the east, DIVISIO CHON ; the second near the west, CIRSV. In the same vault is one keystone ornamented with a female bust in high relief, and another with some floral emblems. These are scarcely visible in the darkness, but the vaults were originally lighted by windows in the arches, which are now filled up with rubbish.

On the north side of the great court are other fragments of inscriptions on pedestals projecting from the walls, doubtless once supporting statues. I do not know whether they have been previously copied, but they are apparently too fragmentary to have any value. The first noticed is :-
. . OHOCI . . . NEMI

The second to the left :-

$$
10 \text {. . LANAA. }
$$

As the temples of Baalbek were dedicated to all the gods, it becomes of interest to study the symbolism of the niches and other decorated portions. One of the alcoves on the north wall of the great court has five niches with carved roofs, the central one having a head of the sungod surrounded with rays, like that at Rukhleh on Hermon. On the left is a niche with the figure of a man, and another with an eagle flying among stars. On the right the design represents fishes swimming on a great shell ; the fifth design is unfortunately obliterated, but perhaps represented some kind of beast, all creation being thas shown surrounding the sun-god.

Among the busts carved on the roof of the colonnade surrounding the smaller temple may be recognised Diana with her quiver, Ceres with the cornucopia, a winged genius-perhaps Eros or Ganymede, a warrior -possibly Mars, a graceful Dionysius with bunches of grapes, and other figures with attributes less easily interpreted. Dr. Robinson speaks of one as a Leda. Hercules with his lion's skin and club is sculptured, as above noted, in the southern vault. On the west side of the colonnade lies a portion of the fallen roof, with a design representing a female suckling an infant-probably one of the nurse-goddesses of Asia. The size of this block may be imagined by the fact that innumerable names of visitors have been written on a single fold of the drapery.

The frieze which is sculptured on the retaining wall of the raised western cella of the smaller temple has been mutilated by later occupants of the place; but it is sufficiently preserved to show that it originally represented some kind of religious dance. One figure blows a long pipe, a second appears to have some kind of horn, a Pan's pipe lies at the foot of the latter, and to the left the thyrsus is plainly visible in the hand of a long robed figure with floating hair. Beneath this cella is a vault, in which a tomb was discovered, containing human bones and other relics. These would probably belong to the Christian period, when this temple was converted into a church.

The exterior masonry at Baalbek is generally drafted, though not with the regularity of the Temple walls at Jerusalem. A careful examination
shows, however, that the tooling of the stones is entirely different. Those at Jerusalem were worked with a toothed instrument, while at Baalbek a pointed chisel had been employed. The criss cross dressing never appears at Baalbek, and seems to be distinctive of the Herodian masonry at Jerusalem. In 1873, Mr. Wright pointed out on the north wall some Greek masons' marks, but I was unable to find these again, perhaps in consequence of the direction of the light.

Magnificent as is the ornamentation of these great temples, the work seems never to have been completed. We were much struck with evidences of unfinished work; capitals sketched in stone, but not cut out; mouldings terminating suddenly, and leaving an unfinished line along the cornice. At the great height at which many of these details are placed, the imperfections are invisible; but in many cases, when closely examined, there can be no doubt that the design has never been completely worked out.

From Baalbek we travelled along the western slopes of the Autilebanon, passing Nahleh, which preserves the Hebrew name Nachal ("a Torrent"), due to the fine stream in the gorge beneath, and where are remains of a temple; Lebweh, the Libo of the Antonine Itinerary, near to which is one of the principal sources of the Orontes; and the village, El 'Ain, which seems not improbably to be the Biblical Ain (Num. xxxiv, 2), south of Riblah; and on the evening of this day (6th), we reached Râs Baallek, where we found Christiau ruins and a tradition of a ruined monastery, with a holy spring, the water of which was said to give milk to any nursing mother who might make a pilgrimage to the spot-a tradition which may be found in other parts of Palestine, as, for instance, at Bethlehem.

From Râs Baalbek we rode north-west to visit the fine lue pool of 'Ain el 'Asy, the largest source of Oroutes, situated in a desolate gorge under Lebanon, and thence to the little medieval hermitage of Mâr Marûn, where the Maronite saint is said to have had his eyes put out by a certain Nicola. The caves are situated in a cliff east of the river, and look down'on the rushing stream beneath. A masoury wall, with loopholes, once protected the passage in front of the caves-a narrow ledge of rock; the site was one well fitted for a hermitage, and similar caves occur west of the river, a few miles further north, at a site called Magharet er Râhib ("Monk's Cave").

## Kamu'a el Hirmil.

About noon we reached the conspicuous monument called Kamía el Hirmil, from the village of Hirmil, which is not far from it, on the opposite or western side of the Orontes. The Kamóa ("Monument") is perhaps the most conspicuous landmark in Syria, standing on the summit of swelling downs of black basalt, with a view extending northwards in the ricinity of Homs, and southwards in fine weather to Hermon. We carefully measured and sketched the details of the monument, but it has
been visited by Robinson and Vandevelde, and the beautiful drawings of detail made by the latter (now in possession of Mr. W. Dickson, in Edinburgh) leave little to be desired. The building appears to have been solid, and is founded on three steps of black basalt. It measures 10 yards side at the base, and consists of two stories each, with flat pilasters and cornice, and a pyramidal superstructure above them. The height, as calculated from the vertical angles taken by Lieutenant Mautell, appears to be as follows (a much higher estimate than that given by Bredieker) :-

| Three basalt steps |  |  |  |  |  | ft. 3 | ${ }_{6}^{\text {in }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| First story, including cormice |  |  |  | .... | .... | 28 | 0 |
| Second " | " |  | $\cdots$ | $\ldots$ | . | 21 | 0 |
| Pyramid | .... | ... | .... | .... | .... | 26 | 0 |
|  |  | Total |  | .... |  | 78 |  |

On the lower story are designs in relief. On the east a wild boar hunted by two hounds, flanked by bows and quivers, with spears and other implements represented above. On the north are two stags, one standing, one lying, with horns like the fallow deer--spears and other weapons flank and separate them. On the west are bears, one walking and followed by its young one, the other rising erect. On the south-east the monument, which appears to have suffered from earthquake, has fallen down ; and the design on the south side is partly destroyed, the fore-part of a dog pursuing a stag being, however, still visible.

The monument is built of coarse limestone. The walls near jits base are covered with the Wastm, or "tribe marks," of the Turkomans, who inhabit the desolate basalt moors which stretch to the north almost to the shores of the Lake of Homs. The details of the cornices and pilasters, some of which we measured carefully, appear to belong to a late period of classic art, and the whole structure seemed most to resemble the work of the second century A.d. in Syria. According to local tradition, the Kama'a is the tomb of a Roman emperor, and there is nothing about the monument which seems to necessitate the idea of any earlier origin. It may be noted that the name CONNA occurs in the Antonine Itinerary between Heliopolis (Baalbek) and Laodicea (Tell Neby Mendeh), in just about the proper position for the Kamn'a, of which name CONNA may be perhaps a corruption.

From the Kamáa we rode north-east to Riblah (Num. xxxiv, 2), a large mud village, with poplars, close to the Orontes on the east bauk, and thence to Kuseir, the seat of a Caimakam, or lieutenant-governor, lying some 3 miles south-east of the Lake of Homs. The following day (8th April) we devoted to a thorough examination of the southern and eastern shores of this interesting lake, and on that day we discovered the actual site of the great Hittite city.

## Kadesir.

Before detailing our observations on the spot, it will perhaps be best briefly to explain the reasons why special interest attaches to this site. The conquest of the great eighteenth and nineteenth dynasties of Egyptian kings, in the fifteenth and fourteenth centuries before Christ, extended over the greater part of Palestine and Syria, and even as far as Asia Minor. Amongst their most formidable opponents were the Kheta, a light-coloured hairless people, wearing high caps and dresses somewhat similar to those of the Assyrians, but specially distinguished by their pointed and turned up boots, like the modern Turkish slipper. The Kheta are by most antiquarians identified with the Hittites who inhabited Northern Syria (Josh. i, 4), and who had monarchs of their own in the time of Solomon (1 Kings x , 29 ; 2 Kings vii, 6). Thothmes III encountered these formidable mountaineers in his expedition against Meggido, and one of the pylons at Karnak, discovered by the late Mariette Bey, gives a list of towns, including the names of Kinnesrin, Aradus, Aleppo, and other places in Northern Syria conquered by Thothmes III after his subjugation of the plains of Palestine and Galilee.

The most important contest, was, however, that between Rameses II and the Hittites, in the fifth year of the Egyptian monarch's reign, when he marched against the city of Kadesh on Orontes. A formidable league was formed to oppose him. The Wysians, the Teurcians, the Dardanians, the inhabitants of Aradus, Aleppo, and Carchemish, and even the Trojans (Iluna), and the tribes of Mesopotamia (Naharain), are said to have gathered to the Hittite standard, with many other unkuown tribes. On the hieroglyphic pictures the Semitic bearded allies are distinguished by dress and arms from the beardless Hittites, who are supposed by some antiquarians to have belonged to a Turanian or Turkoman race from Asia Minor, which had overrun and subjugated the fertile plains of the Orontes, and had even penetrated to the very borders of the Egyptian territory.

According to the ordinary chronology, the expedition of Rameses II occurred while Israel was being oppressed by Jabin, King of Hazar, with his chariots of iron ; and, as it is clear from Egyptian records that the Canaanites were allies or tributaries of the Egyptians at this period, it is highly probable that the iron chariots came from Egypt, and belonged to that formidable force of chariots which Rameses brought up to the plains of Kadesh to subdue the Hittites. The route pursued by Rameses was no doubt controlled by the impossibility of crossing rugged mountains with a force of chariots, and the road which we know him to have followed either on his return or on his advance-and probably on both occasions-led along the sea-coast towards Tripoli, passing the Dog River north of Beyrout, where three tablets carved in the rocks by his order still exist.

Thothmes III, who had attacked Kadesh in the thirtieth year of his reign, founded a strong fortress near Aradus (er Ruad) and Zamira (es

Sumra, near the river Eleutherus), at the foot of Lebanon, and it seems probable that Rameses would have advanced from the same fortress-that is to say, from the Western Plain across the pass which separates the Lebanon from the Anseiriyeh mountains, and leads from Tripoli to Homs.

The town of Kidesh on Orontes is generally said to have been on an island in a lake; but the representation in the Ramesseum at Thebes of the great battle between Eameses II and the Hittites appears rather to show a fortress surrounded by a river, and situated not far from the borders of a lake. The name of this river in the hieroglyphs is Arunatha, or Hanruta, and the city is described as lying " on the western bank of Hanruta at the lake of the land of the Amorites."

The various references to Kadesh on Orontes were kindly collected for me in 1880 by the Rev. H. G. Tomkyns. The portion of the great battlepiece representing the town is to be found copied in Sir G. Wilkinson's "Ancient Egyptians," vol. i, p. 257. The city is shown with a double moat crossed by bridges; on the left a broad stream flows to the lake, but on the right the piece is obliterated, and it is impossible to see whether the moat ran all round, or whether the town lay between the junction of two streams. Three higher and two smaller towers are shown, and the Hittite army occupies the ground to the left of the river, near the shores of the lake.

Mr. Tomkyns also called my attention to another representation of the town to be found in the Denkmäler of Lepsius (III, plates 158, 159), where the plan is a long oval with a single moat. Three high towers are seen projecting above the rest, and the moat leads downwards on the left, and also away on the right, no bridges being shown.

The lake, near or in which Kadesh stood, has long been identified with the Baheiret Homs, or Baheiret Koteineh, the lake 6 miles long and 2 miles broad, through which the Orontes passes between Riblah and Homs about 8 miles south-west of the latter town. This lake, according to Abu el Feda, the geggrapher, was called in his times Bahr ct Kades; but the title is no longer known, and the actual site of Kadesh was doubtful. It is true that an island exists in this lake, but the Egyptian account of the fight cannot be understood easily on the supposition that this island, threefourths of a mile distant from the shore, was the place attacked, and I was never able to understand the topography of the battle until, when standing on the true site of Kadesh, it became suddenly all clear.

The Egyptian army was arrayed south of the city of Shabatun, with the brigade of Amun behind and the brigade of Ra west of Shabatun. Shasu (or Arab) spies were here brought before the Pharaoli and gave false intelligence to the effect that the King of the Hittites was far away, near Aleppo, whereas he lay really in ambush behind the town of Kadesh. Rameses accordingly began to descend towards the region north-west of Kadesh, aud there halted to rest. His scouts here informed him of the secret which they extorted from some Hittite prisoners, and the forces near Shabatun were ordered to advance. The King of the Hittites passed over the ditch south of Kadesh and fell upon and routed the brigade of Ra,
which retreated "on the road upwards to the place where the king was." Rameses was thus attacked on his right flank, and his retreat cut off by 2,500 chariots of the allies. He, however, charged the Hittites, and drove them before him to the Orontes, where many of their soldiers and chariots were lost, and where the king of Aleppo was drowned. The battle is said to have been "in the plain of the land of Kadesh." On the following morning, Rameses attacked the city, which yielded to him, and a peace was made with the Hittite king and written on a plate of silver, the text of which venerable treaty remains to the present day preserved in the official account of this campaign.

Such, then, was the problem to be solved-the discovery of a moated city on Orontes near the lake of Homs, in such a position as to agree with

the minute description of the Egyptian scribe. This site we lit upon unexpectedly in the important ancient city generally known as Tell Neby Mendeh, situated on the left hank of Orontes about four English miles south of the lake of $H$ oms: for we discovered that the name Kades was known to all the inhabitants of the vicinity as applying to extensive ruins on the south side of this great Tell, while Neby Mendeh is the name of an important sacred shrine on the highest part of the hill, cluse to which a
small Arab village has now grown up. Not only is the name of Kadesh thus preserved, but in looking down from the summit of the Tell, we appeared to see the very double moat of the Egyptian picture, for while the stream of Orontes is dammed up so as to form a small lake, some 50 yards across on the south-east of the site, a fresh brook flows on the west and north to join the river, and an outer line of moat is formed by earthen banks, which flank a sort of aqueduct parallel with the main stream. The united waters flow northwards from the Tell, and fall into the lake of Homs. Thus only on the south is Kadesh not naturally protected with a wet ditch, and the moat maty very possibly have formerly been completed by cutting a cross channel from Orontes to the northern stream.*

We spent some considerable time in examining this importat site, and in taking compass observations from the Tell. The mound is remarkably conspicuous from all sides, and the view from the top is extensive. On the south the plain of the Bukî̀a is visible, stretching between the Lebanon and Antilebanon, as far as the ridge or shed on which the Kamu'a stands up against the sky-line. To the east is the rich fertile plain which extends from Orontes, some 20 miles, to the foot of the mountains, and the fine peaks above Palmyra, streaked with patches of snow, form the extreme distance. On the north-east the plains of Homs stretch to the horizon, and great Tells, the sites of buried cities, rise from the flat expanse, while a dusty mound, and a few white domes and minarets, with dark gardens to the left, mark the position of Homs itself. On the north the long narrow lake gleams between its shallow marshy shores, and three large Tells, one in the water, two on the eastern shore, are specially conspicuous. The north-west shore is bare and black, the basalt. moors rising westwards, to form a long low ridge, and dotted here and there with black Turkoman encampments, while behind these downs is seen the distant chain of the Anseirlyeh mountains, with the great crusading fortress of Krak des Chevaliers (Kal'at el Hosn) in a conspicuous position on the heights.

To the south of these mountains a gap occurs, and on the west and south-west the ridge of Lebanon, with dusky brushwood and rocky spurs, rises to the snow-clad summit or the Cedars. The rich plateau east of the Orontes is scattered with mud villages, with here and there a group of poplars, but the basalt moors are almost entirely uncultivated. In the arable land a race of Fellahin, whose black beards and hooked noses beara strong family likeness to the feature of the ancient Assyrians, as shown on the bas-reliefs, is settled; but the Turkomans, who may perhaps be considered to be the modern representatives of the Hittites, are encamped on the moors, and are found far west in the pastures below Kal'at el Hosn.

[^7]The scene is perhaps almost unchanged from that on which Rameses looked down as he crossed the western watershed and descended to the south-west shores of the Hittite lake; and the same mixture of Turanian and Semitic nationalities which students trace on the walls of the Ramesseum is still observable by the traveller in the vicinity of Kadesh.

Dr. Robinson, whose journey only extended as far north as Riblah, identifies the site of Tell Neby Mendeh with the Laodicea of Lebanon (also called Laodicea Scaliosa), mentioned by Ptolemy and Polybins, and shown on the Peutinger Tables. The distance from Homs, and the fact that Polybius mentions a lake and marshes near this Laodicea, serve to confirm this identification, which does not in any way interfere with the supposition that the town was formerly called Kadesh. Laodicea ad Libanum (as it is called by Strabo and Pliny) was one of the six towns named by Seleucus Micator (about 300 в.c.) in honour of his mother Laodice; and the fact that the site at Neby Mendeh was that of an ancient capital of the district, would naturally have commended it to the Greek monarch, while at the present day we find, as in so many other cases in Palestine, that the ancient Semitic appellation has survived the more modern foreign title, and that Laodicea is once more known as Kadesh.

Tell Neby Mendeh is a great mound without any trace of rock-so far as we could see-extending about 400 yauds in a direction about $40^{\circ}$ east of true north. The highest part is on the north-east, where is a Moslem graveyard looking down on gardens in the flat tongue between the two streams. The height is here perhaps 100 feet above the water. On the south-west the mound sinks gradually into the plough land. The village is situated about the middle of the Tell, with the shrine of Neby Mendeh -a large square building with a very white dome, at the north-west angle of the group of houses, which are rudely built of basalt chips in mortar, with mud roufs. Large mud ovens are erected east of the village. On the south-west, at the stream of el Mrukadiyeh, is the Tâhnnet Kades, a modern mill built of older materials, chiefly of basalt, and immediately north of this the brook is crossed by a bridge of one arch, while a second arch crosses the outer chamel or aqueduct, these bridges being just in the same position in which they appear on the Egyptian picture, and while on the one hand they are of modern masonry, on the other they lead to roads, the line of which is probably unaltered. The stream is fresh and flows quickly; we saw a good many fish swimming in it, and fragments of column shafts lay on the ground near the mill and the bridges.

The principal ruins are on the flat ground east of the mill. Here in 1864 Dr. Thomson found the peasants breaking up the stones; and long trenches have been dug, from which blocks of limestone have been excavated and carried away. The ground is strewn with chips of limestone and basalt, and fragments of pottery all over the ploughland. A piece of wall is still standing, built of small rubble in hard mortar, which is full of pounded pottery and charcoal, while courses of thin well-burnt bricks, like those used by the Romans, are built in between the courses of rubble. Still further east are the foundations of a building called el Kamu'a,
about 50 feet square, with remains of a doorway in the south-east corner. Some broken pillar shafts lie near, and the walls appear to have been ornamented with pilasters in low relief, the details of which, as well as those of a fragment of cornice, resemble the moulding at Kimutia el Hirmil. These probably are remains of the Laodicea of later times, for even in the early Christian period this city was the see of a bishop.

Recrossing the western bridges we followed the stream of el Mukadiyeh southwards, and found lying in a field a fragment of scupture representing a sented figure without head or shoulders. It was of very rude execution, and probably not very ancient. No inscription was visible on the stone.

Crossing to the south of the village we regained the great dam with sluices which is built right across the Orontes, at the foot of the Tell on the east. It occupies the position of the eastem bridge shown in the Egyptian picture, and though the masonry is apparently modern, the foundations may perhaps be ancient. The mill on the dam has several fragments of ancient masonry built into its walls, and the door lintel has a curious design, with an Arab inscription much defaced, and a central circle enclosing what appears to be a sabre or cutlass.

Near the eastern end of the dam-which is some 25 yards or more in length-a Greek tombstone has been built into the causeway, and had apparently been lately excavated. The following letters were very clearly legible on the stone which lies on its side :-
OABI
TYMBOCEHEI ....
MACEAAYAXENATN
AMMAICHNADEIMA
TPIEC . OCYNHC
TEPEIAN
ETRN
NA

So far as a cursory examination throws light on the text, it would appear to have belonged to a priest of Emesa (A $\mu \mu \mathrm{L} \boldsymbol{\sigma} \eta \mathrm{V})$, and to contain his age at the time of his death $(N A)$. This inscription proves the late period of construction of the upper part of the masonry in the dam.

The inhabitauts of the village were quite unaccustomed to seeing Franks, and much alarmed at our appearance accompanied by soldiers. They denied that any iuscriptions existed on the spot, and would not allow that they had ever found coins or other antiquities in digging. Nevertheless, I have rarely met with any site which seemed more likely to repay careful examination, and it seems highly probable that, if a mine could be driven through the Tell, Hittite remains might be discovered. It is just such a mount which has lately, at Jerablas (the northeru Hittite capital of Carchemish on Euphrates), produced the valuable sculptures now in the British Museum. The interest taken by Professor Sayce and other learned authorities in the recovery of monuments similar to the

Hamath stones and the inscriptions of Carchemish and Asia Minor, would, I think, lead them to attach great importance to a complete examination of the ruins at the site of Kadesh, which, it will, I think, be generally admitted we have now at last recovered. The suggestion that the Hamath stones were of Hittite origin, was, I believe, first put forward in 1873 by the Rev. W. Wright, of Damascus, and it is now generally admitted on the authority of Professor Sayce. The Hamath stones were cut in basalt, and the chief material used in the village houses at Tell Neby Mendeh is the same-a hard compact volcanic stone. It is possible that is minute examination of the village buildings, and of the interior of the shrime of Neby Mendeh, might result in the discovery of inscribed stones even above the surface; but we were unable to see or hear of any such during our visit.

Tell Neby Mendeh appears to be a sacred site of great antiquity, and this again is not umatural when we reflect that the name Kadesh itself indicates a "sacred" city consecrated to the sun-god, or to his consort Astarte. Neby Mendeh is said to hąve been a sou of "Our Lord Jacob," though which of the twelve tribes, is intended-unless the word be a corruption of Manasseh-it is not easy to understand. The spring from which the tributary stream of el Mukadiyeh flows is called et Tannur ("the Oven") a term applied (I believe in the Koran itself) to a certain deep chasm, whence, according to Moslem tradition, the waters of the Deluge first broke forth; and it is evident that a tradition of Noah's flood still exists in connection with the Tell and the lake, for some three miles north of the Tell and east of the river there is a curious site, known as Sefinet Neby Nôh, "the Ark of the Prophet Noah."

It is a great platform of earth, some 300 yards square, with small mounds at the four angles, as if representing the remains of towers. It is surrounded with a ditch about 40 feet deep and wide. No traces of masonry are visible, and the platform is covered with furrows, having been converted into a ploughed field by the peasantry. The direction of the sides is abont north-east and south-west. An ancient road runs northwards, a little to the west, and on this, close to 'Arjun, about half-a-mile from Tell Neby Meudeh, we found a Roman milestone lying fallenanother detail which favours the identification of the Tell with the Laodicea of the Itineraries.

Before quitting the subject of Karlesh on Orontes, a word must be said as to the position of Shabatuna, the place whence Rameses II advanced to attack the Hittite capital. This town or fortress was situated north of the position occupied by the most advanced hrigade of the Egyptian army. Raneses, at sumrise, went further upwards, and arived south of Shabatuna; he then went "further downwards," and came to the vicinity of the lake. The defeated brigade of Rameses retreated "on the road upwards to the place where the king was." The final advance on Kadesh was made in the evening, and the Hittites were driven into the Orontes.

Now all these indications of topographical features are easily explained on the supposition that Rameses was advancing by the pass which leads
from the plains of Tripoli to the lake of Homs. It is evident that in an advance of some 15 or 20 miles from the vicinity of Shabatuna, the Pharaoh crossed a ridge and descended into the plains north-west of Kadesh, near the southern shores of the Hittite lake.

Just suçh a ridge intervenes between the brod plains of Homs and the small basin called el Bukei'a, which lies west of the watershed, and which is commanded by the castle on the mountain to the moth, the igreat stronghold Kallat el Hosn. The lake of Homs is some 1,500 or 1,(600 feet above the Mediterranean, and the top of the basalt ridge forming the pass is probably about 2,000 feet above the same level. The Bukei'a basin, which is a fertile plain about 5 miles wide, full of springs, which feed the river Eleutherus, dotted with clumps of oak and covered with Turkoman encimpments, is surrounded with basalt hills, 400 to 500 feet high. The great Crusading fortress, on its steep limestone ridge, looks down on the whole region. To the west, the Mediteramean is seen beyond the low hills, and the broad seaside plain; to the south, the spurs of Lebanon rise from the Bukeia basin ; to the sutith-east, the greater part of the lake of Homs is seen, with two black mounds, one being the Tell Neby Mendeh, the other the island in the lake itself.

A narrow pass is seen leading through the basalt ridge from the western hasin to the long flat eastern slope which stretches to the border's of the lake. In the Bukeia basin, south of Kal'at el Hosin, a suitable situation for the great camp of the Egyptim amies might he foumd. By the eastern pass Rameses would have ascended and again descended in a distance of some 15 miles before reaching the battle-fied. (On the west an equally easy line of advance would have brought the Edryptian reinforcements from the sea-coast to the Bukei'a basin. The question thas naturally suggests itself whether Kal'at el Hown may not stand on the site of Shabatuna, and of that fortress at the foot of Lebanon built by Thothmes III., not far from the river Eleutherus.

I find that this identification has ahready been proposed in 1874 in a paper communicated by M. Blanche, the French Vice-Consul at Tripoli, to the Institut Egyptien, on Tth August, and, through the kindness of this gentleman, I am able to give the arguments in favour of this view, which agree with the discovery of Karlesh at Tell Neby Mendeh.

The last syllable Na, in the name Shabatuna, is probally in Egyptian affix, such as was commonly added to Semitic words. The word to be understood is the Hebrew Shabat, or Sabbath, which, in modern Arabic, would take the form Sebta, "rest" (as in the case of the Ballatet Sebta at Hebron). Now, immediately north of Kalat el Hosn is the deep gorge in which the white monastery of St. George, with its red-tiled roof, is seen nestling; and about a mile below the monastery is the wonderful intermittent spring whence rises the Nahres Sebta, or "River of liest," the Sabbatic river of the ancients (see "Wars", vii, 5,1 ), which still flows on in average once a week from its cavern. Here, then, in the immediate vicinity of Kal'at el Hosn, the name Shabat still exists, and is known from a remote period to have always existed, and there seems, therefore, no
good reason to doubt that the fortress of the Crusaders occupied the site of an older Egyptian stronghold commanding the important pass from the sea-coast to Tripoli.

Our attention, after leaving the site of Kadesh, was devoted to the examination of the lake itself, which is generally allowed to be mainly and perhaps altogether artificial. We visited the shore at the point nearest to the island, which is called Tell el Baheirah, "The Mound of the Lake." The shore is flat and marshy; the island is about three quarters of a mile from the maiuland, and perhaps a quarter of a mile in length. We found it to be entirely laid out in gardens, which are cultivated with a mattock. A few huts (el Mezr'ah) exist on the south-west, the persantry crossing over on rafts formed of inflated skins, which are, however, only large enough for one man each, and quite unmanageable in a wind. Three of these rafts we saw, on each of which a man stood punting with a long pole, and drifting eastwards to the shore. We were informed that it would take five hours to make a raft, and that with the wind in the west the island could not be reached from that side of the lake-if, indeed, the raft could be used at all. The idea of constructing boats or large rafts to convey animals seems never to have occurred to the natives; but my interest in the island was much lessened by the previous discovery of the site of Kadesh on the mainland. There is no reference in the Egyptian records to any attack on an island situate at so great a distance from the shore-no account of rafts or boats ; while the picture of Kadesh shows a double moat with bridges, indicating a river rather than a lake ; for the Hittites can scarcely be supposed, even if we consider the scale of the Egyptian picture to be distorted, to have constructed bridges nearly a mile in length, from the island to the shore, as would be necessary if this part of the lake were as wide at that time as it now is.

Leaving the island, therefore, unvisited, we rode along the right bank of the lake, near which there are several mud villages and fine corn-fields and lentil patches. Tell Shomatin is a conspicuous green mound on the edge of the water, and Tell Kotemeh a larger one, with a flat top and evidently artificial. Excavations in these Tells, as well as in two others bstween Kadesh and the lake, might lead to interesting results. On the north-east there are low cliffs of white limestone, but on the north-western shore the basalt appears to come down almost to the water, and the only traces of habitation are a few miserable ruins of basaltic stone, among which the Turkoman encampments are spread out.

Our camp was pitched close to the Sidd, or great dam, which was built across the mouth of the lake, and which banked up the waters to a height of 10 feet above the level of the original river bed. The existence of the dake is mainly, if not altogether, due to the construction of this fine engineering work, and the original "Lake of the Land of the Amorites" would probably only have occupied the southem or upper part of the present basin, where the shores are flattest.

The view from the Sidd in the evening was interesting, though not remarkably picturesque. The flat basaltic slopes on the right, concealed
the pass by which Rameses approached. On the south-west, the black mounds of Kadesh and of the island were conspicuous, and Lebanon, with its snowy ridge, rose behind them. A strong breeze blew down the lake, which was covered with tiny "white horses," and broke in surf on its shingly shore. Great piles of cumulus towered above the mountains, and a flock of pelicans was soaring over the water, flapping slowly against the wind.

The lake of Homs is mentioned by Talmudic writers under its present name as Yam Hemetz (Tal. Jer. Kilaim, lx, 5 ; Tal. Bab. Baba Bathra 74 b), and the Rabbis state that it was not a natural lake, but a reservoir formed by Diocletian at the junction of several rivers. In the time of Abu el Feda tradition ascribed the building of the dam to the favourite Arab hero, Alexauder the Great ; but while we have evidence that the construction dates from the early Christian centuries, at latest, we have no sound reason for supposing that the Hittites were the original engineers of the dam. The object of constructing this great work was that of heading up the waters of the Orontes for the purpose of irrigating the plains round Homs. A great aqueduct between earthen banks (after the Egyptian and Chaldean fashion) leads from the east end of the Sidd to the gardens of Homs. Similar chanuels once existed west of the stream, and other earthen aqueducts occur near Kadesh ; and again, further south, rumning across the cultivated plain from the Orontes, which flows west of it.

We examined the Sidd or dam carefully, but the waves were breaking over it, and the water was rushing through the ruined sluice and through the gaps in the masonry, so that it was impossible so early in the year to walk along it. The total leugth is about half a mile, and the thickuess 25 feet at the top. The dam is built in the shape of a very flat $V$ with the point towards the lake. The difference of level between the lake surface and the stream below the dam is as nearly as possible 10 feet. On the outer or lower side, the thickness is increased by stepping the masonry regularly in each course. On the inside the construction is probably the same. The masonry is a coused rubble of flat pieces of basalt, undressed, set in hard white mortar full of pounded pottery, with a little charcoal. The rubble was originally faced with small ashlar, also of basalt. There were at the western end buttresses on the lower side at frequent intervals. Near the centre of the dam there appears to be a pillar or vertical pier of masonry. This could not, however, ' be reached. The general impression obtained, by comparing the masonry with other monuments I have examined in Palestine, is, that the whole structure is Roman work; and the Talnudic story, which attributes the dam to Diocletian, may perhaps be founded on fact.

There were several sluices and passages for the water, and masonry aqueducts leading off at different levels. The various streams now run at will, from all sides, and unite to form the main stream of Orontes at the mills about half a mile below the dam. At the west end of the dam a small medieval tower has been built on a solid rubble base. It consists of a vaulted chamber with an upper story without roof. The walls are
battlemented; the total height is 28 feet; the exterior measures 28 feet by 25 feet on plan. There are loopholed windows, and on the east a doorway 8 feet from the ground, the lintel of which consists of an inscribed block of basalt, which has been built in sideways, and is evidently not in situ; the inscription is boldly cut on a sort of tablet surmounted with a rosette, possibly meant for a cross in a circle, but much worn by the weather. The text is as below, and may possibly have some connection with the history of the dam. Of the tower and the lintel-stone we took careful measurements, plars, and sketches, as well as of the masomry of the dam. The inscription is perfect, and too well preserved to allow of any hesitation in transcribing.

> ETOY
> CHAY
> IA $\Delta$
> $\Lambda A I$
> OCIA $\Lambda \Lambda E$
> OYA $\Lambda Y \Pi$
> EXAIPE

It contains a date, and appears to be of early Byzantine origin, from the form of the letters-as compared with the dated inscriptions of the Hauran, collected by Waddington.

A small town once stood on either bank of the Orontes below the Sidd. Tradition says that the village Sidd (which takes its uame from the "dam") was removed from this site to its present position down on the small Survey which accompanies this report. There are five basalt shafts 32 inches in diameter, lying about 300 yards from the little town, which is called Kusr es Sidd, on the left bank of the river. They at present surround a modern tomb made of mud and stones, and covered with rags stuck on little stakes, so as to form streamers. A stone cut into the shape of an arch 3 feet 2 inches diameter, and 1 foot thick (a single block of basalt) has been laid on the south side of the tomb to form a kibleh, and piles of basalt chips are heaped up on the fallen pillar-shafts. The site is thus evidently a sacred shrine, to which pilgrimages are made, and it is called "Jeriyet Aly," "the slave of Aly." Probably this modern Wely marks the spot where a small temple was once dedicated, perhaps by the builders of the Sidd.

Such are the main results of our visit to Kadesh on Orontes, including the recovery of the name at a site which fully agrees with the monumental records, and with the topographical notices which are to be found in the great Court Epic of Pentaur ; the recovery of traditions showing the site to be an ancient sacred place; the exploration of the lake and dan ; and the examination of the site of Shabatuna and of the route of the Egyptian advance. The Survey of the lake is laid down from compass observations taken at, various points, and the eastern shore may be looked upon as well fixed, while the western shore is more roughly indicated.

## Appendix.

\{In connection with the discovery of Kadesh may be read Professor Sayce's learned paper on the "Monuments of the Hittites," published in the Transactions of the Society of Biblical Archeology (vol. vii, Part II). These remains and inscriptions - the reading of which will probably throw as much light upon the early history of the Bible as the cuneiform inscriptions have already done-are found scattered over a wide area : at Karabel, on the road from Ephesus to Sardes, which shows that they extended as far as the seaboard ; in Central Asia Minor, Cilicia, Phrygia, and Lycaonia ; at Aleppo, Carchemish, and Hamath, in the earliest times the "children of Heth" were in the south of Palestine. This sacred city on the Orontes has now been found ; of Jerusalem itself it is said (Ezek. xvi, 3) that her "father was an Amorite and her mother a Hittite." As regards the characteristics of Hittite art, they are thus described by Professor Sayce :-
"It is modelled upon the bas-reliefs of Nineveh, or rather the gems of ancient Babylonia, and like them represents human figures and other objects in relief upon stone. But it has a peculiar roundness and thickness; the limbs of the figures are short and thick, and there is little attempt made to delineate the muscles. The feet are shod with boots which have the ends turned up, the head is usually covered with the socalled Phrygian cap, and a spear is often placed in one hand. A modification of the winged solar disk of Assyria is not unusual, and at Eyuk we find a representation of a doubled-headed eagle, which seems the prototype of the Seljukian eagle of later days. At Eyuk also we have two sphinxes, which, though modelled on an Egyptian model, differ profoundly from the Egyptian type, while the mode in which the feet are represented reminds us of the prehistoric statue of Niobe on Mount Sipylus. At Boghaz Keui, the female deities wear mural crowns, from which we may infer the Hittite origin of this decoration of the Ephesian Artemis. The mural crown seems to have been a specially Hittite invention. On the other hand, the general character of the sculptures at Boghaz Keui, where some of the deities, for instance, are represented as standing upon animals, shows its dependence not on Assyrian, but on early Babylonian art."

As regards their history, it is learned from Assyrian and Egyptian monuments that they were the leading people of Western $A$ sia from the seventeenth to the eighteenth centuries b.c. Their city of Kadesh, so curiously found by Lieutenant Conder, disappears from history after the thirteenth century b.c. Their city of Carchemish (now Juabis) was finally captured by Sargon, b.c. 717, when it became the seat of an Assyrian Satrap. Their connection with the Bible narrative is well known.

Professor Sayce is of opinion that the Hittites did not speak a Semitic language: and that they did not belong to the Semitic race. "Their features and physical type are those of a northern people, and their northern origin is confirmed by their use of boots, which is, at least, as old
as the beginning of their writing, since the boot is the commonest of the Hittite hieroglyphics. The boots are always represented with turned $u_{p}$ toes, like the boots of the mountaineers of Asia Minor and Greece at the present day."-Ed.]

## Homs.

From the lake we rode to the city of Homs, where we remained for the Sunday. I made such inquiries as were possible respecting the site of the famous Sun Temple at this place, of which the Roman Emperor Heliogabalus was high prient, but no known remains exist, although Homs is full of ancient pillars and stones, with Greek inscriptions. A possible site is the great mound of the fortress south of the town, where a sacred plase called Mes-haf 'Othman still stands. The great mosque contains the remains of the basilica built by Constantine; several of the pillar bases being in situ, while capitals of early Byzantine character are scattered about the courtyard. On one of the bases we were shown the following inscription :

> KYKAOTEPHC KO MOIO TYחO RACIAEYC EKO .
> E日NEAПAIП AM XONTACOФAICФ PEOINHNIOX . .

## Kalat el Hosn.

Our return journey from Homs led along Midhat Pasha's new road, north-west of the lake, and we made a long detour to visit the magnificent castle Kal'at el Hosn, which has been already described and explored by M. Rey. It is probably the finest specimen of Crusiding work in Syria, and almost perfect, the battlements and machicoulis still remaining in place. We made a collection of masons' marks, some of which are uulike any previously collected in other parts of Palestine. Many of these occur on drafted stones, the drafts having (as at Sôba and in other instances) the diagonal dressing distinctive of medieval work. This is an additional instance of the fact (which has not as yet been generally grasped) that the Crusading masons in Syria, as in Cyprus and other places, made use of the draft in masonry which they themselves hewed. It has often been supposed that such masonry was always more ancient, and was re-usel by the Crusaders ; but the presence of masons' marks on the drafted stones, and that such stones are often cut in the form of voussoirs for pointed arches, seem conclusively to prove that drafted masonry was actually eut by the twelfth century builders for use in their fortress walls.

There is a finely executed Gothic inscription on the walls of the chapel at Kal'at el Hosn. I find, however, that it has alrealy been deciphered by M. Rey. The text, which has many abbreviations, reads :-

Sit tibi Copia.
Sit Sapientia
Formaque detur
Inquinat Omnia
Sola Superbia
Si Comitetur.

## Thipolis.

From Kal'at el Hosn, we travelled to Tripoli, where we were detained by the storm, and were most kindly and hospitably received by M. Blanche, the French Vice-Consul. From him I gathered many interesting traditions and other indications connected with the neighbourhood. We also visited the Dancing Derwish Monastery, and were much interested in the details of the symbolism observable in the performance, which, as is generally allowed, had its origin in an astronomical worship, the tradition of which is, however, apparently lost to the performers.

The ancient name of Tripoli is unknown, but the name Kadishah, applying to the river on which it is built, may indicate that here also an ancient Kadesh is to be sought. North of the town is the sacred shrine of el Bedâwa, which M. Blanche assures me was an old church of St. Anthony of Padua, of whose title the Arab is a cormption.

In the courtyard is a basin or tank containing fish, which are held sacred by the Moslems. Vows and offerings are made to them, and in time of war they are said to disappear, and to depart to fight. for the Prophet against the infidels, returning to Tripoli on the conclusion of peace. This occurred even during the late war with Russia, and no doubt accounts for the successful defence of Plevna. M. Péretié, at Beyront, assures me that there is another tank of these sacred fish at Acre, in the great mosque, and when we remember the sacred fish of the lake of Derceto at Ascalon, and the sacred bath of Vemus mentioned in the Mishna as existing at Acre, there seems good reason to suppose that in these traditions we have the survival of the Dagron and Derceto worthip of the Phoenicians.

Several other curious traditions have been related to me recently and carefully noted, lint the only other point of interest for which space can be found in this long report is the curious chapel of Marima, south of Tripoli, to which our attention was drawn by M. Blanche, and which we visited on our way down the coast.

## Marina.

A ledge of limestone, with a rock-wall facing east, and curving out above so ats to form a natural roof, here constitutes a narrow platform with a rock-icreen, which has been at one time covered with frescoes painted on a coating of cement. The greater part of the cement has fallen off, but one row of designs with inscriptions is left. A niche in the wall formed a sort of apse, and seems still to be used, for the blackened stone gave evidence that some kind of lamp had recently been burnt hefore the picture. The place seems to have belonged to a hermitage, and various caves and rock-excavations were visible to the south. A pit, as if for a tomb, is sunk at one end of the platform, and another smaller recess under an arcosolium occurs in the rock-wall.

The frescoes were originally painted in a series of square partitions,
but at a later period a large head has been painted over the older designs, and is flanked with coarse letters nealy donble the size of the older inseriptions. The designs are as follow, commencing on the right:

First panel-A saint visiting another saint represented as in bed, while a third figure, also with a nimbus, stands behind; the saint raises his hand as though about to heal the invalid. Above, in Gothic characters, carefully painted in white on a blue ground, are the letters PATMRS'.

Second Panel.-A child with a nimbus, brought by a long-robed figure on the right to another saint on the left. The older inscription is nearly illegible, but the Gothic letters remaining of it read thus:
. . . PTsABATS
SPE .
Over the lower line a larger inscniption has been painted in characters and with contractions similar to those found in the thirteenth century inscriptions at Bethlehem.

## AH MITPIOC

Third Panel.-A robed saint with nimbus, kneeling to a second on the right, who appears to extend a cloak or some similar article towards him.

The Gothis inscription is mutilated, bat the letters remaining are SICUT - - LO - - IT' : ANTE ABATE PROTE - FILTA - - SUAM : beneath which is the remainder of the Greek inscription on panel No. 2, viz. :

## OAl'IOC

Fourth Panel.-Two long-robed figures, with nimbi, are standing in conversatiou. The Gothic inscription is almost illegible, the words GEORGII - - NIRIA alone being plainly recoverable.

Fifth Panel.-A large design of the Saviour, seated, with the Virgin to the right (spectator's left), and. Joseph to the left. The panel measures 72 inches in length by 30 in height. The original Gothie inscriptions real MATER and AS IUSEPH ABTI, over which the Greek texts appear, much contracted, but reading Mirjs $\theta$ cou and $I \omega$ on either side of the fowr letters IC. XC. (Jesus Christ).

Sixth Panel:-A man in a tree bearing apples; beneath is a hart or stagr ; and some native visitor has added a lion in black ink, and signed his sketch in Arabic.

Seventh l'anel.-A nimbus only is left, with an inscription in Gothic letters above, ANUNOLAT : VIRGOMARIA, showing that the design represented the Annunciation. The Greek letters, M/D...日Y (" Mother of God") are scrawled across the Latin inscription, and the whole of the fresco is thus converted into a kind of pictorial palimpsest.

Eighth Panel.-A saint, with a hammer, probably Christ as the carpenter. 'Ther is no Gothic lettering visible, but the Greek reads thus:

## HAMMAPIA

This, though much confused, is evidently to be rendered H. A ya Mapar, and belongs to the design on the seventh panel to the right.

We took a sketch with dimensions of these frescoes, and a rough plan
of the place. In sheet XVIII of the "Memoirs" a similar case will be found (Section B., s. v. Deir el Kelt), where inscriptions of two periods occur above one another. The Latin iuscriptions at Marina cannot well be tarlier than the twelfth century, and the character of the Greek letters appears to beloug to the thirteerith-as determined by M. du Vogiié.

Retarning from Tripoli by land to Beyrout, we fomend Messrs. Black and Armstrong awaiting us, and commenced our active preparation for the Fastern Survey. Meantime I may, in conclusion, express my conviction that a most interesting field of operations awaits the archeologist almost untouched in Northern Syria.

Claude R. Comber, R.E.
II.

Jerusalem, 24th May, 1881.
Is marching down the const from Beyrout to Jerusalem, we halted for two days at Tyre, for the purpose of investigating more closely the various points which have given rise to discussion in comection with its topography. The most important of these are: 1st, the extent of the ancient city; 2nd, the position of the Egyplian harbour ; 3rd, the site of the Temple of Melkarth ; 4th, the extent and situation of Palxe Tyrus.

## I.-The Ancient Site of Trre.

It is generally agreed that the original city stood on the islands and reefs which were separated from the shere by a channel, filled up by the mound which Alexander the Great constrneted during the course of his famous siege of Pyre. Two islands originally existed, and are traditionally believed to have been comnected by a mound, consiructed by Hiram, the contemporary of Solomon. A careful inspection seems to lead to the conclasion that very little, if any, subsequent change has occurred since this connecting mound was made, and that the smaller. island, which then lay south of the main reef, is represented by the promontory which projects at the sea comer of the present headland, enclosed by the Crusading walls. That the reefs presented in the middle ages the same outline as at present, seems to be clearly indicated by the line of the 12 th century fortifications, which rise close to the cliffs from the flat ledges of rock existing everywhere, both on the west and on the south. The promontory, representing the smaller island, rises some 30 or 4) feet above the sea, and is bounded by cliffs of soft sandy limestone above the flat reefs. There are no indications of any artificial alterations on these cliffs, and it seems very improbable that the action of the sea can have materially diminished the area of the island, for on the south, as will be seen immediately, the remains of the Egyptian harbour are clearly
traceable, while all along the west the reefs have been hewn, with great patience and ingenuity, so as to form a series of small harbours, landingplaces for boats, and shallow docks, \&e., salt-pans, which are probably attributable to the early Phonician period of Tyrian prosperity. In one place only on the west is the line of reefs broken, by a little round bay with a fine sandy banch measuring. some 70 yards in depth, and perhaps 100 yards acros's north-east and south-west. It is probable that the original chamel, dividing the small southern island from the larger one, here ran out on the west. On the south alsa there is a corresponding bay, but much shallower, measuring about 200 yards east and west, which may detine the limits of the smaller island on the east. The area thins limited appears originally to have included about four or five acres. On this islet stool it temple, which the Greeks called that of Jupiter Olympius. A sarcophagus measuring 7 feet by 5 feet 10 inches and 2 feet 5 inches in height (outside dimensions). lies on the smaller island. It is quite plain, and cubical in shape, with a pillow for the head of the corpse cut inside at one end.

The western flat reefs, below the Crusading walls, extending to the north-west eud of the larger island, present many points of interest. Fragments of the medieval fortifications, rubble masonry, bonded with pillar shafts of granite and syenite, lie fallen upon them. The rise of the tide (about 18 inches) brings the water, on a calm day, almost on a level with the reefs, and in stormy weather they must be partially covered. In the summer, however, safe landing places, and channels for small boats, oceur in every direction, many bearing signs of having been artificially enlarged and altered, while in other parts there are remains of an ancient concrete pavement, full of fragments of pottery, which, seems to have beon spread over the sharp and uneven ridges, to form an open quay close to shore. In one place there is a basin some 3 feet deep and 40 to 50 yards long, surrounded on all sides by the reef. It has no entrance, but a boat could be easily dragged over the narrow rock-mole on the outside, and the basin would thus form a rude dock for the smaller craft in summer time. North of this, on a somewhat higher level, are the basins called Burches Sulîb, "Pools of the Cross"-four large salt-pans divided by cross-walls of rock some 3 feet thick. Oue of these pools measured 35 feet by 22 feet, the depth being, about 3 or 4 feet apparently. These excavations were full of sea water, but are no longer used as salt-pans. Many smaller pans exist close by, and in other places along the reefs, resembling those at 'Ath litt, which are still known by their proper name, el Mellâhah.*

Near the north-west angle of the reefs there is a heap of fallen pillar shafts, which, though quite black externally, show, when broken, a fine pink granite. They are some 2 feet in diameter, and look at first sight

* It may be remarked that the existence of these salt-pans and jetties forms an argument-were a new one noeded-against the exploded notion of the partial submergence of the site of Tyre in consequence of carthquake shochs-an error which seems to have originated in the account given by Benjamin of Tudela.-C. R. C.
like the remains of a small shrine on the reef, but possibly they may have Wen collected by the Crusaders for use in the walls, or for the construction $\mathrm{o}^{0}$ a jetty, like those which they formed at Cesarea, Ascalon, \&c., and even at Tyre itself in the Egyptian harbour, and they may thus have been left unused in their present position.

The above observations along the reefs seems to indicate that the Phecenician port included, not only the two main harbours on north and snuth, but also a series of quays, landing-places, and small harbours, on the west. On the east the accumulation of blown sand on the mound of Alexander has rendered the extent of the original site doubtful ; but it sacms probable that the line of the Crusading walls on this side, founded as they probably are on rock, would mark approximately the limits of the island. Within this line-which is indicated by the position of the Algerine Tower in the Orange Gardens on the south-east, and by the small medieval tower on the north-east of the city, which contains a well, and is partly built of rustic masonry, such as the Crusaders used-the ground is everywhere covered with fragments of broken masonry and pillar shafts. The inhabitants use this open space, east of the modern town, as a quarry, digging down to a depth of 10 or 15 feet, and excavating good building stones. Small gems, Cufic and Byzantine coins, and other antiquities are often found, belonging apparently to the early Christian period; and is hoard of gold coins is said to have been lately discovered, but of what epoch I was unable to learn.

The total area which seems thus to have been enclosed, within the insular site formed by joining the two islands, is little short of 200 acres ; and considering the small size of all the famous cities of Phonicia (Nidon, Byblos or Aradus, the latter only occupving 100 acres) this appears amply sufficient for the site of a town, even of the importance of Tyre.

It would not be difficult to sink shafts beneath the superficial excavations now made by the townspeople, and results of interest might probably be expected at a depth of some 3 l) feet; but, in any further explorations at Tyre, it would seem clear that the only place where excavation would be likely to succeed, is in that part of the site which lies east and south-east of the present town, within the area of the Crusading walls.

As regards the necropolis of ancient Tyre, we made an interesting discovery. The modern graveyard occupies the ground north of the smaller island, and in this part there is a cliff, bounding the little bay already mentioned on the sonth-west side of the larger island. About 6 feet above the beach is a narrower cleft, which has been, I believe, recently broken through, or eularged by the fellatin. We squeezed into it with difficulty, and found within a grotto, which had been pointed out to us under the name Mugharet el Mujahed, "Cave of the Champion." There seems little doubt that it is an ancient tomb, a domed cave about 8 feet by 10 feet, and 11 feet high. A shaft exists above, the roof being covered in with flat slabs of stone, which were all in place. No sarcophagus remains, and, unless the shaft has been at some time or other opened and again closed, no sarcophagus can ever have been placed in the chamber.

There is on the north-east side a flat shelf or step, measuring 5 feet 6 inches by 2 feet 2 inches, on which, perhaps, the sarcophagus or coffin may have rested. No remains of wood or bones were noticed on the floor. The roof of the cavern is probably some 20 feet below the present surface of the ground on the top of the cliff. The discovery of this tomb, with the shaft arrangement which distinguishes the Phonician from the ancient .Tewish tombs, seems to indicate the possible existence of an old Phonician cemetery, in the cliffs under and near the modern graveyad ; and this may account for the puzzling circumstance that the island city had no apparent necropolis. Remains of sunk places in the rocks immediately sonth of the cave may, perhaps, represent other tombs which have been destroyed in quarrying, but it is possible that some of these are salt-pans. In accordance with the ordinary conservatism of the East, I may, perhaps, suggest that the features of modern Tyre preserve ancient Phonician localities. That the necropolis is unchanged ; that the site of the great temple is indicated by the ruined cathedral ; and that the Eurychoros, or "wide-place," may have been identical with the broad Meidan, which is now found inside the line of the Crusading walls, and west of the modern town or village. The necropolis of Tyre was sought by Renan at the important cemetery in the hills east of the plain, a distance of nearly two miles; but it seems probable that, although in later times the rich may have hewn their sepulchres on the mainland, the older tombs, at the time when (according to Pliny) a strait, 700 passus broad, divided the island from the shore, would have been hewn in the cliffs of the reef, and still exist buried some 20 feet beneath the modern graveyard.

## II.-The Egyptian Harbour.

The opinion of Renan and other writers appears to be that the ancient southem harbour of Tyre is no longer traceable;* and it is stated by Professor Socin that the supposed mole, on the south side of the town, was more probably the boundary of a piece of land artificially reclaimed from the sea. We gave considerable attention to this question during our recent visit. Lieutenant Mantell and I examined the mole and the harbour by swimming across it in various directions, thus ascertaining the depths, and closely inspecting the portions furthest from land; and the conclusion at which we arrived was different from that of the authorities mentioned, being to the effect that the harbour is distinctly recoverable, and that the only changes which have taken place are due to the wilful blocking up of the inlets to the port, and to the filling in with stones of portions of the interior ; over which stones the sand has now

[^8]drifted, and partially silted up the harbour. Even in the narowest part there is still, however, an anchorage for small boats, which we found lying close to shore; while the water was far beyomd our depth in that part of the port lying nearest to its western entrance.

It should be remembered that the ancient ports along the Syrian coast, including the famous Phonician harbours, are extremely small. The harbour of Sidon includes 20 acres, the Sidonian or northern port at Tyre only occupies 12 acres. The harbour at Casarea, and that inside the reef at Jatfa, are equally unfited for the requirements of modern navigation ; and it seems never to have occurred to the 'Pyrians to construct works connecting the various rocks in the two great reefs, which run out southwards and northwards beyond the actual harbours; although the existence of these reefs was no doubt the determining canse in fixing the site of the island city, as safe anchorage in the open roadsteads wats thms obtained, from whichever direction the wind blew on shore. Strabo (xvi. 2) speaks of the Egyptian harbour as open, referring probably to the reef which runs out southwards, but the space enclosed within the southeru mole is nevertheless equal to the area ( 12 acres) of the sidonian hamom.

The southern harbour we plamed carefully. It is divided in two by a pier which runs out from land, and which, in calm weather, is visible at a depth of 2 or 3 feet below the surface, but is now covered by the silt and by sea-weed. The southern mole runs out westwards from the land, at the extreme south-east angle of the ancient city, as defined by the Crusading wall.

It consists of ancient concrete full of large pieces of pottery, and had two paths paved with concrete, each about 4 feet wile, with a wall some 6 feet thick between them. The length of this mole is about 500 yards, the western and eastem ends are closely defined; and Lientomant Mantell walked along a good portion which lies under water, between the extremities, and found in one place those fallen columns on the line of the wall.

The pier from the shore divides the harbour into two portions, the western measuring about 400 feet north and south, by boo feet east and west, while the eastern measures 400 feet at its widest, opposite the shallow bay previously noticed, which is enclosed in the harloour, while on the east the harbour narrows to in point between the clifis and the mole.

There are two entrances at least to this port, through the mole, one being 50 feet wide. They have been partially filled with great blocks thrown down apparently from the wall on the mole, but we were obliged to swim across each. Other entrances no doubt also ocemred in the part now under water, but the main adit was from the west, where is a gap, in the reef which runs between the mole and the shore, of 1.40 feet. This entrance is skilfully constructed with an inner traverse, formed by a small tougue in the reef, so that the approach is completely defended from the waves outside. The water is here still very deep, but large hlocks have been thrown down to close the entry, and the harbour is too small, and too much silted up, to be of any present value.

Having carefully planned this harbour (which is, however, I believe, shown on Gaillardot's "Survey of 'Iyre"), we were unable to come to any other conclusion than that it represents the Egyptian harbour. The reefs which run out 600 yards or more, in continuation of the rocks through which the western entrance is cut, break the force of the sea so that a calm open roadstead is formed within, in which a small bark was lying at the time of our visit. Without reference to the history of Alexander's siege of 'Tyre, I am unable to remember what was then done by his ships to the southem harbour. It is possible that the filling in of the port may, however, have been accomplished by the notorious Fakhr ed Dîn, who mined the harbours of Acre and Sidon, and who seems to have had a special aversion to maritime structures: there appears, however, no more reason to doubt that the Egyptian harbour still exists, than to question the identification of the equally small Sidonian harbour north of the present town of Tyre.

## III.-The Temple of Melkartif.

I have suggested above that the Christian church at the southeast angle of the modern town may stand on the site of this famous temple. Melkarth ("the King of the City") was the Tyrian sungod, identified by the Greeks with Hercules; and it is worthy of notice that from the site of the cathedral (which probably replaced the older basilica said to hold the bones of Origen), a clear view is obtained of the great centre of sun-worship, Mount Hermon. The ruined cathedral stands on the highest part of the larger island, in a position marking as nearly as possible the centre of the ancient city ; and the ruined apses are directed towards Hermon. The fact that Christian churches were originally built on the sites of heathen temples (as at Rome, Constantinople, or Jerusalem), is too well ascertained to need more than a passing notice ; and in the case of Tyre we find, lying within the Crusading building, various enormous granite shafts, two being double with diameters of 3 feet 6 inches, the length of the blocks being 26 feet. Such monoliths are entirely unlike any work of the Crusaders, and the rude marble bases and capitals lying in the ruins, are too small to have been placed in comnection with them. The shafts must have been employed as piers from which the vault sibs sprung, and would have had a clumsy and unsuitable appearance even then in contrast with the small masonry and delicate mouldings of the Gothic structure. The material of these huge shafts is a fine red granite, which must have come from Egypt; and the Crusaders are little likely to have imported such stones, as they were always on bad terms with the Egyptian Saracens. Such monoliths are, however, still to be found at Jebeil (Byblos), and in other Phonician towns, and it seems far more probable that the Phonicians, who by religion and commerce were so intimately comnected with the Egyptians, would have brought the pillars to adorn their great temple, which no doubt faced the rising sun on a line not far different from that of the orientation of the Christian basilica.

The church has been already described by other explorers. We noted some smaller grey syenite shafts and a pillar base with the (ireek cross, flanked by four globes, and having the $A$ and $\Omega$ below, the material being a good white marble. This stands in situ on the south side of the central apse. We also found a marble capital of Gothic design, and both of these details were sketched and measured. The aucient font which was visible some years since has been, however, removed. I noticed that the windows of the apses show two periods of construction, the original " dog tooth" monlding, which ran romd them inside, having been replaced in the upper part with small stones.

The ashlar is of small size thronghout, and the centre of the walls of rubble, as usual in Crusading buildings. The material is a soft sandy limestone from the neighbouring cliffs. Only a few matsons' marks are visible.

We copied the inscription which occurs at the foot of the wall, outside the north apse on its north. It is already known, but was seen under a grood light.

> PONTHN
> OHOMH
> O OI OI . N
> KPHTHE

It is said that during the excavations of Sepp in 1874, a set of sacerdotal robes, a silver cup or chalice, with rings and other treasures were discovered in the cathedral.

I made inquiry as to the festivals of St. Barbara and St. Mekhlar, said by Professor Socin to preserve the cultus of Melkarth, but found no one acquainted with either name. The Maronite church is called after Our Lady, and the Greek after St. Thomas. St. Catherine is also worshipped in the town. 'lhese churches with their little belfrys, and the minaret of the single mosque, break the sky line in the long row of bally built cottages which constitute modern Tyre. There are also one or two better houses with red tiled roofs. The little Sidonian harbour was full of small craft ; the walls of the buildings along its mole, with heavier masonry below and smaller above, are decidedly attributable to the 12 th century, as the upper storeys of the towers present round arches, such as are never used by the modern native builders.

Varions antiquities were presented to us, and I purchased a small yellow glass coin or medal, of which two were otfered. It represents the sun-god with his whip standing in his chariot drawn by four horses, and was said to have been found in an excavation near the cathedral.

> IV.-Pale Tyrus.

In deseribing Tyre, Pliny ("Hist. Nat.," v, 17), gives it a circumference of 19 miles including Palat Tyrus, the place itself extending 22 stadia.

The latter estimate would agree faily with the area above described as
probably occupied by the island city, but if the 19 miles were distributed along the plain between the Nahr el Kâsimíy (which Abu el Feda identifies with the Leontes) and the springs of Râs el 'Ain-as has been proposed I believe by M. Renan, we should have to suppose a city almost one quarter as large as London, and quite without parallel in any other town of Syria. Strabo, on the other hand, mentions Pale Tyrus as existing 20 stadia south of Tyre, and having a stream flowing through its midst, without in ay way indicating a large suburb extending over the plain.

A careful examination of the ground between the Kâsimiyeh River, the hills east of Neby M'ashnk, and the springs of Râs el 'Ain on the south, seems to me to point clearly to the conclusion that no such extensive suburb ever existed, and that there is only one site within the area where an ancient town of any extent can have stood. Such ancient sites are clearly indicated in Palestine by various sure signs, such as the grey soil, the numerous thistles, the growth of the yellow marigold, the remains of pottery, cement, and glass, which mark the crumbling mounds long after the original buildings have disappeared. At the great mound of 'Tell Habish, near Râs el 'Ain, these indications of an old site are found. At Neby M'ashotk there are no remains which seem to indicate that there was more than a single building on the hill. The rest of the plain consists of red virgin soil or of sand dunes, with here and there traces of a single building.* The existence of a great open unprotected suburb exteuding over a flat plain without water, is entirely contrary to the ordinary Oriental method of growth in the more important ancient cities, where the houses appear generally to have crowded round the central fortress or sanctuary, and to have nestled close outside the walls when they could no longer find space within their circuit.

There are no indications in the way of wells, cisterns, mounds of ruins or other remains in the pain which would lead to the conclusion that a great defenceless open suburb ever existed, and the theory appears to depend only on the loose expression of Pliny, which may, perhaps, be otherwise explaned, either as referring to the district of which Tyre was the capital, or else as being merely a blunder of the Italian writer, who had probably not visited the city.

The more defiuite description given by Strabo is easily reconciled with existing remains; and these, inchuding the sites of Neby M'ashok, Khubet el Lawâtin, Wâdy et Tin, Tell el Habîsh, and Râs el 'Ain, may in conclusion be briefly described.

A curious mound of rock rises in the plain due east of Tyre. The summit is about 100 ft . above the sea and 40 above the platin. On all sides

* At a point about half-way between Tyre and Neby M'ashalk and south of the ancient aqueduct, some boys digging in the sand dunes have found remains recently of a little shrine or chapel. Fragments of marble, of glass mosaic, of a small twisted pillar shaft, and the shoulder of a small statue in high relief, remains of a marble cornice with feebly executed mouldings, and some curious pieces of dark pottery, seem to indreate that a small Byzantine or Crusading chapel stood here among the dunes.
the bare rock is visible, and on the east is a perpendicular cliff. Close to this cliff, on the south-east extremity of the hill, stands the shrine of Neby M'ashonk, with two domes and a courtyard containing a pahm. A few hovels exist north of the building. The rock is quarried on the west; and on the top of the hill there are indications of old foundations. On the north are rude rock steps, perhaps leading up to the ancient building on the summit, perhaps only made in quarrying. On the north-west are some rock-cut tombs of Tyrian character. The great aqueduct to Tyre runs close to the foot of the hill on the south, and once supplied a small mill, but its course seems to be controlled rather by the fall of the ground than by any intention of carrying water to Neby M'ashôk, as no cisterns to receive the supply appear to exist at this point. Parts of the hill were covered at the time of our visit with corn, and this may have concealed ruins, but a large part of the site shows only bare rock, and there is nothing to indicate that Neby Mashak was ever the centre or the acropolis of a city or suburb, while the excavations made by M. Renan brought to light only the remains of asmall and comparatively modern shrine.

Although Neby Mashak does not, therefore, appear likely to have been the acropolis of the theoretical Pate Tyuns, there is no doubt that it must have been a.sacred shrine of antiquity and importance. It has been proposed to identify it with a temple of Astarte, but the name M'ashôk ("beloved") is in a masculine form (the passive participle of 'Ashaka), aud the Nely is said to have been a man who was so fascinating that every woman who saw him fell in love with hirn. Probally, therefore, we have here the mone ancient temple of the sun-god, pointed out by the Tyrian islanders to Alexander-the shrine of ath Adonis, or: youthful solar hero. A curions story is told in connection with the place. A cave is said to exist beneath it and to contain a treasure; the cave is also satid to be full of bees, and we were shown a narrow cleft in the eastern cliff supposed to be the entrance and from which honey is said occasionally to exude. We saw, however, neither bees nor honey, and although our guide's story was contirmed by ather witnesses on the spot, it seemed improbathe that the narrow fissure in the strata should really be the month of a cavern. The natives say that if the cave were opened the buiding above would fall in ruins. The sacred cave (as has been remarked in a recent paper in the Qquiterly Stutement P. E. Fund) is usually an adjunct of a sum-worship centre; while bees and honey are also intimately comnected with the sun-grod; and bees form the string of the Indian Cupid's low (Kama Deva). In this tradition we have, therefore, possibly an echo of the ohd cultus of the heathen divinity now known as the "beloved prophet."

Eust of Neby M'ashok lies the great cemetery callal Kharbet el Lawâtin. Careful inquiry proved that the spelling Awatin given by some authorities is incorrect. The word is the phural of Latten, the well known name for ""lime kiln" in Syria, and the character of the site agrees, as will be seen immediately, with this translation of the title. To anyone who has read M. Renan's account of this place, the impression
made by a visit to the spot is very disappointing. There are no excavattions at all equal to those at Beit Jebrin, and the character of the cemetery, in spite of its being an extensive site, is very rude, and quite beneath comparison with many other collections of rock-cut tombs in Ealestine. The caves which M. Renan describes as "immense hypogées, of which the roofs have fallen in," appear to me to be nothing else than quaries whence the soft chalk (Iumetrah) used for burning into lime, has been obtained. Such excavations are common in all parts of the country where the very soft chalk appears, and the name Khurbet el Lawâtín "ruin of the kilns," is no doubt an indirection of the origin of these caverns. The niches which have been observed in the walls of these caves appear to be the remains of loculi, occurring at different levels, showing that here, as at Beit Jebrim, an ancient cemetery has been destroyed in quarrying--the original excavators finding it easier to commence operations by breaking up the walls of the tombs, than by cutting into the face of a solid cliff. Similar destruction of ancient cemeteries may be noted wherever modern quarrying has been undertaken in almost any part of Syria. There are no remains visible of the supposed roofs of the caverns, and they do not seem on inspection ever to have been covered in, except in such parts as still are roofed, where the excavations have been pushed deep into the cliff. These caves are now used as goat folds, but they are not of a size or execution in any way comparable to the great caverns of Southern Palestine.

North of the chalk quarries, the lnill-side is covered with tombs. We took plans of several of these, all belonging to one type-a square chamber reached by a shaft some 6 to 10 feet deep, and having rude Fokim on the four walls. These tombs which, on account of their rude execution, might be thonght very ancient, differ only from the Jewish Kohim tombs in the existence of the shaft, which takes the place of the small door entered from the face of a low clin, in the ordinary type of Jewish sepulchre. The Jew hewed a chamber inwards from the face of the hill, while the Phonician sunk downwards from the flat surface of the hill-top; but the chamber within was in both cases identical in its general arrangement.

The cemetery in question is certainly very extensive, and may contain unopened tombs. It seems, however, by no means clear that it is the ancient necropolis of Tyre, which, as ahready suggested, is more probably to be sought on the island itself. The existence of the temple at M'ashak maty perhaps account for the cemetery, the Phonicians being eager to find sepulture near the sacred place, just as the Jew or the Moslem at Jerusalem, and in any sacred city, still desires to be buried close to the sanctuary; but the hill towns or even distant cities may have had their share in this great graveyard, as well as the island town of Tyre, which is distant some two miles from these hills.

Following the hills southwards, we visited the flat valley between Burj esh Shemally and Burj el Kibly, which is sometimes called W'ady et Tin from the fig trees which occur on the slopes. On both sides of the valley there are tombs, and we obtained plans of some of these, which are simply
locali in the rock : remains of wine presses also oceur, and on the south side of the valley, near 'Ain el dudeidehe (" the rock-cut spring") is the curious bas-relief visited by Renau aud Guirin. It measures 18 inches by 23 inches, and is surrounded by a rude frome projecting is inches. The design (uf which a sketch accompanies this report) represents a single mate figure in long robes, the head purposely defaced. On the right, at his feet, is an animal most resembling a dog, and on either side an arabesigue of grape-bunches and leaves (much defaced) russ vertically- the vine on the left springing apparently from a pot, as is generally the catse where this
 am aware that M. Gućriu has described these defaced details ats representing tle heads of sheep surounded by mimbi; but careful examination shows that the curving stem of the vine is continuous throughont. Nor is it clear that the human figure represents the "good shepherd," as the lamh or sheep which he would cary is not distinguishable. The existence of the vine, a symbol of the sum-god ; and of the dog (if dog it be), maty indicate that the smo-deity, Hercules, is represented, whose dog is recorded tirst at Tyre to have discovered the Murex or parple fish, which he brought from the sea in his mouth. It seems clear, moreover, that there is a tomb beneath the block of rock on which the bas-relief is cut, although the entrance is now so completely blocked that excavation would require considerable time.

Hitherto we have found no site which call really be considered to represent Palse 'Tyrus. A visit to the fountains of Râs el'Ain, however, made us acquainted with the importance of the ruin called er Rusheidiyeh, the old name of which is Tall el Mabish, "Momad of the Abyssinian." There is here a great hillock measuring about 400 yards north and south, and including some 25 to 30 acres. It rises about 60 feet above the sea, and has a modern farm-house on the flat summit. The hill was covered with corn, but remains of ancient masomy were visible all over its plateau. On the north-east are two fine springs which have been enclosed with walls like those at has el 'Ain, the work, however, in parts looks like Crusading masomy. On the north-west is a small mill originally fed from these springs, but the water now runs in a stream to the sea. It appears, therefore, that at this site the description given by Strabo of Pala Tyrus, as having a strean ruming through its midst, as well is the distance of twenty stadia from 'Tyre, is realized in a satisfactory manner. A small jungle of brambles, canes, and wild figs grows on the edge of the 'Tell to the north, following the stream to the beach, and at Tell Habish we have every requirement for an ancient town, a fine water supply, a lofty and spacious mound, and a small limbing place on the beach itself.

Râs el 'Ain, about half a mile south of this great mound, may possibly have formed part of the site of Palae 'Tyrus, which would have coverel the intervening space if it was indeed a town of any size. We visited the great reservoirs and aqueducts of Rats el 'Ain, and made a plan of the three principal tanks. There appear to have been originally two spriugs, of which one is enclosed in the great octagonal reservoir called Birket
${ }^{2}$ Tsratwy, while the other rises in a quadrangulav cistern called Birket Sufsafeh, which is situated 370 feet east of the former, and is comnected by a short chammel, with a smaller rudely octagonal reservoir situate at the south-western angle of the Birket Sufsafeh.

The level of the water in these two springs is the same, about 80 feet above the sea. The two"groups of reservoirs were connected by an aqueduct, of which only a few traces rematin. The watls of the pools are 20 feet thick, faced with fine ashlar of stones, sometimes 5 feet long, and built inside with concrete, formed by alternate layers of pebbles in hard cement, and of flat pieces of stone or pottery. Birket 'Isrâw has the appearance of having been originally domed over, the walls curving over above the water some 3 feet beyond the perpendicular of the inmer surface. This Birkeh is now surrounded with small houses. Its sides are of irregular length, and were carefully plamed by Lieutenand Mantell. On the north and on the east bifurated chamels lead from the surface of the pool to two pairs of vertical shafts of circular form, each is feet in diameter. These shafts are lined with good masomry, the stones having their faces cut to the form of the circle. They feed two modern mills, but are evidently part of the original structure of the reservoin.

On the west side of this tank a modern pool has been built; it is now covered with trees and canes, but was distinctly visible from the top of Birket'Isrâwy. It is called Binket el Mâti, and sad to have been built by the Egyptian Emir Bishir el Malti, apparently about the time of Ibrahim Pasha; while the Birket 'Isrâwy is locally, though no doubt wrongly, attributed to Alexander the Great.

Birket Sufsîfeh ("the willow-pool") measures 51 feet by 48 feet inside, with walls 10 feet thick. It is built on a hill side, so that on the south the path reaches almost to the leval of the top of its walls, whereas the walls of the second octagonal tank are some 15 feet high on the west side, and over 20 feet in thickness.

No ancient aqueduct leads from the quadrangular tank, but alterations have been made in its walls, and a modern aqueduct on arches, some of which are pointed, and others round, runs south-west for a short distance from the east side of the tank. Probably these alterations may be attributed to the Crusaders of the 12 th and 13 th centuries.

From the octagonal tank contignous to the Birket Sufsiffeh, the original aqueduct to Tyre still runs about 2 miles, to the vicinity of Tell M'ashak on the north, where it tums round westwards, and disappears in the sand dunes; the water which is caried to the town and rather beyond it, escaping to form a marsh behind the dunes. This aqueduct has the appearance of Roman work, and is lined with concrete. It has a channel, increasing from 2 feet 9 inches near the pool to 5 feet in width, and 6 feet in depth near Neby M'ashonk, where the arch is still intact, the voussoirs surmounted by a series of long slabs laid horizontally as a top covering to the structure. The fall, from Râs el 'Ain to Neby M'ashok, is at the rate of about 10 feet per mile, which would give a level of about 40 feet above the sea at Tyre, were it continued uniformly.

In crossing low ground the aqueduct is carried on litrge round arches with strong piers, and a string course is added above these as an ornament. The arches are generally formed by voussoirs of even proportions, but Lieutenant Mantell noticed near Tell Habish a row of arches, not truly structural, but formed by cutting the stones of the succession courses into the shape of a round arch, each course being corbelled out so as to form together a complete semicircle in elevation. This unusual construction may, perhaps, be a sign of the early date of the aqueduct, and the arches thus formed are dependent for strength, not on structure, but solely on the hardness of the cement used in building. The masons were, however, evidently not ignorant of the theory of the arch, as voussoirs are used in other parts of the aqueduct.

In addition to the three ancient reservoirs, and the later Birket el Malti, there is a fifth ponl of quite distinct character situated north-west of Birket 'Isrâwy. An aqueduct with masonry of late character leads to this tink, which is some 12 feet square inside. The arches of its aqueduct were originally round, but near the tank an outer facing of masonry not bonded in, has been added with pointed arches on the north side of the piers. The tank is called Birket es Seiyideh, "Our Lady's Pool," and is a sacred place, pilgrimage being undertaken to visit the spot, and vows offered to the local divinity. The tank was probably filled at one time through its aqueduct from the more ancient aqueduct from Birket es Sufsaffeh, or rather from the contignous octagonal reservoir. It should be noted in connection with the last-named octagonal tank, that like Birket Israwy it contains a pair of cylindrical shoots of good ancient masonry, which convey the water to a modern mill.

It seems clear that the original constructors of these fine old watertowers had in view rather the utilization of the springs for mill-work than the supply of the distant city of Tyre by an aqueduct.

The conclusions which suggest themselves after a visit to the spot are, that the three older tanks were originally built for local purposes, that an aqueduct to Tyre (seemingly Roman work) was afterwards made from the smaller octagonal reservoir. That the Crusaders subsequently built the Birket es Seiyideh and its aqueduct, as well as the broken aqueduct leading suuth-west from Birket Sufsâfeh, and that the Birket el Mâlti is the latest addition to the group of five tanks at present existing. The arrangement will, however, be rendered clearer by a glance at the plan of the older reservoirs.

The general results of our three days of exploration at Tyre may be briefly summarised in conclusion. They include :-

First, the discovery of a tomb (Mŭghâret el Mujâhed), which seems to indicate the situation of the ancient Tyrian necropolis.

Secondly, the examination of the existing remains of the southern or Egyptian harbour, and of the reef west of the island city of Tyre.

Thirdly, a suggestion as to the position of the Temple of Melkarth, rendered probable by the conspicuons and central position of a site which has long been consecrated by a Christian basilica pointing towards Hermon.

Fourthly, the examination of the hill of Neby M'ashak, its traditions and the neighbouring Tyrian cemetery.

Fifthly, the examination of the important mound of Tell Habish and the neighbouring springs of Rês el 'Ain, the possible site of Pale Tyrus.

Excavations at Tyre might still produce results of interest and importance. They should be confined to the area within the Crusading walls, or to the sites of el Lawâtin and Tell Habish, where alone promising indications occur. The old necropolis of Tyre may, perhaps, exist untouched beneath the accumulated rubbish heaps of Greek, Byzantine, Crusading, and Arab times, but the vicinity of the modern graveyard would make the exploration a very delicate matter.

It should, however, be remembered that the remains as yet found have been of a very rude and uninteresting description, and that the Phonician inscriptions discovered by M. Renan in this district were of very late date. Perhaps the most interesting piece of work which could be suggested would be a complete excavation of the cathedral by shaft sunk to rock, or to such a depth as should enable the explorer to determine whether any relics of the famous temple of Melkarth still exist on the spot.

Modern Tyre has been described as a rising place, and there is no doubt that since the Metâwileh settled here, it has grown into a town from a condition of complete ruin. Its trade is, however, quite insignificant, its harbours far too small to be of any value, and its inland communications too difficult to allow of its competing with Acre, Tripoli, or Alexandretta, as a point of strategical or commercial importance.

The fisher spreads his net on the reefs and ruined walls, as the prophet of old proclaimed in one of the most poetic chapters of the Old Testament, (Ezek. xxvii), and the little town is sarcely more than a fishing village with a small coasting trade in cereals, fruits and silk. Our knowledge of other ancient cities leads us, moreover, to conclude that even when the hardy Phonician mariners were planting colonies in Africa, in Spain, or in France, and were the first of Orientals to discover our own stormy islands, the ports of the mother city, to which the merchants of Asia and the Mediteranean gathered from every quarter, were scarcely larger than the capacity of a fishing harbour in Eugland, while the metropolis itself only covered an area about equal to that of Hyde Park.

The conclusions of archeologists, which a short though careful examination of the site led me to regard as requiring reconsideration, are as already detailed. First, that the Egyptian harbour has disappeared; considering the existence of a well defined port as large as the northern or Sidonian harbour. Secondly, that the Pale Tyrus was a great suburb covering the plains east and south-east of Tyre; since no indications of such a suburb exist, while the idea is quite contrary to all we know of the size and arrangement of ancient eastern cities. Third, that the necropolis of Tyre lay at Khŭrbet el Lawâtinn ; since we were able to discover at least one Tyrian tomb on the island, the natural position in which the cemetery might be expected to exist. Fourthly, that the somewhat exagrerated
description which has been given of the caves at the site of el Lawatin, should be modified by a comparison with similar excavations in other parts of Palestine. And lastly in general, the expectation of finding at Tyre an immense city equal in size to Rome or Athens, should be controlled by the experience which we derive from the examination of the other sacred or commercial cities of ancient Syria, which, like the modern towns of the country, seem to have been crowded into areas quite insignificant in comparison with those occupied by European metropolises, and strangely contrasting to the world-wide fame which such little cities as Tyre, Sidon, Joppa, or Jerusalem have obtained in later ages.

Claude R. Conder, R.E.

## III.

## From Beyrout to Jerusalem.

Jerushlem, 28th May, 1881.
The disturbances in the Hatran rendered it prudent to relinquish our original plan of commencing the Eastern Survey on the north; and, as many of our heavy stores were in Jerusalem, it appeared necessary to shift our base of operations to the Holy City, whence we hope to proceed to Gilead and Moab. Leaving Beyront on 7th May, we journeyed down the coast by Sidon, Tyre, Acre, and Nablus, reaching the capital on Saturday, 21st. We remained two days in Tyre, and one day in Nablus when we revisited the top of Ebal, and rebuilt the cairn erected in the summer of 1872, as the point will probably be conspicuous cast of Jordan. From Ebal we beheld the great plateau broken only by the valley of the Jabbok, which is the scene of our expected labours. Many things, however, required to be settled on a satisfactory basis before we could hope successfully to attack our work, and the time spent in thoroughly organizing the expedition will probably be saved later in the increased working power of the party. Meantime a few scattered notes, on the points which were observed along the road, will probably be thought of interest.

Our camps were pitched at Neby Yinis (where we rested for Sunday, 8th), Sidon, Tyre (where two days were spent), Nakûrah, el Bahjeh? ${ }^{\text {n }}$ near Acre (where the second Sunday was passed), Sheikh Ibreik, Jenin, Nâblus, 'Ain el Haramiyeh, and Jerusalem ; the result of our explorations at Tyre are given in another report.

## The Road.

It has been suggested that the main coast road dates from Arab times, but it has all the appearance of Roman origin, not only because Roman milestones have fallen beside it at intervals, but becanse the broad central rib or backbone of cut stones is visible in places, with side-walls of rough blocks, both of these features being peculiar to Roman roads in Syria. In many places where the road runs along the beach, concrete
was used instead of stone to form the roadway, and the remains of this, set in hard white or pink cement, are still to be found in parts.

The remains of Roman bridges with round arches are also observable both at the River Kisimiyeh and also at the Nahr Abu el Aswad when the arch is still perfect.

## Khurbet Umm el' Amud.*

This important site south of Tyre (the old name of which seems to have been Laodicea) was visited by Renan, who found here some late Phonician inscriptions. There is a temple in a conspicuous position on a rugged hillside, and many other ruins, but they are so overgrown with copse that a long time would be necessary for their exploration. The plan of the temple is very difficult to make out, but it appears to have had three aisles, and to have measured about 180 feet E. and W. (true bearing $30^{\circ}$ ), with an outer colonnade 25 feet wide having two rows of pillars. The capitals are Ionic, and the mouldings have a simple and pure character which marks the temple as being earlier than the Byzantine period. Some curious stones which have the form of segments of spheres about 18 inches in diameter (looking like slices from a Swiss cheese) have sockets in the spherical surface. They may, perhaps, have formed parts of some ornamental erections over the cornices, either as bases from which a small needle was raised or perhaps as representations of shallow vases on a base fitted into the socket.

We measured various curious details, including a sarcophagus with a projecting pilaster at one end, and a stone 5 feet square, $3 \frac{1}{2}$ feet high, with two square shallow troughs, 1 foot side sunk in the upper part, and rude sculptures on the sides, one of which resembled a headless sphinx or lion apparently with wiugs.

There is a second block 2 feet 8 inches square, 3 feet high, with a trough 1 foot square and a few inches deep. Possibly these may have been altars, as there seems no other good explanation of the shallow sunk places in which a fire might have been kindled. A double tomb, rock-cut, exists further north, of which we made a plan; but our visit was too short to enable us to obtain a good idea of the site. There is a large amount of broken tesselated pavement on the hillsides below the temple.

## Nakuraif.

I made special inquiries as to the meaning which the natives attach to this word applied to the pass generally identified with the ancient Scala Tyriorum. Professor Palmer renders the word "trumpet" and suggests that as Sîr in Arabic may also mean "trumpet," the natives may have misunderstood Sur (Tyre) to mean a trumpet, and not as in Hebrew "a rock," and that in process of time they may have substituted the word Nakarah, applying it to the promontory originally called Stir.

The word Nâkurah comes, however (as Professor Palmer tells me), from a root meaning "to pick," or excavate by picking out. It occurs more than once in the survey nomenclature, as in 'Ain en Naknrah, 'Ain en Nukr, and the village Nakturah near Nâblus, places which have no comection with Tyre. I find that the meaning attached by the natives to the term is that of excavation or scarping, which is exactly the Talmudic use of the word, where it is applied to caves excavated artificially. The name, in fact, of Ras en Nakurah, is derived apparently from the rock-cutting through which the road passes. This has been destroyed in making the new road, which is on a higher level than the old, but the vertical cutting of the rock is still visible in more than one place on both sides of the road. I may, perhaps, venture here to remark that I do not know a single instance in which the Fellahin have substituted one word for amother in the maner that Professor Pahner supposes. They adhere, it is true, often to the Hebrew name of a place, long after the meaning has been lost (as is the case also in our own country), sometimes modifying the sound slightly to give it a modern-and often erroneous-meaning.

In the case of Sír, however, it should be noted that the word is still used by the peasantry to mean a rock, and it is not known, as far as I have ascertained, to mean a trumpet.

## Meselifer.

In 1876 I proposed to identify the village of Meselieh, or Mithilia, south of Jenin, with the Bethulia of the Book of Judith, supposing the substitution of MI for B , of which there are occasional instances in Syrian nomenclature. The indications of the site given in the Apocrypha are tolevably distinct. Bethulia stood on a hill, but not apparently on the top, which is mentioned separately (Judith vi, 12). There were springs or wells beneath the town (verse 11), and the houses were above these (verse 13). The city stood in the hill country not far from the plain (verse 11), and apparently near Dothan (.Julith ir, 6). The army of Holofernes was visible when encamped near Dothan (Judith vii, 3-4), by the spring in the valley near Bethulia (verses :3-7).

The site usually supposed to represent Bethulia-namely, the strong village of Sinnur, does not fulfil these various requisites, but the topography of the Book of Judith, as a whole, is so consistent and easily understood, that it seems probable that Bethulia was an actual site. Visiting Mithilia on our way to Shechem (see Sheet XI of the Survey), we found a small ruinous village on the slope of the hill. Beneath it are ancient wells, and above it a rounded hill top, commanding a tolerably extensive view. The north-east part of the great plain, Gilboa, Tabor, and Nazareth, are clearly seen. West of these a neightouring hill hides Jenin aud Wady Bela'meh (the Belmaim probably of the narative), but further west Carmel appears behind the ridge of Sheikh Iskander, and part of the plain of 'Arrabeh, close to Dothan, is seen. A broad corn vale, called "The King's Valley," extends north-west from Meselieh towards Dothan, a distance of only three miles. There is a low shed formed by rising ground between two
hills, separating this valley from the Dothian plain; and at the latter site is the spring beside which probably the Assyrian army is supposed by the old Jewish novelist to have encamped. In imagination one might see the stately Judith walking through the down trodden corn-fields, aud shady olive groves, while on the rugged hill-side above the men of the city " looked after her until she was gone down the mountain, and till she had passed the valley, and could see her no more" (Judith x, 10).

## Jacob's Well.

In 1876 some misconceptions appeared to exist as to the condition of this famous site. The well itself has never been choked. It is 75 feet deep, and still at times contains water. Over the shaft, however, is built a Crusading vault (as described in the "Memoirs"), and this is entered from the present surface through a hole in the roof. The floor is covered with stones, which have fallen from above, and which, until lately, quite concealed the well-mouth. During the present travelling season the vault has been partly cleared by an English traveller, and the mouth of the well is now visible with the shaft as far down as there is light enough to see it. A stone, $2 \frac{1}{2}$ feet ly $3 \frac{1}{2}$ feet, covers the well, and in it is a circular hole, 15 inches in diameter, with a raised square moulding round it. The dressing somewhat resembles Crusading work. The masonry of the shaft beneath is apparently well finished. There are remains of mosaic pavement round the stone forming the well-mouth, and, as has been already noticed in "Tent-Work," two pillars of the ancient church are still in site in a vault north-west of the well. They are of grey syenite, and it is probable that the other shafts of similar character lying near the enclosure ( 70 paces syuare) in which Jacol's Well now stands also belonged, not as some havethought, to the Temple on Gerizim, but rather to the ancient Cruciform Basilica, which was so built as to have the well in the centre of the cross. Excavations would probably result in the tracing of this church under the present surface, but any interference with the place is looked on with extreme suspicion by the peasantry, who imagine that the Franks wish to take the well away to Europe.

## En Tappuaif.

' According to the views of recent writers, this place is to be sought south of Nâblus, and west of the plain of el Mukhnah. There are several good springs in the direction, and it seemed possible that en Tappuah, the "apple spring," might still exist under the Arabian form Ain et Tuffia (or Tuuffh) somewhere either near 'Ain Abns, or further south. We accordingly went along the route in question, as far south at Yâsuf, and enquired, both at 'Ain Abts and afterwards, for the situation of 'Ain et Tuffâh. In spite of this leading question, no one professed to know the site, and the goat-herds (who are the best authority on such questions) denied that any such place existed. They enumerated many other springs which are marked on the nap, and curiously enough
suggested that we meant 'Ain Yâsuf, which (according to the view advocated in the "Handbook to the Bible") is just where en Tappuah should be sought. Although it is thus only a negative result which we have obtained, it is so far satisfactory that careful enquiry, both in 1881 and 1877, failed to recover the name. So that there is no need to suspect that an important name has been omitted from the Survey in this case.

## Jufra.

A curious instance of the way in which small objects may be overlooked occurred in this instance. The village had been visited in 1872 by the Survey party, and subsequently by Lieutenant Kitchener. Colonel Wilson has also been there, and Dr. Clapton has visited the place, yet no one seems to have noticed the sarcophagus side built into the courtyard of the Greek Church of St . George, which stands south of the village in the valley. The design represents three wreaths supported by a winged genii, and three Medusa heads occur in medallions above the wreaths. The side has been broken off and built into the north wall of the courtyard, the door of which bears a modern Greek inseription, with the dates 1858 and 1860.

Inside the courtyard, in a comer, is a fine old Crusading font of the usual pattern, cyliudrical, with a square basin and four semi-circular seats forming a quartrefoil within the circle (as at Tekoa and in many other places south of Jerusalem). There is also a rude Byzantine capital outside the Church, and the other portions of the sarcophagus lie near. Thus, in the little shriue of St . George, we have remains of every period from the Roman epoch downwards, and the site with its fine trees and pomegrauate bushes is probably an ancient shrine.

Er Ramp.
At the shrine which is so conspicuous near this village are remains of a former chapel. The lintel stone (as it would seem) with a basrelicf of rosettes, has been found by Dr. Chaplin within the buildiug, and a very curious stone mask is in his possession, obtained from the village. It represents a human face without hair or beard, the nose wellcut, the eyes and mouth very feebly designed.

The mask is hollowed out behind, and has two deep holes at the back as if to fix it to a wall. It is over a foot in longer diameter, and curiously resembles some of the faces of the Moabite collection of Mr. Shapira. There cannot well be any question of its genuine character, and nothing like it has been found so far as I know in Palestine.

## Jett.

Two Roman lamps with double wicks were shown to me at Nâblus, one is in the form of a bull, the forefeet extended in front to form the spouts for the wicks. These were found in 1874 at-Jett, and I had often heard of the bull as an ancient idol. The place in question is
situate near the plain of Sharon (Sheet XI), and is an ancient site of importance, probably the Gath of the Egyption records, and the Gitte of which Simon Magus is satid to have been a native.

## Jerusalem.

It is almast exactly six years since I last visited the Holy City, and during this time the growth of the place has been very rapid. A Jewish village, not marked on the Survey, has grown up aloug the Jaffia road, and the Jewish population is now estimated at 1,500 sonls out of some 2,503 inhabitants. The number of Germans has also largely increased, and similar changes are said to have occurred at Bethlehem and Hebron. There is always something new to find in the city, and Dr. Chaplin pointed out to me several interesting details. The under-mentioned inscription is not to be found, so far as I am aware, in previous papers, and was unknown to Dr. Chaplin, nor is it among those collected for the Society in 1873, by M. Ganneau. It was kindly pointed out to me by Mr. S. Bergheim. It occurs on the north wall of the tower in which Herod's Gate (Bâb ez Zahreh) is built, and is placed on a sort of tablet, measuring 3 feet by 1 foot with triangular wings. The stone is built into the wall upside down, and the existence of the tablet, the form of the letters, and the words in the 2 nd and 3rd lines, Tins Aytas $\pi \eta s$, seem to show that it is of Christian and Byzantine origin.


I have omitted various doubtful letters, as the inscription does not appear valuable. The stone is too rough and crooked to allow of a satisfactory squeeze being taken. It is some 15 feet from the ground, and I copied it standing on a ladder. It was probably taken from one of the early Christian Churches in the city.

In passing through the bazaars and the Viâ Dolorosa, Dr. Chaplin pointed out to us varions remains of Crusading Jerusalem. The bazaar was known in the twelfth century as Malcuisinat, and the groined valting of the roof seems to belong to this period, while on one of the corbels supporting the arches is cut in medireval characters the inseription

$$
\begin{gathered}
\overline{s c}^{n} \bar{a} \\
\text { anna }
\end{gathered}
$$

Probably there was property belonging to the Church of St. Anne at this spot. There are many other little Crusading relics at Jerusalem of which I have made notes at different periods, and which serve to illustrate the curious medirval account contained in the "Citez de Jherusalem."

## Siloam.

The excavations now conducted on the Ophel ridge by Dr. Guthe for the German Exploration Society are of great interest. Through
his kindness we were enabled to visit them all, but I should ill repay his courtesy by forestalling his own account of his work. It is sufficient to say that he is engaged in investigating a corner of the city where, perhaps, more than anywhere else, success may be expected to attend the employer, and where, moreover, we are most in want of information. He has shown, moreover, that the Ophel spur was once covered with buildings down almost to the very edge of the pool. It is difficult to give a date for such buildings, but with some exceptions they seem at least not later than the time of Hadrian, and I was disposed to think that the continuation of Colonel Warren's Ophel wall has really been found by Dr. Guthe running southwards. Some remains seem, however, clearly (as Dr. Guthe also thinks) to belong to the Byzantine period, and the excavations require to be extended considerably before any final conclusions can safely be reached.

Dr. Guthe also kindly gave us the opportunity of visiting the now fanous inscription in the great rock-cut chamel. Far from wondering that it was never seen before, the marvel appears to me to be that it was ever found at all. Two youths of Jewish birth endeavoured to walk along the passage to the north end, but failed to do so-yet stumbled on the inscription, but the water was then ruming almost on the level of the highest line of the text. It has now been carried off so as to show the whole height of the tablet, which is about 2 feet spuare, with a face carefully polished and slightly convex. The letters are remarkably distinct, but the flaws in the rock reuder the text very difficult to follow. The letters are filled with a deposit of line formed by the water action, and it is consequently impossible to take a squeeze which will give any really valuable idea of the text.

Dr. Guthe has taken several paper squeezes and one gypsum cast, but none of these give a good idea of the letters. With the aid of these, however, and by sketching from the letters themselves, he has produced a copy which will probably supersede all others. This has taken him several weeks of work, and I thought it impossible to rival it in the time at our command. The inscription is on the right hand on entering the passage from the Siloam eud, aud some 12 paces from the entrance.

It is thought in Jerusalem that Professor Sayce's copy and translation may prove too hasty to be of any value. Mr. Shapira gives a different interpretation to the text, explaining it as referring to the cutting of the tunnel from the two opposite ends. This we know was really how the excavation was effected, and Mr. Shapira's intimate acquaintance with the Hebrew idiom (as a 'Talmudist of 20 years' education) seems to render his opinion worthy of consideration.

It might appear strange that the visitor who scratched his name in the upper part of the tablet did not see the text, but there was an old water-mark above the inscription when first discovered, and the letters were no doubt hidden. Dr. Guthe has found part of the ancient pool to which the channel ran, and the impression which I obtained on the spot, when carefully observing the scarps on either side of the valley, was, that
the ancient pool of Siloam, the "ditch" which Hezekiah made for the water of the Old Pool (Isaiah xxii, 9, 11) may have been a large sheet of water forming a defence where the wall was lowest, and closing a weak point at the outlet of the Tyropœon valley.

Claude R. Conder, R.E.

## IV.

Nablu's. Jerusaley. The Mountain of the Scape Goat.
Jerusaleji, 7 th June, 1881.
Ir appears now unavoidable that some delay should occur in commencing the Eastern Survey, in consequence of the difficulties raised by the Turkish authorities which cannot be overcome without patience. Meantime much interesting work remains to be done, in collecting the various discoveries made by residents, and noting the results of excavations and alterations which have occurred during the last five years. During 1872 it was impossible to enter the mosques at Nablus, but during my recent visit I was able, by the kind assistance of M. Falsher, to visit every monument of interest within the walls of the town, and to collect several new traditions.

In the middle of Nablus is a quadrangular building with whitewashed walls, containing the tomb of Sheikh Badran or Sheikh Bedr er Rafia'. The walls are whitewashed, and the roof is supported by four pillars having early Byzantine capitals and grey granite shafts. This is evidently an early basilica which has as yet, so far as I am aware, escaped notice. Sheikh Badrinn is said to have been the father of Sheikh 'Amâd ed Dîn, whose sacred place is on Ebal. This also indicates the Christian origin of the tradition, for the companion shrine on Ebal was originally also a church, and the Greeks and Latins alike in Nablus, regard it as the place where the head of John the Baptist was buried ; his body, according to an early but erroneous tradition, heing buried at samaria. 'Amâd ed Din (" monument of the faith") appears (according to the description given by Marino Sanuto) to be the place which the Crusaders called Dan, and where they supposed the calf to have been set up by Jeroboam,-the Bethel of the narrative being, according to their explanation, the Samaritan site of Luz on Gerizin.

In addition to the great mosque, the Mosque of Hezu Ya'kab ("the wailing of Jacob"), and the Leper's Mosque (the old crusading hospital in the north-east angle of the city), I visited the sacred place called Oulad Y'akûb, "the sons of Jacob," it sight which Robinson sought in vain, and which seems to have an antiquity not inferior to Jacob's well or Joseph's tomb. It is recognized by Jew, Samaritan, and Moslem alike, and is mentioned by St. Jerome in his account of Sta. Paula's journey. It is in the north-east angle of the town, north of the Leper's Mosque, and close
to the "Raisin Mart" (Khân Ezbibb). A door on the north leads to a little paved court, with a division of stone, some 6 inches high, beyond which oues boots must be removed. In this court are two small marble pillar shafts, one of which has im Arab, inscription, with the name of Walik' 'Amr and the date 622 A.f. (13th century). In other respects the building seems quite modern. On the south side is a double chamber, the southern half entered from the east, while in the northern half is a large cenotaph of the ordinary kind, covered with green cloths, and laving a high pilla with sculptured turban at either end. This, aceording to the Sheish, was the tomb of three of the sous of Jacob, to whom he gave the names Reiyalun, Sahyun (apparently sion), and Bushera (perhaps Asher).

I have also paid a visit to the Samaritan High Priest Y'akub, for the purpose of enquiring as to various Samaritan traditions. We found him in the little synagogue, where a representative congregation, robed in white, were reading the law in high nasal key much like that of a Jewish service. The Samaritans appear to be prospering, as their numbers have increased from 135 to 160 souls; and I was much impressed with the fine physique and handsome comntenances of the men, which seem to contradict the idea that the race is dying out, as does also the fact that the number of males is considerably in excess of that of the females ( 98 to 62 ).

I was, however, disappointed by the results of our conversation with respect to the character of Samaritan traditions, not only because I found that the present High Priest has forgotten many things known to Amram, his uncle and predecessor, and has only a confused remembrance of mavy important points, but also because in many ciases the traditions which he related, as commonly received, are of very recent origin, and traceable to the Crusaders. Thus, for instance, he believed that Dothan was not to be placed at Tell Dothan, the site recognized by Jerome and by modern writers, but at Khân Jubb Yusef, where it is placed by the Crusading historians, north of the Sea of Galilee. He stated that this was to be proved from ancient Samaritan books, and was quite unaware of the unsatisfactory nature of the identification.

The Samaritans have a tradition that the twelve sons of Jacol were huried each within the bounds of his own tribe. The sites which they point out are not, however, in accordance with this view. As regards Joshua's tomb, both the modern Samaritans and the medieval Samaritan writers are divided into two parties, the one saying that he lies with Eliazar and Phinehas at 'Awertah, the others that he is buried with Num and Caleb at Kefr Hâris.

I found that Caleb is known among them as Kitl, which reuders the identification of the three sites at Kefr Hâris complete; Neby Nun leing Nun, Neby Kifl Caleb, and Neby Lusha' Joshua, in accordance with the account of R. Jacob of Paris, and other Jewish travellers of the middle ages.

The tombs of the twelve sons of Jacob, as believed in by the Simaritans,
are all now in the hands of the Moslems, excepting perhaps that of Joseph, to which Jews and Samaritans have access, and where they burn oil and incense on two altars, one at the head, the other at the foot of the cenotaph. Judah lies at Neby Hadah in el Yehudîyeh (Jehud), north of Jaffa. Dan, at Neby Dau, in the village of Neby Danian, a little further east. Asher is said to be Neby Tota (the good prophet), in Tâbâs, northeast of Nâblus. Simeon is Neby Shem'ôn, near Kefr Sata, north of Jaffa. Reuben is Neby Rabin, a sacred place east of Yebnah, to which for at least 300 years pilgrimages have been made (far, however, from the lot of the tribe of Reuben). Levi is Neby Lawin, who has a conspicuous shrine near Sileh, north-west of Nâblus. Benjamin, Gad, and Naphtali were unknown to the High Priest, who thought they might be the three buried at the Oulad Ya'kub as above noticed. I believe, however, that Nely Yeminn near Neby Sham'ôn probably belongs to this group, and represents Benjamin.

Issachar, according to the High Priest, is now called Neby Hazkîl (Hazkil or Ezekiel) by the Moslems, and lies in the village of Rameh. It is very remarkable that Rameh is a border town (Remeth) of Issachar, and that the name Hazkin occurs again in the same connection in Jebel Hazkin, which exists on the border of the same tribe near the southeast angle. In this case, therefore, the tradition has some prima fucie alpearance of being genuine. Finally the High Priest had heard that Zebulon was buried somewhere near Sidon. I presume that he referred to Neby Sebelân in the hills above Tyre. He also stated that other children (prolably descendants) of Jacob were buried at 'Asivet el Hatab and at al Bizanch; all these places lie in the districts where in former times the Samaritans were mumerous, and none are within the borders of Judea. I give these traditions for what they are worth as a contribution to the folk-lore of Palestine.

## Jerusalem.

I find that the identification of the hill above Jeremiah's Grotto with the probable site of Calvary, which depends mainly on the fact that, according to Jewish tradition, this was the ancient place of public execution, has found favour with a large number of intelligent readers. I have already explained that we are indebted to Dr. Chaplin for discovering the tradition ; but there are several facts in connection with this most interesting questiou which I have only recently ascertained.

The modern Arab name of the place is el Heidhemuyeh ("torn down"), but this is a corruption of the earlier Adhemìgeh as given by Mejr ed Din, and there seems no doubt that it is derived from the tomb of a son of the famous Edhem, a historical character. The Sheikh of the Jerusalem Haram gave me this explanation; which is coufirmed by Dr. Chaplin. It appears also from Mejr ed Din, that the neighbourhood immediately east was called es Sahira, and was an ill-omened place connected in the imagination of Moslems with death and judgment (like the Kedron Valley
beyond it). Possibly in this we may have some trace of the ill-omened site of the ancient place of execution.

Another point concerning this hillock has been noticed by recent visitors, who have seen in its outline a resemblance to a skull. This was mentioned to me by the Rev. A. Henderson, but I could not then remember the circumstance. On walking from the north-east corner of Jerusalem towards the rock I perceived, however, what was meant. The rounded summit and the two hollow cave entrances beneath do, indeed, give some resemblance to a skull, as may be seen in a photograph taken from this point of view by Lieutenant Mantell, which I enclose. It is the skull of an amimal rather thau of a human being, and I should not like to base


NEWLY DISCOVERED TOMH, 200 yARDS WEST OF JEREMIAH'S GROTTO.-VIEW FROM EAST.
an argment on so slight a resemblance. It is, however, of interest to note the fact, as many persons consider that Golgotha was a name derived from the form of the ground, rather thin from the use of the site as a place of burial or of execution.

It is more important to notice that the site of Jeremiah's Grotto is peculiarly fitted for a place of execution in consequence of its commanding position. From the summit the eye roams above the city walls over the greater part of Jerusalem, while on the west the ground rises beyond the intervening valley like a theatre. There is hardly another
spot near Jerusalem so fitted to be the central point for any public spectacle.

Still more interesting is a discovery which I made about a week agro, of an indisputably Jewish tomb immediately west of the knoll in question. It has only recently been opened, and has not been as yet described, I believe, by any visitor. It is cut in the east face of a very curious rock platform measuring about 70 paces either way-as shown on the Ordnance


NEWLY DISCOVERED JEWISL TOMB NEAE THE CITY, 200 IARDE WEST OE JEREMIAL'B GROTTO.
Survey about 200 yards west of the grotto. The platform is roughly scarped on all sides, in an apparently artificial manner, and on the west is a higher piece of rock, also with sides rudely scarped. The rest of the space is fairly level, but there seem to be traces of the foundations of a surrounding wall in some low mounds near the edge of the platform

I have long been aware of the existence of a curious cistern in the northeast corner of this scarp. It has a domed roof with a man-hole, and also a door with a passage 10 ft . long and 3 ft . wide, leading out castwards. The cistern is about 8 paces in diameter, and three steps lead down from the door to the level of the cistern floor. This excavation seems originally to have been a chamber afterwards converted into a cistern, and there are sockets for the door-hinges and for bolts in the passage entrance.

The ancient tomb is some thirty paces further south, and the entrance is also from the east. The whole is very rudely cut in rock, which is of inferior quality. The doorway is much broken, and there is a loophole or window, 4 ft . wide, either side of the door. The outer court, cut in the rock, is 7 ft . square, and two stones are so placed in this as to give the idea that they may have held in place a rolling-stone before the door. On the right (or north) is a side entrance, leading into a chamber with a single loculus, and thence into a cave, some 8 paces square and 10 ft . high, with a well-mouth in the roof.

The chamber within the tombentrance is reached by a descent of two steps, and measures 6 ft . by 9 ft . From either side wall, and from the back wall is an entrance 20 ins . wide and about $5 \frac{1}{2} \mathrm{ft}$. high, leading into a side chamber. A passage runs in continnation of each entrance for $4_{2}^{1} \mathrm{ft}$., and on each side is a bench about $2 \frac{1}{2} \mathrm{ft}$. wide and 2.4 ft . high. A similar bench occurs at the end, the whole width of each chamber being thus 5 g ft ., its length 7 ft .2 in., and its height from 5 to 6 ft . Each would contain two bodies lying beside the passage, but there would scarcely be room for three. In addition to these three chambers, there are two excavations on the floor-level, in the further corner of the central chamber. They are about 5 ft . square, with narrow entrances, and were scattered with human bones at the time of my visit.

The diseovery of this tomb is of no little importance in comection with Jerusalem topography. If it be compared with the great cemetery at Sheikh Ibreik, and with the monument of Helena at Jerusalem, it will be seen to belong to the later Jewish period-the centuries immediately preceding the Christian era. It is not a Christian tomb, so far as can be judged, for the Christions in Palestine seem mainly to have used the "rock-sunk" tomb. A cemetery of tombs of the form commonly used by the Crusulers, was found in 1873 near the north-east angle of the Jerusalem city walls, but no Jewish tomb has ever been found before so close to the ramparts of the modern city on the north : the next nearest being the tomb discovered in 1873, about 300 yards further north.

It would be bold to hazard the suggestion that the single Jewish sepulchre thus found is indeed the tomb in the garden, nigh unto the place called Golgotha, which belonged to the rich Joseph of Arimathea; yet its appearance so near the old place of execution, and so far from the other tombs in the old cemeteries of the city, is extremely remarkible. I am sorry to say that a group of Jewish houses is growing up round the spot. The rock is being blasted for building-stone, and the tomb, unless
preserved, may perhaps soon be entirely destroyed. It is now in a disgusting condition of filth, which shows that the Jews have little reverence for the old sepulchres of their ancestors. Perhaps some of our readers might feel willing to releem this most interesting monument from its present state of desecration, and to purchase and enclose the little plot of rocky ground in which it stands. Without such preservation the sepulchre is doomed to destruction sooner or later:

The platform of rock in which the tomb is cut seems possibly to have been the base of a group of towers with a scarped foundation.

The distance from the monmment of Helena, and the position with respect to the Cotton Grotto, agrees with the description given by Josephus of the position of the "Women's Towers" (see "Handbook to the Bible," page 352 ). If the third wall actually extended over this line, it is easy to explain why no other tombs of the same period exist so close to the present city. The extension of the fortifications rendered it necessary to remove the cemetery further off, since the Jews did not allow sepulture within the walls. The cisterus may have belonged to the period when the great towers were here erected, and the passage with steps may eveu have been a postern from the towers.

If we could feel any reasonable certitude that in this single Jewish tomb (dating about the time of Christ) we have recovered the actual sepulchre in which he lay, an easy explanation of the loss of the site is affiorded at once; for the construction, some ten years later, of the "Women's 'Towers" by Agrippa, upon the rock over the tomb, would have caused the monmment to be hidden beneath, or within the new buillings; and thus the sepulchre could no longer be visited, and in course of time its existence was forgotten, until the zealous Helena destroyed the Venus Temple on the present site of the Holy Sepulchre Chwreh, and "beyond all hope" (as Eusebius words it) discovered the rock-cut Jewish tomb, which the faithful accepted as the tomb of Christ.

A careful plan of the site and of the tomb is being made by Lieutenant Mantell,* as the alterations in this part of Jerusalem are proceeding so rapidly, that on our next visit rock and tomb may alike have disappeared.

## The Moustain of the Scape Goat. $\dagger$

Since proposing the identification of this mountain, I have been umble until yesterday to revisit the spot. Readers of "Tent Work"

* In making tlis plan, Licutenant, Mantell found various remains of early Byzantine sculpture belonging to comices, also pieces of tesselated pavement and of a stone parement of squares about 6 inches side. These were dug up south of the rock platform, near the spot where Mr. Schick discovered the great sarcophagus, supposed by Dr. Chaplin to have been the tomb of the Empress Eudocia. It is known that the old chureh of St. Stephen, which she built and where she was buried, existed on this spot, and the cornices and terraces are no doubt fragments of this basilica.
$\dagger$ My identification of this site has been recently called in question by
will remember that there was a place called Tzuk, to which the scape goat was conducted, and where his conductor, seizing him by the legs, pushed him over a precipice, so that rolling to the bottom he was killed, and thus the evil omen of his voluntary return to Jerusalem was rendered impossible. The mountain was in a district called Hidoodim, and the place of precipitation was called Tzuk. It was apparently at a distance of eleven Sabbath days' journey from the city, and was at the entrance to the desert.

In 1876 I was able to slow in the Quarterly Statement how all these requisites are met by the site of el Muntîr ("the watch tower"), a great hill north-east of Mar Saba, and ahout $6 \frac{1}{2}$ miles in a line from Jerusalem. The name Tzuk occurs under the form Sûk (radically exact) at an incient well near the ridge. The name Hidoodim seems to be preserved, as I first remarked in 1876, in the title Hadeidan, applying to the ridge or spur running north-east from the mountain. The distance is almost exactly that required, and the view of the desert first opens on the traveller from Jerusalem as he nears the summit. Since I proposed the identification, Mr. Schick has visited the spot; and in our recent visit we were able to recover the names as before from another witness, and to make several other observations of interest.

Lieuteuant Mantell, Dr. Chaplin, and myself rode yesterday to the mountain along the ancient road which leads to it from Jerusalem. This road, diverging from the Jericho highway at Bethany, leads west of Abu Dis, and descends into the upper part of the great Wâdy Abu Hindi, which will be found marked on our map, west of the mountain. We could trace the ancient roadway by its side walls the greater part of the distance, and verified the nomenclature of the map in a very satisfactory manner in riding along. Ancient wells, the sites of which are marked on the map and their names recorded in the "Memoirs," occur all along the course of the road. The well of Sak or Tzuk (Bir es Sak or Herubbet es Sak) is a little south of the road, on the side of a shallow depression in the wolds which extend uubroken from Abu Dis to el Muntar. It has every appearance of antiquity, with a small aqueduct some 200 feet, Professor Neubauer, who does not, however, appear to have been aware of the strength of the arguments in its favour, as he refers only to the name Hadeidun. He supposes Tzuk to hare been 12 Roman miles from Jerusalem, which is contrary to the explanation of the Mishma, given by Maimonides, and he places the site at Jebel Kuruntul, which is orer 13 English miles in a line from Jerusalem. The name Tzuk he proposes to recover in 'Ain Dutk, at the foot of this mountain; but this name (Doch or Dagon) has no connection with Tzuk (צוק).

It may be noticed, moreover, that while el Muntâr is a singularly conspicuous mountain, at the proper distance from Jerusalem, on an ancient road, and reached without crosising any great feature, Kuruntul ean only be reached by a long detour northwards from the city; and far from being visible from the Temple, it is not even seen from Olivet, being hidden by the surrounding ridges. Fiurnmul has, in fact, no circumstinces in its farour, while the distanee is about double that at which the site of 'tzuk is to be sought.
bringing surface water from the hill slopes on the east. The great block in form of a cylinder, with a round perforation in the middle, covering the rockcut cistern beneath, has been broken in two. On the well-mouth lies a rude term or pillar 2 feet long and 9 inches in diameter, much resembling a small mile-stone. There is a second stone collar lying beside the well, cut like the broken one in very hard stone, and showing no marks of the cords of shepherds' buckets, either because the well is little used, or because the stone is too hard. The reservoir is full of good water, and our guide said it extended some way under the ground. There is a small hole in the side of the well, through which the water from the aqueduct enters the cistern beneath at the end of the channel, which is also rockcut.

Some 300 paces east of the well is a cave, with its mouth to the north. It is quite rough, and is 7 feet high and some 10 paces square.

On the spur north of the well-a high ridge, whence Jerusalem and el Muntâr are both distinctly visible, are remains of an enclosure called Rujm Ghuzâleh ("Cairn of the Gazelle"), with a tradition attached, that a favourite horse of an Arab Chief, called "the Gazelle" from its speed and beauty, was here killed in an Arab skirmish. The enclosure is 30 paces east and west, by 24 paces north and south, presenting a single row of roughly cut stones, some being of considerable size ( 4 to 5 feet long), and one having a socket cut in it as if for a door post.

The identification of the Scape Goat Mountain does not seem to require further evidence than that already brought forward. Still two curious points may be noticed. In the first place the word Ghüzaleh contains the root of the name Azazel, rendered "scape" in our version, but generally recogiised as the name of a demon. The enclosure is just about the distance at which the last Tabernacle between Jerusalem and Tzuk should occur, and the messenger as he pushed the goat over the precipice would have been in full view. It is again worthy of notice that the name Midu is used for "India" in the Talmud, and that the unusual name Wady Abu Mindi, "Valley father of the Indian," applies to the main ravine below el Muntâr.

As regards the mountain itself, I was delighted to find that my impression of the precipitous character of its eastern slopes was not exaggerated. El Muntâr is a great rounded hill as seen from the west, but a steep cliff as viewed from the east. A very steep slope of white marl, some hundreds of feet in height, here exists, and it would be difficult for a goat to find foot-hold in climbing on it, while if pushed over the edge it must inevitably roll to the bottom, and would no doubt be killed by the fall.

The view also from the mountain is very remarkable. Jerusalem is in full sight, the Haram Courts are visible, and the Dome of the Rock is only hidden by a group of olive trees. I was not aware that any point in this desert near Mâr Saba could be seen from the city; but the mountain appears through a gap between Olivet and the more southern hills. Thus, when the unhappy goat was pushed over the precipice, the worshippers in the Temple would have been able, by straining their eyes, almost to distin-.
guish the figure of the conductor against the sky line, and the stations whence cloths were waved, to give the news of the death of the scape goat, need not have exceeded two or three in number. These observations serve to connect the mountain in a very remarkable manner with the ritual of the Day of Atonement; and the act of dismissal of the goat is brought, as it were, within the same theatre with the other ceremonies of the day. From the Mount of Olives, the course of the messengers could be distinctly seen almost throughout the whole distance of the journey, for no deep valley intervenes between the city and the Muntâr mountain, a narrow shed running out and connecting the hill with the Olivet chain.

Nor is the view east less striking; a traveller ascends the brown or tawny hill side, and finds himself at the top of the white precipice, the whole of the Judæan desert suddenly unfolds before and beneath him. On the south the Tower of Mat Saba and the peaks called Kurân el Hayr ("horns of stone"). Beyond these the desert of Engedi, and far away south-east of Beersheba, the peaks of Safra Lawandi. On the east, the Bukeica or white platean above the cliffs, west of the Dead Sea. On the north-east the Jordau valley, the black line of the Jordan jungle, the dark thorn groves of Jericho, the white and modern Russian hotel at Eriha (one of the many Russian hospices built within the last five years in Palestine). Far away north the mysterious cone of Sartaba, and beyond all the dark slopes of Gilead and Moab, the high plateau which extends (in view) almost at an unbroken level from the Jabbok southwards, the great gorge of the Zerka M'air, and the dark blue waters of the Dead Sea, with the yellow sand spit at the Jordan mouth, and the long yellow line of the Lisân.

The constrast of the glaring white desert, and the dark eastern hills, between the countless knolls and ridges on the west, and the great gorges on the east, was very striking; and there is, perhaps, no view on the earth which is so weird and strange, as this panorama of the Judxan desert from the mountain of the scape goat.

Claude R. Conder, Lt., R.E.

## A VISIT TO 'AIN QADIS: THE SUPPOSED SITE OF KADESH-BARNEA.

Arong the unsettled sites of the Desert of the Exodus, none is entitled to more prominence than Kadesh-barnea. Dean Stanley says: "There can be no question that next to Sinai, the most important resting place of the Children of Israel is Kadesh." Professor Palmer adds: "This is perhaps the most important site in the whole region, as it forms the key to the movements of the Children of Israel during the forty years wanderings." And Dr. William Smith declares: "To determine the position of Kadesh itself is the great problem of the whole route."

Yet there is a remarkable barrenness of material for the settlement of this important question, supplied by the notes of travellers in the Desert; and any fresh contribution to that material is likely to be heartily welcomed by Biblical scholars everywhere.

In 1842 the Rev. J. Rowlands, of Queen's College, Cambridge, discovered a fountain bearing the name Kädes, or Qadis, a name having the same meaning as the Hebrew "Kadesh," and was confident that this was the site of Kadesh-barnea. His account of his discovery was published in the Appendix to Williams's "Holy City," with his reasons for deeming it the disclosure of the long-desired site. At the same time, he made mention of two other wells, neither of which, however, had been visited by him, bearing "the names of Adeirat and Aseimeh, sometimes called Kadeirat and Kaseimeh," which in his opinion represented Adar and Azmon of the southern boundary of Judah. This reported discovery by Mr. Rowlands has been a fruitful source of discussion for now nearly forty years. The probable correctness of his conclusions has been recognized by such scholars as Ritter, Kalisch, Keil, Kurtz, Schultz, Winer, Professor Palmer, President Bartlett, and others well known in Germany, Great Britain, and America. On the other hand, it has been opposed by Robinson, Stanley, Porter, Espin in the "Speaker's Commentary", Hayman in "Smith's Bible Dictionary," and many others.

It is a singular fact that in all these years the site thas discovered by Mr. Rowlands has never been revisited. Indeed, it has been questional if he did not confuse the names and the wells, Kades and Kadeirat. Dr. Pobinson distinctly declares that he did so. Espin follows Robinson in this error, and on the topography of "el Ain", the location of Kadeirat, builds up an argument against the identification of Kădes or Gadis with Kalesh-barnea. Even Professor Palmer, who agrees with Rowhands in his main conclusion, and confirms his reasoning with cogent arguments, thinks that Rowlands wrongly applied the name 'Ain Qadis "to 'Ain el Quiderat, some miles farther northward, and seems not to have visited this spot [the true 'Ain Qadis] at all." President Bartlett, of Dartmouth College, in his "From Egypt to Palestine," while favouring Rowlands's identification, is confident, after a visit to the region in question, that there is no such fountain as 'A in Qadeirat, and that Rowlands was mistaken in both the location and the distinctive peculiarities of 'Ain Qadis.

Apart, therefore, from the discussion over the identification of 'Ain Qadis with Kadesh-barnea, there has been no little confusion as to the facts of the location and surroundings of the well itself. No traveller, except Mr. Rowlands, has ever reported a visit to 'Ain Qadis, until President Bartlett found a well in that region which he supposed to be the one seen by Rowlands, although it did not meet the published description of it. 'Ain Kadeirat has never been reported as visited; and its existence has been squarely denied. The question is therefore still an open one. Are there three wells, or two ; or is there only one in the region of this supposed site of Kadesh ?

A scholar so familiar with both the Land and the Book as Dr. Thomson, says on this subject, in his latest work, "Southern Palestine and Jerusalem :" "When I was at Mr. Rowlands's Muweilih, I made diligent enquiries about Kadesh; but both our own Arabs and other Bedawin we met in the neighbourhood were either absolutely ignorant of such a place, under any,possible pronounciation of the name, or they purposely concealed their knowledge of it." Referring to the "singularly brief and unsatisfactory" descriptions of it already given to the public, Dr. Thomson very naturally adds: "One sadly wants a little more information in regard to several points;" "for if "Ain Qadis be in reality the Kadesh-barnea in the wilderness of Paran, . . . it is one of the most interesting sites in the eutire history of the Hebrew Wanderings."

In view of this state of the case, I am sure that a report I am now enabled to make of a personal visit to each of the three wells in question will be a matter of interest to all who are familiar with Bible geography.

About the 1st of April of this year, while crossing the Desert from Kala'at Nakhl to Hebron, I determined to satisfy myself concerning the existence and relative position of these three wells. Turning eastward from Wâdi Jerur, at about latitude $30^{\circ} 28^{\prime} \mathrm{N}$., and longitude $34^{\circ} 20^{\prime} \mathrm{E}$., I went on for three hours, to Jebel el Hawâdeh, over which I passed into Wâdi Qadis. Following up this Wâdi, in a direction a little north of east, for three hours more, I came to the place so glowingly described by Mr. Rowlands, and found it all that he had pictured. It was an oasis unapproached by any I had seen in the desert since leaving Feirin, and not surpassed, within its limits, by that. It was carpeted with grass and flowers. Fig-trees laden with fruit were against its limestone hill-sides. Shrubs in richness and variety abounded. Standing out from the mountain range at the northward of the beautiful oasis-amphitheatre, was the "large siugle mass or small hill of solid rock" which Rowlands looked at as the cliff (sela) smitten by Moses to cause it to "give forth its water" when its flowing had ceased. From beneath this cliff came the abundant stream. A well, walled up with time-worn limestone blocks, was the first receptacle of the water. Not far from this was a second well similarly walled, supplied from the same source. Around both these wells were ancient watering troughs of limestone. Several pools, not walled up, were also supplied from the stream. On from the line of these pools, a gurgling stream flowed musically for several hundred yards, and then lost itself in the verdure-covered desert. The water was clear and sweet and abundant. Two of the pools were ample for bathing. Before the cliff, and around its neighbouring wells, camel and goat dung was trodden down as if by the accumulations of centuries, showing that the place was much frequented for watering purposes.

Mr . Rowlands was certainly correct as to the name, the general location, and the description of this remarkable place. It is Qadis (قديس). There is a Jebel.Qadis, a Wadi Qadis, and an 'Ain Qadis. Is is quite as far to the eastward as he put it, fully twelve to fifteen miles E.S.E. of his

Moilâhhi, or 'Ain Muweilih. The Wâdi at the bead of which it is situated is an extensive and fertile plain, larger by far than er Rahah before Jebel Masa, where the Children of Israel received the Law. Remains of rude stone buildings and other ruins abound in the vicinity, showing that it was once a well peopled region.

From 'Ain Qadis I went to 'Ain Qadeirat. Coming out of the oasis above described into the main valley of Qadis, and following that westward for twenty minutes, I turned to the north-west, and went over a lofty mountain pass, Nakb Hâwa, descending into Wâdi Umm 'Ashîn (or Hashin), where Sinaitic inscriptions were numerous. In two and a quarter hours after leaving 'Ain Qadis I reached the upper end of Widi el 'Ain. Going down this, westerly, for half-an-hour, I came to one of the several branches with which that Wâdi is spurred, and turned up this in a north-easterly direction. At the entrance to this branch stands a noteworthy ruin, built of huge blocks of hammered stone laid in courses. It is a rectangular quadrangle, some seventy feet by seventy-five, with double walls about six feet high. Along this branch of Wadi el 'Ain I found vegetation increasing in fulness and beauty. Trees and shrubs and grass were in lixuriance. One tree, called by our Arabs a seyal, but differing from the seyal of the lower desert, surpassed anything I had seen elsewhere. The reach of its branches had a circumfereuce of nearly 250 feet. It had a double trunk, one arm having a girth of six feet, and the other of four and a half. Soon I heard the sound of ruming water. A chamel of forty to sixty feet wide, bordered with flags, was the shallow bed of a running stream. At the head of this was the fountain itself, pouring a rich stream of pure and sweet waters out of the hill side, with a fall of about seven feet, into a basin of some twenty feet sweep, and from twelve to fourteen feet deep. It was such a fountain as one would expect to find in the mountains of Lebanon, rather than in the Desert. There is no wonder that the Wâdi containing it is called Whidi el 'Ain the Wâdi of the Well. This fountain is the 'Ain Kadeirat, or Qadeirát (تضر|ت), mentioued by Rowlands and Robinson, but not before visited by any traveller who has reported his visit.

After finding these two wells I visited, on the day following, the third well named by Rowlands 'Ain Kaseimeh, or Qasêmeh (قسیهa). It is several hours west and south of Qadeirat, and but little more than an hour from Moilâhhi, or by 'Ain Muweilih, thought by many to be Haga's fountain. This plaee is by no means so noteworthy as either of the other two. It has been visited and described by several travellers. Professor Palmer mentious the place in "The Desert of the Exodus," vol. ii, p. 357. President Bartlett was evidently deceived by the wily Sheikh Suleiman into thinking that this Qasimeh was Qadis, hence his description of it is fuller and more enthusiastic than Professor Palmer's. It is found in "Through Egypt to Palestine," pp. 358-362 ; and I can vouch for its substantial accuracy, except as to name.

It is therefore now clear that Mr. Rowlands was correct in his reference
to the three wells; that he did not confound 'Ain Qadeirát with 'Ain Qadis; that he did find a well bearing the name Qadis, the Arabic equivalent of Kadesh ; and that any argument based by Robinson or Espin or their followers on his supposed confusion of names and localities inevitably falls to the ground. Yet it by no means follows that the site of Kadesh-barnea is settled by this new contribution of facts bearing on that question.

Among the reasons why 'Ain Qadis and 'Ain Qadeirát have not been found before during all these years of discussion over them, it may be said that they are in the territory of the 'Azazimeh Arabs, while the guides of travellers from Nakhl to Gaza or Hebron are of the Teyáhah Arabs, who are not on good terms with the'Azazimeh. Moreover the superstitious fears of the Bedawin make them unwilling to disclose to Christians what they deem the riches of their more sacred wells. Again, there are comparatively few who travel over this route all all. Peculiar circumstances, which it is not necessary to detail here, enabled me to accomplish my desire of finding the much-disputed wells. In reporting of them now, I hope to call fresh attention to the exceeding desirableness and importauce of a careful survey of the Negeb and Desert' of et Tih, with similar thoroughness to that already secured for Western Palestine and the lower Sinaitic Peninsula.

H. Clay Tbumbull.

> Philadelphia, U.S.A., June 8, 1881.

## JACOB'S WELL.

> Damascus,
> May 17 th, 1881.

Very prozably some short account of a recent visit that I paid to Nablous may be of some interest to the many readers of the Quarterly Statement. The state of Jacob's Well is doubtless well known to the majority of your subscribers, even to those who have not themselves visited the Holy Land. It has again and again been described by the many writers on Palestine, and all have mentioned their disappointment that instead of finding any semblance to a well, or anything which could recall the interview of our Lord with the woman of Samaria, they have merely found a dark irregular hole amid a mass of ruins in a vaulted chamber heneath the surface of the ground. I have shared this disappointment on many previous visits to Nablous, and again, as a fortuight ago, I stood with my wife beside the spot, it was with great regret that we were so utterly unable to picture before us the scene so graphically dessribed by the Evangelist. We had clambered down into the vault, and were vainly attempting to peer into the dark hole amid the heaps of stones and rubbish, when we chanced to notice, a few feet from the opening, a dark crack between the stones. Fancying that possibly it
might be another opening of the well, we removed some stones and earth, and soon were able to trace part of a carved aperture in a large slab of stone. Deeply interested at finding this, we cleared away more earth and stones, and soon distinguished the circular month of the well, though it was blocked by an immense mass of stone. Calling to aid two men who were looking on, with considerable Jabour we at length managed to remove it, and the opening of the well was clear. It is impossible to describe our feelings as we gazed down the open well, and sat on that ledge on which doubtless the Saviour rested, and felt with our fingers the grooves in the stone caused by the ropes by which the waterpots were drawn up. The following day we devoted to completely excavating round the opening of the well, and laying bare the massive stone which forms its mouth. This consists of the hard white limestone of the country, and is in fair preservation, thongh parts are broken away here and there. The annexed rude sketeh gives some idea of its appearance.


The exact measurements I also give :-


We let a boy down to the bottom, but found nothing of any interest,
but evidently there is a large accumulation of rubbish. I trust that a stone of such intense interest may long remain uninjured now that it has been exposed to light.-I am, yours faithfully,

## Charles Wright Barclay.

The Rev. John Mill in his "'Three Months' Residence at Nablus," published in 1864, at p. 45, states in reference to Jacob's Well, that "in 1855, when we first visited this place, we measured it as carefully as we could, and found it to be 9 feet in diameter, and a little more than 70 deep. But older travellers found it much deeper. . . . On my second visit in 1860, the mouth of the well was completely filled up, so that it was with difficulty I could identify the spot where it was. Nor could I learn how this had occurred. Some of my friends at Nablus thought that the torrents during the rains of the previous winter were the cause; but others believed that it was done by the inhabitants of the little village close by, on account of the well being bought by the Greek Church. The well, however, was completely hid from sight, to the great disappointment of many travellers beside myself."
"On further inquiry I learnt from the Greek priest that their Church had actually bought the well from the Turkish Government, including it plot of ground surrounding it, of 229 feet by 18 C feet. For this they had paid, he told me, 70,000 piastres; but another friend, belonging to the same community, told me it was at least 100,000 ."
Mr. Mill also mentions that the Christians call it Beer Samarigeh. the "Samaritan Well," while the Samaritans themselves call it Beer Jacub, or "Jacob's Well." He also points out that it is not an Ain (עין), a well of living water, but a ber (בN), a cistern to hold rain water.

## THE COLLECTION OF M. PERETIE.

Throvan the kindness of Mr. Dickson, the British Vice-Consul at Beyrout, I obtaiued an introduction to M. Péretié, whose collection of antiques is probably the finest in Syria. Among the most interesting objects are two Phenician mirrors with figures, which have, as M. Péretié himself remarked, a strong affinity iu style to Indian representations, both in feature and in attitude. Egyptian bronzes, and a fine amethyst scarabreus from Byblos; Egyptian bas-reliefs representing Typhon and Isis from Palnyra; cuneiform bricks and Assyrian sculptures; Palmyrene figures with inscriptions in Palmyrene characters; bronzes with negro features dug up on the Syriau coast; a fine collection of coins of the Seleucide, including a god, one of Tryphon, which is almost unique ; medireval signet rings in the same pale gold which is found in the Crusading coinage ; a collection of Venuses, and other classic figures, some of the goddesses having bracelets, armlets, and necklaces of gold-in one case with a pearl let into the necklet; gold rings, chains, and earrings;
a rude idol of ivory; a pair of French pistols, 200 years old, beantifully inlaid with silver masks and scroll work, aud found at Diarbekr ; Cypriote pottery, and grotesque figures like those found by Dr. Schliemann at Troy, such are some of the objects which M. Péretie has collected during a long residence in Syria. He told us that two-handed swords of the


Crusades were still in the possession of the Arabs east of Jordan, and that some of these had been purchased by Europeans. Some of the objects are of great interest to students of native worship, and the mixture of Egyptian, Negro, and Indian types in antiquities collected on the Syrian shores, while fully in acood with the views of antiquaries as to the early history of the Phonicians, is not the less interesting and instructive.

The gem of the collection is, however, the small bronze tablet, of which a sketch traced from a photograph is enclosed, and which has ahready been described by M. Clemont Ganneau in the "Revue Archeologique," December, 1879. It measures $4 \frac{1}{2}$ inches in height, by 31 inches in width, and has an eye at each top corner, whereby it was suspended. It is engraved on both sides, and was intended apparently to be so hung that both sides might be seen. On the back is a kind of demon-cherub, with four wings, a lion's body, eagle's claws, a short tail, and a serpent in front. The front paws rest on the tablet, and are visible on the other side the head, which resembles a tiger's, is boldly monlded, and projects over the tablet in front. It is not unlike that of the Indian infernal grodless Kali, or Durga. It is also worthy of notice that similar heads were picked up by Layard during his Assyrian explorations, and thought to be the tops of sceptres, or the ornaments of thrones, whereas they appear, as M. Péretié pointed out, more probably to have belonged to tablets similar to that under consideration.

The design on the tablet represents the fate of the soul according to Assyrian or Phonician belief. The tablet is divided into four compartments horizontally, the lowest being the largest, and highest the most narrow. In the top compartment, various astronomical symbols occur, many of which, as M. Ganneau points out, occur on other Assyrian monuments. On the extreme right are the seven stars, next to these the crescent, next the winged solar disc, then an eight-rayed star in at circle. The rematining symbols are less easily explained, but the last is called by M. Ganneau a "cidaris" or Persian tiara, while another appears to me to approach most nearly to the Trisul, or symbol of "fire," the emblem of the Indian Siva.

Below these symbols stand seven deities facing to the right, with long robes, and the heads of various animals. The first to the left resembles a lion, the second a wolf or hound, the fourth a ram, the sixth a bird, the seventh a serpent, while the third and fifth are less easily recognized.* In the third compartment a body lies on a bier, with a deity at the head, and another at the feet. These deities

* As a tentative suggestion, I may, perhaps, be allowed to propose that these seven deities are the planets, and that the symbols above belong to them as follows, commencing on the right :-

Planet. Assyrian Name. Head of Deity. Symbol. Remarks.

1. Satirn .. Chiun .. Serpent .. Seven Stars .. A.
2. Moon .. Nanuar .. Bird .. Crescent .. B.
3. Sun .. Shamash.. Boar? .. Winged disc .. C.
4. Mars .. Marduk .. Ram .. Rayed dise .. D.
5. Mercury .. Nebo .. ? .. Two Columns .. E.
6. Venus .. Ishtar .. Wolf? .. Trisul .. F.
7. Jupiter .. Ishu .. Lion .. Cidaris? .. G.
A. The serpent is often the emblem of Saturn, who, as the eldest of the seven, (' the great serpent father of the gods") naturally comes first, and therefore on the right, and hus seven stars for his symbol.
have the right hand held up, and the left down (a common feature of Iadian symbolism also observable in the attitude of the Malawiyeh derwishes), and the figure to the left appears to hold a branch, or three ears of corn. Both are robed in the peculiar fish-headed costume, with a scaly body and fish tail, which is supposed to be symbolical of the mythical Oamues, who, according to Berosus, issued from the Persian Gulf, and taught laws and arts to the early dwellers on the Euphrates. Behind the left-hand fish-god is a tripod stand, on which is an indetinite object; to the right of the other fish-god are two lion-headed humata figures with eagle's claws, apparently contending with one another, the right arms being raised, the left holding hand by hand. To the right of these is another figure of Assyrian type, with a domed head-dress and beard.

In the lowest compartment the infernal river fringed with rushes, and full of fish, is represented. A fearful lion-headed goddess with eagle's claws, kncels on one knee on a horse (the emblem of death), which is carried in a kneeing attitude on a boat with bird-headed prow. The goddess crushes a serpent in either hand, and two lion cubs are represented sucking her breasts. To the left is a demon bearing a close resemblance to the one which stupports the tablet itself, and who appears to urge on the boat from the bank; to the right are various objects, mostly of an indefinite character, among which M. Gameau recognises a vase, and at bottle, a horse's leg with hoof, etc., possibly offerings to appease the infernal deities. The above explanation is mainly derived from M. Gamean's paper ; but I would venture to draw attention to the extremely Indian character of the demons represented-a point which M. Ganneau does not mention. The lion-headed goddess might well be taken for the terrible infernal deity Kali, or Durga, the worship of whose consort Yama was the original source of that of the later Serapis, whose dog was the ancestor of Cerberus.* There is alsõ a general resemblance between this design
B. The moon, according to Lenormant, was always an older divinity than the sun.
C. The boar is often an emblem of the sun in its strength.
D. The dise (litu) was the weapon employed by Marduk, the warrior-god, as mentioned by Lenormant.
E. The two pillars of Hermes are the proper emblem of the ancient Sct or Thoth, the planet Mercury.
F. The trisul belongs properly to the Asherah, god or goddess of fertility-the planet Venus.
G. The Cidaris occurs in the Bavian sculptures, in connection with a similar emblem. In the Chaldean system, Jupiter and Venus occur together as the youngest of the planets.
It should also be noted that the position of the arms, and the long robe covering the feet, resemble the attitudes and dress of the Malawîel derwishes in their sacred dance, symbolic of the seven planets revolving (according to the Ptolemaic system) round the earth.-C. R. C.

* Possibly the two so called lion cubs may represent the two infernal dogs, which accompany Yama, in Indian mythology.
and the well-known Egyptian picture representing the wicked soul couveyed to hell in the form of a pig. The Oannes figures take the place of the two goddesses, who in Egyptian designs stand at either end of the mummy, and who form the prototypes of the two angels for whom the pious Moslem provides seats at the head and foot of his tombstone Perhaps the miserable horse who stumbles under the weight of the gigantic lion goldess, may represent the unhappy soul itself, while the three ears of corn (if I am correct in so calling them), remind us of the grains of corn which have been found in skulls dug up in Syria by Captain Burton. Corn is intimately connected with Dagon, the Syrian fishgod.

This curious tablet is, I believe, unique, and affords strong evidence of the similarity of Egyptian and Assyrian beliefs. The Egyptians are now generally acknowledged to have belonged to an Asiatir Aryan race, and the fact that the mythology of Africa, of Greece, and of Rome, had its origin in the far East is too well known to require notice; but the Assyrian mythology is as yet but imperfectly known, and the present monument, which was brought from Palmyra by a peasant, who sold it at Hamath, comes from a district directly on the line of the Phenician march from their first settlements near the head of the Persian Gulf, to their home on the borders of the Mediterranean. I understand that M. Gamean is anxious to study the original tablet, which I have been fortunate enough to see, in order to decipher some of the more ouscure details, and intends, for that purpose, so soon as his health permits, to visit Beyrout, and to examine this interesting relic.

Claude R. Conder, R.F

## THE HITTITES.

## I.

## Their Sacred Capital.

Tue announcement that Lieutenant Conder had discovered the Sacred capital of the Hittites on the shore of Lake Kades, camot fail to interest Oriental scholars; and it may lead to more important discoveries in the history of that very ancient and remarkable people. It will be remembered that the Hittites are mentioned in Geuesis among those nations who inhmbited Canaan during the patriarchial period, and that it was from one of their Priuces Abraham bought his burying place, the cave of Machpelah. Joshua incidentally describes the position of their country :"From the wilderness and this Lebanon, even unto the river Euphrates, all the land of the IIittites." They are not often mentioned in sacred history, but we have a few suggestive notices of their power, wealth, and warlike character.

Many years ago I visited that remote region in the vailey of the Orontes where the Hittites had their chief stronghold and settlement,
and I examined with considerable care its topography and ruins. I made full notes on the spot, and perhaps if I now give, in a condensed form, the substance of those notes, it may help to stimulate further inquiry, and in some measure to direct more thorough research.

Leaving the site of the Biblical Riblah, I forded the Orontes, and rode to Tell Neby Mindow, six miles distant. It is a large artificial mound on the left bank of the river, with a village and a Muslem tomb on its top; from the latter it gets its modern name. Around it lie extensive ruins, the remains donbtless of Laodiceic ad Libanum mentioned by Strabo and Ptolemy, and placed by the Itinerary of Antoniue 18 Roman miles from Emesa. Polybius says it lay near a lake. Some of the ruins, and the large mound, indicate a much earlier origin for the town which first occupied the site.

About a mile farther I came to a small village called Um el-Adam, where there are also ancient remains. On the right bank of the river, about half-a-mile distant, is a large rectangular enclosure surrounded by an carthern dyke, with mounds at the corners as if for defence. It seems to have been an iutrenched camp; and it may perhaps mark the site occupied by the army of Nebuchadnezzer, while one of his generals was engaged in the siege of Jerusalem.

I rode on to another mound on the right bank of the river, from which I had a good view of the southern section of Lake hicedes, and of the place where the Oronter falls into it. Thence I followed the winding shore, passing the village of Kefr Ady. Here my attention was arrested by an island some distance out in the lake, with a large artificial mound upon it ; examining it carefully with my glass I thought I could discern traces of ruins on the mound, and I was sorry I had no means of reaching it, for it would most probably repay close inspection.

Continuing along the shore northwards, I passed in succession two villages, one of them on a mound, and at length reached a lofty artificial mound near the end of the lake. Ascending it I obtained a commanding view, not only of the entire lake, but of the whole surrounding country; and I here observed that across the northern end of the lake is a dam of solid masonry, about a quarter of a mile long, built to raise the water to such an elevation as would serve to irrigate the plain and vale beyond, and also to supply the town of Emesa. Leaving my horse, I walked along the top of the dam to a square tower at its western end, so that I might examine it more carefully, and, if possible, form some idea of its age and object. It is evidently very ancient, and is one of the most remarkable engineering works in Syria. The centre is about 14 feet high, but it decreases toward the ends. It has often been broken and repaired; and I. thought I could detect in it specimens of the masonry of the ancient Syrians, as well as of the Greeks, Romans, and Turks. There can be no doubt that the dam greatly increases the size of the lake, and perhaps the statement of Abulfeda, the Arab historian, is correct, that "if the embankment were destroyed the water would flow off, the lake would cease to exist, and would become a river." The length of the lake is now
about six miles, and its greatest breadth two. Traces of the ancient canals which led the water off at a high elevation are seen, and some of them are still used for purposes of irrigation. The plain around the lake, and on both sides of the Orontes, southward as far as Riblah, and northward to Emesa, is studded with artificial mounds, each of which was doubtless the site of a primeval city, village or castle. Some of them are very large, and are covered or encompassed with ruins. Here is an ample and most inviting field for research and excavation.

Such, in substance, are my notes, written twenty five years ago. I may olserve that an account of my first journey to Lake Kades and Emesa was given in the first edition of my "Five Years in Damascus," published by Mr. Muray in 1855. I afterwards travelled through the same region several times.

If Lake Kades be artificial it would be interesting to know when and by whom the embankment was first built. It must have been before the days of Polybius, for he mentions the lake as I have already stated. There can be no doubt that its name is derived from Kades, the primeval capital and stronghold of the Hittites, and that city is often mentioned in the account of the wars of Thothmes I (circa b.c. 1630), given on one of the Egyptian tombs (see Brugsch's "Egypt," I, 291) ; and, still more frequently, in the stirring history of Thothmes III (Id. pp. 334 seq.). Kades was captured by Seti I, king of Egypt (circa b.c. 1366) ; but the greatest battle fought there was that between the Hittites and the Egyptians under Rameses II, most probably the Pharaoh in whose reign Moses was born. The story of the battle is contained in a contemporary papyrus still extant, and there are also pictorial representations of it on the walls of Karnac and Luxor. The latter are most interesting, as they show that the field of battle was on the banks of a river or lake (see Brugsch, II, p. 48). In an Egyptian poem composed by a certain Pentaur, a Theban, about two years after the battle, a translation of which is given in "Records of the Past," II, 65, et. seq., I find the following words used to define the position of the Hittite army :-" They were at the lake of the land of the Amorites," and, from what follows, it is clear that the lake was close to the city of Kades. Another inscription of the same age, on the wall of Karnac, gives the full text of a treaty of peace drawn up between Rameses and the Hittites after the battle ("Records of the Past," IV, 25). The Hittites were themselves a literary people, and it is quite possible that among the ruins of their old capital some most interesting records of those early struggles might be found. I have now little doubt that those singular mounds which stud the plain on the banks of the Orontes, and the more ancient ruins near them, are all relics of the Hittites. The Hittites also seem to have been the original founders of that great embankment which dams up, the waters of the Orontes, and forms the lake Kades. The discovery of the exact site of their ancient sacred capital Kades "the Holy," and the excavation of its primeval remains, would rank among the most valuable results of Palestine Exploration.
Queen's College, Belfast, 16 May, 1881.
J. L. Porter.

## II.

## Their Inscriptions.

Is the Quarterly Statements of October, 1880, and April, 1881, there appear some notices of the Hittite inscriptions from the pen of Mr. Dunbar Heath. As during the last two years I have devoted considerable study to the inscriptions and the history of the Hittite tribes, I would venture to ask you to allow me space to say a few words in reply to some of the statements and the translations put forward by Mr. Heath. It may be well for me to state at the commencement of my remarks upon the subject, that I do not profess to be a profound student of the Newtonian Philosophy, nor do I possess a deep understanding of the doctrine of probabilities by which Mr. Heath is enabled to toy so freely with his figures; making letters, roots, formatives, to vibrate in harmony with each other and producing a " musical result." I most certainly must say that I cannot understand the system upon which Mr. Heath claims to have deciphered these inscriptions. The translations which he has proposed seem to me to be the most curious readings of inscriptions which I have ever as yet seen. I am willing to admit that the Aramaic commercial language or dialects of Syria have a somewhat mixed vocabulary, but they certainly never afforded such strange examples of ungrammatical and base writing as Mr. Heath would make the Hamathites use. In the latest contrast tablets of the Babylouian Empire of the time of Nabonidus (в.с. 556), Cyrus (b.c. 538), Darins (b.c. 521), or even as late as the Seleucidæ (b.c. 312), where the language is vernacular and therefore liable to decay and to exhibit a mixed vocabulary, there is not an approach to any such linguistic confusion as Mr. Heath would wish us to believe was current at Hamath in the time when the Hittite inscriptions were written. In Babylonia, with its polyglot population and its assemblage of "all nations, people and tongues," such a mixed vernacular might have existed, but the inscriptions prove did not. I am therefore, on the theory of probabilities, loath to suppose that it existed at Hamath or Carchemish.

Thus far perhaps Mr. Heath may think that I am only theorising, and not producing sound evidence to the contradiction of his theory; I will now pass to a stronger argument. If the Hittites spoke a quasi-Semitic language, and wrote their inscriptions in that dialect, how is it that their kings and their towns have non-Semitic names? Here we may call in the aid of contemporaneous inscriptions from Assyria and Egypt, and we shall see that certainly they were not Semitic. Such royal names as Mauthanar, Maurosar, Sapalil, Kitasar, which appear in the Egyptian inscriptions, with the personal names of Thargathazaz, Zauzaz.* Marzarima are not, as Brugsch Bey states, capable of explanation by Semitic languages. Nor are the names in the Assyrian inscriptions, such as Sangara, Irkhuleni, Lubarna, who were kings of Carchemish, Hamath, and

[^9]Azaz in the ninth century before the Christian era. I may also mention Sapalulne, king of the Patinai, Buranate, king of the Yazbukians. In the eighth century we meet with the same class of names, such as Pisiris of Carchemish, Tarkhulara, king of Sambum or Zeugama, the site of which is marked by the village of Balkis, a little north of Beredjik, Tarkhunazi, king of Milid, and others.

In the geographical inscriptions and in the tribute lists and historical records we meet with many names peculiar to the land of the Hittites.

Among these are a number ending in as, az, and zaz. Mairkhnas, Magnas, Ziras, Tainiras, Thukamras, Zarnas, which appear as Hittite towns in the lists of Thothmes. In the Assyrian inscriptions we have Khazaz and Alzi and Puruluz, which are cities of the Hittites.

Having quoted these somewhat strunge names, both geographical and personal, I will say a few words with regard to them. In the case of the geographical names I would point out that of those ending in az, as, or zaz, there are yet traces in the localities where these cities were. Both by geographical and historical details, the city of Khazaz, whose king, Lubarna, opposed Shalmanesar II (в.c. 858), is to be identified with the town of Azaz, situated north-west of Aleppo, a city which has been important under Hittites, Assyrians, Greeks, Romans, and Saracens. I visited the place last year, and its lofty tell and ruined castle show that it is the same city as is represented on the bronze gates from Balawat. During my stay at Aleppo my attention was called to a number of village names in the regions of North Syria, which appear to be neither Arabic or Turkish, such as Anuz, nerth of Azaz, Armenuz, Keftenaz, Teftanaz, Eminaz, hourinaz, towns in the Jebel Ala and the valleys of the Orontes and the Khoweik. I am inclined to think that in these names we have a survival of the Hittite names in az and zaz. I will now pass to the personal names, as they aid us in effecting the Hittite alliance, which Mr. Heath would break up.

The name Thargathazaz, which Dr. Brugsch gives, is close akin to the names of Tarrik-nazi and Tarrik-lara, and the name of the king on the silver boss, Tarrik-dimmi-dimmi. Mr. Heath denies that the boss is Hittite, yet on it are six characters, all of which appear at Carchemish, on the lintel (?) which Mr. Heath has read. In the list of names given by Dr. Brugsch of Hittite towns is Talekh or Tarekh, a name very close to that of Tarrik, and the name would appear to survive in the Hittite land for a little north of Carchemish or Jerablons on the Euphrates in the village of Tarknis.

Mr. Heath denies that the inscriptions at Karabel, on the rocks at Boghaz Keui or Eyuk, are Hittite; how then does he account for their being written in characters every one of which are found on his texts at Carchemish and Hamath, or how is it that the people from the lands where these inscribed monuments were erected appear in alliance with Hittites at the battle of Kadesh? Such inscriptions as these from Hamath and Carchemish, cut in hard black granite and basalt, are in every probability the records of royal persouages, either dedications to the gods or
records of victories, and when they are read, as they will be, but are not yet, they will furnish us with names akin to those of the kings mentioned by the contemporaneous kings of Assyria and Egypt.

The only monument in this country which has been read does furnish a name such as is akin with other Hittite names, and so must the inscriptions from sites such as Carchemish and Hamath if they are correctly translated. Mr. Heath talks very glibly of an "emphatic looking aleph," and of expressions of causation, command, and possession ; surely the kings who ordered the stones to be carved at Hamath or the lintel at Carchemish would not trouble to cut hard black granite to record such a thing as the charming of a sick man, and he one, by Mr. Heath's own showing, having no title of royalty or office.

Our knowledge of the Hittite inscriptions is not in an advanced state, being at present confined to four syllabic characters and two ideographs which are derived from the bilingual inscriptions on the boss. I may say, in reply to those who call this boss a forgery, let them prove the need or call for a Smyrna silversmith to forge an inscription in one little known and one quite unknown language, and I will believe in the spurious chatracter of the disc. Had the inscription been in Egyptian and Cuneiform then it may have been a forgery, or had the name of the king been less like a Hittite name then the possibility of its forged character might have been admited, but it cannot be now.

We camnot read the Hittite inscriptions, but still we can gather many facts relating to the kings and people which are of interest, and with none of which do Mr. Heath's theories agree. When more inscriptions have been recovered, and when explorations have been made on sites where bilingual inscriptions are likely to be found, then we can speak of reading the inscriptions.

Until that time it is premature to put forward readings such as Mr . Heath has attempted. I am certain that when the inscriptions are deciphered they will not contradict the historic records of the nations in contact with the Hittites as they now do. The question of the relation of the Hittites to the Aramean tribes is one which I will ask you at some future time to give me space to say a few words upon.

W. St. C. Boscawen.

## III.

## Note on Above.

Knowing the great value of your space, I will answer Mr. Boscawen as briefly as possible.

Mr. Boscawen says he does not profess to be a profound student of the Newtonian philosophy. It is not necessary that he should be so ; but nevertheless all knowledge comes to us through the methods of that philosophy, and nothing in Mr. Boscawen's paper shows me that I have
erred in the application of it. Mr. Boscawen considers that my results are very unlikely, in consequence of the fact that they result in is "mixed vocabulary." Now my dictionary contains about 40 words, and in order to understand the charge, I should be glad of a few instances in which this property of mixture appears. Take the first three words, asukil an oiljar, ashtekie to contemplate, and ashibna we restored. I really know not what the accusation means.

Mr. Boscawen says that the names of Hittite kings and towns are nonSemitic. Very likely. But then the names of Oxford and Cambridge Rhyd-Uchain and Cater-Grawnt are not English, and Laban the Syrian appears to have spoken Aramzan. It is also to be remarked that in the select Egyptian Hieratic Papyri, the Semitic words seem to be Aramæan, and that the Greek alphabet also was Aramean.

As to the Cilician Boss, and other small finds, any one interested should give us an enlarged lithographic copy. It is a question of eyesight, and I do not at present see them to be Hittite. Fifty times more important than the Boss question is that of the name Jerablus. I read it in three places without the $l$, and I should be very much puzzled indeed if there be an $l$. Professor Wright has gone carefully int $\rho$ the subject, and says the $l$ is due wholly to European travellers.

Dunbar Isidore Heath.

Esher, Surrey.

## THE ASSYRIANS IN EASTERN PALESTINE AND SYRIA DESERTA.

Tue existence of an Aramæan or Arab Semitic population as a trading element in Babylonia, together with the non-Semitic Sumero-Akkadian population, at a period as early as the eighteenth or nineteenth century before the Christian Era, is proved by the occurrence of Semitic names of a marked Arab character in the contract tanets of the time of the Kassite or Cossea dyuasty founded by Khammuragas. Such names as Abbu, Abikhibu Libet, Kainuv (Hebrew Cain), Abbu (Abel), Mukhatu Pirkhu, and the many compound names formed with the gods Sin (Moon), and Shamas (Sun), both Arab deities as elements, seem to indicate the origin of the population who at this early period appear in the marts of Ur and Erech. It may not be a mere accident that the inscriptions of a bilingual class which were compiled by the scribes of Babylonia at an early period, and afterwards copied and re-edited by the scribes of Assurbanipal, are all of a commercial character, the nonSemitic phrases in one column being translated into Semitic Babyloniau or Assyrian in the other. This would seem to show that the exigencies of trade produced these primitive editions of Clifton and Ollendorf.

Even earlier than the use of the Kassite dynasty, which is to be identified with the Median dynasty of Berosus, a Semitic population to
the north-west of Babylonia was known, and its character is clearly indicated by the generic name given to the people by the writers of the inscriptions. The name Suhki $(-\langle \rangle\langle<\rangle)$ appended to these tribes at a very early period is evidently like the Egyptian name Shasu, derived from their wandering life and marauding character, and we may connect it with the Hebrew root $\mathrm{T}_{\mathbf{T}} \mathrm{D}_{\mathbf{T}}$. The root? in Assyrian has the sense of "to rebel, to revolt, to create rebellion," and the noun, Sikhu, a revolt, occurs several times, notably in the Eponym Canon (W. A. I., 11,52 , lines $9,10,11,25$ ). We may conclude, therefore, that this name Sukki, like the Egyptian Shasu, from the root iot which signified the "plunderers," "spoilers," as the Arab Bedouin, was a characteristic name. The two curious inscriptions of Sargon I, King of Agane, give accounts of expeditions into Syria, but, as only general terms, such as the west, and Elam are employed, together with the "Great sea," no historical argument can be based on these inscriptions. We may conclude that the Semitic population of Assyria was the outcome of these Semitic nomads who had been tempted to come into Chaldea, and be civilised by the learning and wisdom of the Chaldeans. And Abram, the ancestor of the Hebrew race, may be taken as one of the descendants of these primitive fellakin, who had settled round Ur.

It has been thus far necessary to sketch the early contact between Babylonia and the tribes of the desert and the West, in order to gain a knowledge of their character, and the name given to them shows the land to have been occupied by a nomadic people given to making razzios across the River Euphrates. That this was the case, is shown by the oft-recurring passages in the astronomical tablets, "The cattle of Akkad sufely in the desert lie," "The foe plunders, and the corn of the land devours and seizes."

In about the thirteenth century before the Christian Era, this population became settled, and petty kingdoms were established on the west of the Euphrates. All along the Euphrates, both on the east and west bank, colonies of Arameans sprang up, and in the time of Tiglath-paliser I, b.c. 1120, they had obtained considerable power, and were largely connected with trade. The campaign of Tiglath-paliser I in Aram Zobah and the border of the Hittite land, is found recorded on his cylinder. (W. A. I., 1, p. 13, col. v, 44-63.) "In the service of Assur my lord, my chariots, and warriors, I gathered a divination (mut-bara),* I took. . . . . the land of the Armaya (Arameans) opponents of Assur my lord, then I marched from the frontiers of the land of the Sukhi (Bedouins), as far as the city of Kar-Gamish (Carchemish), of the land of the Hittites. . . In one day I swept (akhbudh), $\dagger$ their soldiers I slew, their spoil, their wealth, and property innumerable. . . I recovered. $\ddagger$ The

[^10]remainder of their host, who from before the arrows of Assur my lord had fled away, and the river Euphrates they had crossed. After them in boats of inflated skins, the river Euphrates then I crossed. Six of their cities which are situated at the foot of the mountains of Bisri. . . I captured and with fire I burned . . threw down and dug up ; and their wealth to my city of Assur I brought." During this raid the Assyrian king captured the city of Pitru or Pethor, the birth-place of Balaam. From the Kurkh inscription of Shalmanesar we have the following passage referring to that city: "At that time also (b.c. 854) to the city Assur-utir-azbat, which the men of the Hittites the city of Pethor call, which is above the river Sagura (S'ajur), on the far bank (west) of the river Euphrates, and the city of Mutkin, which is on the near bank (east) of the Euphrates, which Tiglath-paliser I, the ancestor, the prince my predecessor had united to my country from Assur-rab,-Amar, King of Assyria, the King of the Arameans (Arumu), by force had spoiled. These cities to their place I restored." This passage shows that during the period of weakness which followed the death of Tiglathpaliser I (b.c. 1100), the Arameans had recovered the city of Pethor, an important Aramean city, and one which they appear to have regarded as one of the sacred cities. The above passages give us clearly the northern boundary of the Arameans. The city of Carchemish, the stronghold of the Hittites, was one day's forced march from the frontier of the Sukhi; and Pethor lay in the direct line, and above the river Sagura of the text, which we must identify with the modern Sadjur. The Sadjur is at the point where the old caravan road following the Euphrates crosses it three hours from Jerablus, the ruins of Carchemish, therefore from 10 to 11 miles at the pace my horses went. Above this river, and on the road to Carchemish, was the city of Pethor, and, apparently, with a city or fort on the opposite side of the river. The site of Pethor I feel certain will be found at Tokari-Tash-atan, a name which to this day retains an echo of the old name. There is a small stream flowing down from the limestone hills which form the watershed between the Sadjur and the Euphrates, and on this stream at the point where the caravan road crosses it, is the village of Tukari-Tash-atan. The natives say that the village derives its name from an old stone in the bed of the stream which was thrown there by an ancient Moslem Sheik, Tash-atan, meaning "hee threw the stone." The stone in question proved, when I examined it, to be an old Roman milestone, very much defaced, but still with letters such as MCC, etc., remaining on it to prove its original use. We know that the (ireer-Roman colonists called Carchemish Hierapolis, which the Arab conguerons corrupted into Jerablus, and the Turks into Jerabis.* It would therefore seem that they confounded Pethor or Pitru with one of the numerons Petra or Petre. The Turks translated the confused name by the Tashatan, "the village of (he who) threw the Stone," thus the

* The nams of t'is village is Yorablus among the Arabs, (ير) إبلس); the mound being Kaleat Yerallus. Jerabis is the Turkish corruption.
name may be traced. The proof of my argument will be found in the exploration of the large mound a little to the south-east of the village, between it and the Euphrates, and I feel certain, from a hasty inspection of the site, that it will re-pay exploration, as well if not better than Jerablus. There are fewer Greek and Roman remains about than at Jerablus, and so more of an earlier date may be expected.

The Arameans, as I pointed out before, had colonies all along the Euphrates, and when I come to speak of the wars of Assur-nazir-pal, and Shalmanesiu II, in Aram Zobah and Damascus, the Hauran, \&c., I shall have occasion to mention them more particularly. This explains the statement made in Numbers xxii, $\overline{5}$ : " He (Balak) sent messengers, therefore, to Balaam, the son of Beor, to Pethor "פֹר which is by the river of the land of the children of his people" (i.e., the Euphrates) ; and again, in chapter xxiii, "the King of Moab hath brought me out of A ram, out of the mountains of the East." These passages from the inscription, and from the Scriptures, would connect the Arameans of the Euphrates Valley and Eastern Syria with the Moabites, and would account for Carchemish, once an Aramean city, but, taken by the Hittites, having a Semitic name.

During the period from 13.c. 1100, until the accession of Assur-nazir-pal in b.c. 885 , the Aramean or Syrian confederation had made great progress. In this interval the Jewish kingdom under Saul, David, and Solomon, had grown up, and the kingdom of Damascus, and of Aram Zobah, with those of Ammon, Moab, Edom, and Saba, or the Arabs, were all formed out of the mass of partially nomadic tribes of colonies of fellahin settled round strongholds or commercial stations on the Euphrates, or in various parts of Syria Deserta and the regions east of Jordan. In the time of David we have Hadadezer king of Aram, Zobah, and Hanme king of Ammon. During the reign of Solomon, we have the names of Hadad and Genubath as kings of Edum and Resin in Damascus. The foundation of Tadmor by Solomon, was intended to divert the Syro-Babylonian caravan route which, from time immemorial, had passed along the Euphrates, and through Carchemish into a more direct chamel across the Syrian desert. It connected the Aramean tribes on the Euphrates and about the mouth of the Khabour, with Damasens and Syria direct. In the month Sivan,* B.c. 879, the Assyrian king Assur-nazir-pal started from Kalah (Nimroud), and, after crossing the Tigris and the river Kharmis, the modern Sinjar, , course as far as the city of Sadi-kami, now Araban. Following the course of the river as far as its junction with the Euphrates, he received tribute of the city of Sirki, the classical circesium, the modern Karkesi
 Aramean type, such as Dur-kuvlimi, Bit-khalupi, Tsupri, Nagara-bani, Khindani. These towns and districts were situated between the mouth of

[^11]the Khabour and the Wady el Seba. In his inscription the king thus speaks of the march through this district: "From the city of Khindani I departed in the mountains over against the Euphrates; I established a camp." These mountains must be the limestone ranges on the east bank, north of the Wady el Saba. The inscription states further, "I then departed from the mountains, and in Bit Sabaya (Wady el Saba), I encamped in the approach to the city of Kharidi" (Erzi). Departing from here the king next halted at the commencement of the city of Anat (Annah)* Anat was situated on the opposite side of the Euphrates. Starting from here, the Assyrian king marched against the stronghold of the Sukhi (Bedouins), the city of Suru, the modern Sura or Soiera, a little south of Annah. The king of the Sukhi was Sadudu or Sadad (the invader). This opponent of the King of Assyria was aided by the Arameans or Chaldeans from Babylonia, commanded by the brother of Nabu-bal-iddina, King of Babylon, Zalbdanu by name. The allies were defeated, and Sadad threw himself into the Euphrates, and swam across to save his life. The capture of these cities, and the whole of the Aramean colonies from the city of Ittu or Hit, as far as the mouth of the Sadjur, and the land of the Hittites, quite destroyed the commercial caravan route which had been established across the desert from Damascus via Tadmor, and the old line vid Carchemish was once more used. The existence of these colonies of Arameans on the hanks of the Euphrates, the Khabour and the Singar or Hermias, in the ninth century b.c., shows very clearly where we are to place Aram-Nahraim. In this region it exactly corresponds with the Nairi of the Assyrians and the Naharian of the Egyptians.

The principal kingdoms of the Eastern Arameans were :-
East. Bit Adini, from the Khabour as far north as Kalaat Nedjim or Tul Barsip, the Barsamsi of Ptolemy. This was the Eden of Ezekel xxvii, 23. "Haran, Kalneh and the merchants of Sheba, Assur and
 Arabian Sheba, but the Sabaya of the inscriptions of Assur-nazir-pal, now the Wady el Seba.

West. The S'ukhi or semi-nomadic population corresponding to the fellahin Arab of the present.

Laka. North of the Sukhi, extending along the present caravam route to Aleppo. The name is perhaps preserved in Lachadur and Lachadamie stations on that route.

The Arumu or Arameans, about the Sadjur and the country round Aleppo southward as far as Damascus. In the northern portion of this district, round Carchemish and Khilbun (Aleppo) the population was Aramean, but the Hittite conquerors were the dominant class, and muled in these cities.

Up to the end of the reign of Assur-nazri-pal, B.c. 869, the Assyrian armies had only penetrated to the extreme west, the "shores of the sea

* This expression is interesting, as Annah is a town extending a long way upon the river bank.
of the setting sun," by the route through Carchemish, the plain of North Syria, and the valleys of the Afrim and Orontes. In the reign of Shalmanesar II (b.c. 860-824), we shall find them in Eastern Palestine, Aram Zobah, and the regions of Bashan, Moab, and the Hauran.

It has been necessary to sketch thas, in as brief a manner as possible, the connection between the Arameans of the Euphrates Valley and Assyrians, in order the better to understand the connection which these tribes had with those of the lands of Moab and Ammon. This above resume of the growth of the Syrian tribes emables us very clearly to see the nature of the kingdom of Solomon, King of Isratel, the Alexander of the Arameans and Syrians, which reached from the rieer unto the land of the Philistines.

W. St. Chai) Boscawen.

## (To be contimued.)

## EGYptyan view of the exodus

From the "Sixth Auastasi Papyrus."
Wirnin the last two or three years the history of the Exodus has aroused a much larger amount of interest than usual. Witness, among other signs, the publication of Brugsch-that of the anonymous author of the "Hebrew Migration from Egypt,"-and last, not least, the trans-Jordan expedition. As there is a great deal to say on the subject from Egyptian sources I will begin the collation of it at once.

The sixth Anastasi Papyrus was written by a very famous man, named Enna, who stood in close relation as a correspondent to another famous man, the scribe of the Treasury or Finance, named Kek-Kebu. The "Papyrus" contains six large pages, of which I notice at present only two and a half.

The first page is filled up by a splendid superscription in large letters, which may be condensed into the words "Under the reign of Seti II," viz., "Set-Emenephtah." I omit the usual long titles, but note that Seti is called a Ra-Horus, and son of a Ra-Horus, viz., not a mere Regent as his brother Bai-n-Ra Meneptah was, but a reigning king and son of a reigning king. His coffin is in the British Museum, with the word "Set" chipped out. Manetho would thus naturally read him as Emenophis, and his grandson Rameses III shows us in the great Harris papyrus how this Seti was unable to hold the Delta. In fact, after the deaths of his father Rameses II and his Brother Bai-n-Ra, he executed a strategic movement towards Ethiopia. This papyrus is, however, sufficient to show us that his civil and military officers were not obliged to leave their posts in the Delta, and in mitigation of the charge of cowardice, it is stated that when Seti ascended the throne he was upwards of 60 years old, infirm, blind, and helpless. Here follows the first letter :-
"The scribe Enna, for the satisfaction of his lord, viz., for the scribe of
the treasury Kek-Kebu in the palace. This comes to give an account to my lord. Whenever I am to give a full reckoning, to leave to those that shall come after me, perfectly safe will be the groods and chattels. I shall have caused no deficiency to my lord since I have come to his property."

This is the ordinary common opening between the official at home and the scribe on an expedition. Going on with the letter, he says, "I brought up the fleet, which gave me its protection. This it gave to me as far as up to the men of the magazine, in the fortress of Tabnet, which fortress the military scribe, the commissary of cattle, had dug, who was posted at the fortress of Tabnet. The work was completed in 23 days, but its watch fell off, and the head astrologer took every step that was wrong. He forced my three serving men whom he took before the General Huee, with whom was the scribe Ptah-m-heb."

Here we see the political position coming already into view. A strong hostility is evident between our well known Ennt the scrile par excellence of Seti II, and directed against the representative of the astrological party. In other words, between the civil and military ofticers who remained in the Delta when deserted by Seti II. The programme of the military was the digging of fortifications to protect every little village in the Delta. This points to the state of things explained in the great Harris Pipyrus, when Emenophis had retired leaving the Delta open to Siptah Thooris and the strong Mediterranean maritime Powers.

All through this Papyrus the party which opposed the military party in the Delta was specially the Finance or Treasury department. I camnot at present lay my hand upon the evidence, but I stated 25 years ago in my "Exodus Papyri," that the head of the Treasury was Phinehas, second sun of the Great Regent Bai-n-ha Meneptah Hotep-hima. Bai-n-Ra, who saved his comtry for a time at the great battle of Prosopis, was a loyal friend of the Hebrews; and the very name of his secoud son Phinchas shows his cluse relations with the Semites. The letter proceeds. "Now it came to pass that while I numbered the Sem people on the list, he " (the head astrologer) "carried off the Sem people in the fortress. Then it came to pass that he made me number them on the list in the Temple of Rameses. When the people forced him in the fortress, he could not stand against the collected leader. He made me carry the Sem people to the Temple of Nebt-hotep. He brought also two women to me, who said, 'Let the head of the Treasury end the matter.'"

If must be remembered that the papyrus from which I take this is not in a very good condition, but I cannot doubt that I am substantially right in my translations hitherto. It results, then, on Egyptian evidence, that a cerlain sem people, supported by the civil anthorities, managed to get together to the 'emple of Nebt-hotep; notwithstanding the opposition of the military party. There is now a gap of half a lime, after which we read :-
"I pacified (?) the Sem people, who brought up people by my side to say, let the slaves of the Sem people go with it, for there is favour for the slaves of the Sem people before "the Head of Finauce. So they were
allowed to perform the Service in the month Paoni
their beginning of months."

I hesitate in presence of two words which I have here passed over. The fact is that, after the publication of my "Exodus Papyri" I left oft Egyptology, and have only lately resumed it. The sentence, however, seems to identify the Egyptian begimning of their month Paoni with the new year's day among the Sem people at the time these events were taking place. The calculations are all made in my "Exodus Papyri," the result being that in b.c. 1291, which Miss Corbaux holds as the date of the Exodus, the first new moon after the vernal equinox was visible on what we call April 6, which the Egyptians at that time call the beginning of Paoni.

The statement here made, viz., that the Sem people (probably the Semites) had themselves slaves under them, may modify our view on the miseries endured by the Hehrews. Leave, however, having at last been given to these slaves of slaves, they "took the robes which had been brought up before the Head of Finance, to give an account to my lord. The robes were brought and the Head of Finance caused them to be looked to."

| "Royal Robes .... | .... | .... | 87 |
| :---: | :---: | :---: | :---: |
| Other Robes .... | $\ldots$ | ... | 64 |
| Other Robes .... | $\ldots$. | $\ldots$. | 27 |
|  |  |  |  |
|  |  | In all | $178 . "$ |

This part of the papyrus is in good condition, and I apprehend there can be no dispute about the translation. It is surprizing that this spoiling of the Egyptians has been for 25 years pointed out and no notice taken of it. From the Egyptian point of view, it appears that the great Exodus consisted of many small movements, each of them being of manageable size. If every 50th person collected at the Temple of Nebt-hotep considered himself or herself entitled to a splendid robe, there would have been about 8,000 desirous of attending the national annual ceremonies.
"When the numbering was over, I disposed the people before the leaders. The leaders, said to it, 'Let the people be complete in everything that is arranged for it.' There was put down for me four days for the journey which the leaders made. The second military scribe gave it the start. He also brought aid of carriers. He brought also two women at the waters of who said, 'Let each child go.' He did not allow it. He was after the cattle of the head commissary Moses."

Thus, from the Egyptian point of view, Moses superintended herds of cattle, and this presence of a Moses makes it probable that Enna is here describing the chief among the many small movements for keeping the new year's day. A military scribe seems to have been obliged to accompany the four days' expedition, showing, however, his aunoyance by refusing a request about the children. It is also very curious to observe that up to the time when the sacred robes were given out the account has
related to the Sem people, but after the slaves of the Sem people had leave to accompany the expedition, the "people" alone are named, and the name of Sem is dropped.

Thus have I done my best with one and a half pages out of five, exclusive of the title page. There is more in this papyrus of the very highest interest. Among other things, I feel called upon with great regret to say that Dr. Brugsch has done harm by circulating his account from this papyrus of the Shasu people passing from Edom into Egypt. My translation of the passage is now 25 years old, and will be found in my "Exodus Papyri," p. 183. Dr. Brugsch begins with "we have carried into effect." There is possibly a "we," but nothing about "carrying into effect." In fact the papyrus is a confession throughout of the weakness of the Egyptians before the Shasu. Dr. Brugsch goes on "from the land of Edom." There is no word signifying "from." "Through the fortress." There is no word signifying "through." "To the city Pithom, etc., situated in the land of Thuku." Dr. Brugsch in his own book of "Foreign Gengraphy," plate xvi, gives us his own map of Palestine showing that Thuku was in Edom. How, then, could the Shasu pass from Edom to Thuku, which is in Edom?

Dunbar J. Heath.

Esher, Surrey.

## MEGIDDO.

Megiddo has thrice to do with horses and chariots, in the case of Sisera, Ahaziah, and Josiah, but its connection with Mujedda, three miles southwest of Bethshean, is merely a mare's-nest.

This identification put forward in Quarterly Statement, 1877, p. 13, repeated in "Tent Work," but apparently abandoned in his "Handbook," is once more revived ( 1881, p. 87) by Lieutenant Conder, when, on returning from the slaughter of Abu Gheith, with the head of Beth Aphrah in his hand (my overlooking of the $l i$ in Beth li Aphrah I can only explain on the principle "humanum est errare"), he finds a Jonathan ready to embrace his theory (1880, p. 224).

It is best to repel this advance at once, and without delay fight out the topographical battle of Megiddo, before more allies come up.

We propose to show (1) that Megiddo was near Taanach (now Taanuk), and (2) that the only feature near Taanach answering to the waters of Megiddo are the streams near Lejjun. If these points be proved, then it is certain that Megiddo was situated at or close to Lejjun (as proposed by D. Robinson), aud not at Mujedda.
(1). That Megiddo was near Taanach is somewhat probable from Joshua xii, 21 ; xvii, 11 ; 1 Kings iv, 12 ; 1 Chron. vii, 29 ; where the two names occur in juxtaposition. As however Judges i, 27, is against us, we turn for certainty to Judges v, 19-21: "The kings came and fought in (= near)

Tannach, by (= near) the waters of Megiddo." These words evidently describe a battle, and not a campaign. Therefore, as the kings fought near both these places, it is obvious that they must have been near one another. Thus (it seems to me) our first point is aheady fully made out.

But suppose for a moment that Megiddo was not near Tamach, but at Mujedda. Then we have to believe that Batak and his ten thousand, armed with staves and ox-goads, or at the best with bows and slings, fought along a line of nearly sixteen miles, while most of the Canataites must have galloped up the valley of Jeareel, before they could be swept away by the Kishon. The whole supposition is supremely ridiculous. The known site of Tannach so atlicts Lieutenant Conder's theory, that he has to put a gloss on this reference to it, offering thest alternatives (1877, p. 15). "The words 'in Tamach' must either be taken to be a district name applying to all the plain, of which Tanatch was the capital, or it must be translated to its meaning 'sandy soil.'" No doubt "in Taanach" does describe that part of the plain which was near Taanach, but certainly not the whole breadth of the plain as far ass the northem hills, under which Lieutenant Conder thinks the battle took place; while, again, as Taanach is five times (above, and Judges $\mathrm{i}, 27$ ), connected with Megiddo, it is an ioudmissible throwing of dust to take the worl differently in the sixth instance. The vagueness too of describing the plain near Tabor as by or (Lieutenant Conder) cebore the waters of Mujedda is certainly not like the precision of topographical notices in the Bible ; but on this point Lieutenant Conder offers no comment. Barak's battle, however, would not be more real than that of the Titans if its site were just at the foot of Tabor, thirteen miles from Taanach, and sixteen from Megiddo, if placed at Mujedda; while, again, the last place is fifteen miles from Taunuk. The italicized positions are obviously at variance with Judges v, 19-21 ; indeed, they are quite impossible, and the theory arises from an initial error as to the right position of the Kishon in Judgess iv, 7, $13 ;$ v, 21.

This Lieutenant Conder fixes at "a place called el Mujaliaych, where there is an extensive chain of pools and springs about three miles west of the foot of Mount Tabor." He thinks also that the above passages require this position ; that Josephus coufirms it in "Ant.,"v, 5, 3; "Barak camped at Mount Tabor . . . Sisera met them, and pitched not far from the enemy." (In Josephus, however, not fur may mean any thing); that "the advantage obtained by Barak in his impetuous descent from the mountain on the enemy in the plain is evident;" that had the battle taken place at Taanach, he "would have had to come the whole width of the great plain, and would have attacked from low ground the enemy on the spurs of the hills, far away from the main hed of the Kishon." He also adds (1881, p. 88), "It is an assumption which contradicts Scripture that the stream from Lejjun is the ancient Kishon."

Here are several errors, one of which must be pointed out.
As to the position of the Kishon. Since Sisera's arny was gathered to the river Kishon, and the battle was fought near. Taanach, it is clear that the main watercourse in the plain below Taanuk must be the brook

Kishon in Judges iv, v . For if Sisera had encamped at el Mujahiyeh, he must have turned southwards, and Barak must have passed him, to fight near Taanach ; a thing utterly absurd, as Barak was on Tabor. Thus, "the assumption which contradicts Scripture" is really Lieutenant Conder's own.

My notion of the battle is this:-
From Tabor, Barak descended on foot (as is emphatically stated) to the valley (Emek) between Tabor and Endor. The watchmen of Sisera in Taauach (or in Megiddo) must have spied afar off" "the advance of the ten thousand" rustics over the great plain (Bikath Megiddo). The little army, without shield and spear, seemed marching to sure destruction; meanwhile Sisera was not slow to seize the opportunity, little thinking that he was about to fall into his own trap. Leaving his encampment at the foot of the hills, he hastily crossed the Kishon with his nine hundred chariots and vast host, marshalled in Hamitic array (like the Egyptians and Zulus), in an extended line, and soon the long wings of the dragon had enclosed Barak's little flock of kids. Escape now seemed impossible, yet not to faith. The battle began ; but suddenly the clonds poured out water, "the rain descended, and the floods came, and the winds blew, and beat upon the house " of Canaan, "and it fell, and great was the fall of it." At once the horses and chariots moved heavily in the viscons mud; soon the whole plain was a quagmire; before long the recently dry watercourse became a foaming torrent, sweeping away the terrified Canaanites that tried to ford it ; while the rest of the enemy, fleeing in a worth easterly direction, were pursued by the fleet hinds of Naphtali (Gen. xlix, 21; Judges iv, 6), and overtaken and scattered near Endor, wherenpon Sisena alighted down off his chariot and fled away on his feet.

The passages in Judges and Psalm lxxxiii, relating to the brook Kishon, thus seem to be in perfect agreement with the natural meaning of the words, "then fought the kings of Canam in Taanach by the waters of Megiddo," and we conclude that our first point is proved viz., Megiddo was near T'aunach.
(2). The waters of Megiddo were the streams near Lejjun. On reference to the Great Ma, we find four miles N.N.W. of Tanak abundant perennial streams flowing from the hills near Lejjun.

These are the nearest to Tannk, and to find the next we must go five miles further, to Wâly el Kŭsal, which is nine miles from Tannuk. As Sisera would hardly need so extended an encampment, we have at once to admit that the ruters of Megiddo were the copions streams rising in the neighbourhood of Lejjun, which or near which was the fanous city of Megidllo. I well remember how six years ago here, in the high luxuriant grass, revelled our mules and Selim's ill-starred ass, destined on the morrow to be half buried in BikathMegiddo's mud, and how the spiteful miller spoilt his morning meal. Worse things, however, than these happened, not far off, to Sisera thirty centuries ago.

In support of Mujedda, Lieutenant Conder quotes Ahaziah's flight.
Without giving an opinion on the position of "Beth-hag-gan," "Maaleh Gur," and Ibleam, I would point out that even if Ahaziah fled northwards towards en N'aurah, he might afterwards, under cover of night, reach Megiddo (near Lejjun) as easily as Mujedda.

His object seems to have been, not to get to Jerusalem, but to the nearest place of refuge, and afterwards (as we learn from 2 Chron. xxii, 9) "they caught him (for he was hid in Samatia) and brought him to Jehur." Thus it is probable that the words "he died there," (2 Kingsix, 27), ought to be translated "he died then," i.e., at that time, when Jehu cut off the house of Ahab.

The Bible does not state by what road Necho approached Megiddo. I am not sure, however, that to march up the Jordan valley would not be more exhausting than "to toil over the hostile mountains of Ephraim," hostile only by an oversight, as Josiah's power reached even unto Naphtali (2 Chron. xxxiv, 6).

It is very satisfactory to find that the great plain near Taanuk is after all "the valley (Bikuh) of Megiddo," as the uniform meaning of the word Bikah is hereby preserved. The next step is to admit that "Baalgad in the valley (Bihah) of Lebanon" (Josh. xi, 17; xii, 7) must be Ba'albeh in el Buka'a.

The Jordan valley east of Mujedda seems to me hardly worthy to be called a Bikch, and if it were, it ought to be called the Bikah of Bethshean and not of Mujedda.

If one had to point out on the map where Barak fought, I should say el'Afulch or the Birket el Fuleh, just west of it, which is marked as "marsh in winter." Here Sisera's host would be shut in between the confluents of the Kishon. This spot is six miles from Tranach, and four from the waters of Megiddo, which distances I hope are not too great to be covered by the Hebrew $l i$; but if they are, then the battle must be placed still nearer to Tainuk.

Until it is agreed what is the correct translation of the Mohar's adventures, it seems premature to attach any weight to them in this matter.
W. F. Bircit.

## HIDING PLACES IN CANAAN.

## II. Gideon's Wine-phess at Ophraif.

Opirah of the Abi-ezrites was certainly in westerm Manasseh (Josh. xvii, 1-6), although Josephus speaks of Gideon's preparing to cross the Jordan ("Ant.," v, vi, 3) in order to attack the Midianites in the valley of Jezreel. Lieutenant Conder in his "Handbook" states that this Ophrah is "probably the present village Ferata, near Shechem, the old name of which was Ophrah (Samaritan Chronicle)." Happily the identification of Gideon's famous city need not rest on this insufficient evidence, as
the details of the Bible story will, I believe, be found to fix the exact spot beyond all doubt.

We have to find in western Manasseh, which reached apparently from Issachar to a little south of Shechem, a place satisfying the following conditions :-
(1.) It ought to be suitable for vines, and perhaps to contain some old wine-presses; as Gideon was beating wheat in the wine-press. This would probably be in a vineyard on the southern slope of a hill.
(2.) There ought to be cliff near, since close to the wine-press was a Seleh (A. V. rock, Jud. vi, 20), i.e., a precipitous rock. Welcome again to this old friend, who has helped us before! On this sela Gideon apparently built the altar called "Jehoval Shalom."
(3.) There ought also to be a strong place, or fortress (A. V. rock, Hebr. manz, Jud. vi, 26), to which, I imagine, the inhabitants used to escape with their cattle in times of danger.

On it stood the altar and gave of Baal, which Gideon destroyed ; here too he built an altar unto the Lord (vi, 26). If (which seems uncertain) the two altars were identical, then the fortress must have stood upon the cliff.
(4.) There ought to be at least one ancient tomb, as Gideon was buried in the sepulchre of his father at Ophrah.
(5.) It ought probably to be not far from Shechem, as Gideon's concubine lived at the latter city.
(6.) It ought probably to be on the south side of Shechem, as Jotham took his stand on the southern Gerizin, and not on the northern Ebal.

Guided by conditions 1 to 4, I had in vain searched the country north of Samaria ; when however we turn to the Survey Map, to find some spot to which all the indicating lines 1-6 converge, we meet with complete success.

One and three quarter miles ( 5 ) south-west of Shechen, (6) is an elevated ( 2,508 feet) village named el Arak (2), i.e., the cliff. It is apparently marked as an isolated place perched on the precipitous extremity (3) of a narrow ridge rurning westwards from Mount Gerizim. As this spot most remarkably satisfies the conditions 2,3 , as well as 5 and 6 , I do not hesitate to recognize it as the muoz or fortress, if not also as the sela or cliff mentioned in Jud. vi, 20, 26. I venture to predict that when search is made on the spot, tombs will be found to satisfy (4), and possibly an old wine-press to suit (1), as vineyards seem in the map to be marked on the southern side of the hill.

In regard to Arabic, as I have not even the little knowledge which is proverbially dangerous, I abstain from discussing whether the name of Ophrah does, or does not survive in the ruin called Khurbet Aufarr, on the opposite hill, three-quarters of a mile south-east of el Arak. The memoirs will probably give some interesting particulas bearing on this identifcation.

The tower of Shechem, the hold of the House of the god Baal Berith and Mount Zalmon. The tower though not in was obviously near Shechem, so
that Jebel Suleiman ("Handbook," p. 210), four miles off, camot be Mount Zalmon, as Abimelech though willing once in a way to be a hewer of wood, would naturally demur to carrying his load further than wats necessary. It seems to me that Kahon ("Sinai and Palestine," p. 239) must be some part of Ebal. The curious ruin on whose summit ("Tent Work," i, p. 67) may well be the hold (a kind of tower) mentioned in Jud. ix, 46. An altar of Baal might as suitably have stood on the top of Ebal as of Camel.

I propose in the next number to give the arguments for placing the cave of Adullam at Khureitôn, and the rock Etam near it in Wady Urtas.
W. F. Binch.

## EMMAUS.

Finst of all, Khamésa, which has of late secured some votes ass the probable site of Emmaus, is at least 8 2 miles, as the crow flies, from Jerusalem, and by any possible road camot be less than $9 \frac{1}{d}$ miles from that city. The distance is therefore too great to tally with St. Luke or Josephus.

Now among the cities of Benjamin, Joshua (xviii, 26) speaks of Musah, as we read it, but in Hebrew דהם Hammosah, "The Mosah." Fuirst gives Musah the meaning "place of reeds," but it seems more probable that it is equivalent to $\mathbf{N} \mathbf{T} \mathbf{1} \boldsymbol{\sim}$, a spring. Be this as it may, the Talmud says that this Musah, or Mâza, is the place whence willows were brought to adorn the Altar at the Feast of Tabernacles, and this suggests a valley; and elsewhere again the Talmud says that it was made a colony. (See Caspari § 242.)

But Josephus tells us in the well known passage that his Anmaus was colonised by the assigmment of the place by Titus to 800 discharged veterans.

We have thus side by side these statements from totally different sources : first, that a place called by Joshua Hammusah became a Roman colony; secondly, that Ammaus became a Roman colony. Hammusah is therefore in all probability identical with Ammaus.

We now turn to the map. We find a well known place on the main road from Jerusalem to the west, called Kolonieh, manifestly from Colonia, and about a mile to the north of this, looking down on a valley which trends at that point south and west toward Kolonieh, a ruin called. Brit Muzza.

Here we have another linking of these two, Hammusal, the fountain, and a Roman colony, and we must be near the place we are looking for.

But now let us pass up from Kolonieh along the valley, under Brit Muzza, and pursue our way along the whole length of the valley (Wady Burwai) up to its head. We are then some three miles from Kolonieh, and
about a mile further, on the hill, in Kubeibet, which it is said the Crusuders were informed was the site of Emmaus.

Now the head of this valley is as near as may be 60 stadia from Jerusalem. And it would seem probable that the original Emmaus, or the principal part of its population, originally laid around the heal of the valley, giving its name, however, more or less exactly, to the whole : that this valley, and especially its upper part, was originally the colonice of the lischarged soldiers of Titus, but that as time went on the chief part of the population gravitated down to the Roman road, not at the nearest point to Jerusalem, but at the junction of the valley with that road.

Travellers from Jerusalem to the upper valley of Emmaus would not pass through Kolonieh, but wonld leave the main road about two miles from that place, and descend into the Wady Bŭwai just where the roads from Kolonieh on the left, and from Lifta on the right, converge upon it. At such a point as this we may well imagine that the two disciples encountered their veiled and risen Lord, and as they went along that upland path towards what was then the chief part at least of Emmaus, the fountains of a new life were opened out to them.

Joshua and the Talmud, St. Luke and Josephus, the traditions heard by the Crusaders, and the stern requirements of a modern survey fixing distances beyond possibility of mistake, seem all harmonised by the identification thus proposed.

## THE

## PaLESTINE EXPLORATION FUND

## NOTES AND NEWS.

We have great pleasure in announcing that all the instruments hnving arrived and been examined, and all preparations having been made, Lieutenants Conder and Mantell have crossed the Jordan and taken up their quarters for the present at Ain Hesban, where they have been joined by the Surveyors, Mesers. Black and Armstrong.

The Survey of Eastern Palestine has therefore been commenced in the south instead of the north, as was originally proposed. The change has been necessitated by recent disturbances in the Hauran. The second theodolite did not arrive in Jerusalem until June, and the Arabs were then fighting, so that it was then impossible to cross the river. Now, however, peace is re-established. This delay at starting shows that the difficulties of the Eastern Survey may prove to be greater than those of the west. Fortunately, the officer in command is experienced, and may be trusted to exercise prudence and tact.

A base-line has been successfully measured, and eight trigonometrical stations have been set up. The work has been conducted under great difliculties arising from the heat, the thermometer in the Jordan ralley standing at $118^{\circ} \mathrm{F}$. in the shade. Lieutenant Conder's first report from the eastern side, and his notes on the commencement of the work, with his proposed identification of Balak's Altar, will be found in their place, in Report VIII.

Among the topics touched upon in the other Reports will be found a very remarkable attempt at identifying Kirjath Jearim with a place called Khurbet Erma. The suggestion had already been made by Licutenant Couder, and is now followed up by a more careful examination of this ground. The name will be found on the great Map on Shect XVII. Lts reference in the Name Lists is (Kt), but it seems as if it should rather be (Jt). The ruin does not appear to hare
been visited by anybody before the Survey-it is not, for instance, on Guerin's map or on Vandevelde's, or Murray's. The arguments adranced by Licutenant Conder will be read with the greatest interest. Perhaps we have here a solution of one of the greatest topographical difficulties connected with the sacred narrative. His observations on Ai, Hebron, Gibeon, ete., may be advantageously followed by the light of the new map.

Licutenant Conder has made a copy of the inscription of the Pool of Siloam, on which Professor sayce sends a paper, which will be found in its place (p. 282). The copy was taken after Herr Guthe had cleared the letters by means of nitric acid. A cast has also been taken by Herr Paules, and is on its way to England. As regards the last, Lieutenant Conder writes, "I have been orer it with my copy, which agrees very well indeed with it. I see one more letter, but do not see anything to change my copy." M. Clermont Ganneau is reported to be working at the inscription. Another aqueduct has been discovered, rumning west from the Pool of Siloam, on the same level as the one previously known. This new aqueduct, when traced, may lead to important discoveries. It was found by some fellahin.

Since the publication of the last Quarterly Statement, the General Committee has been strengthened by the addition of two new members, namely, Sir Albert Snssoon, C.S.I., and Mr. Edward Thomas, F.R.S. They have also to lament the loss of four of their oldest and most valuable members, a notice of whom will be found on pp. 243-246.

The Reduced Map of Modern Palestine is now completed, having received the final corrections. The first edition will be issued on October 17th, after which date subseribers may expect to have their copies in order of application. They are reminded that the price to them is $6 s .6 d$ a copy, carriage free. To the general public it will be 12s., through all booksellers, or the agent, Mr. Stanford, 55 , Charing Cross. It will be issued in six sheets, including the title page in a paper cover. There is in preparation a list of Biblical names and their identifications, a copy of which, when ready, will be given with the map. But the first subscribers will probably have to wait a little for this list. It will also be given to every subseriber of the large map who wishes for it.

As regarls the two ancient maps, Mr. Saunders reports that the outline is engraved, and that they are proceeding with the names. We hope to have them ready very shortly.

For convenience of travellers and for library purposes, an arrangement has been made with the agent, Mr. Edward Stanford, for mounting the map. He undertakes to mount the map on strong cloth, and to place it in a case for the bookshelf or for travelling. The map in this form will be charged 11 s . fd , a copy, carriage paid, to subscribers, and 18s. 6d. to non-subscribers. For hanging purposes, he will supply the map on mahogany rollers at $16 s$. $6 d$. for subseribers, and $24 s$. for the general public. And he will make special arrangements if desired for a more expensive mode of mounting.

Two more volumes of the Memoirs, viz., the "Name Lists" and the "Special Papers," have been issued. The next is far advanced and will be ready in November. The remaining two will, it is hoped, be issued in January.

Enquiries have been made as to the price of the memoirs in separate parts. It must be remembered that only a small number of copics remain; arrangements have been made for offering these copies to libraries in Great Britain, America, Germany, etc. Should any remain when these have been supplied, they may be had in separate parts, as follows:-


Mr. Suunders has completed his delineation of the water basins on the map of Western Palestine, and has given it to Mr. Stanford, the engraver and agent of the maps, to be laid down on the reduced map, which can then be used to illustrate and explain his "Introduction."

It can also be laid down on the great map, but as the work will have to be done by hand, the cost of doing so will be no less than £5. On the reduced map it can be done by a double printing at a very small cost. In fact a shilling will corer it. It is hoped that any one who wants Mr. Saunders' "Iutroduction" (now in the binder's hands) will have the water basin edition of the reduced map.

A general Index to the Quarterly Statement from its commencement to the issue of this number inclusive, has been prepared, and is now in the printer's hands. It will be ready some time in Norember.

The Committee will be greatly obliged if subscribers will forward their subscriptions for the current year as early as possible. Arrangements for lectures on the Biblical Results of the Survey by the Rev. Henry Geary and the Rev. James King should be made as carly as possible.

The income of the Society from all sources from June 21st, 1881, to September 22nd, was 1,253l. 5s. 1d. The amount in the Banks on Tuesday, September 13th, was $451 l .4 s .9 \mathrm{~d}$. About $1,000 l$. will be required before the end of the year.

A Cheap Edition of "Tent Work in Palestine," has been published by Messrs. Bentley and Son. All the small illustrations which were in the Library Edition, and two of the full-page drawings, will be found in the new Edition, which has been carefully revised by the author. An additional chapter has also been added on the "Future of Palestine." The work will be read with greater interest now that the progress of the Survey may be followed on the Map.

It is suggested to subscribers that the safest and the most convenient manner of paying subseriptions is through a bank. Many subseribers have adopted this method, which remures the danger of loss or miscarriage, and renders unnecessary the acknowledgment by ollicial receipt and letter.

Subscribers who do not receire the Quarterly Statement regularly, are asked to send a note to the Sceretary. Great care is taken to forward each number to all who are entitled to receive it, but changes of address and other causes give rise occasionally to omissions.

While desiring to gire every publicity to proposed identifications and other theoriesadvanced by officers of the Fund and contributors to the pages of the Quarterly Statement, the Committee wish it to be distinctly understood that by publishing them in the Quarterly Statement they neither sanction nor adopt them.

## OBITUARY NOTICE.

The Society has experienced a rery heavy blow in the deaths, during the last quarter, of four of its oldest and most valuable friends. The first of these, Dean Stanley, was one of the Founders of the Society. He gave the use of the Jerusalem Chamber for the meeting, at which he was present, on May 12th, 1865, when the Palestine Exploration Fund was founded. At this meeting he was appointed one of a Sub-Committee, afterwards expanded into the Exccutive Committee, appointed "to draw up a statement of the general objects of the Association." The other two members were the Archbishop of York, and Professor Owen. The Honorary Secretary was Mr. George Grove. It was this Committee who drew up that very careful document, the original Prospectus of this Society. Dean Stanley frequently addressed meetings in behalf of the work, and never failed in his interest in the scientific examination of the country for which he had himself done so much in his great work "Sinai and Palestine." The last occasion on which he showed his sympathy and gave his assistance was exactly similar to the first. He lent the Jerusalem Chamber for the very important meeting, presided over by himself, at which the Survey of Eastern Palestine was resolved upon. At the moment of his death our party were just beginning their work across the Jordan. His words at the mecting were :-" When the Palestine Exploration Fund was first set on foot by my friend Mr. Grove, though I sympathised heartily with the proposal, I felt what Mr. Freshfield has expressed as his feeling also, that the point at which every effort ought to be directed, was the exploration of Eastern Palestine. Beautiful as the new map of Western Palestine is, and great as has been the light which has been cast upon the country by the explorations, that light is as nothing compared with the light that can be thrown upon the eastern district of Palestine. Of a!l the features of interest that struck me when I first went to Palestino-a feature altogether undescribed, and of which I had not the least
idea till I went there, of which no book of travel had given the slightest information-the most interesting was the constant view of the mountains of Moab, and the great wall of the east of Jordan. Wherever we went, that wall, rising up from the purple chasm which separated us from it, was a beautiful source of mystery and of tantalization, filling us with a sense of ignorance, and with a desire to hnow what there was beyond it, I feel pleased and delighted beyond measure that that desire is now about to be satisfied."

Among the bequests of the Dean is one to the Palestine Exploration Fund of a small collection of books on the Holy Land and Egypt. These are now on the shelves of our oflice.

We have also to record the death of the Rev. F. W. Holland, Vicar of Evesham, one of our Honorary Secretaries.

He joined the Committee, being then one of the Curates at Quebec Chapel, in November, 1866, and was associnted with Mr. Grove as Honorary Secretary. In 1868 he raised the Sinai Survey Fund and joined the party, which was commanded by Captain (now Colonel Sir Charles) Wilson, which accomplished that valuable piece of work. On being appointed Vicar of Evesham he offered to resign his post as Honorary Secretary, but was requested by the Committee to continue a connection which was never, in spite of his absence from London, nominal. Itis death was sudden, and happened on a mountain side in Switzer. land on August the 27th last.

Again, on the 11th of September, died Major Samuel Anderson, C.M.G., R.E., one of the Executive Committee, formerly one of our officers in Palestine, general editor of our maps, and always the constant friend, adviser, and upholder of this Society. The list of his public services is thus detailed in the Times of September 16th, and will help to show how great a loss our work has sustained:-

Major Samuel Anderson, C.M.G., of the Royal Engineers, who filled the office of Inspector of Submarine Mining Defences under the War Department, died at Dalliousie Grunge, Bonnyrigg, N.B., on the 11 th of September. He was in his 42nd year. Having received his professional education at the Royal Military Academy, Woolwich, he entered the corps of Royal Engineers as Licutenant in December, 1858, and in September. 1859, was appointed surveying officer to the

North American Boundary Land Commission, under Colonel (now General Sir John S.) Hawkins, who had the duty of marking out the boundary between Her Majesty's possessions in North Americu and the territory of the United States. From this duty Major Anderson returned to England in July, 1862, but was employed in London in completing the maps of the Commission till February, 1864. After various professional engagements, in June, 1872, in which year he was promoted to Captain, another Commission was formed, under Major Donald R. Cameron, R.A., who was deputed to mark out, in conjunction with a Commissioner on the part of the United States of America, the line of boundary between British and American territory from the Lake of the Woods to the Rocky Mountains, and to this Commission Major Anderson was appointed Chief Astronomer. In September, 1876, he was appointed Assistant Inspector of Submarine Miming Defences under the War Oflice, and in May, 1877, he was created a Companion of the Order of St. Michacl and St. George, in recognition of his oflicial services in North America. In 1879 he was employed for a few months as Mer Majesty's Commissioner for the demarcation of the frontier of Servia, and attained the rank of Major in the Royal Engineers in September of the same year. A short time ago he succeeded Lieutenant-Colonel Crossman, C.M.G., as Inspector of Mining Defences, which oflice becomes vacant by his death.

The following letter appeared in the "Times" of September 21st.
Sir,-Among your obituary notices on Friday last, September 16, occurred that of the late distinguished oflicer, Major Samuel Anderson, R.E., C.M.G. Will you allow me to supplement the list of his public services, there detailed, by the addition of those which he rendered to this Society during a period of 16 jears? Major (then Licutenant) Anderson was one of the two officers, the other being Captain (now Colonel Sir Charles) Wilson, who made a preliminary expedition through Western Palestine, with the view of ascertaining the best way to conduct the scientific and systematic examination of the country which this Society has since been carrying on. The survey of Western Palestine, now completed, and justly acknowledged to be the greatest contribution to Biblical illustration ever accomplished, is the outcome of that expedition, and will ever be associnted with the names of the two officers who led it. When, again, ten years ago, the committee thought themselves justified in beginning this great and costly enterprise, it was Major Anderson who sought among the younger men of his corps for one possessing the ability, knowledge, and enthusiasm necessary for the work, and found him in the oflicer who executed the greater part of the survey.

He has since that time always been ready to give, not only advice, but also time and active work, to the furtherance of the undertaking, and at the time of
his death was the editor of the New Maps of Western Palestine, which will henceforth form the basis of all writings and discussions on Biblical geography and topography. His latest work for us was the outfit and despatch of the new expedition, with which we hope to do for the last of Palestine what we have already done for the West.

> I remain, Sir, your obedient servant, JAMES GLAISHER, Chairman, Executive Committee.

Palestine Exploration Fund, 1, Adam Street, Adelphi, W.C.

Lastly, we have to record the death of the Rev. Samuel Mranning, LL.D., one of the members of the General Committee, and better known as Secretary of the Religious Society. His own work prevented hiun from actively aiding this Society, except when he was able to do so by speaking in its behalf. No one who heard his address at the Royal Institution some six years ago can fail to remember the cloyuen"e and fulness of knowledge with which he explained the value of scientific exploration.

## LIEUTENANT CONDER'S REPORTS.

V.<br>\section*{The Land of Benjamin.}

$$
\text { Gibeon, Ist July, } 1881 .
$$

Taking advantage of the delay occasioned by circumstances already referred to, we have revisited one of the tirst districts surveyed by the party employed in 1872, while under care of Mr. Tyrwhitt Drake, before my arrival in Palestine.

The chief points of interest include the questions of Rimmon and Ai ; the vicinity of Gibeon and the battle of Ajalon; and the ruins of Tellilia, and Deir esh Shebab, with some traditions commected with 'Tell' 'Asûr, and el Jib. \&c. The general result of our re-examination is satisfactory, insomuch as the nomenclature of the Map has been tested in many places, and found correct; while scarcely any ruins of even the least importance are found to be omitted ; all the really ancient sites and buildings having been plotted and described. This is specially satisfactory, inasmuch as the district is one of the most difficult to survey, on account of the ruggedness of the hills and the great depth of the valleys, while it was also one which was undertaken while the party were still new to the work, and unfamiliar with the archroology of the country.

The Rock Rimmon.-Until the year 18،!, it was generally agreed that this site, in the wilderness (Judg. $x x, 47$ ) where the six hundred Benjamites lived for four months after their defeat at Geba of Beujamin (Judg. xx, 10 and 33 ) was to be recogrised at the ancient village of Rummon, on the edge of the cultivated hill-country, overlooking the desert ranges, above the Jordan valley. It has now, however, been proposed to recognise a connection between this Rimmon rock (which may most properly be rendered "high rock" on the authority of (iesenins, and on other authorities) with the "pomegranate tree which is by Migron" (1 Sam. xiv, 2), Ha Rimmon asher bi Migron in the Hebrew, a site which it is unnecessary to say camnot be expected still to exist if the reudering "pomegranate tree" be correct, but which is to be sought in the vicinity of Wâdy Suweinit (the valley of Michmash), to the cliffs of which the term Migron "precipice" appears from another passage to apply (Isaiah x, 28).

Those who support this view point to the large cave in Wady Suweinit called Mugharet el Jaî as the possible refuge of the Benjamites, and eonsequently to the precipice in which it occurs as the true Rock Rimmon. Having now revisited and carefully examined both this cave and the village of Rummon, I send you the following results.

Before describing the sites, however, it is necessity to take note of the word Sel'a, rendered "rock" in the English version. It is a term of
frequent occurrence in the Bible, and is rendered almost invariably rock. The Rev. W. F. Birch, in writing on Rimmon ((quarterly Stutement), 1879, p. 127) states that the term "always means a precipitous rock, i.e., it cliff," and this has been urged as an objection to the identitication of Rummon with Sela Rimmon. The quotations which he gives (p. 129) are, however, scarcely sufficient to prove that $S_{e} l^{\prime} a$ should be rendered precipice. Gesenius gives its radical meaning as signifying "High place or place of refuge," and the Septuagint translators, who may be supposed to have known the contemporary use of the word, render it by the Greek $\pi \in \tau \rho a$ a stone or rock.

There are also pasiages in Scripture where the term can scarcely be understood as meaning a precipice, as in Psilm xvii, 2, "The Lord is my rock" or Psalm xl, 2, "Set my feet upon a rock," for David cannot be supposed to mear " set my feet upon a precipice" - a position hardly to be considered as one of safety and comfort.

The arguments in favour of the site proposed by Mr. Birch (Mugharet el Jaî and the south cliff of the Michmash valley) are the following: 1st, the identity with the pomegranate tree, supposed to have existed at or near this spot, but no longer to be found; while the name Rimmon no longer occurs in the vicinity; 2nd, the existence of a cave reputed to hold 600 men, which cave, however, is not mentioned in the Bible; 3rd, the existence of precipices, which may represent the Rock, or Sel'a, although, as shown above, the Hebrew word has not the meaning of precipice.

The present village Rummon stands in a conspicuous position, at the end of a high narrow ridge which runs out south from the village of 'Tayibeh. The houses stand on a rounded knoll of hard rock, very similar to that on which Beit 'Atâb (the Rock Etam according to my view) is built. On the west the rock is specially steep, with low cliff's or steps, sonke 10 feet high in places. On the south are several rude caves used as cattle stables, and callerl Shukif Jiljal ; there are other small caves under the houses on the east. The village consists of straggling cottages of stone, supplied by ancient cisterns. There is a ruined tank on the flat top of the knoll. On the north is a small plateau with olive groves, on the west are some caves and rock-cut tombs. The site is evidently ancient, and is of great strength, as deep, narrow valleys occur on three sides, so that it is only easily rached from the north. On the east are the gorges and inaccessible precipices of the great ravine which runs from Taiyibeh to the Jordan valley. From the rocky hill top a fine view is obtained southwards, extending to Jebel Fureidis, south of Jerusalem, and including Tell el Fal, Jeba' (Geba of Benjamin) and er Râm, and on the north Taiyibeh and 'Tell 'Asur are visible. This site I afterwards induced Dr. Chaplin to visit, and he agreed with me that it could not be more correctly described than by the term Sel'u, a rock, a high place, a stronghold, or place of refuge. Here, then, on a rock close to the edge of the Midbar or pastoral desert which extended east of Bethel (Josh. xviii, 12) we find the name Rimmon preserved unchanged, in a form which has no meaning. in Arabic, but which in Hebrew properly describes the site as "high."

We must now turn to the question whether the cave called Jai, is likely to have any connection with the rock called Rimmon. The position and character of the cave have been very carefully described in a former paper by Mr. H. B. Rawnsley, and I can only add the results of a careful survey of the interior (see Quarterly statement, 1879, pp. 118-129 and 170-171). Mr. Rawnsley's plan, though rough, agrees fairly with the Survey now made, which was executed on main lines laid down with magnetic directions, with numerous offsets. This Survey enables us to calculate very closely the area of the cave.

Mughâret el Jâi is excavated in a precipice some 40 feet high, on the south bank of Wady Suweinît, east of Jeba' (Sheet XVII) and about a quarter of a mile east of the small hidden spring (Ain Suweinit) which is on the top of the precipices, but accessible by a path down a steep slope, which occurs west of the two bluffs, one called el Mehour (" the place of holes") in which is the cave, the other el hobu' (apparently "the helmet") immediately west of the former. The cavern is entered from the north-east, and is hidden from the west by the projecting blufis. Beyoud it is a second cave, to which I obtained the name Abu demal, the entrance to which, partly closed by a rude wall, is quite inaccessible, being some 20 feet from the foot of the cliff. This second cave faces northwest, a recess occurring in the precipice between the two caverns.

The rocky slope at the foot of the cliffs is polished by the bare feet of shepherds and the hoofs of goats, and an explorer shod with boots is in great danger of sliding down towards the stiff slope which falls perhaps 300 feet to the rocky bed of the ravine. On the north rise cliflis and bluffs equally barren, and also burrowed with caves.

The gorge is as solitary and desolate as the well known kelt valley, which it joins further east; and is inhabited by the black grackles, the rockdoves, and desert partridges ; while the sage-hushes, the thoruy bellan, and a few scattered Kharabah trees form the only vegetation. The guide who accompanied us seemed much impressed by the awful silence and desolation of the great valley. He muttered constant pravers to the Moslem saints for aid, and sat in the great entrance-hall of the cave, and refused to come further. He became much alarmed when we disappeared in the dark; and afterwards, when the light of a magnesium torch shone in the distance, we could hear him calling to us as we penetrated yet further into the darkness, and he gravely stated that the great passage led to Jerusalem, and that if we walked from dawn till eve we should not come to the end.

But although the site is impressive, the catve itself was disappointing. It is not like the famous Khureitun cavern, a network of halls and passages, but simply a large cavern, with a narrower gallery leading upwards and returning with a stiff descent to a second entrance visible in the cliff, west of that now accessible. Why the advocates of a Rock Rimmon in this vicinity sbould have pitched on this particular cave it would be difficult to understand, seeing that there are many other caves along both sides of the valley, were it not that they appear to rely on the statement of the fellahin that this cave will contain $6(0) \mathrm{men}$, and that 16 flocks of 100
sheep have been folded at one time in its main chamber. The Survey shows that the total area of the cave and its branches does not exceed 970 square yards, while the main chamber is about 500 square yards. Thus if 1,600 sheep were ever crowded into this chamber they must have stood half of them on the backs of the rest, as more than 3 sheep could scarcely be packed into 2 square yards.

In the same way, allowing 6 feet by 3 feet for a man, if the 600 Benjamites lived and slept in this cave (even including the branches which are low and pitch dark) 120 of them mast have lain above the rest (which is improbable). I am therefore mable to agree with Mr. Rawnsley that "three hundred could perhaps find ample accommodation," as even this smaller number would necessitate the supposition that for four months they were packed twice as thick in this dark cavern (without ventilation) as soldiers in barrack rooms, which, however carefully ventilated, are still unpleasantly crowded at night.

Thus the only remaining argument in favour of this site-that it is a cave capable of containing tiromen, vanishes before the results of careful survey, and we are left to choose between a rock where the name Rimmon still exists, and a cave in at cliff which will not hold the mumber of fugitives mentioned in the story, and has not any connection by name with the topography of the episode, and is not mentioned in the Bible.

The cave appears to be mainly natural, formed probably by the action of water, and pussibly enlarged by man. The floor is covered with the dung of sheep and bats, a few of the latter being encountered, while a goat's skull lay at the end of the passage which once communicated with the second entrance. The roof of the main chamber is blackened with smoke. The branches have lower roofs and are quite dark. There is nothing remarkalle in this cavern, which resembles many others visited by the Survey-party, some being much larger. Both sides of the valley have many similar caves of various dimensions, mostly inaccessible. In almost every case they appear to be traditionally connected with the Christians, aud a comparison with similas caves near Mar Sâba, in Wady Kelt, and on Jebel Kŭruntŭ, seems to show that whether or no they were originally natural, they have been enlarged by the hermits who, in the 5th and 12th centuries, retired to these fastnesses and lived and died in the caves.

In searching for the name Rimmon at this spot, Mr. Rawnsley collected many titles applied to suroming features, some of which were new. These local names are specially numerons in the desert districts, where the Arabs have no landmarks other than those formed by natural features, and we recovered no less than thirty similar names in one valley near Taiyibeh.* They do not, however, as a rulo, appear to be very ancient or of

* The same peculiarity of the much greater number of names applied to natural objects in pastoral districts, as compared with those in the settled or agricultural districts, is observable in the British Ordnance Survey. The surveyors, I am told, in the highlands find among the Gaelic shepherds that every feature has a well known name, and the number thus collected is much
any special value, but can easily be recognised as describing the peculiarities of the features to which they apply in the present case ; while some of the names are evidently genuine and well known, others are differently given by different guides and are extremely doubtful. The following are the names collected in a length of about $1 \frac{1}{2}$ miles along the course of Wady Suweinit.


## I.-North side of Valley going East.

1. Ev' Aleiligat, "the upper chambers," hermits' caves. See Sheet XVII.
2. El IIosn, "the fortress," hermits' caves with windows in cliff.
3. El IIosn, "the fortress," another group in same cliff $\frac{1}{2}$ mile E. It seems that the name must apply to the whole cliff.
4. 'Arakesh Shimar," "Partridges' Cave," above No. 1.
5. El Jerjameh, "place of the Cairn," above No. 3.
6. Shich el Hati" the walled spur," a narrow spur of rock like a wall with ravine behind.
7. Whallet er Rakib, "monks' dell," above this ravine.
8. Kurnet el Futkeint, "peak of two clefts," a cliff.
9. 'Arakk el W'ar, "cave of rough rocks," above No. 8.
10. 'Arak (or Shakif) el Akhdeish, "Cliff of the Scratch."
II.-South side of Valley going East.
11. Kal"at Abu Damas, "Castle of Damus," a large cave opposite No. 1. See Survey, Sheet XVII.
12. Khallet el Ilaiyeh, "dell of the snake," from a ruin of same name south-east of it.
13. 'A in Suweintt, "spring of the little Acacia."
larger than in the Lowlands, where the country is divided into fields, and the roads, villages, and buildings form landmarks which do not exist in the moors. I believe that the same rule applies in Palestine, as we have always collected more names (though fewer of value) among the Bedawin than among the Fellahin. In the vicinity of Shechem, Jerusalem, and Hebron, there are, howerer, unquestionably a great number of names, applying to hills and valleys, although for the most part they appear to be of little value to the archecologist, and are often indisputably modern.

In connection with this question I may mention a very interesting conversation with Mr. S. Bergheim, of Abu Shusheh. He quoted to me several instances in which, within the last ten years, the peasantry in the above village had changed the names of various plots of ground, and small valleys, in consequence of local events. Thus a hill formerly known by another name is now called by that of an Arab found murdered on the spot. This fully accords with the survey experience, and it appears necessary to distinguish between the true nomenclature attaching to villages, ruins, springs, and spring wells, and the secondary local nomenclature of small natural features which appears to be of modern and rarying character.
14. El Kol'a, from a root meaning " domed," a cliff.
15. El Meh'ant;, "the place of holes," cliff with caves.
16. Mugharet el Jai. The meaning is unknown to the Fellahin.
17. Mugharet Abu Jemal, "Cave of Camels."

The only names of any interest in this long list seem to be Nos. 1, 2, 7, 11, 13, 16, of which only 7 and 13 are omitted on the Survey, Sheet X VII.

The name Jaii (16) appears to come from the same root as the Hebrew Gai, and the Aralic deveh, has the same meaning as the Hebrew Gai, viz., "a place where water collects." It has been suggested above that it was by the action of water that the cavern was originally formed, but it is perhaps more probable that it should simply be rendered "cave of the ravine," in allusion to the side ravine which runs into the gorge immediately east of the cave or to the main valley itself.

In consequence of the assmmption that the 600 Benjamites lived in a cave, and that this cave was Mujhâret el Jâi, the cavern has been awarded an undue amount of importance, for there are many other caves of greater interest in Wady Sinweinit (especially Nos. 1, 2, and 11), though unfortunately they are for the most part inaccessible.

In these, perhaps, the mysterious Essenes dwelt long before the Christian hermits, and probably among them we may recognise the "Caves and rocks, and high places ('Alali) and pits" (I Sam. xiii. 6) in which the Israelites hid from the Philistine garrison of Geba.

The most important in appearance of these is the cave in the great cliff called el Hosn, " the stronghold," which cliff appeats to be the Biblical Bozez as mentioned in "Tent-Work in Palestine." After visiting the Mughâret el Jâi I attempted, in company with Mr. Armstrong, to reach this other cave, climbing down about 600 feet and ascending some 200 feet on the north side of the gorge. Here we found ourselves at the foot of a cliff at least 100 feet high and seemingly inaccessible. Near the top were the little windows which seem to belong to a chapel, but the caves at the foot of the cliff which we had hoped to find connected with this upper story proved to be only shallow excavations blackened by smoke.

We now attempted to reach the windows by climbing the precipice, and for this purpose I took off my boots and clambered over a high ledge slippery from the naked feet of former climbers, and found myself on a broad platform extending to the Aleiliyat caves on the west. Above this was another cliff some 20 feet high, which I was able to climb without great difliculty, reaching a second narrower terace. The next cliff was apparently quite inaccessible, but I found in it a fissure half filled by a bush, and using my shoulders against the sides of the crevice I succeeded in gaining a yet higher and narrower ledge. Walking eastwards along this I endeavoured to reach the windows, which were hidden by in intervening buttress of rock. I found, however, that the ledge terminated in a vertical cliff, and that I was now higher than the windows, although not yet at the very top of the cliff. Descending again to the next termace, I joined my companion, and we again tried to reach the cave, but found that there was no foot-hold on the cliff. We were thas obliged to abandon the
attempt when within a few yards of our object, and after a very fatiguing climb. We marked the spot which we reached with a sheet of white paper, and descending to the bottom of the ravine climbed up the south side, visiting another small cave in a cliff. On gaining the top of the southern precipice, much exhansted by our efforts, we looked back at the white sheet of paper, and I was surprised to find that I had climbed the whole cliff with exception of the highest ledge, which did not appear to be more difficult than those summounted.

The interest of this escalade lies in the fact that the cliff of el Hosn is probably the rock Bozez, up which Jonathan climbed " upon his hands, and upon his feet, and his armour-bearer after him" (1 Sam. xiv, 13).

The position of the Philistine camp near Michmash is carefully described by Josephus, in a manner which strikingly recalls the clifl of el Hosn, and it seems possible that in the name Hosn, or "Stronghold," may linger some reminiscence of the ancient history of the spot. The descent of the clifi' Seneh is not mentioned as specially diflicult in the history of Jonathan's adventure, and the fact that the Survey party once brought their horses down this side of the gorge shows that though apparently impassable, a comparatively easy descent can be found. I had always, however, supposed that it would be impossible to climb up the northern precipice, and Mr. Rawnsley has recently suggested that Jonathan reached the top by the Shab et $I$ tuti, a steep but quite practicable ascent.

The objections to this view seem to be that this approach would no doubt have been specially guarded by the Philistines, and, moreover, that Jonathan would not have been obliged to climb on his hands and feet, as stated in the Biblical account. It was no doubt the audacity of the attempt, and the appearance of the enemy at an apparently impregnable point, that spread such panic among the Philistines, and in searching for an entrance to the hermits' caves, I unconsciously proved the possibility of scaling the cliffs, perhaps at the very point where Jonathan himself ascended. Above the precipices a stiff slope of perhaps 2 Co feet or more leads to the flatter ground near the summit, and if the Hebrew champion at all approached the modern Arab in his powers of endurance, there appears to be nothing impossible in his being fit to fight when he reached the top of the mountain.

In riding from our camp at el Jib to the valley of Michmash, we passed throngh Jeha, and as questions have at various times arisen respecting the view from this village, I carefully recorded the places visible. There is high ground immediately north of the houses, almost level with the top of the central tower, and the view is here the same obtained by In. Chaplin when standing on the tower itself, but as the position of the village is not high compared with the surrounding ridges, the panorama is much less extensive than seems to have been supposed. From Jeb'a (2,220 above the sea) are seen on the north, Rummon, Mukhmâs (Taiyibeh being hidden), Tell 'Asir ( 3,300 ), et Tell, Deir Diwân (2,570), Burkah and Kefr 'Akâb: both Beitin and Bîreh are hidden by intervening hills, though the gardens of the latter can be seen.

On the west, er Ram is completely shut out by the crest of its own hill, although 400 feet higher than Jeb'a, on the south-west Tell el Ful $(2,754)$ stands up against the sky-line, and the ridge near it entirely conceals every part of the Jerusalem plateau; as a section along this line would show to be necessarily the case. Hizmeh (2,020), and 'Anâta (2,225) are visible, but the ridge of Râs el Meshârif (2,900) conceals the buildings on Olwet (2,700). A portion of the Dead Sea is visible on the east, but the view from er Râm is much more extensive than that from Jeb'a.

Aî.-From our Taiyibeh camp in company with Dr. Chaplin and Lieutenant Mantell, I made a thorough investigation of the vicinity of Bethel and Michmash. It has been advanced by uther writers in the (uarterly stitement that the term beside (Josh.xii, 9), intimates that Ai was close to Bethel, while the same may be deduced from the description of Abraham's altar, "having Bethel on the west, and Mai on the east" (Gen. xii, 8). For this reason the site proposed by Lieutenant Kitchener (Khŭrbet el Hâi, south-east of Michmash) appears unsuitable, being at a distance of six miles south-east of Bethel, and therefore not likely to be mentioned as detining the situation of the mountain east of Bethel, and not properly describable as "heside" that city.

It is curious to note how many places there are in this district to which the name Iraiyeh ("living animal" or "serpent," according to the termination) is aplied ; 1st, Kharbet el Hayeh, south of Wady Suweinit ; 2nd, Khŭthet el Haii, north of the same; 3ril, Khŭrbet Haịan; 4th, Khurbet, Ditr, Haiyeh, further north ; 5th, Wady Abu Haiyât, east of the latter. None of these have, however, the exact form of the Hebrew Ai (Tת), though the Me may perhats take the place of the Hebrew guttural Ain.

Khŭrbet Hâi is an insignificant ruin, apparently a shepherd's hamlet, with caves and foundations of ruined cottages. It has a large cistern on the hill above it, and enclosures walled in with large rude blocks, which are often found round the village threshing floors. The natives of Mukhmâs say that this was formerly a village belonging to them, and inhabited by Moslems.

The site which appears most probably to represent Aî, is the important ruin of Haiyan, immediately south of the curious hillock called et Tell. The vicinity has long been recognized as the approximate locality, but the ruins were first described by the Survey party.

The mound of et Tell with its terrace walls of rude stones, and its conspicuous group of olives, is a natural feature modified by the construction of the terraces. It does not appear to have been the site of a city, and only a single cistern has been found there. It is, however, only half-a-mile distant from Khurbet Haiyan, and the arguments which were brought forward by Vandevelde, Colonel Wilson, and others, apply with even greater force to the site at Haiyân. There is a deep valley to the north (Josh. viii, 1l), such as would be called Gai; there is an open plateau on the east, which may perhaps be intended by the "plain" ('Arabah, Josh. xii, 14); and there is a valley on the
west (Wâdy el Medinet), which may have afforded concealment to the ambush sent by Joshua from Gilgal (Josh. viii, 3) before he marched up to Aî himself (verse 10), supposing that this force of 30,000 men advanced by the ouly really practicable route, which leads from Jericho to the vicinity of Michmash, and reaches Haiyin on the south-east.

The mins of Haiyan will be found fully described in the memoir to Sheet XVII; they include several large tombs on the south, three fine rock-cut tanks (the largest in the district), and a number of rock-cut tombs on the north. The site is now covered with olive gardens, but the name is well known to the villagers of Deir Diwân, a Moslem village immediately north of the site.

From Haiyân we followed the oid road westwards to Bethel. On this road there is a curions construction of rude stones on the ridge some 300 yards west of et Tell; it resembles one or two other similar foundations to be found near Bethel, being apparently solid, about 10 feet square, of rude unshaped blocks 2 to 4 feet in length. There are three courses standing, and the building might be taken for an altar (which would be of the highest interest in such a situation); but its. position by the roadside more probably indicates that it is a small watch-tower, such as are frequently found on Roman roads.

We paid three visits to the vicinity of Bethel with the view of examining the supposed circle of stones said to exist near it. We were, however, unable to arrive at any other conclusion than that the curions rocks photographed by Colonel Wilson are natural features ; and although Dr. Sepp speaks (I believe) of a rude stone circle, I was unable to find any such monument after searching the entire vicinity. The rocks called ol Küla'h are very remarkable features, and might at a distance easily be mistaken for remains of an ancient monument, but they are not detached from the mass of the mountain, and are not arranged in any particular forn.

It is worthy of notice in this connection that the plains of Jordan and the north end of the Dead sea are clearly visible from the ridge between Beitîn and Haiyân, where Abraham's altar would probably have stood (Gen. xiii, 10). Thus the crusading monastery of Burj Beitin, and the neighbouring chapel of el Mukitir, no doubt represent the traditional sites of this famous altar in the 12th and 5th centuries respectively.

Gibeon.-Our camp has been fixed at this famous city for ten days, and we have carefully examined the site of the ancient town. El dîb, the modern village, occupies the north end of a detached hill some 200 fett high, surromoded by broad flat corn valleys on every side. The inhabitante state that the old city stood on the south part of the hill, and here in the sides of the natural scarps which fortify the site we have visited and explored some 20 rock-cut tombs. There are eight springs on the hill, the largest, on the last, being one of the finest supplies of water in this part of Palestine. One of the springs is called el Birkeh, and flows out into a rock-cut tank measuring 11 feet by 7 feet, the
water issuing from a small cave. This place is south-west of the village, and close to the main east and west road through Gibeon. The pool is cut in the face of a cliff, and has a wall of rock about $3 \frac{1}{2}$ feet high on the west. Above it grows a pomegranate tree, and near it are ancient tombs in the cliff.

tibe pool in oheron.
The reader will remember the dramatic account of the meeting between Joab with David's followers, and Abner with the clansmen of the house of Saul (2 Sam. ii, 13) ; how they sat oue on oue side, the other on the other at " the pool in Gibeon," and arranged the fatal duel between the young men who were bid to "arise, and play before us." The Hebrew word describing the pool is the same as the modern Aralic Birkeh, and the apparent antiquity of the ancient tank fed partly by rain water, partly by the little spring in the cave, seems to countenance the idea that we here find preserved one of the lesser sites of the Biblical narrative, the recovery of which lends so much force and reality to the ancient narration.

It is possible, however, that the great spring ('Ain el Belled) is the place iutended in this episode, as it wells up in a chamber some 30 feet long and 7 feet wide, reached by a descent of several steps. This cave resembles very closely that of the Gibeon spring (Virgin's Fountain) at Jerusalem, for there is said to be a passage with steps leading up from
the back of the cave to the surface above. As the water is some 5 feet deep, and the passage is now stopped up, we did not attempt to enter it. It is, however, clear that a door of some kind once existed at the present entrance to the cave, and it would appear that the inhabitants of Gibeon were thus able to close their spring below, and to obtain access to it from above within the city.

The spring in question, like many of the famous fountains in Palestine, is held sacred by the Fellâhin. An earthenware lamp is occasionally lighted in the chamber, but at other times the peasantry say that supernatural lights and smoke are seen within, and that a Neby or Prophet inhabits the cave. Close by is a little rock chamber with a rude masonry wall. It is plastered inside, and in one of the niches of its rock sides we found some sardine tins containing offerings of pomegranate flowers and young figs, while pottery lamps are placed in others. This Muktum is called Jamia' el Burideh, and near it above the spring is a small platform for prayer. The villagers may often be seen praying here, and great consternation fell upon the women who drew water when they found the sacred grotto of the spring full of dense white smoke some few days since. It was not, however, in this instance the action of the presiding genius, descending to punish the peasants for allowing Franks to enter the sacred cave, for the smoke was the result of burning a magnesium torch for the better investigation of the dark interior.

It is worthy of remark that the older the site of a village in Palestine, the more numerous and venerable are the sacred places now recognized by the Fellâhin of the spot. At Gibeon we have but one instance of that reverence for living water, which is so marked and so natural a feature of the ancient Asiatic religions, from the Ganges to the Nile. The niches which once held perhaps statues of the genii of the springs, are still to be found at Baniâs, Jericho, Shechem, Yasuf, and in other places where five fountains occur. Springs, trees, stones, and mountain tops, form the central objects of the Fellah cultus not less than of that of the ancient Canaanites.

From Gibeon we visited among other places the Nether Beth Horon, where a treasure trove was reported some little time since, which proved, however, as in so many other cases, to be an exaggerated version of the discovery of a small rock tomb. We ascertained the correctuess of the position of Khŭrbet Dâriah, which I have proposed to identify with Ataroth Adar (Josh. xviii, 13), and although scarcely a trace of a ruin exists we found the name to be well known among the peasantry.

In returning I was reminded of the eloquent description given by Dean Stanley of the defeat of the Canaanites by Joshua, and the pursuit from Gibeon to Ajalon. If, however, we are to apply strictly the words of the book, we must seek a place north of Gibeon, and in sight of the Valley of Ajalon (Josh. x, 12). In such a position we should imagine Joshua to have stood when he spoke the words, "sun stand thou still on Gibeon, and thou moon in the valley of Ajalon." If the sun stood still " in the midst of heaven," it was of necessity visible in the south,
while the moon cannot have been (as picturesquely described by Dean Stanley) a crescent, but must have been in the third quarter on account of its relative position to the sun.

It may be noted that there is a position on the ancient road from Gibeou to Bethoron, which fulfils these requisites, for on the hill east of Khŭrbet el Lattâtin, a view is obtained down the ravine of Wâdy Selmân, while Gibeon and the high place of Gibeon (if at Neby Samwil) are visible on the south.

Within the village of el Jib, Lieutenant Mantell has recently discovered the remains of a small crusading church. The place is called e Keniseh by the natives, but the building is now converted into a house, and the plan is scarcely traceable. The nave appears to have been 22 feet wide by 40 feet long. No apse is now visible, but the west wall, with an orial window, exactly resembles that of the erusading church at Taiyibeh.

Ebenezer.-We have also taken this opportunity to visit Khurbet Samwil, which Mr. Birch proposes to identify with the stone erected by Samuel ( $\mathrm{S}_{\mathrm{i}} \mathrm{m}$. vii, 12). Some foundations, caves, and rock-cut cisterns exist here, and near it on a high knoll is the ruined fort called el Burj, which seems to be not earlier than crusading times, even if as early. No monument of the kind required now exists on this spot, and it appears probable that the name is derived from the proximity of Neby Samồl. The identity of the latter with Mizpeh, as proposed by Dr. Robinson, has been disputed mainly on account of a passage which appears to place Mizpeh on the road from Shiloh to Jerusalem (Jer. xli, 5-7). The topographical notices of this important place are otherwise so vague, that it seems impossible to decide between the two high places of Nob and Gibeon, to one of which the name Mizpeh appears to have applied. The ideutitication of Shen with Deir Yasîn was mentioned to me in 1874, by Dr. Chaplin. As regards Ebenezer, the only point which is clear is that the early Christians believed Deir Abân to mark the site. This I found in 1876 in reading the "Onomasticon." It appears to have been also independently recognised by M. Clermont Ganneau, although I have been unable to find any publication earlier than 1877 , in which he announces his discovery. No doubt other readers of Jerome's works must have formed the same couclusion, although Robinson appears to have overlooked it.

Roman Camp at Tellilia.-The hill east of Wâdy Beit Hannina, which is a spur of the Neby Samwil ridge, terminates in a rather steep slope, and on the end of the spur is seen what appears to be a grigantic cairn of stures ; a careful examination, however, proves that this is a quadrangular enclosure built of unhewn stones without mortar.

The area measures 190 feet north and south, by 13.) feet east and west, and the labour entailed in its construction must have been enormous. The interior is sublivided iuto three by two walls, running north and south, while cross walls form side chambers about 37 feet by 40 feet along the sides of the enclosure. On the outside is a slope formed of loose stones,
which though partly due, perhaps, to the falling down of the walls, seems to have been intended to strengthen the fortification with an outer scanj). No well or cistern is visible inside, but there is a large cistern on the hill 200 or 300 yards to the west. The walls are still standing some 15 feet above the ground outside the structure, and 6 or 8 feet above the interior.

Such rude stone buildings are generally considered among the oldest remains to be found in Palestine. The stones used are, indeed, not much larger than those employed in building terrace walls, but the work seems too important to have been executed by the Fellahin for a cattle fold, and the position commands the junction of two important roads, both showing signs of antiquity. That on the west comes down from Neby Samwil, and that on the east follows the valley from el Jib; the two join on the south and ascend theuce to Jerusalem.

The conclusion which seems most natural is that Tellilia (" the little Tell") represents a camp constructed by one of the Roman armies (either of Titus or Severus) in advancing on Jerusalem. The whole structure resembles the Roman Camps which exist almost untouched at Masada ; and in a mountain district where earth was not to be found in sufficient quantity it seems that the Romans were obliged to use stone.

This discovery at Tellilia serves to confirm a conjecture which has often occurred to me, that the great stone heaps north of Jerusalem, and west of the Nablus road, represent the remains of the camp which Titus constructed on Scopus. The plan of a camp can in this case no longer be traced, but the long line of stone-heaps called Rujm el Kehakir has an appearance very similar to the rude scarp at Tellilia-a work which must have entailed the labour of a large body of men, and the collection of materials from a considerable area.
'Alali el Benat (" the towers of the maidens"), east of Kilia (Sheet XV), in the great gorge of Wady Simieh. Mr. Black has recently explored a curious hermits' cave with three cisterns. It is reached by a narow stair of rock in the face of the precipice, and it presents the same peculiarity found in several of the caves of Wâdy Suweinit, \&c., namely a little gallery leading to a window in the rock at a higher level than the cave-mouth, from which the anchorites were able to reconnoitre anyone approaching their abode.

Deir esh Shebab.-Although this site, representing a mediaval monastery north of Bethel, has been more than once visited, it is curious that the front has never been noticed. It is hewn out of a siugle block, and is of the usual form,-a cylinder hollowed within, in form of a cross composed of four semicircles on four sides of a central square. Other examples occur at Jufna, Tekoa, Khŭrbet, Zakariya, and near Beit Jebrin.

Deir esh Shebab, "Monastery of youths," possibly represents a traditional site of the "School of the Prophets" near Bethel. The ruins are described in full in the memoir.

Tell 'Astr.-This mountain (which is generally called el 'Asut or al Aser by the natives) has been identified in an apparently satisfactory
manner with the ancient Baal Hazor, or Baal of the "Enclosure ;" and it now appears that the mountain is still a sacred place. There is no building on the summit, but a fine group of oaks; the remains perhaps of a sacred grove, such as is still to be found venerated among the Nuseireh Pagans. During our recent visit to the cairn constructed on this hill (one of the highest points in Palestine) in 1872, and which we found still standing, Dr. Chaplin, who accompanied the party, was informed that there was a cave, sacred to Sheikh Haderah, at the place. This name preserves the Hebrew Hazor in the usual Arabic form with the Dad. I am also informed that the Moslems of the vicinity are in the habit of making vows to the Rijal el 'Asawir, or "Men of 'Astr," whom they now call Companions of the Prophet. It seems, therefore, that, although no modern shrine or ancient stone temple now exists (the vineyards haviog crept to the very top of the hill), yet traces of the old Canaanite worship are still recognisable on the spot among the moderu Fellâhin.

Felluh traditions. - The collector of such traditions has to contend with many difficulties. In 1874 a good many stories, which were rude imitations of the Biblical narrative, were collected at Sur'ah, in connection with the tomb of Neby Samit, who is variously represented as having been identical with, or brother of Shemshatn el Jebbar. We have only just returned from a three days' visit to this village. We were told the stories of the defeat of infidels by this hero, ammed with a camel's jaw-bone instead of a sword, of his death under a great building, of his being betrayed by a woman, but we also found that the village for many years has been owned by a Christion from Beit Jala, and the peasants at once confessed that they knew nothing of Neby Sâmit before the new owner told them who he was. In the same way at Taiyibeh, we were told that the old name was 'Afrâ, and that it was the city of Gideon. This tradition is derived from the Latiu priest, who has thus instilled erroneous ideas into the Fellah mind, as, even if it were certain that Taiyibeh represents Ophrah of Benjamin, it certainly could not represent Gideon's city Ophrah of Abiezer, which belonged to Manasseh (Judg. vi, 11-15), and wis probably the Samaritin Ophrah, now called Fer'ata, not far from Shechem.

It is, moreover, another cause of difficulty that the traditions of the peasantry are rapidly being forgotten, as are those of the Samaritans. The young men do not know the stories which can occasionally be extracted from an old man or woman. At Abu Shôsheh, Mr. Bergheim, in the winter's evenings, has had many such stories related to him by an old sheikh, now dead, including' the plot of the "Merchant of Venice," and that of "Pericles, Prince of Tyre," both slightly altered and orientalised. In the first story it was a father-in-law, who exacted the pound of flesh in case of the husband quarrelling with his wife, and the wife who invented the limitation that no blood should be drawn. This tale the Sheikh had heard from his father. Possibly it may have come down from the twelfth century, but when we consider how modern research has traced the fairy tales of Europe to the East, and found

Cinderella's glass slipper in India, there seems no very great improbability in thus recovering in Syria the stories-much older than the time of Shakespeare, on which he founded the plots of two of his plays.

## VI.

'Ain Karim, 14th July, 1881.
Kirjuth Jearim.-We have just returned from a long vide to Khŭrbet 'Erma, which, in 1878, I indicated as possibly representing the important town of Kirjath Jearim, and our ohservations at this spot, which I had not previously visited in person, seem so materially to confirm the identification, that it may be of interest to recapitulate the arguments published on various occasious in the Quarterly Statement, and to describe in full the existing remains.

Kirjath. Jearim is first mentioned in the Book of Joshua as identical with Kirjath Baal, a town of Judah (Josh. xv, 60). It was on the houndary between the tribes of Judah and Benjamin (verse 9), and from the peculiar expressions used in the description of the border line (Josh. xviii, 15 ; $x v, 10$ ), it appears that the town must have stood at an angle, from which the line ran in two directions, one being eastwards towards Nephtoah, the other northwards towards Kesla, which is Chesalon, on the north side.

The next appearance of the city is in the Book of Judges, when the men of Dan, who had no inheritance (Judges xviii, 1), went up to the Mahaneh Ditn, which was "behind" (or more correctly west of) Kirjath Jearim. Of the position of this Mahaneh Dan, or "Camp of Dan," we have a further indication in the history of Samson, in which it is mentioned as " between Zowah (S"̆r"ah) and Eshtaol" (Eshri'a) (Judges xiii, 25). The term Mahaneh is identical with Muhhnah, "camp," a title now applied to the plain east of shechem, and it seems to be properly indicative of it plain fit for camping ground. We can therefore have little hesitation in placing the Mahmeh Dan in the broad Wady surar, near the recognizen sites of Zorah and Eshtaol ; and the site of Kirjath Jearim should thas apparently be sought east of this natural camping ground.

Kirjath Jearim is agrain mentioned as the place where the Ark remained for twenty years after the destruction of the men of Beth Shemesh (1 Sam. vi, 19 ; vii, 1). From this passage it appears that Kirjath Jearin was in the mountains above Beth Shemesh; yet Josephus, who may be supposed to have known the real site, states that the two cities were near one another (6 "Ant.," i, 4).

At a late period David went down to Baale (or Kirjath Jearim) to bring up the Ark to Jerusalem. It was found in the house of Abinadah "in (iibeah" (the hill or knoll), but this place would appear to have been in or part of the city of Baalah. This is the last mention of the city
except its enumeration in the lists of Erra, where the name appears under the abbreviated form Kirjath Arim (Ezra ii, 25).

From these various notices we may sum up the apparent requisites which should be satisfied in any site proposed as identical with this important town.

1. The name Arim or Jearim ("thickets") should be recovered, and the site should present such thickets.
2. It must be east of the Mahaneh Dan, which lay between Zorah and Eshtaol.
3. It must be south of Chesalon, identified with the modern Keslia.
4. It must be near Beth Shemesh (now 'Ain Shems), which agrees with the second indication.
5. It must be in the mountains above the last-mentioned site.
6. It must be at the south-west angle of the border line of Benjamin.
7. Its position must agree with that of Nephtoah and Rachel's tomb (cf. Josh. xv, 9 ; and, 1 Sam. x, 2), so as to allow of an intelligible line being drawn for the south border of Benjamin.
8. The name Baalah indicates either that a high place of Baal existed at the city, or else that the position was elevated (taking Baal in a wider geographical sense, as some authorities are inclined to do).
9. A rounded hillock or humped knoll of some kind seems indicated by the term Gibeah, occurring in comnection with the site of the city.

The usual site shewn as representing Kirjath Jearim is the village of Kuryet el 'Anab ("'Town of Grapes"), better known as Abu Ghosh, on the road from Jatfi to Jerusalem. This town is called simply el Kuryeh by the Fellahin, and appears to be the ancient Kirjath of Benjamin (Josh. xviii, 28), a place apparently distinct from Kirjath Jearim, and situated in the Lot of Benjamin, whereas the latter belonged to Judah. There is no doubt that in the fifth century Abu Ghosh was believed to be Kirjath Jearim, and the only argument which Dr. Robinson has adduced in favour of this identification appears to be founded on the early Christian tradition, which he too often quotes in favour of his own views, even against his own canon of criticism condemning such traditions as of no value. The site thus commonly pointed out to travellers does not, however, fulfil the requisites enumerated. The name Arim is not found at Abu Ghosh, the site of which lies 9 miles north-west of 'Ain Shems, and 3 miles north-west of Chesalon. The border line of Benjamin camnot be drawn through Abu Ghosh and also through Rachel's tomb, without being so twisted as to be practically improbable, while no special features occur which would serve to explain the names Gibeah and Baalah, connected with that of Kirjath Jearim.

These objections have been so far recognized by various writers as to induce some archeologists to prefer the conspicuous village of Soba, as proposed by Dr. Chaplin, a site answering better to the requirements of the name Baalah or (iibeah. Sôba is the Bel Mont of the Crusaders, and is undoubtedly an ancient Jewish site. In the Septuagint of Josh. xv (verse inserted after 60) it seems to be mentioned, according to some

MSS．，under the form Thobes．It lies，however， 4 miles east of Chesalon， and is separated by 10 miles of rugged mountains from Beth Shemesh． No trace of the name Kirjath Jearim has been found in its vicinity，and the difficulties with regard to the boundary of Judah and Benjamin are not removed by the choice of this site．

The ruin discovered by the Survey Party in 1873，seems in every respect to answer better than any previously proposed to the nine require－ ments enumerated above．

1st．The three principal letters（コフワ）of the name Jearim，or of the later abbreviated form Arim，occur in the proper order in the modern Arabic＇Erma（spelt with the guttural Ain）；the site is moreover sur－ rounded and concealed by the thickets of lentisk，oak，hawthorn，and other shrubs，which properly represent the Hebrew word tarim（ロาภ）from a root signifying to be＂tangled＂or confused．

2nd．The ruin is due east of the open plain formed by the junction of Wady Ismain with Wady el Mutluk，extending from Beth Shemesh on the south－west，to Eshtaol on the north－east，and to the hill of Zorah on the north－west，representing the ancient Mahaneh Dan．

3rd．It is $2 \frac{1}{4}$ miles south of Chesalon or Kesla．
4 th．It is only 4 miles from Beth Shemesh，and an ancient road des－ ceuds north of the ruin into Wâdy Ismăin，and thus leads to Beth Shemesh direct along the valley banks．

5th．The site of＇Erma is nevertheless in the mountain proper，and about 1,000 feet higher than that of Beth Shemesh．

6th．The identification of the sites of Ataroth Adar（ed Dârieh）， Gibeah（Jebia），and Kirjath（Kuryet el＇Anab），belonging to Benjamin ； of Jethlah（Beit Tul）and Eltekeh（Beit Likia）belonging to Dan，as pro－ posed by the survey party，all agree with the supposition that the west border of Benjamin ran south，from near the Nether Beth－horon，along the crests of the spurs which sink so suddenly from the level of the mountains proper（Har）to the distiuct region of the Shephelah．This natural boundary，excluding on the west the Vale of Ajalon，which belonged to Dan，cannot be reconciled with the proposed identifications of Kirjath Jearim at Abu Ghosh or at Sôba，but agrees perfectly with the wording of the biblical description：＂The border was drawn thence，and compassed the western side southwards，and the groings out thereof were at Kirjath Baal which is Kirjath Jearim，a city of the children of Judah． This was the west quarter．And the south quarter was from the end of Kirjath Jearim（i．e．，the end of the spur on which the city stood），and the border went out on the west（i．e．，west side），and went out（eastwards）to the Springs of Nesshtoah＂（Josh．xviii，14－15）．

Again，it agrees also with the other description，＂And the border compassed from Baalah on the west（or looking west）unto Mount Seir， and passed along unto the shoulder of Mount Jearim，which is Chesalon，on the north side，and went down unto Beth Shemesh＂（Josh．xv，10）．

If the reader will compare this paper with Sheet XVII of the Survey，he will at once see the line which appears to be indicated．＇Erma is on the
south or Judah side of the great valley, with a spur (perhaps " the end of Kirjath Jearim") running out northwards. Here, on the north side, are the precipices of a remarkably rocky hill burrowed with hermits' caves, to which the word seir ("rough") might very well apply.

On the same northern ridge, moreover, the name Saghir, which is radically the same as seir, may he found marked rather further east. The line running due north along Mount Jearim (which appears from the text to have been on the opposite side of the valley to Kirjath Jearim, as the expression ${ }^{7}$ y rendered "passed along," means strictly "crossed over," as of a river or valley) arrives at Kesla or Chesalon, and thence follows the important valley called Wady Ghurâb, which joins Wady Ismần and flows past Beth Shemesh. The position of 'Erma is thus naturally placed at the south-west angle of the border of Benjamin.

7th. The common boundary of Judah and Benjamin may be drawn from the new site of Kirjath Jearim in a direction which agrees with various other indications. It would follow the crest of a long spur to the watershed at 'Ain 'Atan (near Solomon's pools), the en Etan which, according to the Talmudists, was the same as Nephtoah (Tal. Bah Yoma, 31, a). Thence it would pass along a watershed northwards by Rachel's Tomb (1 Sam. x, 2) to the Emek Rephaim, which, according to Josephus, extended from Jerusalem towards Bethlehem ( 7 "Ant.," xıi, 4).

Lifta is thus left to be identified with Eleph of Benjamin (Josh. xviii, 28) rather than with Nephtoah. The identification of Lifta and Nephtoah has always seemed unsatisfactory, not only on account of the difficulties which result in drawing the boundary line, but also because no great spring or group of springs such as seems to be implied by the expression TM2, M'ain occurs at the spot. The modern Arabic name is moreover deficient in the guttural of the Hebrew.

8th. The expression Baalah would refer very properly to the situation of 'Erma, overlooking the great valley, while, as will be explained immediately, the traces of what may have been an aucient "high place" (Bamah) still remain.

9th. A central knoll such as would account for the name Gibeah occurs at the ruin of 'Erma.

Although the indications of identity thus appear very strong, they could not be considered as conclusive if the site proved to be insignificant, with modern ruins in an inconspicuous situation. I was therefore anxious to revisit the spot, and was much pleased to find that an evidently ancient and important ruin exists still in this position. Riding down the great gorge which, under various names, runs down from near Gibeon to Beth Shemesh, we gradually ascended the southern slopes in the vicinity of the little ruined village of Deir esh Sheikh. Before us was the notable peaked knoll of Khŭrbet Sammanieh, a conspicuous feature of the view up the valley from surah, and leaving this on the right we followed an ancient road along the slope of the mountain. Here and there remains of side wills are visible, and there can be little doubt that this is a bravch of
the Roman road from the vicinity of Bethlehem leading to Beth Shemesh.

In front of us, far beneath, we saw the white bed of the torrent twisting in bold bends between the steep slopes which rise fully 1,000 feet to the hill tops. Both slopes were rocky and rugged, both, but especially that to the south, were clothed with a dense brushwood of lentisk, arbutus, oak, hawthorn, cornel, kharab, and other shrubs, while in the open glades the thyme, sage, citus, and bellân carpetted the ledges with a thick fragrant undergrowth.

A bold spur rumning northwards from the southern ridge was characterised by a small natural turret or platform of rock, rising from a knoll which stood covered with fallen masonry above a group of olives, beneath which again the thickets clothed the mountain. This knoll represented the ruin of 'Erma, which on closer inspection proved to be a site undoubtedly ancient, and presenting the aspect of an old ruined town. Some of the walls, rudely built in mortar, may belong to the Arab period, but the rude blocks built up against scarps natural or artiticial which occur in various directions, resemble the old masonry of the vineyard towers, which date back to a very early period.

On the east is a fine rock-cut wine press; on the south a great cistern covered by a huge hollowed stone, which forms the well-mouth, and which from its size and its weather-beaten appearance, must evidently be very ancient.

Rude caves also occur, and the ground is strewn with fragments of ancient pottery. But the most curious feature of the site is the platform of rock, which has all the appearance of an ancient high-place or central shrine. The area is about 50 feet north and south by 30 feet east and west, the surface, which appears to be artificially levelled, being some 10 feet above the ground outside. The scarping of the sides seems mainly natural, but a foundation has been sunk on three sides, in which rudely squared blocks of stone have been fitted as the base of a wall. On the east this wall consisted of rock to a height of $3 \frac{1}{2}$ feet with a thickness of 7 feet. There is an outer platform, about 10 feet wide, traceable on the south and south-east, and a flight of steps 3 feet wide, each step being 1 foot high and 1 foot broad, leads up to this lower level at the south-east angles. There is a small cave under the platform, and the ruined houses extend along the spur principally north and south of this remarkable rocky tower.

The view from the ruin on the west is also worthy of notice. The valley is seen winding 600 or 700 feet beneath, and the cliffs and caves of the northern ridge form unusually accentuated features. Beyond these the broad corn vale of Sorek (the Mahaneh Dan) is seen extending beneath the rounded hill on which gleams the white dome of Neby Samit, close to Zoreah. The actual site of Beth Shemesh is hidden by the southern ridge, but the valley-bed north of the ruin is visible.

On the hill to the south stand the houses of Deir el Hawa, and to the east the peak of Sammunieh hides the further course of the valley.

Standing on the rocky tower we saw clearly how well the Mahaneh Dan might be described as "west" of Kirjath Jearim. How naturally the Ark might have been sent from the lowlands of Beth shemesh to this neighbouring city, so strongly posted in the rude hills of Judah.

In the central platform we might perhaps recognize the high place of Baal, whence the city took its name, or the dibeah where the Ark waskept; for Kirjath Jearim is not the only sacred city of Palestine in which the altars of Jehovah and of Baal once stood side by side. The instances of Carmel and of Bethel will recur to the reader's mind, with other indications of a similar kind.

Here then at 'Erma we seem to find in a remarkable manner the numerons requisites of the site of Kirjath Jearim fulfilled. The name, the position, the character of the ruin, the view thence, the surrounding thickets which half cover the site, the situation close to the edge of the higher hills and to the mouth of the great gorge, the proximity to Beth Shemesh, and the relative positions of Chesalon and the Mahaneh Dan, all seem to agree in fixing' Erma as the true site of the important boundary town where the Ark was kept for twenty years.

Having studied the question carefully on the spot, and having ascertained the importance and antiquity of the site, I camot but look upon this identification as one of the most valuable which has yet resulted from the Survey of Western Palestine.

## VII.

Hebron, 31st July, 1881.
Since last report the camp has been moved to Hebron, with a view of clearing up various questions of minor interest in comection with the nomenclature of the vicinity. This is almost the only piece of revision which remains to be done in connection with the Survey west of Jordan. The great change which has occurred in Palestine since Hebron was surveyed, has enabled us to examine even the vicinity of the Haram, without any danger of insults such as I had to endure on the occasion of our previous visit, during the great storm of the sping of 1875 , which drove us to take shelter in the Jews' quarter of the town.

The IIaram.-As regards the Haram we were able to make one interesting observation. The great stones of the outer wall are, as we have now ascertained, dressed in a precisely si nilar manner to those of the Jerusalem Haram. The drafts vary from 2 to 4 inches in width, and are about $\frac{3}{8}$ inch deep. The draft and the margin of the boss for a wilth of about 2 inches, have been dressed with a toothed instrument -an adze like that now used by native masons, but more carefully employed, -thus giving the peculiar crisscross appearance ohservable in the Jernsalem stones. The rest of the boss has been dressed with a point, as at Jerusalem. The interest of this observation lies in its bearing on the
probable date of the masonry. It would appear that the Hebron Haram is of the same date as that at Jerusalem, which it resembles so closely not mily as regards the size, the dressing, and the drafting of the stones, but also in the existence of piers projecting from the wall, of which there are 54 at Hebron, white their former existence at Jerusalem seems to be shown by the discovery I was fortunate enough to make, in 1873, of two such piers still in situ at the north-west angle of the Haram wall.

We visited the eastern side of the enclosure, and found ourselves on the housetops almost level with the comice of the old wall. We here found a mosque, called el Jâwalîyeh, with a large dome. There is also a third entrance to the enclosure on this side, and the old wall appears to he almost as high here as on the west, although the mountain called el Jotabineh rises very suddenly behind the Haram on the east. It would appear therefore that the rock beneath the Maram platform, in which the great cave is said to exist, must be a detached knoll : since on all sides there is lower ground, and a retaining wall some 40 feet in height.

As a religious centre Hebron may be said to rival Shechem, and far surpasses Jerusalem. The old name, Kirjath Arba, "City of Eour," was said by the Tahmudists to refer to the four prophets, Adam, Abraham, Isaac, and Jacol. It is curious that the Moslems still invoke four prophets in their prayers at Hebron, but instead of Adam they repeat the name of Joseph, whose tomb is shown just outside the Haram at the north-wost angle. The tomb of Joseph at Hebron is mentioned also by Josephus. According, however, to the Book of Joshua, the name Kirjath Arba was derived from one of the Anakim (xiv, $15 ; \mathrm{xv}, 13$ ).

In addition to the sepulchres of these four patriarchs and their four wives, we tind the curions rock-cut tomb west of the town, known to the natives as Kabr Habran, "the Grave of Hebron," possibly, however, a corruption of the name Ephron ; by the Jews this is known as the tomb of Othniel, and lhey show the graves of Jesse and Ruth higher on the same hill, at the mediaval monastery of el Arbain. The tradition of the cave in which Adam and Eve lived for 100 years near Hebron is now unknown, though the probable site-as described hy medieval writers-is the present subterranean spring called 'Ain el Jedideh. The site of the sacrifice of (atin and Abel, which used to be shown south-west of the town, has now been removed to Neby Yukin (the Cain of Josh. xv, 57), about 3 miles south-east of Hebron. In audition to these traditions we have the tomb of Noah, west of Hebron ; of Lot, on the east ; of Esan, on the northeast (at Si'air, which must at one time have been identified with Seir), and of Jonah, on the north; the early Christian tomb of Gad the Seer. The tomb of Abner is shown in Hebron, north-west of the Haram, but it is a modern cenotaph in a Moslem house, and of no particular interest. Abraham's well and Jacob's well are shown also, towards the north, but no well of Istac appears to exist, and the inhabitants say that his wells are to be found at Beersheba and Tell el Milh.

Another very curious tradition we found during our recent revision work. There is on the north-west of the town-south of the present site
of Abraham's Oak-a hill called Kuff en Neby, "the prophet's palm" (of the hands), and below this is a cave called Mughâret edh Dhukkâah, with a narrow entrance. There is a bench of large stones running round the walls, and this was found covered with the usual rude offerings of pottery, lamps, \&c. The cave is a very sacred place, where the prophets Abraham, Isaac, and Jacol are said to appear every Friday. Mr. Black entered it, however, on that day, without reporting any appearance of either of the Patriarchs, but his guide did not enter, and was roundly abused by the inhabitants of the place, who warned him that the local divinities would be sure to take vengeance on him for bringing a Christian into their sanctuary.

This is not the only instance we have heard in which prophets are said to relieve the monotony of residing in one sanctuary by paying occasional visits to other places.

There are several interesting problems in connection with Hebron which may be considered more important than the traditions above noticed. Where was the plain (or oak) of Manre? where was Kirjath Arba? where Eshcol? where the place in which Abraham "stood before Jehovah"? (Gen. xix, 27). To each of these questions I have now been able to devote some attention.

In respect to Mamre, we may be allowed to lity aside the traditions which have placed Abraham's oak in various sites, ranging from Râmet el Khulil on the north to Sebta on the north-west, and to the Drus Ogyges of Josephus ("Ant.," I, ix, 4), apparently yet nearer to Hebron.

Mamre, we learn from the Bible, was in or by Hebron (Gen. xiii, 18), and Machpelah was before or in face of Mamre (Gen. xxiii, 17, 19), "the same is Hebron." It seems, therefore, most natural to identify the plain of Manme with the flat open vale facing Machpelah (or the Haram of Hebron) on the west. In this vale, the threshing-floors and the chief Moslem cemetery of Hebron are now to be found. It does not, however, appear quite clearly whether the original Kirjath Arba was on the western or the eastern hill, as the expressions used are somewhat ambiguons. We examined the western hill carefully, but found no traces of any ancient town, although a Jewish cemetery of considerable antiquity exists there, near the four rock-cut Jewish tombs, of which the largest is called Kabr Habrun. It might not be unreasonable to identify the Cave of Machpelah with this double tomb, or with the newly-discovered sacred cave above noticed ; but the consent of Jewish, Maslem, and Christian evidence in favour of the traditional site of the Haram, is too strong an argument in its favour to be lightly set aside.

As regards Eshcol, which is mentioned in connection with Hebron (Num. xiii, 23), and took its name from one of the Anakirn of the same place (Gen. xiv, 13-24), the identification proposed by Vandevelde with 'Ain Keshkaleh appears somewhat doubtful, as the Hebrew Caph is supposed to be represented by the Arabic Quaf instead of Kaf. It is, however, noticeable, that the first $K$ is always dropped in ordinary speaking, and the word is pronounced Ashkali. We have not found
any nearer equivalent to Eshcol; and the position of this fine spring among the vineyards, is well adapted for that of the famous "brook," whence the grapes of Hebron were brought down by the spies.

The Biblical passage just quoted includes the curions topographical note, "Now Hebron was built seven years before Zoan in Egypt." The site of Zoan (San) has produced monuments attributed to the 6th Egyptian dynasty (a thousand years before Abraham), but the real building of the city is attributed to Rameses II, the famous conqueror of the Hittites (circa 1365 b.c.) If it be to this building that the Scripture refers, the translation of the name Mebron, "friendship," might be thought to refer to Abraham's friendship, with the Hittites, and the name may have superseded the earlier title of Kirjath Arba at the later period of the conguest of Palestine ly Joshua. This is one of the few instances in the Holy Land where the meaning of an old name is preserved instead of the sound : el Khulth, "the friend," having superseded Hebron, "friendship," in the mouths of the modern inhabitants.

The traditional site of the place where Abraham "stood before Jehovah," and whence he is said to have perceived, after the destruction of the Cities of the Plain, that "the smoke of the country went up as a furnace" (Gen. xix, 28), has been placed at the village of Beni N'aim, three miles east of Hebron, where the Tomb of Lot is now shown.

It has often, however, been suggested by recent travellers that the site should be sought nearer to the Plain of Mamre, and we therefore visited all the highest points immediately east of Hebron, to observe the view towards the Dead sea. We found that the long spurs which run out above the Desert of Judah are so high as to shat out entirely all the eastern view, except the very highest portion of the Moabite ridge. At Beni Naim, on the other hand, the traveller stauds on the very edge of the desert, which is spread out beneath him. The cliffs of Engedi are clearly seen, and the eastern slopes from Kerak to Nebo, although the waters of the Dead Sea and the Valley of the Jordan are hidden by the western precipices.

Beni N'aim is mentioned by St. Jerome and other early Christian authorities, under the name Caphar Bareca, "the village of blessing," and I was much interested to find, on recently visiting the village (where are remains of a basilica, now a mosque), that this name was still known to the Sheikh. Without any prompting he asked me if I knew the old name of the place in the time of the Beni Israil. On my professing ignorance, he said it was Kefr Bareka, and volunteered the information that Suddum was east of it by the Dead Sea-pointing towards Engedi. This name, "village of blessing," is no doubt ancient and genuine, and must have had its origin in the original sanctity of the spot, which is a natural site for a high-place on account of its magnificent view. It is to be noted that the three angels are said to have "looked towards Sodom," and Abraham went with them to bring them on the way (Gen. xviii, 16). The destruction of the cities is said to have taken place after sumrise (Gen. xix, 23), but Abraham "gat up early in the morning to the place
where he stood before the Lord" (verse 27). These details do not seem to require that the place in question should have been very close to Hebron, and it seems quite comprehensible that the site intended should have been the ancient " Village of Blessing," now called Beni N'aim.

It camnot, however, be said that this throws any very clear light ou the position of the Cities of the Plain, as the north and south ends of the sea are about equidistant and equally invisible ; and we are forced to rely on other arguments in discussing the situation of Sodom, which Josephus, no less than the modern Moslem, believed to lie beneath the waters of the "Vale of Siddim, which is the Salt Sea" (Gen. xiv, 2).

In the year 1856, Dr. G. Rosen devoted some time to the investigation of the vicinity of Hebron, and made various interesting discoveries, I have now been able to compare his map, embracing an area of about 25 square miles, with our own, and the result is curious, as showing the difficulties of collecting names in Palestine.

Dr. Rosen collected, in all, 116 names within the area of five miles either way, the town of Hebron being near the south-east corner of his map. Out of these, 34 are to be found on our map, and six are merely reduplications of names on the map with slight variations, giving 40 as the total collected by ourselves against 116 collected by Dr. Rosen. By devoting a week to the vicinity of the city we have collected 90 new names, giving 124 in all. Of these, no less than 26 are not noticed by Dr. Rosen, and these include the important sites of Mughatret edh Dhukka'ah, Ain Ibrahim, and 'Ain esh Shems. We found 80 names given by Dr. Rosen to be correct, and 12 to be given with very serious errors; while 18 names which he shows on his map or notices in the text were entirely unknown to any of the natives. Out of these 18 , five are unimportant, but the rest are for the most part unlike Arabic in form. One deserves special notice, namely, Jebel Elîni, which Dr. Rosen renders "Mount Helena." The name is certainly not now known in Hebron, and is applied by Dr. Rosen to the vicinity of Râmet el Khulll-the early traditional site of Mamre. It seems therefore to be probably a corruption of the Hebrew Elon (" oak" or "plain"), and may have been obtained from the Jewish inhabitants of the city.

With exception of the sacred cavern of edh Dhukka'ah we have not found any important site omitted from the 1 -inch map. Of the 124 names now recorded, only two, namely Kushtialeh (Eshkol) and 'Ain Sûra (en Sirah) are of Biblical interest, but the examination seems to show that the nomenclature of the district is gralually changing, and that names which may have existed in Dr. Rosen's time are now forgotten.

This agrees with some facts as to nomenclature which I have noted in a previous report, and with others which I observed at Hebron. Thus 'Ain Mearôk (which Dr. Rosen calls Mezru'a, but which is clearly spelt with a (Quaf) is known to others as 'Ain Merank. 'The valley east of Hebron is called Wâdy el Besititin by some, and el Mesition by others, and I overheard a group of ladies sitting by a tombstone, who were holding a lively dispute as to whether a certain place west of the
town should be called Zerzir or Shelshir. This was unusually interesting, as they were quite unaware of my presence or of my interest in nomenclature.

The more carefully we study the nomenclature, the more do we seem forced to the conclusion that the only really permanent and ancient names are those of villages, ruins, and springs, and that the secondary Nomenclature, as it may be called, applying to small natural features, is of fleeting and modern character, while the ancient uames of hills and valleys have, as a rule, been utterly lost.

Aceldama.-While speaking of names I may mention a curious survival of a Latin name near Jerusalem. Aceldama, south of the city (the possible site of Tophet), was known in the 12th century as Carnarium, "The Charnel," being indeed used for that purpose. This name is still known to the iuhabitants (according to Mr. P. Berghein) under the corrupted form, Shernei, attached to this rock-cut cemetery. Among Christians the place is also sometimes called Hakk ed Dumm-a transliteration of Aceldama, the Aramaic name rendered "field of blood" in English.

Beth Haccerem.-From Hebron we have returned-while awaiting a final decision as to our Firman-to 'Ain Yals in the Valley of Roses, south-west of Jerusalem. We are here close to the curious cairns above Malhah. The object of their construction is not clear, but they may have been used as ancient beacons, and in connection with them we may recall the passage in which the prophet exclaims, "Blow the trumpet in 'I'ekoa and set up a sign of fire in Beth Haccerem" (Jer. vi, 1). Christian tradition fixes on the so-called Frank Mountain as representing the site of this beacon ; but the name Beth Haccerem ("house of the vineyard") has not been recovered in that direction, while, on the other hand, we find the present 'Ain Kîrim ("spring of vineyards") close under the slope of the ridge on which the great cairns in question are now found. This identification would not clash with the very probable supposition that 'Ain Kârim is Beth Car (l Sam. vii, 11). Beth Haccerem may have been the later form, intermediate between the old Beth Car and the modern ' Ain Kârim, and the name occurs again in the lists of Nehemiah (iii, 14), in connection with that of other places near Jerusalem. So far as I am aware, this identification has not previously been indicated as probable.

The cairns above noted are among the most interesting remains in Western Palestine, and seem more probably to belong to pre-historic times than any monuments as yet discovered. The largest is that nearest 'Ain Karim, known as Rujm et Târôd, which is 40 feet high and 130 feet in diameter, with a flat top about 40 feet across. It is composed entirely of stones some 4 to 6 inches long, quite unshaped, and the sides, which slope at an angle of about $45^{\circ}$, are covered with a thin layer of earth. The next largest is Rujm 'Afaneh, more than 30 feet high and 96 feet in diameter. The smallest is Rujm'Ateiyeh, some 9 feet high aud 40 feet in diameter. The cairns are seven in number, without counting one very
small heap, and another which seems of different character. Rujm et Târud stands highest on the ridge, the others are irregularly disposed on the spurs, and one is in a hollow at the head of a ravine. They seem too numerous and too irregularly-disposed to have been originally intended for beacons, though the Tarad cairm is well suited for such a purpose. It seems highly probable that they may have been originally seven highplaces, consecrated to the seven planetary deities. As is usual with such high-phaces, they command an extensive view from the Mediterranean on the west to the Moab Mountains on the east; Neby Samwil (the highplace of (filreon), Tell 'Asur (Baal Hazor), the Summit of Olivet (the old high-place of Chemosh), Abu Thor (father of the Bull, possibly the old sanctuary of Moloch), and Neby Samat (possibly Samson's Tomb), are all in sight from one or other, as well as Soba, Kustul, Râs Sherifeh, \&c. Excavations have been attempted but apparently abaudoned before any result of interest was obtained. It is possible that a Kist or tomb of some kind may exist under the centre of each cairn.

The only similar monuments are the Jordan Valley Tells, and we are thins led to conjecture whether these latter may not have been originally "high-places" of the Camanites. They oceur generally close to springs, which would agree with such an hypothesis, and in many cases they are still consecrated by a Mukitm standing ou the Tell. The idea seems worthy of some consideration.

Jerrsalem. - On receipt of Professor Sayce's pamphlet I compared his copy of the Siloam Inscription with ours. I see various differences of importance, especially in the form of some of the letters, and we shall consequently revisit the tunuel, and endeavour to make sure as to the doubtful points.

I have also received from Herr Konrad Schick a copy of an inscribed slal, which was found some time ago lying inside the tomb deseribed in the last Quarterly Statement. It measured 3 feet 11 inches by 2 feet $7 \frac{1}{2}$ inches, and near the top was an inscription with a cross, the letters being about 21 inches high, and 6 inches below the top edge of the slab. The text reads-

## 

This inscription, $\theta \eta \kappa \eta$ $\Delta$ abepovs, has been found in several other instances in early Christian tombs near Jerusalem. The occurrence of the slab cannot, however, be considered conclusive evidence of late date in the tomb, becanse the arrangement of the loculi, as previously explained, is exactly that found in the so-called "Tombs of the Kings," and other monuments near Jerusalem, dating from a period earlier than the Byzantine. The tomb may have been re-used, or the slab may have been originally placed in the neighbouring Church of St. Stephen.

While speaking of inscriptions, I may also note that the inscription from the town-walls contains the name John Iavavov in the third and fourth lines, and that there are several misprints in the text (page 197).

I believe the wo:d $\theta$ entokov may be read in the third line, but it is very indistinct.

About 100 yards south of the tomb above noticed is another sepulchre, which was excavated in 1875, and described in the Quarterly Statement (p. 190, and 1876, p. 9). I have now obtained a plan and a detailed account of this tomb from Herr Schick.

In digging for a cistern, the proprietor of the ground hit upon two flat slabs covering shafts which led to the tomb. The depth of rubbish was 10 feet 6 inches, and the tomb was entirely cut in rock. The shaft was about 4 feet deep, and the chamber beneath $6 \frac{1}{2}$ feet high and $8 \frac{8}{2}$ feet square, with three loculi on north, south, and west, and an entrance on the east from the face of the rock. The loculi are sunk beneath the level of the tomb floor, and were covered originally with flat slabs. A narrow opening in the north-west angle led into a second chamber about 10 feet square and $9 \frac{1}{2}$ feet high, but of trapezoid form.

This second chamber had also three loculi and an eastern entrance with six steps. The loculi in this case were, however, under arcosolia, and with the bottom of the coftin level with the chamber floor. The entrance now built up is well formed, as in the better specimens of loculitombs. It was in this chamber that the great stone sarcophagus was found which has been conjectured to have held the coffin of the Empress Eudoxia. The sarcophagus measured nearly 8 feet in length and 3 feet 3 inches in height, including the four legs; the width was about 3 feet, and the stone sides were only about 3 inches thick and the bottom 5 inches. It had a cover with rudely-arched cross section, and its size was such that it could evidently not have been brought in through the door. It was found indeed that a shaft, carefully blocked up with masonry, existed in the roof of the chamber, through which it appears to have been lowered. The sarcophagus was broken in trying to raise it through this same shaft.

A third chamber was found to exist beneath the first described, and it was only to be reached by removing slabs which pave the northern loculus of the first chamber. Three loculi covered with slabs, and placed side by side with their length direction east and west, were here found. They were sunk 9 feet below the floor of the upper chamber, the loculi themselves being 2 feet deep.

The tomb thus described is very curious and puzzling. It seems probably to have been enlarged and altered at various periods, and has, it will be observed, two methods of access, namely, from doors in the face of the cliff, and by shafts from above. The use of the loculus tomb by the early Christians is proved by the examples at Shefa 'Amr (Sheet V), and other instatuces; the use of tombs reached by shafts and of loculi sunk in the chamber-floor is also observable in Christian tombs. It appears on the whole probable that an early Christian tomb was here found at a later period, and re-used at the time when the great sarcophagus was lowered into it. The arrangement of the loculi would seem to show that the sepulchre is later than the northern tomb, which
was described in the last Quarterly Statement, and it may perhaps be best ascribed to the early Byzantine period, althongh the larger chamber may belong to the Jewish times.

Emmaus.-The suggestion that Ham Motzah may represent Emmaus is very interesting, and from a philological point of view no objection can be raised to it. The distance does not appear, however, to agree, as Kolonia is only $4 \frac{1}{2}$ English miles from Jerusalem, and Beit Mizzeh not much more, which is under 40 furlongs, whereas the distance given by the third Gospel and by Josephus is 50 furlongs. The distance of Khamesa is $8 \frac{1}{2}$ English miles (some 70 stadia) in a straight line, and 10 by road.

The fact that a Motzah mentioned in the Talmud was called "Colonia" is in favour of Mr. Birch's view. Kolonia has often before been proposed as the site of Emmaus, by Canon Williams and others. The identification of the Motzah of the Bible with the ruin called Beit Mizzeh (not Muzza as spelt in the Querterly Statement) was proposed by Mr. Tyrwhitt Drake, mine years ago, and I have accepted it in my "Bible Handbook," although there is an objection that the Arabic Zain rarely takes the place of the Hebrew Tzadi. Mr. Birch does not appear to have been aware of this previous identification of Motzah.

Kolônia was-and still is-a place to which the inhabitants of Jerusalem went out for recreation (cf. Mishua Yoma and Tal. Jer. Succalh, IV, 5) ; possibly the expression "weut into the country" ( $\boldsymbol{\epsilon} \boldsymbol{\epsilon}$ à ápov, Mark xvi, 12) may be taken in the sense of a similar retreat for rest and refreshment from the city, and, in spite of the distance, Mr. Birch's proposal may be considered cousiderably to strengthen the case in favour of Kolônia.

Muristan.-The eastern half of the great enclosure which once belonged to the Knights Hospitallers of Jerusalem is now German property, and excavations have been carried on in these precincts since 1872.

The Hospital proper and the Church of St. John still lie buried beneath at least 30 feet of rubbish, but the Church of St. Marie la Grande and the monastic establishment south of it have been cleared out, and a complete plan has been made for me by Herr K. Schick. The rock, varying in level from 2,445 to 2,425 feet, and forming the bottom of the 'Tyropeon Valley, has been traced throughout, and it appears that the medireval buildings were founded on débris varying from 20 to 50 feet in depth. The only structures which rise from the rock are the walls of two magnificent reservoirs, which I visited in 1872, beneath the monastery. Here, at a depth of 50 feet below ground, we were able to walk along the very bed of the Tyropeoon, treading on rock for a distance of 100 feet or more.

The buildings, though all attributable to the Crusaders, are of various dates, as shown by the straight joints and the varying finish of the masonry. Even the narrow street to the east (the old Malcuisiviat) appears to belong to the 12 th century, as mentioned in a recent report.

Part of the old masoury has been destroyed in opening a new street
on the west of the property, but the buildings are shown on the plan just obtained, which I am sending home to Colonel Warren for his volume of the "Memoirs."

## VIII.

Mount Nebo.

- 'Ain Hesban, 25th August, 1881.

Ir is with great satisfaction that I pen the first report from beyond Jordan, more especially as some points of interest have already rewarded our exploration of the country round this camp.

I seized the first favourable opportunity which has presented itself since we landed in Palestine, to push across the river. When we took the field in May, the country was in a very excited state, the Drnzes were almost in open rebellion : the French seizure of Tunis, the non-settlement of the (treek affair, and the visit of various princes and political agents to Palestine, raised a very general feeling that some sort of crisis was approaching. The great tribes of the Adwân and the Beni Sakhr were at war, and the governor of the Belka had proceeded from Nablus to es Salt and was travelling over the whole country which we intended first to survey.

It appeared, therefore, prudent to await a more favourable opportunity, while employing the party in the south of Palestine as detailed in preceding reports. We were thus able to watch for the proper moment for commencing our real work, and found that our presence was tolerated by the government so long as we avoided asking for any ofticial assistance or protection.

On the 16th August Lieutenant Mantell and I left our camp at 'A in Yalo with six of the native staff, and marched down to Jericho, where we had arranged to meet Sheikh Goblan en Nimr of the Adwân Arals. My principal object was to secure a satisfactory agreement with the Adwân Arabs before committing the whole of our heavy expedition and of our valuable property heyond the river. On the 1 th Goblân appeared with two spearmen and two swordsmen, and we marched over the valley, crossing the river at the Ghoraniyeh ford, and camping in Goblân's own property at Kefrein. The stream of Jordan was easily fordable, being only up to the horses' shoulders, and thus before we had time almost to realise it we crossed the barrier beyoud which I had for nearly three months so much longed to penetrate. The heat in the valley was very great, rising to $100^{\circ} \mathrm{F}$. in the shade by day, and remaining at about $90^{\circ}$ all night. On the 18 th we reached the beautiful stream of 'Ain Hesbân, which flows rapidly down the steep mountain sides to the Jordan valley, rising about 2 miles N.W. of the ruins of Heshbon. Here on the 19th we made our arrangements with Sheikh Goblan; and on the 20th, having arrauged these preliminaries, we despatched mules to Jerusalem to bring over the rest of the party.

During the week we have been employed in visiting the country surronuding the camp, arranging the trigonometrical stations, and collecting the names of the principal ruins. It becomes necessary, in consequence of cur change of plan, to measure a new base-line between Heshbon and Madeba, on the flat plateau called the Mishor in the Bible. The site for this base has been chosen, and I hope soon to report that it has been measured and the triangulation extended thence for about 100 square miles.

Our operations have been considerably facilitated by the work of preceding explorers, for the Arabs areaccustomed to see cairns erected, and lines measured, theodolites set up and aneroids consulted, and we are, moreover, able to make use of the cairns built by Lieut. Steever's party in 1873. On the other hand, the liberality of our predecessors has raised the market so that it is not possible for us- unrecognised by the government, and thus dependent entirely on the Bedawin-to work as cheaply as we were able to do in other Arab districts-notably in the Judwan desert and the Jordan valley. It is, however, very satisfactory to feel some sense of security due to our present agreement. instead of having night and day the anxiety of expecting constant attempts to steal horses or other valuable belongings. The Adwân impress me very favourably, and among ali Arabs an agreement may be corsidered as binding as it would be among men of honour in Europe.

Our first ride was along the western slopes of the great plateau, to visit the famous site of Jebel Neba, supposed to represent the Biblical Nebo or Pisgah, whence Moses surveyed the Land of Promise, and where Balaam is recorded to have been brought by Balak to curse the children of Israel Crossing Wady Hesban we rode south to the beautiful 'A yan Masa, where two streams issue from the cliffs and flow in a succession of cascades down the mountain sides. This is one of the most picturesque spots I have yet seen in Syria (excepting in Lebanon), and the magnifieent water supply of the district we are now exploring-every gorge having its strean even as late as the autum-contrasts with the scantier and more diffused character of the water supply west of Jordan in a remarkable manner. The northern spring at 'Ayûn Mûsa falls over a cliff 40 or 50 feet high, the southern wells out at the base of a precipice forming a beautiful clear pool Hanked by two aged wild figs; and here in the face of the cliff a rude cottage is built up and inhabited by a family of Christians of the Greek Church from Taiyibeh, north of Jerusalem.

From these springs we climbed up 700 feet to the spur which runs out west from the summit of Nebo, and which takes the name Siaghah from a ruin so called on the crest. We examined the site, and found remains of a small Byzantine village with a church, fallen colmmes, rude capitals of the 5th century style, and vaults supported on roand arches, such as are common in early Christian ruins throughout Palestine. The name Siâghah has already been collected by the American Survey party, but I am not aware whether its identity with the Aramaic Seath (Dיצת) has beeu pointed out. Seath, "the burial place of Moses," is the paraphrase
for Nebo given by the Targum of Onkelos in Num. xxxii, 3, and the name forms therefore a link in the identification of Nebo with the ridge of Jebel Nebo where Siaghah still exists.

So far as I can judge by the map, it is to this ruin that Canon Tristram gives the name Z'ura, and which he identifies with Zoar. No other ruin appears to exist on the way from 'Ayun Musa to the ridge south of these springs, and with great deference to so experienced an explorer I cannot but think that an error has arisen, due to the great similarity in sound (to an European ear) between the Re and the G'hein in Arabic. The name Ziara was quite unknown to Sheikh Goblân, although he has shown himself thoronghly acquainted with the nomenclature of the district, which has as yet been imperfectly collected. Whoever is responsible for the Arabic spelling of the name Zi'ara as given in Dr. Tristram's "Land of Moab," I feel couvinced that the form Siaghah given by the American party is the correct one, and it is evident that this form has no connection with the Hebrew Zoar, which in Arabic would appear most probably as $S^{\prime \prime} u r e h$ or Saghir.

Other objections to Canon Tristram's proposal have been pointed out by various writers, the main difficulty being that Siaghah is situated almost on the level of the great plateau 3,000 feet above the Jordan valley, which appears hardly to agree with the plea put forth by Lot in asking permission to flee to Zoar, that the mountains were too far from him. We shall have, I hope, further opportunities of searching for Zoar near the foot of the mountains, where Tell Shaghor has been pointed out by the Rev. W. F. Birch as a possible site; but if Zoar should be sought higher up the 'slopes we may perhaps have an indication in the names Rujm S'aur and Tal'at S'ant, which we discovered yesterday north of our present camp.

The hot haze rising from the Jordan valley rendered it impossible to obtain a very accurate idea of the extreme limits of the view commanded by the Siaghah ridge, but the Arabs assured us that in clear weather Kaukabel Hawa, Tabor, and Neby Duhy could be seen on the north-west, and Beni N'aim and Yekin (the city Cain of the Kenites) on the southwest. Bethlehem, Beit Jâla, Jebel Fureidis, Olivet, Taiyiber, Tell Asur, Gerizim, Ebal, Neby Belân, Jebel Hazkin, and Gilboa can be seen, and the Jordan valley from Jericho to Kaukab; the Kum Sartaba, the northern part of the Dead sea, Jebel Osha above es Salt, Heshbon, and Elealah are also in view. The most striking peculiarity of the scene seems, however, to be that the valley east of the river is plainly seen, Kefrein, Nimrin, Rameh, and other places close to the foot of the Moab hills being in view. Thus the prospect seems to agree well with the account in the book of Deuteronomy (xxxiv, 1-3), although Dan (if Bâniâs be intended) and the "utmost sea" camot, I think, be seen, as high mountains appear to intervene. Perhaps we should read "all Judah towurds the utmost sea." Gilead with its oak woods, the land of Ephraim and Manasseh west of Jordan, Naphthali (in the vicinity of Tabor, which formed, as the survey of Western Palestine shows, the border between that tribe and Issachar), the hills of Judah, and the Negeb, or country south of Hebron, are all seen as
described in the Bible narrative; while no description could be more exact than that of the "plain of Jericho unto Zoar," if Zoar is to be sought at the edge of the Ghor es Seisebân, near Kefrein or Râmeh.

The name Neba appears to apply to the highest part of the ridge at the very edge of the great plateau. The name Siâghah applies to the spur further west near the ruin of that name; but as is usual with natural features these titles are not very strictly applied, and the whole ridge appears occasionally to be called Dhahret Neba.

A very startling discovery awaited us at Neba, which, while making every deduction which prudence suggests, seems more likely to give a direct connection with the Bible narrative than anything we have yet come across. Immediately north-west of the highest summit, near the ancient road which here descends from the plateau, we found a distinct and well preserved specimen of those rude stone monuments, called by some "cromlechs," and by others (though, according to Max Muller incorrectly) "dolmens." Their existence in this district has already been noticed by Canon Tristram, though, so far as I know, he has not described the specimen in question. It is distinct and well preserved, consisting of one large covering stone supported by two others.

The monument stands on the bare rock, and cannot apparently have been erected over a grave. Large scattered blocks near it appear to have belonged to other monuments of the same kind, and, as in Galilee, they seem more probably to have been ancient altars than anything else-an explanation which has, I believe, been accepted by many archreologists, ats best accounting for the purpose for which similar cromlechs were erected in our own country, and in other parts of the world.

There is nothing to give a date to the cromlechs on Nebo, unless it be found in the Bible, where we are informed that Balak erected seven altars -one no doubt to each of the great planetary divinities-at this spot. The position 'of these altars was evidently not on the extreme summit of the hill, as Balaam went aside to the high place leaving the king standing by his sacrifices. It may, perhaps, be considered a bold suggestion, hut there appears nothing extravagant in the idea that one of those ancient altars, so hastily erected to summon the deities of Moab to war against Israel, my yet be standing, unharmed by more than 3,000 winters, on the bleak slopes of Nebo, beneath the summit where, according to the dramatic story of the Book of Numbers, the prophet from Euphrates went up to meet with Jehovah.

That similar monuments are alluded to in the Bible in the opinion of many modern authorities, who recognize in the "gilgal" or "circle" of the book of Joshua, where the twelve stones taken from Jordan were set up, a circular monument not unlike Stonehenge. Such a gilgal still exists east of Dhibân, as recently described by Herr Schick, consisting of stones of great size, and of this as well as of all the most perfect cromlechs, Lieutenant Mantell will now endeavour to obtain photographs. Caution is, however, very necessary, as some of the supposed monuments may turn out to be merely natural features, for the hill-sides here, as in

Western Palestine, are strewne with fallen blocks. In two instances west of Jordan we came across groups of stones, which may have belonged respectively to a cromlech, and to a stone circle; but we were unable to make sure that they were not natural features, and they are consequently not marked on the map.

It is striking to find that the ummistakable cromlechs exist only beyond Jordan and in Upper Galilee, at a distance from the influence of Jewish faith in Jerusalem, and this serves to strengthen the conjecture that the ancient Baal worshippers made use of rude cromlechs, similar to those of the Druids of a later period, for altars.

In connection with this subject the form of the Makams, or places now held sacred by the Arabs, is very interesting.

During the present week we have visited some six or eight of these shrines, consisting of circles some 20 feet in diameter, built up of stones about a foot long. In each case there was a sort of doorway or small cromlech on the west, formed by two stones-generally well hewn and takeu from a neighbouring ruin, supporting a third stone or lintel. The jambs were generally about 2 feet high, and the width of the entrance about the same. The remainder of the circle was composed of unhewn blocks about a foot long piled up into a wall some 2 feet in height. The lintel stone of the cromlech or western entrance serves as an altar on which are laid offerings, consisting of biue beads, fragments of pottery or of purple basalt, bits of china, the locks of guns, rags, etc. The ploughs of the Arabs are left inside the charmed circle for protection, and a rude grave of stones occupies the centre, while in three cases sacred trees grow close by. The names of some of these $1 / a k a m s$ are modern, others are said to date from "ancient times," but whatever be the age of the existing structures, it is probable that the custom of thus constructing "gilgals" has been derived by the Arabs from their forefathers, from a remote period, while many of the sites (especially that of Neby Bal'ath), may be supposed to preserve ancient centres of Baal worship on the high places of Moab.

The field we have at length entered promises to be one of great interest. It may be said to stand to Western Palestine something in the relation of the highlands to the lowlands of Scotland-a wilder region; inhabited by clans of pastoral habits; distinguished by its gushing springs, its uncultivated moors, and its more ancient archæological remains.

The ruins appear to be more important, though less numerous than west of the river, but with the exception of cromlechs all those we have as yet visited appear to belong to the Byzantine period. The ruin of Samich in Wâdy Hesbân has not apparently been previously noted, and its position seems to fit well with that of the Biblical Sibmah of Moab. The great tower of Sâmik may prove to be the Samega of Josephus, and Sufa may have some connection with the field of Zophin, bat withoat books of reference it is impossible to follow up these indications very closely.

Most of the sites which we have visited are marked on the excellent
maps of Biedeker's Handbook, though the names are often incorrectly spelt.

At Umm el Burak we found a mutilated Greek inscription, which appears to record the erection of a building by a certain Antonius Rufus, and is evidently not older than the Byzantine period. Three other inscriptions from Madeba have been removed to Jerusalem, where I hope to see them in the winter, and no doubt many others as yet uncopied remain to be found, but the Adwân say that they know of no other stone like the Moabite stone anywhere in their country.

It may be interesting here to note the present condition of the more important tribes east of Jordan. The Adwan are at present perhaps the strongest, being allied with one section of the Beni Sakhr. Their country is bounded by Jordan and the Zerka Ma'în, Jebel 'Ajlôn, and Jerash, 'Ammân and the ridge on which stands the ruin of Sâmik, embracing some 1,000 square miles of very good country, including the best part of the Ghor, and the hill slopes and part of the Heshbon plateau.

On the south-east is the country of the Beni Sakhr, or "sons of the rock," including the platean east of Maleba and Sâmik, as far as the country of the 'Auezeh. The fimous Sheikh Fendi el Faiz has died within the last few years, and his sons quarelled among themselves. Ibn el Fiaz and Zutum allied themselves with their old enemies the 'Anezeh, while another section made peace with the Adwân, who during the present year (about the middle of May) slew Zutum in fair fight. Peace has since been made, and blood money paid, but the Beni Sakhr have lost much of their power, and the Hameidi tribes who inhabit the district south of the Zerka M'ain as far as Kerak are now their own masters. The establishment of a colony of fifty Christian families in the caves of Marleba, under protection of Padre Paulo, the priest appointed by the Latin Patriarch of Jerusalem, has also made a great change in the condition of the country. On the 22nd we paid a visit to this worthy priest in his cave, and I had a long conversation with him in Italian, which served to throw much light on the best method of proceeding. He offered us all the assistance in his power, and will send our letters for us to Jerusalem. His assistance ought to be a great help to us in making arramgements with the Haneidi, who have a wholesome fear of him, as he has cansed some of their number to be imprisoned. So far, indeed, as the country south of the Jahbok is concerned, our way is now clear, with the exception of possible interference; and as the district has the reputation of being healthy, we may hope to reap a good harvest before the winter sets in.

From day to day our store of notes increases rapidly. Every evening Sheikh Goblân comes to our tent for a cup of tea, and over this our conversation is often considerably prolonged. The Arabs being a freer and nobler people than the peasantry, are less suspicious of Europeans, and more willing to give information. They are also much less fanatical and, indeed, have very little religion. We have not yet seen Sheikh Goblin at his prayers, and his foresight politically seems to be shown by his having sent his younger sons to the English School in Jeru-
salem. Yet, although in constant communication with travellers, although he has even been on board an English man-of-war, and has acquired a truly civilised love of money, he has not lost the native dignity of the Arab, nor acquired the detestably familiar and impertinent mamer of the Dragomans of Western Palestine, whose treatment of travellers seems to become more insufferably contemptnous every year. It is impossible in a short report to give amy account of the fund of traditions, notes of customs and manners, of scenery and archaology, which we are now gathering day by day, while the more intelligent among the natives, including our new Protestant seribe, and our old major domo (Habîb el Jemâil), appear to enter thoroughly into the spirit of the work, and fill their note books with traditions and other scraps of information diligently collected from the Arabs.

My present plan is to proceed southwards by Dibon to the Arnon, and thence north-east by Ziza to 'Ammân, visiting the palace of Mashitta, and completing the survey of the momatains, if possible, from the Arnon to the vicinity of es Salt. For however interesting the district round Kerak may be, it is properly speaking no part of the Holy Land, and this, together with the south end of the Dead Sea, the Harrah, and the Negeb, south of Beersheba, might with advantage be undertaken at one time, with an expedition rather differently organised, and by a more rapid method of work. The region to the north, including mount Gilead and the Hauran, appears, however, to present more immediate interest, and we may perhaps hope if all goes well to complete the survey of the Ghor to the Sea of Galilee next spring, and before autumn to extend the work as far as the river Hieromax on the north, and eastwards to Remtheh and the Haj road.

The country south of Heshbon is absolntely bare of trees, and we are therefore liable to suffer from extremes of temperature. On the day of writing this report the thermometer stands at $108^{\circ} \mathrm{F}$. in the shade of the tent, the wind from the east being hotter and stronger than I have almost ever experienced it in Palestine.

A few days ago the mists covered the hills in the morning, and the temperature at night was quite chilly. North of our present camp there are, however, hills covered with oaks, and here we shall hope to find refuge before the equinoctial gates commence. The attached sketch-map will serve to show the proposed field of our immediate operations, and I hope that before the January Quarterly is issued we may be able to send further interesting particulars of our work in Moab.

Mr. Black and Mr. Armstrong, with the remainder of the expedition, arrived here on August 26th, after three days' march. They encountered a fearful scirocco in the Jordan valley, the thermometer reading $118^{\circ} \mathrm{F}$. in the shade by day and over $90^{\circ} \mathrm{F}$. by night. Fortunately all members of the party arrived safely, except our trusty watch-dog Barad ("gunpowder "), who succumbed to the heat near Jericho.

Claude R. Conder, Licut. R.E.

## THE ANCIENT HEBREW INSCRIPTION IN THE POOL OF SILOAM.

I.

Since the publication of the last Quarterly Statement much new light has been thrown upon the ancient Hebrew inscription in the tunnel of Siloam. Dr. Guthe-who has succeeded in discovering remains of the old city wall which defended the eutrance of the Tyropocon valley-has not only taken a gypsum cast of the inscription, but has also removed the deposit of lime which filled the characters, and has thus made their exact forms visible. He kindly allowed Lieutenants Conder and Mantell to take a squeeze of the inscription after the process of cleaning it had been completed, and Lieutenant Conder has forwarded to the Palestine Exploration Fund two tracings of the squeeze corrected by a careful comparison with the original text. I communicated a revised translation of the inscription based upon these tracings to the Athencum of August 13th, and pointed out at the same time that the recovery of the exact forms of the letters obliges me to bring it down to a later period than the age of Solomon. Unfortunately the application of the acid, by means of which the lime was removed, seens to have injured some of the characters; at all events several of those which were clearly visible when I copied the text do not appear in the squeeze at all, and Mr. Pilter iuforms me that "Dr. Guthe's repeated washings" have made others of them more indistiuct than they were last February.*

Since the appearance of my letter in the Athenceum, I have carefully examined Dr. Guthe's cast at Berlin. An article on the inscription has also been published by Prof. Kinutsch, in the last number of the "Zeitschrift des deutschen Palaestina-Vereins, " containing statements which it is matter of astonishment should have been permitted to appear in the responsible organ of a scieutific Society. Iu his perhaps not unnatural annoyance at the appropriation by an Englishman of an important inscription which he had regarded as the special property of the German Association, he has forgotten the courtesy due to a sister Society which has been in the field for years before the German Palestine Association was founded, as well as the candour and fairness we might expect from a scholar. Personal controversy and international jealousies are always undesirable, more especially when they involve two societies which are working for a common eud, and I should have taken no notice of Dr. Kautsch's remarks were it not for two or three assertions which concern the credit of the Palestine Exploration Fund.

Dr. Kautsch seems particularly indignant at my having charged him with being in too great hurry to vindicate the German Palestine Association. But I must again bring the same charge against him. At any rate, in no other way can I explain, for instance, his interpretation of my statement as regards the money sent by the English Palestine Exploration Fund for lowering the water in the pool of Siloam. As the Secretary of

* Lieut. Conder's interesting letter published in this Statement makes the fact quite plain.
the Fund is prepared to prove, Dr. Chaplin was authorised to draw $£ 25$ for the purpose, that being the sum estimated as necessary to complete the work. Similarly Dr. Kautsch more than once sueers at me for finding a birah or "castle" in the inscription. If he had taken the trouble to read my article, he would have seen that I put a query after the translation, that I regarded it in my notes as more than doubtful, and that I finally withdrew it in the postscript in favour of Dr. Neubauer's conjecture ! Dr. Kautsch further discovers that my copy of the inscription added next to nothing to his knowledge of it, and was but a very slight improvement upon the copy he had published in the preceding number of the (derman Journal. Other Semitic scholars will not be disposed to agree with him, as scarcely any Phœnician letters or Hebrew words can be recognised in his facsimile, and the only complete sentence Dr. Kautsch was able to give was derived from my letters in the Athencum of February.

I need say no more on this distasteful subject, but will turn to the disputed readings as to which Dr. Kantsch and myself still differ. In line 5 he follows Mr. Shapira in reading פלֹ ever, from the grammatical difficulty already urged by Dr. Neubauer against Mr. Shapira (Athenaum, August 6th, p. 176), neither Lieut. Conder's squeeze nor the Berlin cast show any trace either of or $\square$. On the contrary both have a point in the place where Dr. Kautsch puts his mên. This was very evident on the Berlin cast, as M. Halévy aud others agreed with me in seeing. Consequently we must read $\operatorname{IJ}$, for which I can find no other possible rendering than that which I have already suggested. There is certainly room for a waw before $\boldsymbol{7}^{2} \mathbf{x}$ in the break in the rock which occurs here, supposing this to have been subsequent to the engraving of the inscription, but I satisfied myself when on the spot that such was not the case, the break having existed before the letters were cut. The actual length of the tumnel, however, precludes Dr. Kautsch's reading, which would make it much longer than it really is.

In line 2, Dr. Kautsch reads תמSis instead of TMN, and takes credit to himself for having doubted the philological "monster" 7ian. But Lieut. Conder's tracings, as well as the cast, again testify against him. I see no sign of a tau in them, whereas they both have what looks like the lower part of a ke. At the time I copied the inscription, however, the whole hê was distinct, and in a matter of this kind, one, a large part of whose life has been passed in copying inscriptions in comparison with which the inscription of Siloam is as clear as daylight, may be allowed to speak with some confidence. Dr. Kautsch further disputes the pe I have read in the following word, and puts a doubtful man in its place. The pê, nevertheless, was perfectly evident last February. Dr. Kautsch will not admit of any $\boldsymbol{j}^{T}$ at the beginning of the inseription, apparently because it was copied by Mr. Pilter. I can assure him, however, that at least two letters exist here, though I was not able to make out their exact forms myself. His דע for "day" is ingeniuus, but not probable.

The tramslation which follows I have alseady given in the Athenoum of 'August 183th (p. 208) before the appearance of Dr. Kautsch's article. It has been obtained by a comparison of Lieut. Conder's squeezes with my own copy of the inscription.

(1) "Behold the excavation! Now this is the history of the tunnel. While the excavators were lifting up
(2) the pick, each towards the other ; and while there were yet three. cubits to be broken through . . . the voice of the one called
(3) to his neighbour, for there was an excess (?) in the rock on the right. They rose up. . . . they struck on the west of the
(4) excavation, the excavators struck, each to meet the other, pick to pick. And there flowed
(5) the waters from their outlet to the Pool for a distance of a thousand cubits; and (three-fourths ?)
(6) of a cubic was the height of the rock over the head of the excavation here."

The word 77 in line 3 seems to be connected with 7 Ti, 7 ,, , radical meaning of which is rather "excess" than "boiling over." Lieut. Conder's tracings, however, give הבּ instead of הTF, which may be related to $\boldsymbol{i}$ "to flow." We must notice the spelling הית for
 Dr. Kiatuch's $\boldsymbol{a}^{\text {4 }}$ for is from likely, and no point occurs after the mêm. In line 2, gh must be a hiphil infinitive, perhaps from $\mathfrak{y}$, though the meaning of the latter does not suit the context very well.

The squeeze shows that my copy was substantially correct, except in line 5, where I read איצM instead of Nug, and in line 6. Here, however, I find that my fist copy gave the right reading, which I corrected erroneonsly in my second and third.

But as regards the forms of the letters, the removal of the line proves
that I had gone far astray. My copy represents them as they appeared when blurred and hidden by the deposit which had formed over them, and, as is now clear, had wholly metamorphosed their true shapes. It now possesses only an historic interest, as showing fathfully what the inseription looked like when it was first discovered. As I stated in the Athencum (August 13th), it is no longer possible to assign it to so early a date as the age of Solomon. The looped zayin disappears, though the origin of the loop formed by the line is evident. The letter has two small tags at the right hand ends of its horizontal lines ( If), which, by the way, are omitted in the facsimile published by Dr. Katstsch, and the calcareous deposit overflowed from the upper of these into the lower.

But while I must surrender the Sulomonic date of the inscription, I find myself unable to accept Dr. Isaac Taylor's counter-hypothesis (see, however, his letter in the Athencum of September 24th). We all agree that the age of an inscription must be determined by that of the most recent forms of the characters which it contains. But the question is what this age precisely is. Dr. Taylor's arguments, if strictly pressed, would make the inscription as late as the post-exilic period. We must remember, however, that the age of the shekels to which he appeals is doubtful, and furthermore that they are the product of an antiquarian revival which endeavoured to imitate faithfully an older style of writing. It is safer, therefore, to compare the inseribed seals. Nor can I admit that the three-barred kheth is later than the two-barred one, although the latter is found on the Moabite Stone. But I believe that the inscriptions of Mesha and of Siloam represent two different forms of the Phowician alphabet, the one being north Canaanite, and the other south Canamite. A comparison of the characters of the Silom inscription, as they now lie before us, with the alphabets given by Euting, proves that the inscription must fall between the eighth and sixth centuries 13.c. This being so, I see no reason for rejecting Dr. Neubaner's ingenious suggestion mentioned in my previons article (Quorterly Stutement for July, p. 153), which would refer the excavation of the tumnel to the reign of Ahaz. The force of my argument from the fact that, while the Pool of Siloam is given specitic names in the book of Nehemiah, it is called simply "the pool" in the Siloam inscription, remains undiminished.
A. H. Sayce.

## II.

'Ain Karim, July 16th, 1881.
On the 15 th instant, Lientenant Mantell and I again spent three homs in the narrow passage leading to the Pool of Siloam, endeavouring to render more certain the decipherment of the interesting text which has lately been made so much more legible by the use of hydrochloric acid in semov-
ing the lime deposit from the rock. We are indebted to the courtesy of Dr. Guthe for exceptional facilities, and I hope that our joint production may be of some value in the determination of the true translation.

Our method was to produce a facsimile founded on a careful squeeze, and distinguishing the sculptured strokes from natural cracks or dents, by pencilling the former on the squeeze itself. We then compared the whole again with the text, reading letter by letter, and throwing the light on each letter in turn from every side. I have had no opportunity of comparing the result with Dr. Guthe's copy; and Professor Sayce's pamphlet on the subject has not reached me. There may, however, be advantages in thus forming an entirely independent copy, and I should be grad to have my attention directed to any points in our tracing (of which I enclose two copies) which may appear donbtful or incorrect. If Professor Sayce would kindly indicate any portions of the inscription which require re-exmmination, we will take a further opportunity of visiting the spot. Meantime, although the plaster cast has been ordered, and will be sent to England as soon as possible, it seems to me that in many instances it will be only possible to distinguish intentional and natural lines and strokes by examination of the text itself.

The following remarks occurred to me in the course of our work, and are here noted as being possibly of some use to those who have not seen the inscription.

The text consists of six lines, occupying a space of 23 inches by $7 \frac{1}{2}$ inches, on the lower half of the tablet. The letters are from half-an-inch to three-quarters of an inch in height. The first and second lines are injured on the right, and a large deep crack extends all down the tablet near the left hand extremity, breaking the three upper lines, and partly mutilating the fourth. The first line is illegible to the left of this fissure, the surface being rough and covered with cracks. The fifth line does not extend the whole length of the longer lines, occupying only about 16 inches.

There appear to have been originally about 180 letters, of which 130 are now more or less clearly recoverable. The text is thus not quite as closely written as the famous Marseilles tablet. The letters are carefully formed, and some of the minor peculiarities, such as the small hooks at the right hand extremities of the two horizontal strokes of the Zain, are repeated in each repetition of the letter. The size of each letter is also much the same on each repetition; the vertical lines are broad, but not deep, the horizontal strokes are narrow, but very sharply cut. The fucsimile first published gives quite a false impression of the regularity and fuish of the execution of the inscription.

All the letters of the Aramaic alphabet are represented with exception apparently of the T'eth and the Samech, and perhaps also of the Gimel. The Alcph seems to approach much more closely to the form found on the early Jewish coins than to that on the Moabite Stone. The Vou also appears to have three short strokes as on the coins. The peculiar form of the Zain is very carefnlly reproduced on each repetition. The Cheth, which occurs at least twice, seems to have a form intermediate between that on

ON,
'H JULY, 1881,
LL, RE.






## SILOAM INSCRIPTION,

## TRACING FROM A SQUEEZE, TAKEN 15Th JULY, 1881, <br> BY LIEUTS. CONDER AND MANTELL, R.E.


the coins and that on the Moabite Stone．The Mem and the Nrun wre drawn with square strokes，and long tails．The din has invariably a pointed ending towards the right．The form of the Tradi is very peculiar， and quite different to that on the Morbite Stone，as is also apparently the shape of the lioph．

The letters are quite sufficiently well formed to make these differences apparent，and they may，I should suppose，serve as indications of the date of the text．

I enclose what I hope may be found to be the correct transliteration of the letters most clearly recoverable，into spuare Hebrew forms．It seemed very doulatful whether any letter ever preceded the Num in the first word
הユロン．In the second line the reading Tian seems probably correct，on account of the space between this word and the next，but the last letter is unfortunately pirtly destroyed．The word following seems quite clearly to read $\pi$ ㄱ．The last words of the third line appeared to us to read ה＂בים and not The top of the letter is，however，damaged，so that it was difficult to determine between and a thongh the tail was too distinct to allow of its being easily read as 7 ．

The fifth line is the most perfect ind most easily decipherable of the whole text，but we were unable to determine the existence of a Fod， shown in Professor Sayce＇s first published letter，the word apparently reading wato as in the Bible（2（thron．xxxii，3（0））．The Tan in the word
 line the two last letters of the first word，which has，I believe，been read TMN ，are also very indistinct．We have recovered twenty letters in this line．I am not as yet aware whether any of these form additions to those copied by Professor Sayce．

A point on whicha learned opinion seems necessary is the form of the F＇au and the（uph．The word which ocens three times in lines Nos，2，3， 4 respectively，hats for its last letter a form somewhat resembling the Van of the coins．In the word הコาב occurning in the fifth line，the form of the Cophe is different from that above noticed，as the letter has a tail below the line．The same form occurs twice in the fourth line，and seems closely to approach the C＇oplh of the Moabite Stone．The straighter form which I have supposed to be the leun occurs eleven times at least in the text，and in one case（Nugy in the fifth line）is rendered low by Professor sayce，while the form which I have taken to be Caph occurs only four times，and is so rendered by Professor Sayce in the word 9 ป 9 ，in the fourth line．If the distinction is a correct one，the word thrice occurring should read $9 \boldsymbol{7}$ ．The difference was，however，probably not visible before the inscription had been cleaned．The ocenrence of the lane would naturally be more frequent than that of Caph，and the letters thas noticed are in most instances very clearly cut．

Clavde Ir．Conder，Licut．R．E．

## III.

5 th August, 1881.

Haring received on lst instant, the Quarterly Statement, containing Professor Sayce's pamphlet on the inscription, and the notes of Dr. Isaac Taylor on the same, we revisited on the 4th instant the rock-cut channel, and again spent three hours in examining the text.

The result is that after several independent readings, we do not feel able to make any alteration in the copy which I sent home on the 19th ult, with the exception of one doubtful letter in the first line. It seems to us that this copy may be taken as representing all the letters clearly traceable in the present condition of the inscription ; and although, when guided by Professor Sayce's copy, we were able in some cases to distinguish traces of other letters, we were not always able to make these agree entirely with the forms which he has given.

We are ahle only to add one letter to those given hy Professor Sayce, namely a $K^{\circ}$ oph, which appears pretty distinctly at the end of the second line. We still are obliged to omit 12 letters which are no longer traceable (to our eyes), and our copy differs in 18 letters from that of Professor Sayce, notably in two passages which occur in the third and the sixth lines. It must be remembered that I speak of the present condition of the text, as we had no opportunity of examining it very minutely before it was cleaned with acid. Dr. Guthe's copy, taken before this operation was performed, may however show letters not now traceable, although, as far as we can judge, the inscription has not been in any way damaged by the removal of the lime deposit.

In our recent visit we were obliged to stand each for an hour and ahalf knee-deep in water; and we could not but admire the accuracy of Professor Sayce's results, obtained under conditions even more unfavourable than those of our last visit. The pullished copy is however not a farsimile, the spaces between the letters not being always the same as those given by the squeeze, and the form of many of the characters not being exactly that given by the text. The inscription occupies a space 26 inches long by 8 inches in height, the top being 14 inches from the upper surface of the tablet, and the bottom of the sixth line 5 inches above the lower border of the tablet, which is 27 inches square.

As regards the forms of the letters, I may add a few notes to those in my former communication.

The Aleph is written throughout in an uniform manner, and the shape does not appear to us to be exactly that given by Professor Sayce, which resembles the Aleph of the Moabite Stone, but rather the form of an inverted $F$ with a spur-such as is found on Jewish coins.

The Vau appears also to be written throughout with a head formed by three strokes. We are unable to find a single instance in which the head of the letter remains, and in which only two strokes occur. In all the best preserved specimens the central stroke has at the end a cross stroke or shoe, which makes it specially conspicuous.


The Zain-as now seen very clearly, has also an uniform character, and is not formed as shown on Professor Sayce's copy, no curved line occuring to join the horizontal bars. The hooks at the right hand end of these latter I
 have already noticed in a former letter.

The Tzadi also does not seem to be formed as shown in Professor Sayce's copy. The letter is only found five times on the inscription, and in three cases it is imperfect. In the two perfect instances there is no loop joining the bars, but the latter resembles a $W$ inverted
 with shoes.

These peculiarities bave no doubt become clearer since the inscription was cleaned. The length of the stroke of the Lamed, and its inclined position, are also details which seem worthy of notice.

The form of the Mem is also an important consideration. I am not sure whether my copy sent home does not show the second Nem of the fifth line to have the rigzag form. I have however now carefully inspected this letter, which is well cut, and feel convinced that there is not a single instance of the zigzag form on the inscription. The cross strokes are very sharply cut, and although at a first glance the letters seem to have a $W$ form for the head, yet when minutely examined they all prove to be cut with a bar and cross strokes. The Nun is also formed in a similar
 manner throughout.

We may now proceed to consider the differences which appear in the copy made from a squeeze by Lientenant Mantell and myself, as compared with Professor Sayce's copy. The results, which are given below, are derived from four independent readings of the inscription, two taken by me, and two by Lieutenamt Mantell. The position of the letters in our tracing recently sent home is obtained by means of the squeeze, and this serves in one or two instances to check the readings, and to determine the number of letters missing with tolerable certitude.

First Line.-At the commencement of the inscription the original surface of the rock is still preserved, though somewhat cracked. The first Nun is very imperfect, and we were quite unable to trace any distinct letters preceding it, though indications of what may have been a. He might be conjectured to exist.

It is very doubtful whether one or two dots follow the word בקבה.

There are so many small holes in the stone that the dots between the words are in a great many cases very doubtful.

The Dulcth in the word is not very clear, but its form and size resemble those of the Daleth immediately beneath it in the second line, the horizoutal stroke being very slightly curved.

The reading given by Professor Sayce appears to us to be still legible, but the thind letter only is distinct, being a large and well formed Toun. The first and fourth letters seem to be unusually small.

The Vau at the end of the line has no head, and never apparently had one, the rock being quite smooth. We thought that we could distinguish traces of Lamed and Ain preceding it, as read by Professor Sayce, but their existence seems extremely problematical. There is room for two such letters, but to the right of them is a hole, and we were unable to trace the Beth shown by Professor Sayce immediately to the left of the great crack.

With these exceptions, the reading of the text in this line is remarkably clear, and (nave as to the form of the letters) is the same as given by Professor Sayce. Our copy, however, supports Mr. Pilter's reading בקבה, and after carefully re-examining the first letter of this word, we felt sure that it could never have been a $1 / \mathrm{em}$.

Second Line. - The traces of a He will be found in our copy at the beginning of this line, and after minute examination, we were able to find the remains of a Gimel following it, and to distinguish a Resh, well formed, bat much worn, to the left-thus conirming the reading הגרז. The last two letters, and the dot are quite clear.

After the word רעו, there is a dot and a very clear Vau. Between this and the Daleth there is room for two large or for three smaller letters-as shown by Professor Sayce. The letters which he shows we were however unable to recognise, and the first two seemed to us most to approach $y$, though so indistinct and confused by cracks as to be very doubtful. There would also seem to be the tail of a letter Mem, Nun, Cuph, or Pe to the left of those two.

The $1 / e$ in the word Amah is, as I have previously noted, almost indistinguishable, from a crack in the rock. The next two letters are clear, but beyond these, where Professor Sayce shows $\boldsymbol{T}$, we are only able to trace what looks like the head of a Vau, and the loop of either a Beth or a liesk following it.

Beyond the great crack in this line, there is a Koph as shown by Professor Sayce, and to the right of this three strokes which seem most probably to have belonged to an Aleph. The Lamed after the Koph sems to us quite clear, as well as the Shin and the second Koph with a dot after it (this last letter is not given by Professor Sayce).

In all the distinct and several of the doubtful letters of this line, we are therefore able to confirm the readings of Professor Sayce.

Third Line.-The first Aleph should be preceded by a Beth, but there is now a small deep hole in the rock where this letter (marked as doubtful by Professor Sayce) would have occurred, and no trace it is visible.

After the distinct word $\boldsymbol{\text { רע }}$ we make a great difference from previous copies. It is to be hoped that our reading may render the translation of this puzaling passage easier. The words, according to us, should stand . רעצ . The Caph and the Jod seem very clear. The double stop after the Tuz is not however very certain. Lieutenant Mantell was inclined to think that an $A$ in might have existed here, which Professor Sayce also shows with a query. The Daleth in the last word of the group is also not quite certain. There is a horizontal stroke beneath it, but the rock is smooth and well preserved, and no trace of a vertical stroke exists. Nor would the shape of the Beth thus formed, if it existed, be the same as that of other Beths in the inscription.

Professor Sayce has divided the letters ביد further on in this line into two words by a dot, but we were unable to make certain of this division. The two letters which follow are much defaced, and the rock is covered with a network of small cracks in this part, which would make the cast almost entirely unintelligible. I was inclined to think that I cond trace the Koph shown by Professor Sayce, and that it may have been followed by a Beth. Lientenant Mantell would however give a Resh with part of the tail of another letter.

It will be for others to decide which reading suits the text best, and whether the words can have origimally been written here.

Beyond the great crack on the left, we read with Mr. Pilter ה־רים ; and after a very close examination we could clearly determine that the last letter but one is not a $N u n$, but certainly a Mem, with the horizontal stroke and cross-bars. The only letter which we are unable to distinguish to the right of this word looks like the remains of an Aleph. There may have been a Lamed between this and the Var, but we regard both these letters as highly problematical. There is room for a third letter before the Vau.

Fourth Line.-The second word is read $\boldsymbol{7}$ by Professor Sayce; but the first letter of the word seems to us clearly to be a, He and not a Cheth. There is a deep crack in the stone at this point, which, before the deposit was removed, would have given the left stroke of the Cheth, but as now seen, it appears to be clearly a natural and not a scuptured line. The surface of the stone being uninjured, we could ascertain that there but never been any "horn" on the left at the end of the bars of the $H c$.

By the aid of the copy we are able to distinguish the $A$ in preceding the Lamed in the sentence find. Sy . imperfect, and the second Gimel cannot be distinguished. The Vau succeeding these words is fairly clear, but only the middle stroke of the head can be seen, with its characteristic shoe on the end of the stroke. The final Irau at the end of the line we could not see clearly, but a trace of its vertical stroke may perhaps be recognised.

Fifth Line.-The second Mem has the same form as all the others in the text. We are quite unable to find any remains of the Yod given by Professor Sayce in Nam, nor does there seem to be any space for it
between the Tradi and the Aleph. The T'ar in seems to us to be very doubtful, though strokes exist which may have belonged to such a letter. It should be noted that between this word and the next there is more space than is shown in Professor Sayce's copy. The dot is at some distance from the Yod, but even then there is fully room for another letter before the Aleph. The surface of the rock is however injured in this place. The last two letters of this line appear to us to read 27, though the last may be a Hem , as it is very imperfect and indistinct.

Sixth Line.-The third letter read ('heth by Professor Sayce is very indistinct, and may have been a $M e$. The letters appear to us to be now quite distinct, and unmistakable, although Professor Sayce reads quite differently. The letters also seem to us to be distinct, and the letter which follows seems more probably a $H e$ than a Cheth. The Tzadi which follows is imperfect, and the Resh or Beth next in order cannot be read as now seen. The final letter of the inscription should apparently be Beth, but the surface of the rock is here so damaged as to make it impossible to distinguish any of the three letters which Professor Sayce places after the last Tzadi, for there is a hole in the stone at this point.

Such is a summary of our observations, which have been pursued entirely without consideration of anything beyond the present appearance of the text. The main results which seem likely to be of some service are those which concern the forms of the letters, and the difficult readings of the third and sixth lines.

Claude R. Conder, Licut. R.E.

## IV.

I have been favoured with a tracing of the squeeze of the Siloam inscription. In the last Quarterly Statement of the Palestine Exploration Fund I argued, in reply to Professcr Sayce, that the Solomonic age of the inscription was on palæographic grounds quite untenable, and that it must be placed at least two centuries and a half later. In the Athencum of August 13th, Professor Sayce surrenders his former opinion, and asks whether I still venture to uphold my own. In reply to this challenge $I$ am bound to acknowledge that a date so early as the middle of the eighth century can no longer be maintained.

I argued for the earlier date on the ground that Professor Sayce's copy exhibited transitional forms of certain letters, notably of aleph and mim. In some instances the Moabite or ninth century forms were used, in others the sixth century or Eshmunazar forms. In the tracing all these earlier forms vanish. Both aleph and mim appear as we find them in the seventh century Phonician inscription at Abu Simbel, while other letters, notably koph and tsade, approximate to sixth century forms. I cannot, therefore, now maintain that the inscription is earlier than the seventh century, nor do I think it can be later than the sixth. The closing years of the

Jewish monarchy might suit very well all the conditions of the problem, and it does not seem improbable that the conduit may have been constructed in preparation for one or other of the closing sieges, or actually during the last siege, after the aqueduct from Gihon had been cut. This would give 587 13.c. as the date of the inscription. See, however, Ecclesiasticus xlviii, 17 ; and 2 Chron. xxxii, 30.

Isame Taylor.

## V.

'lne discovery of this inscription has excited no more attention and critical curiosity than it deserves. It speaks to us in the primitive Hebrew, the language of the past, and narrates a matter of the highest topographical interest, in the simplest forms of ancient orthography then in use. It will be our duty to interpret these forms, with all their defects, so as to have a correct conception of that little morsel of topographical history which the engraver of this inscription intended posterity should know and place on record. The following is the inscription :-

## TRANSLATION.

Behold the boring (tumnel). This is the history of the tumel. While the excavators lifted the pick, each toward his neighbour, and while there were 3 cubits to the mouth (height of tumnel at the spot here described),
 unto his neighbour. They then measured (מדרה) and discovered (רצרד) $=y a-a r a h$, discovered, became obvious) in the rock, that there was a clearly-defined $(\boldsymbol{\mu}=$ mamuh in its ancient uncontracted form, meaning to point out, clearly define, and count out by reckoning up the weasurements) crookeduss (pap - kumetoo, wrinkled, crooked, corrugated, not going straight) in the direction (בירד = barah, direction, leading ; beth is a preposition in this word) of the boring (nakucuh). The excavators then eagerly worked, and each met (likrath) his neighbour, pick to pick. The waters then advanced ( $w y$-yalachoo) and Howed from the outlet towards the pool, from a distance of 1000 cubits from the described boundury ( $\boldsymbol{T}^{7}$ = tauh, boundary pointed out and described) of the tumel they excavated at the head of the excavation here.

## I. Inference.-Two branches.

We infer, as a radical conclusion, that two gangs of men were employed in the excavation, and that they started from two opposite ends of the tunuel, and met somewhere in the length. Now the question we are about to raise is one that has never yet been assumed, nor has it ever been suggested in any publications on the subject. It has always been
assumed that the entire aqueduct from Virgin's Fount to the Pool of Siloam was one continuous construction by two gangs of men. We hold that the two gangs of men were not employed on the whole, but only on the Siloam branch which runs south. And that the two gangs formed one whilst constructing the branch rumning west from the Fountain. We hold the theory that the siloam branch alone is the excavation referred to in this inscription, and that the upper or head branch of the Fountain running west is not included in this narative. A careful reading of its clauses, and the general context also, confirm this theory. 'The last clause especially cannot be iuterpreted otherwise.

Then, again, the word of the tumel, or to the Siloam Pool, it is applied to the other end of the tumnel where the excavators begen; and this end the narmative calls the raish, "WV = "head of the excavation here." "The "head" of the Siloan branch is therefore meant by this word. Certainly the "lower end" must mean the tail end, and not the head of a tunnel or stream. If, therefore, the word be admitted, it must refer to the head of the Siloam branch of the aqueduct. This much then is certain without further discussion. In fact, Professor Sayce has himself noticed this inherent difficulty. He says: "I must confers that the meaning of 'lower part' would be more suitable to the Siloam end of the tumel than to the other, to which it refers."

Now a careful reading of the last clause will prove, beyond a doubt, that the double gangs of excavators worked together first as one body, and as one gang, in excavating jointly the Virgin's lount first, giving it a wider, more open, and spacial appearance as an entrance. And this was the first excavation of these men, and was regarded as the head of the tunnel. This was carried directly west about 231 feet, with a roof of 6 feet, roughly estimated by Captain Warren. This was the first excavation to which the narrator refers, when he says:
"The waters advanced and flowed from the outlet towards the pool, from a distance of 1,000 cubits from the boundary of the tumnel they excetvated at the head of the excavation here."

The inference is fairly drawn, that a tunnel had previously been made at the head or beginning of the Siloam branch, by these same men; and that this tumel had a given limit or boundary. Now this first tumnel could be none other than the Virgin's Fount branch, which runs almost due west $2: 3$ feet, and 6 feet high. And the bomdury referred to would be this limit of 231 feet. The Siloam branch must, therefore, begin from this limit, and the 1,000 cubits must be counted from this boundary of the first tumel. After cutting this first branch at the head of the excavation in Siloam, the gang of men divided themselves into two independent gangs for the greater convenience of carrying out the debris of the cutting. It being inteuded that the two gangs should meet at some intermediate point. Thus we have fairly established the fact, that the last clause of this inscription conclusively proves that the tunnel referred to is that Siloam branch of the aqueduct on which the two gangs of men only were
thus engaged to meet each other ; the inscription camot refer to any other but the tunnel made by these men meeting together.

## II. Inference.-The Cubit.

Metrologically the inscription seems to fix the length of the Hebrew cubit, or ammuh. The tumnel is 1,708 feet in length, according to Captain Warren. If this be the length of 1,000 cubits intended by the narrator, then the cubit will be equal to 20.496 inches. But the place where these two gangs of men met was 3 cubits high $=5 \cdot 124$ feet, and there is no such place in the whole length of the tumnel, except at the long vault in the Virgin's Fount branch. Hence the cabit camnot be 20.496 inches.

Then, again, we have seen that the two gangs met in the Siloam branch somewhere. The heights have been given by Captain Warren. For the first 350 feet the height sloped down from 16 feet at the entrance to 4 feet 4 inches, width 2 feet. At 450 feet the height fell to 3 feet 9 inches. At 600 feet the height was 2 feet 6 inches. At 850 feet it was only 1 foot 10 inches, and at 900 feet it was reduced to 1 foot 4 iuches high. Just at this point of the narrowest cutting the height suddenly rises to 4 feet 6 inches, which height continues for a length of 150 feet, when at a distance of 1,050 feet, the height is again reduced to 2 feet 6 inches, and at 1,100 feet it was again only 1 foot 10 inches. At 1,150 feet the height averaged 2 feet to 2 feet 6 inches ; at 1,450 feet the Siloam branch begins to turn towards the Virgin's Fount branch ; and at 1,477 to 1,480 feet, the height suddenly rises in the open vault of the Fount branch to 6 feet.

Thus it will be seen the highest point in this Siloam branch is a space of 150 feet in length, where it averages 4 feet 6 inches. Now, if there be any likely spot where the two gangs met it will be at this high cutting. At 850 to 900 feet the height sinks down from 1 foot 10 inches to 1 foot 4 inches, then suddenly rises into a cutting of 4 feet 6 inches. In like manner at the other end of this same siloam branch, from this central space of 150 feet with a height of 4 feet 6 inches, the other end also tapers off and lowers down to 1 foot 10 inches. Now, does it not seem reasonable to suppose that when the men got to a point where they expected to meet each other, they would widen their tunnel in order that the chances of meeting each other would be greater? And that where we find this space of enlargement at the middle of an aqueduct, there is the spot where they endeavoured to meet? We think it reasonable to make this inference. Professionally, as a civil engineer, we think this a very reasonable supposition, especially where the engineers were not supposed to be equal to the sappers and miners of modern times.

Let us summarize a little. If the Virgin's Fount branch be almost due west for about 230 feet, to the end of the passage with 6 feet in height, the Siloam branch will be $1,708-230=1,478$ feet in length. But in this case the 1,000 cubits will be $=1,478$ feet, or 1.478 feet to a cubit, which is equal to $17 \% 36$ inches per cubit. Let us test this value also. The
narrator of the inscription says the grangs were working, when they met, with a tumel equal to :3 cubits; but the greatest height of this Siloam branch is near the middle, and equal to 4 feet 6 inches - 18 inches to a cubit.

Now, in an article on the "Sacred C'ubit-Test Cases," October, 1879, Guarterly Siutement, we then suggested that the auciont cubit was 17.70 inches, or $\sqrt{ } 3 \cdot 14159 \times 10=17 \cdot 7245$; or the full cubit rod of what Ezekiel calls "a cubit and a humblbreulth" (ch. x.5), consisting of 7 hindbreadths $=20.6786$ inches. And it would now appear that this Silom branch of 1,000 cubits wats $=1475$ feet in length, or $17 \cdot 724$ inches per cubit; whilst the height of the place of meeting of the excavators was 4 feet 6 inches $=3$ cubits of this length, as the narator declares in the inscription. Hence the cubit used by the engineer and workmen was $17 \% 24$ inches in length. When the prophet Ezekiel said:

> "A cubit is a cubit and a handlueadth."-Ezek. xliii, 13 .
> "In his hand a measuring reed of 6 cubits, by tho cubit and a handbreadth."-Ezek. x1, 5.

The extra hendbrecuth was simply a handle by which to hold the cubit rod whilst measuring: the cubit was 6 handbreadths only, but the cubit-rod was 7 hairbreadths. Hence almost every cubit rod found has measured 206886 inches with its extre handbreadths, and this simple fact hias led to the conception that a cubit was 7 handbreadths $=20.6786$ inches. The Egyptian cubit-rods were constructed similarly; they were a cubit and a handbreadth in length $=20.6786$ inches, or $17.72 \pm$ inches to the cubit.
S. Beswick.

Strathroy, Ontario, Canada.

## VI.

I IADE been much interested in the paper contained in the Quarterly Statement upon "the ancient Hebrew inseription discovered at the pool of Siloam," and particularly so in the idea that the discovery may define the length of the Hebrew cubit. My object in writing to you is to point out that further examination of the tumel may possibly lead to the discovery of exact and detiuite data from which the exact length of the cubit measure used in its construction may be mathematically demonstrated. In additiou to the tablet (or smoothed portion of rock) upon which the inseription is cut, Mr. Sayce says he "came across small portions which had apparently been smoothed, as well as hollows or niches in the face of them all." I suppose these niches are of triangular shape like the one said to be opposite the tablet. If so, I am iuclined to form a different theory as to the formation of the triangular nich opposite the tablet than that which Mr. Schick suggrests A theory
which will also account for the existence of the other niches which are found at intervals in the walls of the tunnel.

To construct a tunnel from both ends, the starting point must be definitely marked somewhere, and careful measurement must be made along the course of the tumnel as the excavation proceeds. Now if the niches occur at regular intervals along the tumnel, it is more reasonable to suppose they each mark offia measured length, so that instead of remeasuring the whole distance whenever the amount of work done is required to be known, a measurement from the last mark would be sutticient. If the niches are large enough to hold a lamp, a double purpose may have been served in their construction. The triangular point would serve to indicate distance, and the light would serve to light the tunnel at intervals, by which facility in the removal of materials would be gained. Now suppose this theory be correct, what more natural thing than to inscribe upon the wall of the tumel the length thereof near the last nich? Probably the ornamental finish described by Mr. Sayce as found under the middle of the bottom line may be a mark intended to direct attention to the marks on the opposite side of the twoul. The character of the finish is a remarkable one, however, being composed of three figures, two like the triangular niches in shape, and one just like a surveyor's mark. It is even possible that the inscription and the finish are
 intended to mark the exact spot from which the thousand cubits are measured. If another inscription is discovered at the other end of the tumel much uncertainty will be removed, but without such an inscription a careful measurement of the distance between the niches may lead to remarkable results. As to the upper part of the tablet upon which the inseription is found being without lettering, this may arise from an intention to engrave upon it the name of the king who ordered the tunnel to be cut, or some other recorl, an intention never caried out. Or it may have been so left to draw attention to the other tablet formations which Mr. Sayce describes.

## H. Sulley.

# LIFE, HABITS, AND CUSTOMS OF THE FELLAHIN OF Palestine. By Rev. F. A. Klein. 

(From the "Zeitschrift" of the German Palestine Exploration Society.)
.

## Continuation.*

TuE clothing of the Fellahin is extremely simple, but at the same time comfortable and suited to the climate. Their hair is worn quite short
except a tuft at the crown, and the first portion of the head covering consists of a white cotton skull cap. With people who have any tendency to cleanliness, this cap (Takiyeh) is washed every week, and for boys it is generally the only head gear. Over this they wear one or two felt skull caps, and then the 'arbansh or 'lurkish fez, round which is wound the piece of stuff which completes the turban ; this varies in colour and quality according to the religion, rank or taste of the wearer. Sometimes it is of unbleached cotton fringed and striped with red or a red and yellow silk Kufeiyeh. The richer Christians use black cashmere, the Bethemites and upper class Mussulmen a strip of white muslin, whilst a descendant of the Prophet may be always known hy his large green turban. In many neighbourhoods red cloth is worn, and the whole head covering is called a Leffe, from (luffi to wind round). The more important sheikhs wear particularly large and cumbersome Leffes. I knew one Christian sheikh in Nazareth who, whenever he changed an old turban for a new one, took the greatest care not only to have it the same size, but of exactly the same weight ; if he found it lighter than his old one he added folds of cloth or extra felt caps, for he maintained that any change in the weight to which he was accustomed, gave him pains in his head. These weighty head dresses are rapidly giving place to the 'lurkish mode, and many of the upper classes who formerly took great pride in their ponderous Leffes, now wear what is called a keshf, a tarbash with a light mendil round it, or even only a tarbush stambuti.

The thick head coverings were certainly a great protection against the scorching rays of the sun, and in case of necessity they formed a very gool pillow; I have often seen the Fellahin stretch themselves under the shatlo of an olive tree, and enjoy the most peaceful slumbers with nothing but a stone under their head. It was strangely suggestive of Jacob. The Leffe with its many folds served also as a receptacle in which important documents or letters could be safely bestowed. Another head-dress which Fellahin who are in the habit of mixing with the Bedawin often adopt, is the silk Kufeiyeh or a bright coloured mendil, which is bound to the head with a woollen cord and falls over the neck and shoulders.

The body is covered with a coarse blue or white cotton garment down to the ankles, with wide sleeves reaching to the knees. This answers the purpose of shirt and coat combined, and is drawn in at the waist by a broad leathern belt fastened above the hip. For hard work or travelling the skirt is turned up, and the awkward sleeves are tied back between the shoulders. To wear the clothes almost trailing on the ground is a sign of opulence or else of arrogance and atfectation. In speaking of the men of one or other of the principal Mahometan families people often make the remark that " they go ungirded in their houses."

A cloak called an'Abba completes the Fellahin costume. It is a black or brown woollen garment of the most primitive and clumsy construction, it must have been in vogue as eaxly as the days of the early Canaanites, for certainly it is no product of modern civilization. Some of the people spin their own 'alhas; they are made of a very thick picce of stufir of an oblong
shape, and sewn so that the front part and two holes for the arms are left open. It forms a garment as useful as it is inelegant. It protects them from rain and cold ; at night it serves as covering and bed, for the Fellah retires to rest on a mat or on the bare ground, where wrapped in his 'abba he sleeps as soundly as we should on the softest mattress. Often in the imns I have seen rows of mummy-like figures lying close to each other on the ground fast asleep, and upon waking up they shook their coverings and put them on again ats cloaks. If the Fellah has to fetch food for the cattle, or to carry anything to market, he uses his 'abba as a sack; if the Mussulman has to say his prayers whilst joumeying, he spreads his 'abba on the ground and performs his devotions in the orthodox mamer; if there is no available manger or nose-bag for his camel, he lays his 'abla on the ground and shakes the fodder upon it ; finally he can make a little tent of it under which to take shelter when out in the fields. Only youths or beggars can do without this indispensalule garment; for a respectable Fellah to appear minus his 'abla would be almost equivalent to going out naked. In winter many of them wear a sheepskin jacket with short sleeves, the woolly side turned inwards, and the outside smeared with ruddle. Stockings and socks are unknown luxuries ; they either go barefooted or wear comfortable but queer looking shoes; sandals are only met with on the other side of Jordan. But in the time of harvest, every one wears shoes on account of walking over the stubble, and at this period the shoemakers do a very good trade. Amongst people who are fairly well off the ordinary costume is of course often modified, and gives place to more of a town style, including shirts and the Kumbag, a striped silk or cotton gown, also a short cloth jacket called a Jubbeh, and finely embroidered 'abbas, omamental girdles and town-made shoes.
The women wear a blue or white robe with wide sleeves, and for fête days a silk gown striped in many colours with pieces of red or yellow cloth let in to the breast and sleeves. Their abba is shorter and narrower than the men's, and sometimes they wear a short jacket richly embroidered in gold; the 'abba is generally dark red.
The shape of the cap varies according to the different districts. In Bethlehem they wear a sort of cloth coif ornament across the forehead with gold or silver coins according to the wealth of the wearer, and in Nazareth and the surrounding district, a padded head-dress coming down the sides of the face, and decorated with a number of silver coins (five piastre pieces), often as many as six or seven pounds' worth. These foolishly heavy decorations cause them to suffer a great deal from pains in the head and diseases of the eye, though once they have become accustomed to them, leaving them off has always a bad effect. I had an opportunity of assuring myself of this fact in Nazareth; a woman there had exchanged the smadi for the light sooki which is worn in the towns (it consists of a small tarbûsh with a golden clasp, a mendil and only a few coins at the back), she got ophthalmia; some others had sacrificed their coins through want of money, so that only their cloth coif remained; and all of them suffered with pains in the head.

If a woman is in want of money, she cuts off a few coins, if she earns anything she stitches some more on, thus her head-dress forms a portable bank on which her capital is stitched. During a night attack the first thought of the women is to hide their smude. The Bedawin will often attack them and rok them of their head-pieces, and in some villages they have even heen murdered on their way home from fetching water, only on account of their coins.

Amongst the Christians, a woman will often leave her smade or a portion of it to be expented in masses for the repose of her soul. A small chain or band fastens this ponderous head-covering under the chin, and sometimes from this hangs a second chain on which is suspended a large woid or silver coin as a neck ormament. 'The mendil or veil is worn over the smed, covering the heal and neck, though not the face, but if any stranger appears the women at once cover their mouth and nose; a well behaved woman never appears in puhlie without her mendit. Often riding through a village and passing near the huts, I have noticed the women without their veils, having taken them off, perhaps on account of the heat, or whilst combing their hair, but directly they becane aware of my approach, the veils were on in a second. The mendil in some districts is white, and is often ornamented with a bright fringe and border as in Jerusalem aml lhethlehem. In"the Nâblus district it is red, and rombl about Nazareth hack with yellow stripes. The beauty or ugliness of the women is alike hid by the veil, only just the top part of the face remaining visible. They all use kohel, which not only enhances the beauty of their eyes, hut is atso supposed to strengthen them. On very joyful oceasions, and for weddings, they stain their fingers and feet with henna, and the old women also dye their hair with it when it is turning grey. Bracelets made of inferior silver, brass or silver rings and bangles for the ankles are the principal ornaments. In some parts the women dress better, wearing underclothes as well as the orthodox costume. The ginls can be casily distinguished from the married women by their much simpler and lighter head-dress. 'The smade is only adopted after marriage.

Like all Orientals, the Fellah's chief wish is to have a number of male descendants. As a rule, the sons remain in their father's house, or at all events in the same village, and a father who is surrounded by his sons and his grandsons not only secures help and protection for his declining years, but also gains greatly in homour and influence. A clan (hama'il) numbering two hundred men, under the present state of govermment, can get anything they want much more easily than one mustering only fifty. The fathers are very prond of their sons, and the sisters take the greatest delight in hearing their brothers well spoken of. Such being the case, it may be imagined that there is great rejoicing over the birth of a son. All the relations and friends visit the father to offer their congratulations, adding the usual formula, "May that which has come to you be blessed," to which he joyfully makes answer, "May God also bless you." A cup of coffee is then offered to each guest, or among the Christians, wine and sweetmeats. The birth of a danghter creates no excitement, nor do the
friends offer congratulations; nevertheless it has its bright side, for if every son adds to the family strength and influence, so each daughter is an addition to their capital, for on reaching a marriageable age, she is worth several thousind piastres. For instance, if a poor man has four daughters, they represent a capital of twelve thousand piastres, and should he be a poor man, the traders will give him credit on their account.

Immediately after birth, the children are rubbed with finely powdered salt. This process which is supposed to have the effect of hardening them is repeated for some weeks; sometimes it does the child a great deal of harm. In Bethlehem, I remember seeing a fine boy who had nearly lost his sight through this senseless custom, the salt having got into his eyes. On the whole though, the experiment camot do the children any real injury, for in spite of dirt, neglect, and exposure, they grow up hardy, and soon get accustomed to the rough life which lies before them. As infants they are certainly not fussed over; even when only a few days old they are left swaddled and tied into a very primitive wooden cradle, where they have to remain whilst the mother goes about her household duties. If she has tried to protect the poor little creature from the flies and mosquitoes by throwing a mendil over his face, he is almost suffocated for want of air, but if left without, dozens of flies swarm round him and settle in clusters on his mouth and eyes ; at first he screams and struggles as much as his narrow quarters will allow, but escape being impossible, he submits to the inevitable. It has often surprised me to see the bigger children playing in the streets or sitting on the rubbish heaps without making the slightest attempt to brush the flies from their faces, so early do they become accustomed to the plague of the land. Still, in spite of their being brought up with so little comfort, there is no lack of maternal affection. In their own fashion, the women are dotingly fond of their children, and will endure the greatest privation, and make almost any sacrifice to further their welfare. Whilst caressing them they make use of the tenderest terms of endearment, apostrophising the child with such expressions as "My soul! my Lord! my Life! Oh light of my eye!" and they sing them the softest cradle songs. They have a great love for all children, and would not willingly do one of them any harm. This is especially noticeable when they go out as nurses ; nothing can exceed their devotion and the patience with which they work or sit up at night if necessary. If anything, they carry their affection for their sons too far. Many a mother works hard or denies herself every comfort until her latest years, in order to enable her son to marry, and then to aid him in supporting his wife and children. The women suckle their children for three or four years. They consider that long nursing strengthens the child, and have several saying to that effect, whilst they often give as the reason of a weak constitution, the fact of the sufferer having been weaned too soon. In such a climate this belief is perhaps not without foundation. If a mother dies, a neighbour will take the child until a nurse can be found, and only very rarely are they brought up on goat's milk. The children are early accustomed to eat bread, and are often
stuffed with the most unwholesome food. There is great joy on the appearance of the first teeth, for then, armed with a piece of bread, the child is left to crawl ahout in front of the door. If the mother has anything to do in the Lown or the field, she carries her child in a sort of sack on her back; and during the havest, the cradle is often dragged into the fields. The children are spared much doctoring, a great deal heing left to nature. For wounds, finely sifted red earth is mixed with water and applied in the form of a paste, or sometimes a bright red powder called zerakon. In bad cases of fever, they let blood by scraping the skin with a razor, and for inflammation of the groms whilst teething, they burn the under part of the tongue with a red hot needle. If these remedies fail, their power to help, is at an end, and Allah alone can sate. Many bad diseases of the eye might be prevented in the first instance ly the simple use of a little clem water, but, unluckily, except for drinking purposes, the Fellah has the greatest dislike to making use of it.

A chitd having made his first effort at speech by acquiring the words father and mother, he next accomplishes the "abuk" or cursing of his father, and when he can seize hold of his father's beard and cry abok, his parent greatly rejoices, and everyone predicts his future worth.

The children have literally no games, they tumble about the streets and squares, and in their way seem quite merry and contenter. Directly they are ohl enough they begin to make themselves useful by taking the goats and donkeys to the pastures, and watching to prevent them straying into the vineyards or cultivated fields, and there the boys lie under the shade of an olive or fig tree quietly looking out, or sometimes whiling away the time by phying on a very primitive sort of pipe made of reed. When the fruit begins to ripen, they are set to watch the vineyards and figgardens in order to frighten away chance intruders by soreaming and throwing stones. During the harvest they help to load and drive home the camels. The girls balancing a water pot on their heads, soon learn to fetch water from the well. They have also to collect fuel and dry it in the sun ready for the oven, to help their mother fetch wood, to tend the younger children, and directly they are strong enough, they leam to grind the grain, knead the dough, and help with the baking. In the neighbourhood of a large town, many chidren, both boys and girls, are employed by the builders, some come from a considerable distance, and remaining in the town all the week, only return home on Saturdays. They live chiefly on bread, eating with it onions, fruit, cheese, olives, or some such relish; meat they very seldom taste.

Until ahout fifty years ago, when foreign missions and societies began to take an interest in the welfare of the children, there were literally no elementary schools; but now, in all the towns, and in the larger villages, we find several of various denominations-Greek, Roman, Protestant, or Armenian-as well as the Govermment schools for Mahometans. Many of the Fellahin, convinced of the necessity of education, send their children regularly to one or other of these schools. Previously, only people who were well ofi sent their children to either a Christian or a Mahometan
school, where they were taught to read Arabic and perhaps to write a little. The Mussulman learnt to drone out the Koran, the Christians the Psalms ; even now the Koran and the Psalms are respectively the first reading books. The salary of the schoolmaster was paid in kind, namely in loread and eggs, which the pupils brought with them every day, and to which they added a few piastres at the end of the month. Sometimes, when the children had reached a certain part of their text books, a backsheesh would be presented to the teacher, in acknowledgment of their progress. I have met old men who could repeat the whole of the Psalms or long portions of the Koran by heart, having learnt them in this way. The writing was done on a wooden tablet, but they seldom made as much progress in caligraphy as in reading or learning by heart; even now there are some villages (generally Mahometan) where not a creature excepting the katib or preacher could read or write, and occasionally not even he, so that if a letter comes which has to be read, or if anything has to be written, they are obliged to send to the next village, where the katib will just manage to spell out the contents, or to scrawl a few characters on paper. The Arabian schoolmaster's only method was to frighten his pupils into attention and a small amount of industry; to this end he used the rod and the "fuluk," a wooden thing to which the delinquent's feet were tied by a cord, whilst he lay on the ground to be belaboured by his teacher. Now and then I have seen this much-hated instrument hung up on the wall, in order to intimidate the children. In very exceptional cases a father would let his daughters learn to read, but this never happened in Mahometan families. Some of the Fellahin are very sharp-witted and teachable. A grood supply of capable schoohmasters and careful school inspectors would soon be able to improve the state of the village schools, and to introduce a more progressive system. The children seldom remain at school later than their thirteenth year, by which time they are very often engaged, and sometimes even married, whereupon they assume the manly leffe, and commence their calling in life. The majority of them tike to agriculture, and find full occupation in tending the vineyards and fig-gardens, or in looking after the crops and the cattle. Others follow trades, but beyond becoming shoemakers, weavers, buiders, or joiners, there is but little choice, and even in these they find scanty employment. In some villages there is not a single artisan. The weaver uses a very primitive loom, and makes the thick cotton material used for the tob; although a great quantity of European cotton is sold in Syria, the Fellah does not find it strong enough for this strange garment; in the same manuer they weave the thick stuff for the 'abbas, though the finer ones come from Damascus. A weaver who hegins his work in good time, can easily make enough stuff for a garment during the day, and earn a fair profit for his work. The joiners make the wonden parts of the very simple ploughs and farm implements, and those who have advanced a little in their trade are able to put up the rough doors and window framea, but more difficult work would be heyond them. The iron portions of the plough and the various tools, are made either by the smith of the nearest
town or by gipsies (Naury), who travel about the country making nails, axe-heads, etc., and dwelling in black Bedawin tents. Only on the other side of Jordan do we find smiths in the smaller villages, and there the surname Haddad (smith or forger) is of frequent occurence. For things which they can neither obtain in their own village nor in the neighbouring town, the Fellahin are dependent on journeymen mechanics-coppersmiths, silversmiths, gun-makers, pedlars, and coverlet makers, who travel from place to place accordingly as they find work. The pedlars and mattress-makers are generally Jews. Quack doctors and inoculators are also to be found travelling through the villages.

In Bethlehem there is a considerable industry in rosaries and ornaments made of mother-o'-pearl and the black Nebey musa stone, through which trade many families earn a living, and some even become wealthy.

Again, in villages like Ram Allah and Lifta, many gain their living by keeping donkeys and carrying produce into the towns. Every morning one sees groups of these animals being driven to the market at Jerusalem, laden according to the season, sometimes with wood, fruit, or grain, at others with oil or water. In the evening they trot merrily home with much joking on the part of the drivers. Lifta is the great centre of the donkey drivers and water-carriers, and in Sâris and Kubebe there are a great many camel-drivers, who are chietly employed in carrying wares between Jatfa, Jerusalem, and Nâbulus.
(T'o be continued.)

## SOME REMARKS ON THE INTERPRETATION OF THE IMPRESSIONS ON THE VASE HANDLES FOUND AT THE FOOT OF THE TEMPLE WALL.

By J. Baker Greene, LL.B.
Amongst the many objects contaiued in the Museum of the Palestine Exploration Fund, perhaps none are marked with a greater interest, both in their historical and their religious associations, than some fragments of pottery, easily identified as vase handles, which were discovered some years since in the vicinity of the Temple wall at Jerusalem. 'Iwo or three of these fragments contain inscriptions, or rather impressions made in the clay when in process of manufacture, but although the Phonician characters have been deciphered, I am not aware that up to the present any explanation of their meaning has been given which has recommended itself to the arceptance of Biblical archwologists. The object of the present piaper is to throw, if possible, some light upon this obscure but most interestiug subject.

The chanacters found on these vase handles are Phonician, and similar to
those on the Moabite Stone, the date of which is as nearly as possible $900 \mathrm{B.C}$. Judging of the probable date of this pottery, which was found at the south-eastern corner of Solomon's palace, and adjoining the foot of the Temple wall, and which must have been subsequent to the building of the Temple, and prior to the Babylonian captivity, we should expect that the words, like those in the Moabite inseriptien, would be similar to those found in the Old Testament records, and if so we are not likely to err in intrepreting them in the sume way.

The characters found on one of the vase handles transcribed into Hebrew, are as follows:-L ל, M M, L ל, Ch T, Ts 3, P פ II. T, or in their entirety, L M L. Ch Ts P H. To these letters we must now supply the vowel points. The subdivision of the words into $\mathrm{L}: \mathrm{MLCh}$ : and Ts P H is doubtless correct. Let us for the present postpone the consideration of the first word or letter $L$.

M L. Ch may be read, following the Hebrew text of the Scriptures, as Moloch, Molech, or Melech. 'This word, however spelt, was the name given to one of the deities worshipped in Camaan, and is supposed to have heen the sun-grod regarded in his scorching or destruction aspect, and as such he was propitiated with hmman sacrifices by fire. Molech was also, especially by the Carthagenians, identified with the planet Saturn, which may explain the myth of Saturn devouring his children. The word when translated, is "king," as Baal means "lord," but in the Hebrew text the word Molech is generally supposed to be used to express the deity, Melech to express the title of king. The word Moloch occurs very rarely. Molech is, like Baal, almost invariably preceded by the definite article. There are several passages in the Old Testament where this word is translated king, in which there can be no doubt the deity was alluded to. For example, in Is. xxx, 33, "For Tophet is ordained of old. Yea for the king it is prepared, ete." The Hebrew text is Molech, but we know from wther sources that it was in 'ophet that the fearful rites of Molech worship were chietly celebrated. 2 Kings xxiii, 10; Jer. vii, 31, ete.

The letters in this inscription may therefore be read Molech or Melech, and in the absence of anything else to guide us, might, with equal plansibility, be construed as the name of a deity or the title of an earthly monarch. Let us now proceed to consider the next word.

Ts P H is supposed to be Zepha, and this is further presumed to be a proper name. I question very much the accuracy of this conclusion. There is no record in history of a king so named, ruling either in the northem or southern kingdom, into which the Jewish Monarchy was split up by the revolt of the ten tribes, or in any of the adjacent States. I also think it very improbable that any king in those times, or indeed in any other, would have stamped his name and title on pottery intrinsically valueless. If hedesired to mark it as royal property, it seems in the highest degree unlikely that he would adopt such a device or such an idiom. Let us cast about for a more probable solution of the mystery.

The Hebrew verb Kapha (Ts P H with the necessary vowel points
means " to look out, to view," and also "to shine," at least in the Arabic. It would be needless to cite passages in which it is used in the former sense, but we must refer to one because it is very much in point. At the parting between Laban and Jacob on Mount Gilead, they raised a heap of stones, and set up a pillar, and made a covenant to respect each other's possessions. Laban called the pillar "the Mizpah, for he said, the Lord watch (Jehovah itzeph) between me and thee when we are absent one from thother." Gen. xxxi, 49. The verb is here employed to indicate the unceasing watchfulness of Giod, and a peranomasicu is used to connect it with Mizpah, which comes from the same root, and siguifies not only a pillar, but a watch tower. In the absence therefore of any indication that Ts $\mathbf{P} \mathbf{H}$ is a proper name, it seems only reasonable to treat it as an ordinary translatable word, and all the more if we find that it is such a word as would in all probability be associated with the name given to the deity, and be expressive of one of his attributes. Molech was not an idol; though if we trust tradition, he was represented by a brazen image in the valley of Ben Hinnom, in whose outstretched arms the children were placed which were sacrificed to the terrible god. The early religion of the inhabitants of Palestine was simply nature worship. But the forces of nature were varions. The unseen power whose efforts alone were manifest, might be exercised in a beneficial or in a destructive manner. The sun might by its genial warmth bring forth in abundance the fruits of the earth, or by its scorching heat utterly consume them. The generative power in nature needed the productive power as a counterpart, and if there was a king or lord of heaven, there was a queen or lady. The consort of Baal, or perhaps more correctly speaking the complement, was Baaltis. The Ashera (in the authorised version rendered "the grove") which was the symbol of the queen of heaven, invariably stood beside the altar which was raised to the king, and as we know, stood in the temple of Jerusalem at the time of King Josiah, hy whom it was cut down. The Baalim and the Ashtaroth were numerous, but it is doubtful whether they were regarded as distinct deities or only as indicative of different manifestations of divine power. But however this may be, "the Molech," Kat' $\xi \xi^{\circ} \chi \eta \eta^{\prime}$ "the king," was believed to view, i.e., to look out of heaven constantly, and if it was desired to refer to this attribute, some form of the verb Tsapha would unquestionably have been used by an Isratite living at the era to which the pottery found in underground Jerusalem unquestionably must be referred.

It may perhaps be suggested that Molech Z P H is simply an illustration of a practice which was very common amongst the various races inhabiting the region which, for convenience sake, we will call Palestine. We mean that of calling themselves by names compounded of the name of the deity they desired to honour. A great number of Israelitish names were thus formed, and a very curious light they seem to throw on the religion of Israel prior to the Babylonian captivity. For example Joash (a compound of Jehovah) has a son named Jerubbaal (a compound of Baal), who becomes Tudge over Iscael, and is succeeded by his son Abimelech (a compound of

Molech). Saul called one of his sons Jonathan (a compound of Jehovah), and another Eshbaal; and Jonathan in his turn called his son Meribbaal. Saul's High Priest is in one place called Ahiah (a compound of Jehovah), ( 1 Sam. xiv), and in a subsequent one is called Ahimelech ( 1 Sam. xxii), which would almost lead to the notion that Jehovah and " the Molech" were at one time considered convertible terms. David called one of his sons Beeliadah (1 Chr. xiv, 7), but elsewhere (2 Sam. v, 16) his name appears as Eliada (a compound of El, Elohim or God). Hezekiah, Jeremiah, Isaiah, and many other names might be cited as compounds of Jehovah. The Carthagenians, it is needless to remind the reader, preserved the usage of their Phoenician ancestors, as illustrated in such names as Hamnibal, Asdrubal, \&c., names compounded of Baal.

May we not have here stamped on this jar handle a name compounded of Molech, and may not this stamp be that of the potter who made the jar or of the owner? The latter supposition may, I think, be summarily rejected. The modern usage of having crests or cyphers stamped on dimner plates when in the course of manufacture, or if in trade, of having the name and calling of the makers stamped on bottles and jars, was, so far as I am aware, unknown to the ancients. The possibility that it may be the potter's name demands, however, careful consideration, because if we have here simply the manufacturer's stamp, the discovery of these jar handles throws no light on the religion of Israel.

We have in the Old Testament one name which has an apparent if not a real analogy to Melech ZPH considered as a compound name. It is Zephaniah ; the last syllable indicates a compound of Jehovah, but it is not so easy to speak with certainty regarding the first portion of the word. St. Jerome was of opinion that it was derived from the verb we have just been considering, Zapha, and accordingly interpreted the entire name as "speculator Domini," the watcher of Jehovah. This would have been a very fitting name for the prophet, of whose name St. Jerome supplied the etymology, but as he was named when he was a child, and as others who were not prophets held the name before him, we must examine his name irrespective of the qualifications of its possessor. Gesenius with more probability derives the name from Zaphan, "to hide," the true interpretation of the entire name being " whom Jehoval hides," that is "defends."

Those who accept the patristic etymology will see in Zephaniah the precise counterpart of Molech Zepha. The only difference being that one name is compounded of Jehovah, and the other of Molech. Those who prefer placing their reliance on Gesenius, must however still admit that there is no valid reason why a compound name should not have been formed with the verb Zapha as with the verb Zaphan.
Curionsly enough there was a Zephaniah who was second priest in the Temple at the time of its destruction by order of Nebuchadnezzar ( 2 Kings $\mathrm{xxv}, 18$ ), and the temptation is very great to identify his name with the inscription, and to conclude that as Ahiah (l Sam. xiv) became Ahimelech (1 Sam. xxii), so the Molech ZPH or Melchizeph of the inscription became converted by the sacred historian into Zephaniah. But irrespective
of etymological objections to this solution, it seems to me in the highest degree improbable that vessels used in the service of the Temple were stamped with the names of any of the priests.

Thus far therefore our inquiry carries us no farther than this-Molech Z P H may be a compound name, and in that case the vase handle tells us no more than probably the name of the maker ; or else Molech Z PH is a phase which must be construed according to the meaning of the words comprising it. Let us however now proceed to consider that apparently insiguificant portion of the inscription, the notice of which is purposely postponed.

The first letter is L 3. This is simply the preposition "to," which is invariably used in the Old Testament writings. In 1 Kings xi, 7, which states that Solomon raised a high place to Molech, the precise letters are found in the Hebrew text as in this inscription, $L M L C h$; and equally so in 2 Kings xxiii, 10 , where an account is given of the defilement of Tophet by king Josiah in order "that no man might make his son or daughter to pass through the fire to Molech."

Does not, however, the employment of the preposition " to "furnish the key to the right interpretation of the following words, and completely dispel any doubts whether, after all, we had only acquired possession of an old Hebrew trade mark! If Molech Z P H meant king Zepha, or if the two words together formed a proper name similar to Zephaniah, the employment of the preposition is unintelligible. But if the words be understood in their ordinary meaning, the employment of the preposition becomes at once obvious. If the vases or jars were employed in the service of Molech, what more natural than that they should have impressed on them at the time of their manufacture a stamp declaring that they were dedicated to the service of the deity, and at the same time conveying a warning that the ever watchful deity would take notice if they were stolen or appropriated to any profane use?

And this construction seems to find corroboration in the writings of St . Paul. He appears to have been familiar with the practice of "dedicating" vessels and the way of signifying their dedications by means of a seal. In his Epistle to the Romans (ix, 21) he asks, "Has not the potter power over the clay of the same lump to make one vessel to honour and another unto dishonour? What if God, willing to show His wrath, and to make His power known, endured with much long suffering the vessels of wrath fitted to destruction, and that He might make known the riches of His glory on the vessels of mercy which he had afore prepared unto glory." Pursuing the same train of thought in his Second Epistle to Timothy (ii, 19, 20), and using the same metaphor, he writes, "The foundation of God standeth sure having this seal, 'The Lord knoweth them that are His;'" and then follows the allusion to the "Great house," where were "not only vessels of gold and of silver, but also of wood and earth, and some to honour and some to dishonour." The Apostle thus continues "If a man therefore purge himself from these, he shall be a vessel unto honour sanctified and meet for the mister's use, and prepared unto every good work." The practice of
dedicating, nay of sanctifying vessels for the Temple, would seem to have survived down to the time of St. Paul, and it would also appear that in the case of earthenware vessels which, being intrinsically valueless, might in the service of the Temple be inadvertently used both for sacred or profane uses, it was the practice of the potter to impress upon those which were to be exclusively employed for sacred purposes a seal denoting their sanctification.

There are in the Museum two other handles, the impressions on which are not so legible. In both, however, it would seem that the introductory word is L.MLK ; and consequently according to this construction dedicated "To Molech."

The presumption that the impressions on the vase handles indicated the dedication of the vessels to a sacred use, is of course considerably strengthened if the inference be well founded that the figure resembling a dove with outstretched wings, which forms part of the impression, was the emblem of the sun-god.

How then must we read this inscription, and what light, if any, does it throw on the religion of Lsrael prior to the Babylonian captivity? What were these vases and this pottery, of which the relics were found in such quantities as to give rise to an idea on the part of Mr. Fergusson and others that they were the remains of a museum of crockery which had been collected by one of the kings of Judah? The conclusion appears to me irresistible that these vases were used in the service of the Temple, and that this is shown by the place where they were found, and the stamp which declares that they were dedicated "to Molech who views," "the All Seeing" or "Ever Watchful." That Molech worship, which was simply a worship of Baal, existed side by side even in the Temple at Jerusalem with the worship of Jehovah, is placed beyond all doubt by the records of the Books of Kings, and by the protests of the Prophets of the seventh and eighth centuries b.c. Tophet, in the valley of the son of Hinnom, was just outside the walls of Jerusalem, and there the sacrifice of children to Molech was perhaps only too common down to the very eve of the captivity. We are told that Manasseh, Josiah's immediate predecessor on the throne of Judah, satcrificed his son to Molech. But under Josiah, a great reformation was effected. The book of the Law was found in the Temple by Hilkiah the priest, and Josiah proceeded to carry out the instructions which he found therein. "And the king commanded Hilkiah the High Priest, and the priests of the second orler, and the keepers of the door, to bring forth out of the Temple of the Lord all the vessels that were made for Baal and for the Grove" (the Ashera, the symbol of Ashtoreth, the consort or female side of Baal), "and for all the host of heaven, and he burned them without Jerusalem in the fields of Kidron, and carried the ashes of them unto Bethel" (2 Kings, xxiii, 4). Is it very improbable that in this broken pottery found at the foot of the Temple wall, we may have some of "the vessels of Baal" (as they would be termed by the historian) which were cast out of the Temple by order of Josiah, but which, from their fragile nature, intrinsic worthlessness and incombustibility, were not removed to

Kidron to be destroyed by fire? Nay, do not all the circumstances seem to indicate that these vessels were cast in Josiah's time on the spot where they have now been discovered! So long as the kingdom of Judah lasted, so long it is reasonable to assume that comparatively little alteration took place in immediate proximity to the Temple walls. But when the monarchy was overthrown, and the Temple was rifled and destroyed, the first layer would be formed of the débris, through which, after the lapse of two thousind four hundred years, deep shafts must now be sunk to reach the ground on which Josiah's contemporaries stood.

It is not however necessary to suppose that the fragments now found are those of the vessels which were destroyed by order of Josiah. The pottery used in the service of the Temple was, like all other pottery, fragile, and when broken was doubtless thrown out as useless. Those who accept the rendering given by Grotius of Zech. ii, 13, will perhaps recoguize in the place where these fragments were found, "the pottery in the House of the Lord "that is in the precincts of, or adjoining the Temple where refuse was cast, and which was therefore an appropriate place for the thirty pieces of silver of which the prophet speaks.

The material point is that the fragments to which I have directed attention were parts of vessels used in the Temple in the service of "the Molech," and that they dated in all probability from the concluding years of the Jewish monarchy. Josiah survived his great attempt at reformation only a few years. Assyria having been threatened by Egypt, he was so ill advised as to interfere, and endeavoured to arrest the advance of the Egyptian army. A battle was fought at Meggido, where the Israelites were routed and Josiah slain. The bent of Hebrew religious thought, both among believers and unbelievers, invariably connected temporal prosperity or adversity as the case might be, with divine pleasure or divine resentment,* and it was therefore not surprising that the terrible disaster at Megiddo and its consequences were attributed by the discontented people to their abandoument of the worship of the Baalim and the Ashtaroth. The kingdom of Judah was laid under tribute; many of the Israelites were carried into captivity beyond the Nile. Hence the bitter reproaches addressed to Jeremiah by the exiles in Egypt: "Since we left off to burn incense to the queen of heaven ( $\mathrm{ML} \mathrm{Ch} T h$ ) ind to pour out drink offerings to her" as "we and our fathers, our kings and our princes have done in the cities of Judah, and in the streets of Jerusalem, we have wanted all things, and have been consumed by the sword and by famine." (Jer. xliv, 17, 18.) At all events, on the death of Josiah, the Jews and their rulers appear to have acted on the assumption that the deceased monarch had committed a blunder. The former religion was re-established, so far as we can judge from the little that is told us by the sacred historian of Josiah's sons and grandsons, who in turn filled the throne of Judah. It is conveyed in the familiar refrain, "they did

[^12]evil in the sight of the Lord according to all that their fathers had done." Then came the crowning disaster. The siege and capture of Jerusalem by the Babylonian monarch. The spoilation of the Temple. The removal of all its treasures, and the carrying away into captivity of the bulk of the population. To the Jews the night seemed at its blackest, but still it was the harbinger of the dawn. When they returned from the Chebar to the Jordan, and proceeded to rear the walls of the second Temple, a new era was commencing; Baal, and Molech, and Ashtoreth had vanished never to return. The overthrow of the Babylonian empire by Cyrus gave the Istaelites their liberty, and when Erra proceeded to Jerusalem, "with the Book of the Law in his hands," his companions, like himself, were the stameh maintainers of that pure monotheism which was then firmly established in Judea, and has continued amongst the Children of Isratel uncorrupted to the present day.

## BIBLICAL RESEARCH.

## Jannes and Jambres witistanding Moses.

I have received with great pleasure the statement of your Committee that "they desire that their Journal should become as much as possible a record of all discoveries comnected with Biblical Research." Few Biblical names are more interesting than those of James and Jambres, or Kamr(es) as the Select Papyri seem to call him. The two are named by St. Paul to Timothy as agents, in a general way, who " withstood Moses;" and if we find their names comnected with that of Moses in pure Egyptian papyri, in other words, if the epoch of Moses is the epoch of Jannes, and the epoch of Jannes is the epoch of Seti II and Bai-n-Ra, then many an old stop-gap theory of a merely Egyptian chronology will have to make way for the chronology of the epoch of Moses, in which the Bible and the papyri are very closely intertwined.

Must unfortunately, the fifth Anastasi Papyrus, which I shall chiefly make use of, has been injured at the name of $\operatorname{Kamr(es)}$, and the name only occurs once ; but we shall find him engaged with a Jannes in a very important military business; a business the very object of which was to "withstand" a person named Moses. With respect to the reading of the name of Kamr(es) or Kamr, the authority of my lamented friend and former pupil, Charles Goodwin, is so great, that I am much pleased to see that he follows me so far as he goes, and differs from me only in saying nothing about the letter $r$. In the "Cambridge Essays," p. 262, he reads : "Ka Kam (Black Bull)." He agrees that Ka is a title ; and therefore that the true name begins with Kam.

The passage to which I would first call your attention is in the fifth Anastasi Papyrus, begimning from plate 18, line 6. It contains a sequence of military orders from this Kamr(es) or Jambres. Happily we can here learn in a few lines a good deal about the man, and, to begin with, it is a great thing to know which side he was fighting for, in the auarchy around
him. On every occasion the scribes connected with him parade the grand titles of Seti II, and, with Jamnes and Bek-n-Ptah, the three profess they will sing for Seti eternal songs ; and "Oh," say they, " may he make for us myriads of festivals." Now in presence of Jambres who (as we shall soon see) could initiate the moving of troops in Edom, we have of course to ask ourselves wats he a lientenant of the Regent, Mai-n-Ra, or was Bai-n-Ral dead? Unless the latter was the case, I camnot in any degree picture the situation. Mr. Goodwin ("Society of Biblical Archatology," vol. ii, part 2, p. 3as) is astonished at the frantic loyalty shown to Bai-nRa (2nd Anastasi, p. 5). An explanation which merely supposes him to have been a king does not sufficiently account for the fact. This was in Goodwin's day the general opinion, which not only leads to nothing, but Miss Corbeaux had already foroibly pointed out the weakness of such a supposition. In fact it rests upon the moral impossibility that the great Rameses II should have dismembered the empire in his own lifetime. Seti II also and his children would not have dedicated royal statues to Bai-n-Ra had there been even a suspicion of treason resting on such a Bai-n-Ra as the conqueror at Prosopis. The fact that Seti and his children allowed these statnes to be erected has doubtless been the chief reason why he has been thought to have been a king. But to this the answer is sufficient that, in gratitude for his great services, the statues were erected during the lifetime of Rumeses $I I$ himself. In fact at Medinet Abou the statue of Bai-n-Ra was actually placed before that of his own father. This I should say instead of proving, clearly disproves that he can have been then considered as anything more than a regent. 'Co sum up then, it seems most probable that Bai-n-Ra exercised royal functions for about five years, and that his death took place about this time, which event, coupled with the absence of his half-brother Seti II, in Ethiopia, brought forward Jambres, and was the principal cause of the rising of the Semites, which eventuated the Exodus. While alive, his mere name, and the tribute in corn which he wisely gave the Khita, would sutfice to keep things tolerably quiet, but "apres lui le deluge." The key of the situation seems to have been at Edom, and a regent friendly to the Semites, and pretending to be so to the Hittites, might do much from Edom which could not be done from Ethiopia.

Again, Jambres and his companions have made it quite clear in these papyri that they worshipped Amen-Ra, the great Theban god, but then it is equally clear that Bai-n-Ra, acting for his father Rameses, built a strong place, avowedly to connect Egypt with the foreign men of Jaha (End Anastasi, p. 1). Four deities are mentioned as patrons of the four sides of it. Amen could not of course be well left out, but the other three were Semitic, viz, Sutech, Ashteroth, and Sati. In the fice of this solid fact, how can Egyptologists have been so blinded by the early military successes of Rameses II as to forget what his glories led to, viz., tribute to the Khita in his own lifetime, and a general prepration for the Exodus soon after his death. Wonderful discoveries in this very mouth of August show us that the mummy of the great

Rameses, at some time not yet known, was inclosed in a plain sycamore citse, and dropped into a ditch to hide it from foreigners.*

After Bai-n-Ra's death the unity of Egypt depended upon the powerful and prosperous Khita, and the strategy of Jambres, so far as we know it, was equal to the occasion. The difficulty was first, to reinforce Zoar, the key of the position for defence against the Northeners; secondly, not to offend the Khita; and, thirdly, to keep a hold on his own Semitic troops. The device by which he secured the first and third desideratum was ingenious. He ordered a corps of loyal Midianites to Thuku or Edom, and kept in his own hands, as a pledge, the books containing the genealogies or roll call of the soldiers. This fact neither Goodwin nor Brugsch have perceived. It rests upon the following first part of the order I have been mentioning. (Anastasi 5, xvii, 6.) "Communication. When my letter gets to you, you are to bring the Midianites of the captivity to the plain in face of Tasak(arta), with an intimation given thus, viz,' 'Ye (the Midiauites) are not to carry away the genealogies of the people.' I will keep them in my hand in a written document. Then do you (viz, my officers) take notes, while you cause the people to pass along before their signalizing officers, for the object of arriving at Thuku. I give you command to carry them across (viz., the genealogies) for the people; I who am Captain of Archers, Bull Kamr(es) of Thuku, to Captain of Archers Ani and Captain of Archers Bek-n-Ptah in the Palace."

This translation (in a primitive form) I gave in my Exodus Papyri, A.D. 1855. In 1858, Goodwin, reviewing me, did not see his way to giving his own version, as he would have been lorought face to face with the problem of Jambres the Bull of Thuku. Brugsch too, in 1879, passes it over in silence. It is, in my opinion, the very key-note which harmonizes all around it.

In passing on to the next part of the paragraph we come to the sign of a stop. In such a case it is not certain that the coming paragraph must be connected with what we have just read. Nevertheless, the context seems to give us a comection, and if it were not for the tantalising gaps at the most important points, we should all probably agree that we have before us what seems to be an order to close in on the south, given to another officer, Amen-mesu, son of Bek-n-Ptah. Even if this part of the papyri were not otherwise interesting, it has achieved such notoriety that I ought not to pass it by without notice. Dr. Brugsch (Vol. II, "History," p. 358) has attributed its preservation to Divine Providence, and calls it the most precions memorial of the epoch. He follows Goodwin in considering that it refers to two runaway slaves. Now considering that a singular pronoun cannot agree with a plural noun, I cousider that there was only one slave, who was a slave to two people, viz., Bek-n-Ptah and Amen-mesu, father and son, and that he was not running away, but carrying

* September. They now say that the above mummy was that of Rameses XII.
messages; and that the order refers to the movement of a large body of troops. The reason Goodwin must have had for what he must have considered an improvement upon my version, was doubtless that the preposition $m-s a$ may mean belind. No doubt it may; but then, on the other hand, it no less frequently means by the side of. An instance of this may be found nt Plate 13 , line 1 , of this papyrus-" While I hold thy heart near me." I am astonished to find in Pierret's dictionary that the sense of behind is given exclusively. "Communication. Seeing that I have given orders in the halls of the Palace on the 9th of Epiphi at time of night by the side of the servant for two, and considering that I am about to start for Zoar of Thuku on the 12th, to tell them to pass to the south, and to give orders for the passage on the Epiphi, I arrived at the fortress. They told me they had taken the field to pass Ta-Anab, north of the Migdol of Seti I like Baal. My order is for you to go. I have arranged for everything that could happen." Surely the running away of a couple of servants (even if they were Moses and Aaron) cannot have necessitated the movements of large bodies of troops like this. The order then proceeds, "Dispatch with them the bearer of the roll-call : dispatch ever so many men with them. I have taken care for everything that could happen, and do yon give signals for great numbers of people beside them."

The English of all this seems to be that the commander-in-chief, Jambres, having received information that a body of Semites were escaping, ordered Pek-n-Ptah, who was somewhere south, to allow them to cross his front (just as Marius did with the Teutons), but to take careful notes from his corps in observation.

As had been expected, they were found to be marching north, and Amen-Mesu, son of Bek-n-Ptah, was then consequently ordered to close up south. The "Servant for two" carried the necessary orders to the two corps, while Jambres took one more night's rest, and next day drove on towards Edom.

The next portion of the papyrus is a very curious, and very uatural letter from the young Amen-mesu, whom we have seen to be in active service in the field, to his elderly father Bek-n-Ptah, at the depôt apparently of the troops employed. Instead of describing what he heard, and saw about him, he most dutifully, but most annoyingly says, "Prithee, send me word of thy condition." "Yea, not a man of those whom thou hast sent to visit me has told me conceming thy condition." "Moreover, send thou me some good loaves, and 50 small cakes ; the messenger brought 20 of them," etc. This trauslation is Goorlwin's.

We next (Plate 21, line 8) have a letter which according to all rules ought to be of most particular importance, as it is from a royal scribe. Royal scribes were very great personages indeed, especially serving as generals, which this one did. His name was Rameses. He writes to one Avari, whom he orders to proceed to Bubastis, where he is to put the signals to work, and to report himself at the place agreed upon. He was not to go and stand at this place, and that place; he was to go under command of the priest Rameses, where the military and royal Rameses
would join him at the breakage of the waters. "I am angry with you," he says, "beyond speech, your throwing away your business. I appoint you to work at the breakage, whatever state it is in."

Neither Goodwin nor Brugsch have said a word to this. This breakage of waters, however, camot have been a small matter, so excited was the royal scribe. Whatever it was, it is probable he would seek to diminish its importance in his letters home. Bubastis was a ceutral position letween the fields of Zoan, the city of Rameses, and Talmet, where so much was taking place, as shown in my last paper. My own view is that there must have heen partial concentrations of the Hebrews with the mixed multitudes, previous to the grand march; and that the Egyptian seribes in these papyri give their account of the partial events here and there.

We must remember that the Nile would be at about its lowest on the first day of Abib, on and about b.c. 1291. A body in marching order might, I suppose, cut a dyke so as to cross over safely, while the downward water rushed out in the form of a wall on to the surrounding country. The gap would then tend to get filled up, and the royal scribe may have done no better than our own Duke of York at Walcheren.

In giving this description, the candid reader will remember that I am not professing to describe what did happen, but what the Egyptians said happened. The same cantion applies to the name and deeds of James. Six times is he named in these papyri, and the religious public has a right to ask of Egyptologists is this so?

Twenty-five years ago I showed the fact, and not one step of investigation into his history has been made ; and now Professor Brugsch gives us the astounding tramsmodification of the letter $i$ into $z$, and calls him Zani! This necessitates some examination into his individuality.

The honest Goodwin, as quoted above, names a Captain of Archers as "Ani." I confess there is a difficulty about this name, for facts are stubborn things. So in the days of Queen Elizabeth, there was a mighty Keltic man, named Shan, and to have called him John, without any explanation, might doubtless have led to some difliculty. Now the name in the papyri is written in four ways.


To begin with, I consider that the double mark in 1 and 3 is a sign of reduplication, so that the name which Goodwin wrote above as "Ani," is really "Anni." Another thing to remark is that in page 117 , the name
spelt as No. 2 is ordered to escort some obelisks, and in page 119 progress is reported by No. 3. Surely, therefore, the names 2 and 3 were meant to be identical. Which then of these names is nearest to the spoken name of the famous Jannes? Of course it will be satid that I am prejudiced, lut then St. Paul shows that there really was a man named as in No. 3. I retain then the opiuion that I was right in my Exodus Papyri, twenty-five years ago. Dr. Brugsch's present opinion is absolutely incompreherisible. He reads No. 4 as Zani (see Vol. II, p. 127). If this were so, Jordan ind Joppa should be read Zordan and Zoppa. I may as well mention here that the discoveries here attributed hy Dr. Brugsch (II, 127) to Chabas were mine ; as also was that of Baal-Zephon, in the 8th Anastasi, line 6. attributed here to Goodwin. The letter concerning the obelisks is valuable, in stating that James and others were " of the king's children," brought up probably as Moses himself was, and I strongly suspect that the obelisks had been made for Rameses II, and were being appropriated by Seti II. Their transportation seems to be dated in the listh year, and I know of no king but Seti II who could have had a 13 th year at this time. If this is correct, it would be the very year of the return of Seti II from Athiopia, when probably the mummy of Rameses II was lying in the ditch.

The next letter is very curious. It opens with i negotiation between Jannes and "the great man." I am aware that Pi-otr, which means "the great man," was also a proper name, but the real name appeas at the end of the negotiation. The great man had demanded a census, which had evidently been agreed to (by Jambres, I suppose). The real fight was on a point of detail, which was clung to earnestly by each party for reasons which we may guess at, but camot well know. The question was whether the names were to be called out and answered miad coce, or written on tickets. An answer was expected that those in the actual custody of Jambres might use tickets, while those who had escaped over to the great man might use their voices. I may as well say at once that the great man was Moses himself. This compromise was to be nominally rejected, but this was to be on the plea that James knew nothing about the foreign names and signals. Moses however was to be considered as on an equality with the nobles (i.e., the Egyptian nobles), and if a few more objections could be slipped in while the enemy listened, it would be held that he (viz, Jannes) had doue his best. Thus fruitlessly did James and Jimbres withstand Moses.

Here is the letter (plate XXV), "Communication. To wit. Seeing that I have sent the Captain of Archers, Jannes, captain of captains, to consult with the great man, it is because he had said to us, I demand at census of the people ; and because (on his statement) we were to call out loud the name of each person who owned the name. Now let it be known to them I am not for the plan of calling out
"I wish and Mai of Thuku* to give them tickets in writing.

* Mai held the highly important post of head of those Midianites who remained loyal to Egypt on the defection of the mixed multitudes under Moses.

It is between himself and God if they do not give tickets in due form. Likewise if an answer should arrive to say, 'Let it be that the names should be called out for those in your custody, for you brought them there, then you are not to make a question of the correspondence of the name called out to the ticket written, and brought there. You are to say I am not capable of reckoning with you the signals of the Midianites, with their sigual officers. Thou cinst repeat them, for thou are among them of a verity. Lo thou art Moses of the Semites. Art thou not a noble? Thou wast brought from another place (viz., Midian, I suppose), to set thyself on an equality with the nobles. Thom hast leant their words of command, the answering to their names. I give orders that - should be brought, - - their langnage with the language of those who live in Egypt, for thou art of the race of the Midianites
"In giving our instructions again, a few words. While you listen, do what you can. Yea, are not these things to be reckoned to you. Your kind Excellency will bear the burden."

Dunbar J. Heath.

Esher, Surrey, September, 5.

## THE PLACE OF STONING.

## (Reprinted from the "Athenuum," by permission of the Proprictors.)

## I.

Jerusalem, August 17, 1881.
Tree discovery of an interesting tomb of the Herodian period in the rocky knoll to the west of Jeremiah's Grotto was recently amomed in the columns of the Atheneum. Lient. Conder surgests that this tomb may possibly be the "Sepulchre in the Garden" of the Gospel narmative. Whether or not the distiuguished exphorer is right in his conjecture will probably always remain an open question. I desire simply to call attention to one or two facts which will, I think, throw some light on the name " Place of Stoning," mentioned by Lieut. Conder in connection with the lately discovered "sepulchre."

It is well known that when Jerusalem was in the possession of the Crusaders the northern gate of the city (a predecessor of the present Damascus Gate) was known as the Gate of St. Estiene-St. Etieme-St. Stephen, from its proximity to a church of that name, situated outside the walls on the spot where, according to the traditions of that agre, the proto-martyr had been stoned. From the account given in "La Citez de Jherusalem" vide Appendix ii to vol. ii of Robinson's "Biblical Researches") it appears that the church of St. Stephen was built on the opposite side of the road to that on which stood the "donkey-house of the Knights Hospitallers," the ruins of which building were discovered by Col. Warren some years ago. Saewulf (p. 43, "Eanly Travels in Palestine," "Bohn's Antiquarian

Library ") tells us that " the stoning of St. Stephen took place about two or three arbalist shots without the wall to the north, where a very handsome church was built, which has been entirely destroyed by the pagans." These notices evidently point to the "Place of Stoning," that is, the rocky knoll above mentioned, as the site of the medirval church of St. Stephen, and it seems probable that one or other of the two or three rock-tombs on the spot may have been the last resting-place of Eudoxia, the empress of Theodosius II. A French guide-hook for the use of Latin pilgrims to Palestine ("Guide Indicateur des Sanctuaires et Lieux Historiques de la Terre Sainte") states (p. 252), on the authority of William of Tyre and Albert Aquensis, that Eudoxia was buried in the church of St. Stephen, which she built.

It is remarkable how, during the lapse of centuries, the monkish traditions as to the place where Stephen was stoned varied. Arculf (A.D. 700) was shown the site of Stephen's martyrdom on Mount Zion (" Early Travels in Palestine," p. 5), Bernard the Wise (A.d. 867) mentions the place as on Mount Zion (p.28), Saewulf (A.D. 1102), and the author of "La Citez de Thérusalem" (A.D. 1187) place it north of the city, and Sir John Mandeville (A.d. 1:322) on the east, over against the Valley of Jehoshaphat. The spot now shown to pilgrims as that where Stephen suffered is on the way from the St. Stephen's Gate of our days (during the Middle Ages it was the Gate of Jehoshaphat) to Gethsemane.

## II.

Jerusalem, August 25th, 1881.
Maving in my letter of the 17 th called attention to a few historical notices concerning the medirval church of St. Stephen, which is alleged to have been built by, and to have contained the tomb of, Eudoxia, and having also made some remarks on the vacillating character of the monkish traditions, I would now say a few words about the Jewish opinions respecting the "Place of Stoning." From various passages in the Talmud, especially Sanhedrin, fol. 23, 1, Bab. Sanhedr., ful. 42, 2, in explanation of
 was without the camp, or more correctly, "without three camps,"
 Shechinah, i.c., the Temple, the second the camp of the Levites, and the third, Jerusalem, the camp of Israel. In other words, the Place of Stoning was situated outside the city, always supposing the tribunal which condemned the malefactor to have been held within the city.

Maimonides, Sanhedr. xii, 3, p. 96 , is of opinion that if the trial took place outside the city, then the place of execution was situated at a distance of the city was allowed to walk on the Sabbath from the place where the
tribunal sat. We are not, however, told in what direction from the city the place of execution lay. One local Jewish tradition considers the Convent of the Cross (el Masallabeh) to be situated on the site of the
 Grotto with the precipice as the Place of Stoning. This is, perhaps, the Place of Stoning alluded to in the notice in the "Athentem" mentioned in my letter of last week. The general opinion amongst those Jews of whom I made enquiries on the sulject of the location of the Beth Hasekeelah, who did not seem to know anything of, and to whom I took care not to mention, the traditional sites I have just referred to, is that the Place of Stoning was situated outside the city and not far from the Damascus Gate, or rather the place now occupied by that gate.

The chief argmonts in favour of the supposition that the place above - Teremiah's Grotto really was the Jewish Place of Stoning seem to be (1) the tradition; (2) its position outside the city ; and (3) the adjacent precipice, thongh the last does not appear to have been an absolutely necessary adjunct to the Beth Hasekeelah, which, it seems, was a sort of scaffold ("ein Geriist," Rabbinowicz, 'Einleitung in die Gesetzgebung und die Medicin des Thalmuds, aus dem Französischen übersetzt,' 'Trier, 1881) from ten to twelve feet high (see Lightfoot on Acts vii, 58), or twice a man's height.

If, therefore, we are able to identify the place above Jeremiah's Grotio with the ancient. Jewish Place of Stoning, where after death the bodies of executed criminals were hung up by the hands (a proceeding suggestive of crucifixion), the question very naturally suggests itself as to whether this spot may not have been the Golgotha of the New Testament, conspicuous "afar off") Mark xv, 40, Luke xxiii, 49), near a great high road leading up "from the country" (Mark xv, 21, Luke xxxiii, 26), and "nigh to" but "without" the city gate. Compare John xix, 20, with Hebrews xiii, 12.

This theory seems to have great probabilities in its favour, though, as I remarked in my former letter, it will probably always remain an open question as to whether the recently discovered Herodian tomb be the actual "Sepulchre in the Garden" or not.

## J. E. Hananiel.

## SITE OF MEGiddo.

Aberdeen, 30th March, 1881.
Romnson identifies Megiddo with Lejjum, and Conder with Mujedda in the Jordan valley.

There is one important notice of Megiddo that seems not to have been taken into account in determining the site, 2 Kings ix, 27, "But when Ahaziah, the king of Judah, saw this, he fled by the way of the garden
house. And Jehn followed after him, and said, Smite him also in the chariot. And they did so at the going up to Gur, which is by Ibleam. And he fled to Megiddo, and died there." This seems to me absolutely to exclude Mujedda from identification with the Meriddo here mentioned. Jehu would come from the direction of Mujedda. It is not likely that Ahaziah would flee in that direction, but rather towards Jerusalem. This agrees with one of the places mentioned in the same verse-Ibleam. According to Conder's "Handbook," this is to be identified with Wady Belameh, south of Jenin. This is exactly the course that Ahaziah would likely take, but it is irreconcilable with Megiddo being either Lejjun or Mujedda.

There are three passages in the Bible which give definite indications regarding the site of Meggido.

1. Judges v, 19, "Then fought the kings of Cauaan in Tatanach by the waters of Megiddo." The obvious meaning of this is that the battle was fought in Taanach, and that Tamach was by or over the waters of Megiddo. Whether Taanach be a town or district, if the battle was fought south of Tabor, the only waters in which it could be fought are some of the sources of the Kishon. It is a question, however, whether the words may not be rendered "The kings of Canatan, in Taanach, by the waters of Meggido, fought." The Targum of Jonathan paraphases the text thus, "then the kings of Canaan began war ; in Taanach did they dwell, and extended even to the waters of Megiddo." Jonathan was probably well acquainted with Palestine, and felt the difficulty of connecting Tanach either with the battle between Barak and Sisera, or with the waters of Megiddo. The only other of the ancient versions whose author we may suppose to have known Palestine, the Syriac version, indicates a conscionsness of the same difficulty. It drops Taanach altogether, and translates "The kings came and fought by the waters of Megiddo.' Thus the pasage, in the light cast on it by these two tramslations, rather opposes than favours the idea of any close connection between Taanach and Megiddo.
2. 2 Kings ix, 27. The flight of Ahaziah. The localities indicated here are the garden-house, or Beth Gur, the ascent of Gur near Ibleam, Megiddo. If the situation of Megiddo were once determined, it would determine the direction of the other places; or if the position of the other places were determined, it would determine the direction of Megiddo. Lieutellant Conder, in his "Handbook," where there is no theory to support, identific Ibleam with Bel'umuh, near Jenin, in which case Jenin might indicate the site of Beth Gur. In the last number of the Quarterly Statement he identifies it with Yebla. It is thas evident that mere similarity of name is not a sufficient gaide. We must turn to other cousiderations to find out the direction of Ahaziah's flight. Tehu approached Jezreel from the direction of Mujedda. It is not likely that Ahaziah would flee in that direction, or that he would flee in a direction that would cut him off from his own kingdom, Juilah. It is most probable that he would take the road for Jerusalem, and the natural road would be through

Samaria. The account in Chronicles says that he was hid in Samaria. Jehu, when he was on the way to Samaria, met the brethren of Ahaziah. It seems to have been then the recognized route for the princes of Judah to take in visiting their kinsmen in Jezreel. The whole connection of the passage would indicate Jenin as the road which Ahaziah took rather than Beit Jemn. It would be absurd to suppose that he went thence to Lajjun, but it is as difficult to see how he would go thence to Mujedda.
3. 2 Kings xxiii, 29. The battle between Josiah and Nechoh could hardly have taken place at Lajjun. Lientenant Conder's objections to this seem unanswerable. But the corresponding passage in Chronicles speaks of the battle as taking place in the valley of Mecriddo. Mujedda would be a good situation from which to attack an army wishing to cross the Jordan, as Lieutenant Conder points cut. But to a non-military reader it appear's not to be secure against an enemy coming up from Egypt, unless the heights to the west were also occupied, and if they were occupied, it is more likely that the battle would take place towards Jenin.

With regard to the two sites, Lajjun and Mujedda, the former seems to have nothing to support it, the latter has its name. Biblical indications do not point to either, but rather to some point on the road, or near the road, from . Jezreel to Samaria, where an army approaching from Egypt by the coast might be encountered.
4. The battle of Megiddo. We read in 2 Kings xxiii, 29 , that Nechoh slew Josiah at Megiddo when he had seen him. And his servants carried him in a chatiot dead from Megiddo, and brought him to Jerusalem." In 2 Chron. xxxv, 22, we read that he came to fight in the valley of Megiddo. There seems also to be little doubt that the reference, Zech. xii, 11, "the mourning of Hadad Rimmon in the valley of Megiddon"-is to the same event.

These are all the references we have to this battle in Scripture. If Nechoh's army followed the usual route by the plains, the only possible part of the platin of Erdraclon, in which the battle could have been fought would have been about the head, somewhere near Jeuin. To a non-military reader Mujedda would not seem a very safe position unless the heights to the west were occupied, and if they were occupied, the battle would more likely be on the western side towards Jenin. It is difficult, too, to conceive why Josiah should have allowed Nechoh to march all the way up the coast without attacking him.

But it is highly probable that this was not the route which Nechoh took. Herodotus (II, 159) iuforms us that he constructed a powerful Heet in the Mediterranean, which he used as he had opportunity; that he invaded Syria, and defeated the Syrians at Migdol. The natural inference is that he invaded Syria by sea. He was obviously anxious to avoid all quarrel with the king of Judah, and to strike a blow at the Assyrian power. The point from which he could most effectively do this with a fleet at his command was obviously Accha, and it is probable that this was the base of his operations. He would consider the kingdom of the ten tribes as part of the possessions of Assyria while Jenin laid claim to it.

Hence the conflict between the two. Migdol has been considered a corruption of Megiddo, but on the map there is a place marked el Mejdil, south of Accho, which an army advancing from the latter place would naturally occupy in going to encounter an army coming from Jerusalem. It may have been the head-quarters of the Egyptian army, and Hadad Rimmon that of the Jewish army, while the battle would probably take place between the two.

While the Bible does not supply data to enable us to determine with alsolute certainty the site of Megiddo, all indications point to the plain of Erdraclon as being the valley of Megiddo.

## REMARKS ON THE "JAM SUPH."

In the Quarterly Statement for April, p. 107, the writer of the "Notes on the Topography of Exodus" says, "It is remarkable that throughout the direct narrative there is no meution of a Jam Suph. Let us look at Exodus xiii, v. 17, there we are told that God led them (the Israelites) not by way of the land of the Philistines, althongh it was near . . . . but God led the people about (the original implies a circuitous route) the way of the wilderness, literally Jam Suph (there is no off) ; and verse 20 says God led them to the edge of the wilderness (clearly still the same as before, Jam Suph) ; there we find them encimped. The narrative then is continued in Chap. xiv. And God spake to Moses, 'Speak . . . . that they turn and encamp before Pihahiroth between Migdol and the sea.'" Here we find the direction of their march altered, they are to turn. Now let me remark that the writer having stated that they had encamped on the edge of the wilderness, defined by Jam Suph, must in his continuation of the narrative when he speaks of the sea of necessity refer to that particular sea described as Jam Suph, and so I would say throughout the narrative, and this is confirmed by the repetition of Jam Suph in the song in chap. $x v$, and in $\mathbf{v} .22$ we have it stated that Moses brought Israel from Jam Suph.

Further, in Deut. xi, 4, we have these words of Moses in his exhortation to the people, "What He did unto the army of Egypt, and how He made the water of the Jam Suph to overflow them as they pursued after you." Other passages in the Old Testament clearly state that it was Jam Suph that was dried up (see Joshua ii, 10, iv, 23). Joshua xxiv, 6, relates Joshua's speech before his death. He was an eye-witness, and says it was the Jam Suph. Surely these places are rather too numerous to be accounted for, as Mr. Greville Chester does, by saying that the Jam Suph has crept into the text ; cin any one doubt with these passages before them that the Jam Suph was the sea where the miraculons preservation of the Israelites and destruction of their enemies took place? In the New
 This alone would prove little; but on turning over the same passage
in the Syrian version I find this translated as in the Old Testament "Jam Suph." Some will perhaps say this is a mere tradition, but anyhow we have Scripture traditions stating that it was the Jam Suph. The Jam Suph is first mentioned in Exodus x, 19, in connection with the plague of locusts. An cast wind brought the locusts, a west wind took them away and carried them into the Jam Suph. Surely the description here given seems well to answer to the position of the sea east of Egypt called the Red Sea.
G. F. S. Stooke Vaughan

## hiding places in canaan.

## III. Samson and the Rock Etam.

Distance was nothing to the roaming lion of Dan. Eager to prey on the Philistines, he went down to Ashkelon, though both Ekron aud Ashdod were nearer to Timmath; at another time he carried away the gates of Gaza to within sight of Hebron. When therefore he wanted to be quiet, Samson might easily have sauntered quite as far from home in going down to the top (lit. fissure) of the rock Etam.

In seeking then for this hiding place of the famous Danite, we must not groundlessly assume that it was in the vicinity of his native Zorah, but be guided solely by the following conditions required in the Bible :-
A. The rock Etam is in Hebrew called a sela; therefore it was a precipitous rock or crag.
B. It was in the tribe of Judah, as also was Lehi.
C. It was probably near to Lehi, where the Philistines having gone up spread themselves, and also to an eminemce called Ramath-Lehi, close to which was a spring called En-hakkore.
D. Its position was such, that it is said (1) that Samson went down (from Timnath or Zorah?) and dwelt in the top of the rock Etam, and (2) that the men of Judah went down to the same place and brought him $u p$ from the rock to Lehi.

In "Tent Work," the rock Etam is placed at Beit'Atâb, and the identification is there thought satisfactory. It must however be rejected, as it fails to satisfy $A$; for though it may be said to be pre-cminently a rock-a knoll of hard limestone, without a handful of arable soil, standing above deep ravines, still it has no claim whatever to be considered a selu or crag, if we compare it with known instances, viz., Petra and the precipices of the passage of Michmash. Further, it is not clear how the springs to the north-west of Zorah could represent En-hakkore in Lehi, for they are situated far below Beit 'Atâb, in Dan, while Lehi was in Juduh, and the men of Judah brought Samson up and not down from the rock to Lehi.

Any candidate for the honour of being the rock Etam, must pass the prelimiuary examination required by sela.

Accordingly it is unnecessary to sift the suggestions that Samson's retreat was in one of the caves near Deir Dubban or Beit Jibrin, until a genuine selc reveals itself in that neighbourhood.

No position for the rock Etam seems to me more likely or suitable than one in Wady Urtas. This valley becomes a romantic gorge as we descend eastwards to the great cave of Khureitûn. Here, if not nearer to Solomon's pools, are found magnificent crogs, fully deserving the title of sela. As this part is in the desert of $J$ tuluh, conditions A and B are already satisfied.

The Ramah of Samuel was certainly (as it seems to me) just to the west of Solomon's pools. We have then a Ramah (with a spring adjacent) not far distant from a sele in Wâdy Urtas to answer to the Ramah in Lehi. This latter name appears to me to have been that of the valley extending north-east towards Rachel's sepulchre.

With Lehi in this position, the Philistines would naturally be said to go up to it in search of Samson, probably intending also, at the expense of Judah, to recoup themselves for their burnt corn with the rich harvest in Lehi or (else) in the valley of Rephaim. With the same precision of language, the men of Judah would be said to go down luwards Khureitun, and to bring Samson up to Lehi.

This position for the rock Etam is not really at variance with the statement that Samson went doun (from Timmath!) to the top of the rock, thongh the long uscent preceding the descent is not alluded to. David ( 1 Chron. xiii, (i) went $u_{p}$ ) to Kirjath-jearim (from Jerusalem) to bring up thence the Ark of Gond (to Jerusalem). Why may not an ascent be passed over in silence in Samson's case, just as well as a descent in David's? Thus a sele in Wâdy Urtas further satisfies $C$ and $D$.

The name Etam still survives in 'Ain 'Atan, near Solomon's pools, and a city Etam at one time apparently existed in this district (2 Chron. xi, 6); thourh " the rock Etam" does not seem to me necessurily to mean that the rock was near a city of this name.

An Etam also occurs in 1 Chron. iv, 2, immediately after the mention of Zurathites, while the Zareathites (i.e., the people of Zorah) and Eshtatulites seem in II, $50-54$ to be comnected with Bethlehem. This contact of the tribe of Judah with Dan at Zorah may have influenced Simson (even if he were not by descent connected with the immigrants from Bethlehem; to take refuge in their country when it was expedient for him to leave his own.

Not improbably then, through information given by Judah, the secret fissure in the crag Etam became the celebrated hermitage of the great Nazarite. But whether this could possibly be identical with the still more famous cave of Adullam of after time, must depend upon the precise kind of hole or fissure really described by the Hebrew word rendered "top" in the A.V.

## THE NATIVES OF PALESTINE.

We have from time to time been able to give papers on the manners and customs of the natives of Palestine, which have been received with great interest. The Rev. James Niel, formerly incumbent of Christ Church, Jerusalem, has just produced a work on the same subject, in which he embodies his own observations while resident in the country. Many of them are extremely interesting and valuable as illustrations of the Bible. We are permitted to quote one or two passiges from this book. The first extract is on the measuring of corn.

One of the characteristic sights of Palestine, shortly after the harvest has been gathered in, is the measuring out of wheat and barley, which sometimes takes place in the corn-market, but more frequently in the courtyard of the purchaser's house. All families at this time, that is, during July and August, lay up in store the wheat which will be required to provide bread for the use of the household throughout the ensuing year, and also bariey sufficient for their horses, mules, and asses during the same period. Samples are procured either from the farmer or merchant, and when approved the whole quantity ordered is delivered to the purchaser bound up in sacks. A professional measurer is always present on these occasions, and in the presence of the seller and buyer, or their representatives, duly proceeds to ascertain the contents of each sack. This is done by meting out the grain in a circular wooden measure in the shape of our own bushel, but less deep, called in Arabic a timneh. The measurer seats himself cross-legged on the ground, and proceeds to shovel the wheat or barley, as the case may be, into the timnel with both his hands until it is partly full. Next he seizes the measure, and shakes it strongly from side to side, by means of two or three rapid half turns, without raising it from the ground, in order that the grain may settle into a smaller space. This quick shaking together of the corn is a striking part of the process, and is very effective in forcing it to occupy less room. He then fills it further, and repeats the shaking from side to side, going over the same thing again and again until it is full up to the brim. As soon as this is the case, he gently but firmly presses upon it with his hands, so as to drive it into a yet smaller space. Finally, having first made a slight hollow on the top, he takes some more handfuls of grain, and very skilfully constructs a cone of corn upon the dlat surface of the timneh, which he has now filled. He continues carefully to build up this cone until no more grain can posssibly be held, and that which he adds begins to flow over and run down. Upon this the measure is considered to be of full weight, and is emptied into the purchaser's sack. This is the universal method by which grain is now meted out, and the price is always quoted at so much per timneh.

These professional measurers are often dishonest, taking bribes from seller or buyer, and in this case are very skilful in cheating either party as it suits their purpose. If it is to their interest to do so, while apparently going through the ordinary process, they can so contrive as to bring the contents of the measure to half a rottle, or three pounds less than the proper quantity, involving a loss
to the purchaser of over 6 per cent. On the other hand, their dishonesty more commonly favours the merchants and townspeople, who buy from the poor fellakeen, the peasants. The cunning of the measurers in this way is said to be brought to the highest degree at Nablous, the ancient Shechem. If one of them in that town is bribed by the buyer of wheat, not only does he bring his measure to take up the largest possible quantity, but in raising it after it is flowing over, he secretly lifts up with the hand supporting the bottom of the measure a considerable quantity of grain, which is so swiftly and adroitly done as to escape the observation of the fellah who is selling it.

I have taken means carefully to ascertain the capacity of the Palestine timneh. It is true, different kinds of wheat differ in weight. The following measures give the contents in the case of the best quality. A timneh filled up to the brim, without being shaken or pressed, weighs six rotlles and one-sixth, or just thirty-seven pounds. The same timneh, not only filled to the top but ruming over, that is, piled up above in the shape of a cone, also without being pressed and shaken, weighs seven rottles and one-third, or forty-four pounds. When, however, the measure in question is not only filled till it flows over, but is, at the same time, shaken together and pressed down, it holds just eight rottles, or forty-eight pounds.

No doubt it is to this simple and familiar custom that our Blessed Lord alludes, when He speaks under an allegory of the recompense of those liberal souls who shall assuredly themselves be made fat. "Give, and it shall be given unto you; good measure, pressed down, shaken together, running over, shall they give into your bosom [that is into the capacious natural pocket formed by that part of the loose Eastern shirt which is above the girdle]. For with what measure ye mete it shall be measured to you again" (Luke vi, 38 ; Mathew vii, 2; Mark iv, 24). The above facts lend far more power and definiteness to our Saviour's graphic illustration than we should at first sight have supposed it to contain. There is no less than eleven pounds' difference in weight between a "measure" filled to the brim, as we should fill it here, and one such as I have described filled according to the bountiful method of Bible lands, when it is "pressed down, shaken together, running over." In this latter case no less than about 30 per cent. is added to its worth!

The next extract illustrates a remarkable passage in Ezekiel (xxiv, 7, 8) with other passages.

A practice to be constantly noticed throughout Syria is that of hiding any blood, which may happen to be spilled on the ground, by covering it over with the surrounding soil or dust. If while you are on a journey a Bedaveen of your escort only so much as cuts his hand, or suffers from bleeding at the nose, he is very careful to let the blood fall apon the earth, without leaving any stain upon his clothing or person, and he then and there buries it out of sight by seraping over it the sand or dust of the desert before he proceeds on his way. The reason which they give for this observance I have not been able to discover. Most probably it comes from the thought in Numbers that blood pollutes the land if left to lic upon it (Numbers xxxy, 3) and from the plain direction in the case of the huntsman who caught any beast or fowl, to "pour out the blood thereof, and cover it with dust" (Leviticus xvii, 13). It is reasonable to
suppose that this direction, like many other matters contained in the Law, embodied and sanctioned an already well-know and universal practice. Very likely it arose from anxiety lest any blood apparing upon the ground might by any possibility be construed to represent some act of violence, and thus, in the language of Scripture, "cause fury to come up to take vengeance." This, in a land where the law of blood-revenge causing endless sanguinary family feuds is so stringent, may well be no imaginary fear. In any case, it is deeply interesting to mark its observance at the present day. It would seem to be referred to in the strong figurative language of several passages, notably that where Job in the bitterness of his soul cries (Job xvi, 18),
"Earth, cover not thou my blood."
A very striking Scripture in connection with this Eastern usage is that in Ezekiel, where God fortells the judgments coming upon Jerusalem at the hands of the Chaldeans. These judgments are dechared to be a retribution for the reckless violence and cruelty that had openly stalked through her streets. "For her blood is in the midst of her; she set it upon the bare rock; she hath not poured it upon the ground to cover it with dust. That it may cause fury to come up to take vengeance, I have set her blood unon the bare rock, that it should not be covered" (Ezekiel xxiv, 7, 8). There is here a force of meaning that might at first sight be overlooked. Jerusalem, as I shall have oceasion elsewhere to explain at length, is essentially a rock city. The rock crops up to the surface in every part of it. In ancient times, before the rugged slopes and precipices of limestone and indurated chalk were choked up and covered over, as they are now, by mountains of délris, it appeared, as at the fortress of Jebus, with its walls resting on rock scarps in some places fifty feet high. Hence one of its proud titles was "The Tableland Rock."

## CITY OF DAVID.

Plymouth, March 24th, 1881.
The Editor, "Quarterly Statement" of the Palestine Exploration Fund.
Sir, -Will you allow me to point out in reference to the question whether the "City of David" was on Ophel, as contended by the Rev. W. F. Birch; that on page 229 of the number for October 1850, Lieutenant Conder maintains, that "these royal sepulchres on Ophel are identical with the "field of burial of the kings" (2 Chron. xxvi, 23), where Uzziah was buried," and are a "pluce distinct from the Royal Cemetery in the City of David."

Now if the two passages in which account is given of the burial of Uzziah, be compared together, it will be seen that the place where Uzziah was interred, was in the City of David. They are as follow :-

## 2 Kings xv, 7.

"So Azariah (Uzziah) slept with his fathers; and they buried him with his fathers in the City of David: and Jotham his son reigned in his stead."

2 Chron. xxvi, 23.
"So Uzziah slept with his fathers, and they buried him with his fathers in the field of the burial which belonged to the Kings; for they said, he is a leper: and Jotham his son reigned in his stead."

Two other passages (one of which shows the distinctness of the two places of sepulture) confirm the view that both were "in the City of David." They are-

2 Kings xvi, 20.
"And Ahaz slept with his fathers, and was buried with his fathers in the City of David : and Mezckiah his son reigned in his stead."

2 Chron. xxviii, 27.
"And Ahaz slept with his fathers, and they buried him in the city, even in Jerusalem: but they brought him not into the sepulchres of the Kings of Israel; and Hezekiah his son reigned in his stead."

In this latter passage the "sepulchres of the Kings of Israel" are evidently equivalent to the "sepulchres of David," whose existence on Ophel Mr. Conder says on same page (229, lines 6 and 7), cannot be denied.

It follows therefore, I venture to think, that the "City of David" wherein these kings were buried, must have been on Ophel.

Yours truly,
H. B. S.W.

# LIS' OF DONATIONS AND SUBSCRIPTIONS. 

JUNE 21st, TO SEPTEMBER 30th, 1881.
a denotes Ammul Subseriber.
*** If any omission or mistuke he observed in the following lists, the Secretary will be very glad to be informed of it, and will rectify the error in the next Quarterly statement.



## LOCAL SOCIETIES.

Acknowledged in detail under special heading.


## BATH.



## BIRKENHEAD.



## BRIGH ION.



## CHELMSEORD.





$$
\alpha \Delta[r . \text { I. Coleman }
$$ Rev. G. B. Hamilton . . . 010 6

$$
\text { .. } \quad . \quad 0 \quad 0 \quad 10 \quad 6
$$ a'L. Tillboald, Esq. .. .. 110

$$
\begin{array}{lllll}
\text { aMr. L. S. Reeve } & \therefore & \therefore & 0 & 10 \\
6
\end{array}
$$ Miss A. Scabrook .. .. 010 6

$$
\begin{array}{lllll}
a \mathrm{Mrs} . \text { Holgate. } & \because- & \cdots & 0 & 10 \\
\hline
\end{array}
$$ Editor of the "Cheelm, ford

$$
\text { aJ. A. Spawel Bayley, Esq. .. } 00106
$$

Chronicle". . . . . $010 \quad 6$

$$
a \mathrm{~F} . \mathrm{G} . \mathbb{1} \text { unt . . } \quad . . \quad . \quad 0 \quad 10
$$ aEditor of the "Essex Weekly

$$
\text { aC. Shearman, Esq. . } \quad \therefore \quad \begin{array}{llll}
0 & 0 & 0 \\
\hline
\end{array}
$$ Nows"

Lssex Weckly

$$
010 \quad 6
$$

## LIST OF SUBSCRIPTIONS.

## FALMOU'IH ANJ COINNIVALL.

Scpt. 5. By cash.. .. .. .. .. \&16 $11 s$.

|  | dis. s . |  | $\mathrm{E}^{2} \mathrm{~s}$ 。 $d^{\text {d }}$ |
| :---: | :---: | :---: | :---: |
| Edward Banks, Keq. | 0106 | Brought forward | $\begin{array}{llll}9 & 7 & 0\end{array}$ |
| Rev. S. H. P. Bemett | 050 | 2. Lloyd Fux.. | 1100 |
| Edmund Carlyon, lisq. | 220 | Rev. George Hext | 0106 |
| Rev. G. Lemon Churd | 0100 | Mrs. Hodge | 0100 |
| W. Dunculf, Esq. | $0 \quad 50$ | Tiss Tustler | 100 |
| Miss Enys . . | 100 | Tliss. Peter . | 0106 |
| Rev W. Fookes | 010 | Rev. Wm. Rogers | 100 |
| Miss Fox | 1. | Comon Rogers . . | 0100 |
| Robert Fox, Esq. | 110 | Sir P. P'smith | 110 |
| Francis Edward Fox, Hosi. | 110 | Colonel Tremanne | 1.0 |
| R. Reynolds Eox, Esq. | 110 |  |  |

## GREENOCK.

Sept. 12. By cash .. .. .. .. $\mathfrak{f o g} 11 \mathrm{~s}$.


## LINCOTN.

a Mis Waldo Sibthorp ... | in | s. |  |
| :--- | :--- | :--- |
| 1 | 1 | 0 |

## LIST OF SUBSCRIPTIONS.

## LICIEIELD.



## MANCIESTER.

|  |  |  |  |  | £ | $s$. | d. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 29.-By cash.. | $\cdots$ | $\cdots$ | $\cdots$ | $\cdots$ | 5 | 0 | 0 |
| July 8.- , cheque | . | . | . | . | 5 | 0 | 0 |
| , 23.- , cash.. | $\cdots$ | $\cdots$ | $\cdots$ | - | 1 | 9 | 0 |



## MEETING ACCOUNT.



## NORWICH.

June 22.—By cash .. .. .. .. £2 2 0

## PLYMOUTH.

September 10.—By cash .

.. 5526


Mrs. M. Guswell .. .. $0 \quad 2 \quad 6$
Mr. H. A. Woodhouse .. 0
Mrs. Woodhouse .. .. 050
Mr. W. King .. . . . $0 \quad 2 \quad 6$
Mr. W. W. Anthony .. .. $0 \quad 2 \quad 0$
Mr. W. C. Nicholson .. .. 0
Woodhouse, Jerusalem
$-\quad 10-6$
$5 \cong 6$

## LIST OF SUBSCRIPTIONS.

## LECTURES AND MEETINGS.

Rev. Henry Geary.

|  |  |  | Procceds. |  |
| :---: | :---: | :---: | :---: | :---: |
| Place. | Date. |  | E $s$. | d. |
| Torquay (two) | Sarch 24 |  | 81 | 0 |
| Plymouth (two) | April 6 |  | 2.113 | 9 |
| Clifton, Bristol (two). . | ", 8 |  | 117 | 6 |
| Romsey | March 28 |  | 1412 | 6 |
| Southampton .. | 29 |  | 07 | ${ }_{6}$ |

DONATIONS AND SUBSCRIPTIONS FROM THE LECTURE LISTS.

EALING.


PLYMOUTH.

| $a$ Capt. Inkip | . | . |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $a \mathrm{H}$. Greenway, Esq. | $\ldots$ | $\ldots$ |  |  |  |  |  |
| $a \mathrm{~J} . \mathrm{W}$. Bumnett, Esq. | . | . |  |  |  |  |  |
| $a$ E. James, Esq. | $\cdots$ | $\cdots$ |  |  | 0 |  |  |
| Miss Bragg | . | . |  |  |  |  |  |

## LIST OF HONORARY SECRETARIES AND LOCAL ASSOCIATIONS.

Alloa: Rev. Alexander Bryson and Ref. Daniel M'Lean.
Aberdeen: Rev. Prof. Milligan, D.D. Hon. Sec. Ladies' Association, Miss Mary Forbes.
Adelaide: Rov. W. R. Fletcher.
Ambleside: Rev. II. B. Rawnsley, Wray Vicarage.
Anstruther: W. H. Mackintosh, Esq.
Ayr: Robert Murdoch, Esy.
Basingstoke: Rev. W. Marriner.
Bath: Rev. 'T. P. Methuen.
Bedford : Rev. Canon Haddock.
Belfast: Rev. the President of Queen's College.
Birkenhead: Rev. J. 'T. Kingsmill, St. Aidan's College.
Bishop's Waltham: Rev. H. R. Fleming.
Blackburn : Herbert Birch, Esq., and Rev. A. B. Grosart.
Blatrgowrie: W. S. Soutar, Esq.
Bodmin : S. Hicks, Esq.
Bolton : George Monk, Esq.
Brecon : Richard Mills, Esq.
Brighton: Rev. C. E. Douglass.
Broadstairs: Rev. J. H. Carr.
Brombey : Rev. W. J. Devereux.
Burnley: Alfred Strange, Eisq.
Bury : Hon. Treas.-Rev. Canon J. Hornby; Hon. Sec.-Rev. W. Walmaley.
Cambridge: W. M. Hicks, Esq., M.A., St. John's College; G. T. Bettany, Esq., M.A., Gonville and Caius.
Canada : Toronto.-Subseriptions are received by the Hon. G. W. Allan.
Cardiff: W. Adams, Esq., 53, Crockherbtown.
Chelmsford: Rev. G. B. Hamilton.
Cheltenifam: Dr. E. Wilson.
Chester: Rev. J. Davidson.
Chippeniam: A. T. Keary, Esq.
City and County of Cork: H. S. Perry, Esq., Monkstowh.
Cliftox and Bristol : Rev. C. H. Wallace.
Oroydon: J. W. Janson, Esq.
Darlington : J. P. Pritchett, Eeq.
Devonport : J. Venning, Esq.
Dorchester: Rev. Handley Moule.
Dublin: Denis Crofton, Esq., and Rev. G. T. Stokes.

Dunder: Robert Mackenzie, Esq.; Hon. Treas.-Alex, Scott, Esq.
Dunfermline : Rev. A. Graham, Crossgates.
Eastbourne: Rev. H. R. Whelpton.
Edinburah: Rev. W. Lindsay Alexander, D.D., William Dickson, Esq., F.R.S.E. and T. B. Johaston, Esq., F.R.G.S., 16, So. St. Andrew Street.

Egham: Rev. Horrocks Cocks.
Exeter: Rev. Prebendary Acland, Broad Clyst, and Rev. W, David.
Falmouth, for the County of Cornwall: A. Lloyd Fox, and W. P. Dymond, Esq.
Fleetwood: G. Curwen, Esq.
Frone: Philip Le Gros, Esq., J. P., North Hill House.
Gaza: J. G. Pickard, Esq.
Glasgow: Rev. W. P. Dickson, D.D., Rev. Donald Macleod, D.D., and A. B. M'Grigor, Esq., LL.D.
Greenock: D. MacDonald, Esq.
Guildford: Major-General E. A. Foord, R.E.
Hastings: J. E. Liddiard, Esq.
Hereford: Rev. F. S. Stooke-Vaughan.
Hertford: W. M. Armstrong, Esq.
Hitchin : J. Pollard, Esq.
Huddersfield: Henry Baker, Esq.
Mull: J. P. Bell, Esq.
Ipswioh: Rev. J. R. Turnock.
Ireland :-Dublin : Hon. Secs.-Rev. G.T. Stokes, Blackrock; Denis Crofton, Esq. Treasurers.-The Munster Bank.
Jerusalem: Dr. Chaptin.
Kendal: Robert Somervell, Esq.
Krrkcaldy: John Barnett, Esq.
Lancaster: Rev. J. Bone.
Larkifall: Rev. William Findlay, A.M., and Rev. W. P. Rorison.
Leamington: Rev. J. Johnson, M.A., and Rev. I. C. W. Phillips, M.A.
Ledbuty: Rev. F. Salter Stooke-Vaughan.
Leeds: Edward Atkinson, Esq., F.R.C.S.
Leicester: Rev. A. A. Isaacs, M.A.
Lewes: Rev. R. Straffen.
Lichfield: Merbert M. Morgan, Esq. Hon. Sec. Ladies' Association, Mrs. Bagnall.
Lincoly: Rev. A. R. Maddison.
Liverpool: Ven. Archdeacon Bardsley.
Londonderry: James McCorkell, Esq., Queen Street.
Maidstone: Rev. Thomas Harvey.
Manchester: Rev. W. F. Birch, and Rev. Canon Crane. Treasurer.-Oliver Heywood, Esq., Manchester and Salford Bank, St. Ann's Street.
Mansfleld: W. Gouk, Esq.
Margate: Rev. G. Collis.
Markbt Habborovgif: Joseph Nunnelly, Esq.
Melton Mowbray: Rev. Arthur M. Rendell.
Melrose: Ralph Dunn, Esq.
Middlesbobough: Rev. Edmund Jackson.
Montrose: Mr. Mackie.

Morpeth : Dr. Robinson.
Newark: Ladies' Committec. Hon. Treas. -Mrs. Tallents Mon. Sec.-Mr子. G. Hodgkinson.

Newcastle : Hon. Treas.-Thomas Hodgkin, Esq. ; Hoa. Sec.-W Lyall, Esq.
Norwich: Rev. W. F. Creeny.
Oxfond: Rev. Canon Ridgway.
Pbrtif: John W. Jameson, Esq.
Pitlochrie: Hugh Mitchell, Esq.
Plymouth: J. B. Rowe, Esq., and J. Shelly, Esq.
Raysgate: Rev. F. Gell.
Reigate : Alfied Putney, Esq., The Woodlands.
Richmond, Surrey : Henry Douglas, Esq.
Ripon: J. W. Weight, Esq.
Scarborough: Rev. J. Bedford.
Seyenoaks: Graham Jackson, Esq.
Shrewsbury: Rev. C. H. Drinkwater.
Sissinghurst: Rev. W. Peterson.
Soutinampton and Romsey: Rev. Henry C. Hawtrey.
Southisea: Rev. F. Baldey.
Sowerby: Rev. A. L. W. Bean.
St. Albans: Rev. W. J. Lawrance.
St. Andrews: Dr. Lees, and Dr. Mitchell.
Stroud: T. S. Osborne, Esq.
Spdenifay aud Forest Hill : Rev. William Boyd, LL.D.
Sydney, New South Wales: Rev. R. Steel, D.D.
Teignmouth: Rev. H. Hutchins.
Torquay: Rev. Preb. Wolfe.
Warminster: W. Frank Morgan, Esq.
Wells: W. I. Welsh, Esq.
Weston-super-Mare: Rev. H. G. Tomkins.
Weymouth : G. Ff. Eliot, Esq.
Whitby: E. W. Chapman, Esq.
Willesden : Rev. J. Crane Wharton.
Winchester: Miss Zornlin.
Windsore: Rev. Stephen Mawtrey.
Wolverhampton: Mr. J. McD., Roebuck.
Woonstock : Ontario.-William Edwards, sen., Esq.
Worcester: Rev. Francis J. Eld.
Yeovil : Rev. Abel Phillips, Holy Trinity Vicarage.
York: Rev. F. Lawrence.
The Committee will be glad to communicate with gentlemen willing to help the Fund as Honorary Secretaries.

## AGENTS.

The following are the Agents authorised by Local Secretaries to receive, distribute, and sell the publications of the Fund:

Aberdeen : Messrs. Wyllie and Sons.
Barnsley: Messrs. T. and C. Lingard, Chronicle Office.
Bath : Mr. R. E. Peach, 8, Bridge Street.
Bedford : Mr. Thompson, High Street.
Birkenhead: Mr. H. W. Allen, 156, Grange Lane.
Bodmin : Messrs. E. and H. G. Liddell, 7, Fore Street.
Bournemoutif: Mr. Hankinson.
Bradford: Mr. Henry Gaskarth, 5, Westgate.
Briailton: Messrs. H. and C. Treacher, 170, North Street.
Burnley: Messrs. Burghope and Strange, St. James's Street.
Cambridge: Mr. Dixon, Market Hill.
Cardiff: Mr. Wm. Jones.
Cheltenham: Messrs. Westley, Promenade.
Clifton and Bristol : Mr. W. Mack, 38, Park Street.
Cork: Mr. P. Morgan.
Darlingtoy: Mr. Harrison Penney.
Dover: Mr. J. J. Goulden, 176, Snargate Street.
Dundee: Miss Middleton, High Strect.
Eastrourne : Mr. Leach, Grand Parade.
Edinburgi : Messrs. W. and A. K. Johnston, 16, So. St. Andrew Street.
Falmouth: Mr. R.C. Richards.
Frome: Mr. C. J. Sage, Upper Market Place.
Greenock: Messrs. J. MeKelvie and Son.
Halfax: Mr. King, North Gate.
Hitchin : Mr. John Palmer, High Street.
Hudderspiele : Mr. Alfred Jubb, Estate Buildings.
Hưle: Messrs. Leng and Co., 15, Saville Street.
Ikvine: Mr. C. Marchland.
Leeds: Mr. Jackson, Commercial Strect.
Nortifampton: Mesers. Taylor and Son, Gold Street.
Norwich: Mr. Henry W. Stacy, Gentleman's Walk.
Perthe: Mr. Jno. Christie.
Preston: Mr. II. Oakey, Fishergate.
Reading: Mr. G. Lorejoy, London Street.
Scarborougif: Messrs. G. Marshall and Son, 72, Newborough.
Sevenoaks : Mr. Harrison, High Street.
St. Andrew's: Mr. W. C. Henderson, Chureh Street.
Weston : Mr. Robbins, High Street.
Whitby: Mr Reed.
Winchester: Messis. Jacob and Johnson.
Wolverhampton: Mr, J. M'D. Roebuck.
York: Mr. William Sessions.

# LIST OF DONATIONS AND SUBSCRIPTIONS. 

SEPTEMBER 20Ti TO DECEMBER 13TH, 1880.
a denotes Annual Subscriber.
*** If anr omission or mistake be observed in the following lists, the Secretary will be very glad to be informed of it, and will rectify the error in the next Quarterly Statement.

| $a \mathrm{~B}$. Anderson, Esq. | $\left.\begin{array}{ccc} \mathcal{E} & \varepsilon & d \\ 0 & 10 & 6 \end{array} \right\rvert\,$ | Brought forward. . | $\begin{array}{ccc} £ & s . & d . \\ 37 & 15 & 0 \end{array}$ |
| :---: | :---: | :---: | :---: |
| a Miss G. M. Areher | 0 | $a \mathrm{Rev}$ A. J. Ererett | 010 |
| Miss Asheraft | $0 \quad 26$ | aRev. W. Farrer | 2 |
| $a$ Rev. W. H. Askwith | 110 | $a \mathrm{Rev}$ H. Fisher | 10 |
| $a$ Rev. L. R. Ayre | 10 | J. F. Fordham, Esq. | 55 |
| $a$ W. Baker, Esq. | $0 \quad 50$ | aRer. H. D. French | 10 |
| $a \mathrm{R}$. Baron, Esq. | 0106 | W. Galbraith, Esq. (don.) | $10 \quad 6$ |
| $a$ W. Beamont, E | 200 | Rev. II. Geary (lectures) | 1710 |
| $a \mathrm{St}$. Bee's College | 110 | aRev. J. B. Goldberg .. | 106 |
| aJames Benham, | 10 | $a$ Mrs. Goldberg | 10 |
| $a \mathrm{R}$. Blair, Esq. | 0106 | $a$ Miss Goldstone | 10 |
| $a$ Archdeacon Boutflower | 220 | $a \mathrm{II}$. Goodman, Esq. | 0 O |
| $a \mathrm{Jno}$. Brewster, Esq. | 110 | $a \mathrm{Mrs}$. G. C. Gorham | $10 \quad 0$ |
| $a$ Rer. J. Ingham Brooke | $1 \begin{array}{lll}1 & 1 & 0\end{array}$ | aJ. Gould, Esq. | 10 |
| $a$ W. F. Browell, Esq. . | $\begin{array}{lll}1 & 1 & 0\end{array}$ | R. Govett, Esq. | $\begin{array}{llll}1 & 0 & 0\end{array}$ |
| $a$ Rev. Canou Brownlow | 0106 | $a \mathrm{Rev}$. S. Gray | 0100 |
| $a$ Rer. J. W. Brooks | 0 | aJ. J. Greaves, Esq. | 10 |
| $a \mathrm{G}$. Burns, Esq. | 500 | $a$ Rev. J. R. Gregg | $1{ }^{1} 100$ |
| a Misses Capel .. | 0106 | a Mrs. Guise | $\begin{array}{lll}1 & 0 & 0\end{array}$ |
| aRev. W. 13. Caparn | 0100 | $a \mathrm{~F}$. W. Hitchin-Kemp, Esq. | 1 |
| $a \mathrm{Mrs}$. S. M. Cash | 010 | a Miss A. Hodgson |  |
| $a \mathrm{~A}$. Cator, Esq. | 0 | E. T. Holden, Esq. | $\begin{array}{lll}2 & 2 & 0\end{array}$ |
| $a \mathrm{Rer}$. W. Champernowne | 110 | ar. Hollings, Esq. | 1100 |
| $a \mathrm{Mrs}$. W. Chester | 100 | $a \mathrm{Mrs}$. C. Kemble | $1 \begin{array}{lll}1 & 1 & 0\end{array}$ |
| $a$ Rev. G. J. Chester | 010 | Rev. J. King (lectures) | - |
| $a$ Dr. Cooke .. | 110 | $a$ C. J. Lacy, Esq. .. | 010 |
| $a$ Miss C. Cotion | 110 | Miss Leach . | 010 |
| aMrs. Cruikshank | 100 | $a$ Hon. and Rev. Augustus |  |
| aJ. Cudworth, Esq. | $1 \begin{array}{lll}1 & 1 & 0\end{array}$ | Legge . | 11 |
| $a$ Rev. C. H. Davis | 10106 | $a$ Rev. R. Lovett | 010 |
| aMaj.-Gen. Sir H. C. B. Daubeney. . |  | aLuke Mackey, Esq. <br> a Mrs. Macpherson | $\begin{array}{ll} 10 & 6 \\ 10 & 6 \end{array}$ |
| aWm. Dawson, Esq. | $2 \begin{array}{lll}2 & 2 & 0\end{array}$ | aJas. MeCorkell, Esq. | 10 |
| a A. Elliot, Esq. | $\begin{array}{lll}0 & 10 & 6\end{array}$ | Rev. E. H. Mexeile (don) | 10 |
| a Miss Emmett . | 100 | Bishop of Madras |  |
| $a \mathrm{Miss}$ Enderby.. | 0 | a Mrso. Maxwell. | 0 0 |
| $a \mathrm{Mrs}$. Evans | $2 \quad 20$ | aCapt. H. Moody | 1 |
| Carried forward. . | 37150 | Carried forward. | 82910 |



| Brought forwardAberdeen |  |  |  |  |  |  |  | ${ }_{136}^{\text {L }}$ | $\stackrel{ }{s}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | . | $\cdots$ | . | - | +28 | 13 |  |
| Brighton | - | $\cdots$ | $\cdots$ | $\cdots$ | $\cdots$ | $\cdots$ | $\cdots$ | 12 | 10 | 11 |
| Chichester | $\cdots$ | $\ldots$ | $\cdots$ | $\cdots$ |  |  |  | 4 | 6 | 0 |
| Cork . | - | . | $\ldots$ | . | $\cdots$ |  | $\cdots$ | 11 | 17 | 6 |
| Eastbourne | - | . | $\cdots$ | $\cdots$ | $\cdots$ |  | $\because$ | 3 | + | 0 |
| Exeter |  | $\cdots$ | $\cdots$ | $\cdots$ | $\cdots$ |  | . | 13 | 8 | 0 |
| Hull | . | . | - | $\cdots$ | - | $\cdots$ | $\cdots$ | 19 | 19 | 0 |
| Manchester |  | $\cdots$ | . | $\cdots$ | - |  | $\cdots$ | 15 | 3 | 6 |
| Plymouth |  | $\cdots$ |  | $\cdots$ |  |  | " | 19 | $\stackrel{1}{0}$ | 6 |
| From other sources |  | . | $\ldots$ | $\because$ | $\ldots$ | . | - | 560 | 5 | 0 |
|  |  |  |  |  |  |  |  | 798 | 9 | 9 |

## SUPPLEMENTARY LIST.



LISI OF SUBSCRIPTIONS.

## LOCAL SOCIETIES.

## ABERDEEN (Ladies' Association.)

Collected by Miss Thompson, 5, Golden Square.
December, 1880.
$a$ O. L. Stephen, Esq., 5, White Hall Yard, London, S.W.
aGeorge Thompson. Esq., 5, Golden Square .. .. 100
aGeo. Thompson Yost, Esq., Binghill .. .. .. 1 o 0
aDavid Stewart, Esq., 259, Union Strect . . .. .. $\quad 1 \quad 0 \quad 0$
$a$ Theodore Crombie, Esq., Goval $\because \quad \therefore \quad \ddot{\text { Tondon }} \quad \begin{array}{lllll}1 & 0 & 0 \\ 0 & 10 & 6\end{array}$
a Mrs. Stephen Thompson, 30, Hamilton Terrace, London
$a$ Mrs. Cornelius Thompson, 17, Albyn Place, Aberdecn.. $\quad 0 \quad 106$
aMrs. J. Crombie, jun., Danestone $\quad . \quad$.. $\quad$. $\quad 0 \quad 106$

aJames Rose, Esq., 5, Rubislaw Terrace ..
$\begin{array}{llllllll}a W . & \text { Henderson, Esq., Deranah } & . & . & . & . & 0 & 10 \\ 6\end{array}$
aAlex. Webster, Esq., M.P. $\quad . . \quad$.. $\quad .$.
$\begin{array}{llllllll}a \text { Miss Beard } \\ a \text { Miss Thompson, } 5, & \ddot{G} \text { Golden Square } & \cdots & \because & \because & 0 & 5 & 0\end{array}$
Collected by Mrs. Kirby, 15, Dee Street.
aCol. Fiby 15, Dee Street .. .. .. .. 1 1 0
a Major Ros, 1, Albyn Place .. .. .. .. 010 6
adames Gebbie, Esq. $\quad \because \quad \cdots \quad . . \quad . \quad . \quad 0 \quad 0 \quad 10 ~ 6$
a David Mitchell, Esq., 24, Adelphi $\quad . \quad$.. $\quad .$.

$a \mathrm{Mrs}$. Kirby, 15, Dee Street
Collected by Miss Mary Forbes, 6, Mackie Place.
Misses Fiddes, Union Street .. .. .. .. $0 \quad$ \& 6
a Miss Gordon and W. Gordon, Esiq., 35, Albrn Place.. 0
a Rev. Prof. Forbes, D.D., 3, Westfield Terrace .. .. 010 6
$a$ Miss Thurburn do. do. .. .. $0 \quad 5 \quad 0$

aRev. John Calder, New Manse, Old Aberdeen . . . . . $\quad 0 \quad 10$ 0


aRev. Henry Cowan, St. Swithin Street $\quad . \quad . \quad \begin{array}{llllll}0 & & 0 & 0 & 0\end{array}$
aMrs. Simpson, 8. Golden Square .. $\quad \because \quad$.. $\quad \because \quad \begin{array}{llll}0 & 5 & 0\end{array}$


afames Stephen, R.N., 155, Crown Strect $\quad . \quad . \quad . \quad 0 \quad 10 \quad 0$
a Mrs. Duthe, 20, Albrn Place $\quad . \quad$.. $\quad . \quad$.. $0 \quad 0 \quad 10$ 0
a Mrs. Maclure, 18, Rubislaw Terrace $\quad . \quad$.. $\quad .$.
aWilliam Hunter, Esq., 14, Adelphi . Old Aberdeen .. 010 ©
aRev. Prof. Milligan, D.D., Universit . .. .. 010 ©
aMrs. Macpherson, 18, Albert Street .. .. .. 0
aJohn Smith, Esq., Advocate, Queen's Gate .. .. 1 1 0
$\begin{array}{r}22 \quad 13 \quad 0 \\ \hline=\end{array}$

LIST OF SUBSCRIPTIONS.

## ARBROATII.

1880. 



BRIGHTON.
G. Leveceipts.

Rev. T. Calvert Lsq
Miss Bovill
J. N. Winter, Ësq.

Miss Cobham
Misses Carr
Mdlle. de Paris
Rev. T. Moseley
Mrs. Soames
Miss Cruso
N. 'Turnbull, Esq.

Rev 11. H. Methue
G. W. King, Esq.
S. Clarke, Esq. .-


## CUICHESTER.

Dec. 2.-By Cush .. .. .. .. \&t 6
Per Mrs. II. Smith :-


CORK.
Nov. 13.-By Cash .. .. $£ 11 \quad 17$ 6
Subscriptions from Oct. 1880, to Oct. 1881 :-


## LIST OF SUBSCRIPTIONS.

## EASTBOLRNE.

$$
\text { Dec. 8.-By Cash .. .. .. } \quad \text { \&3 } \quad 3 \quad 0
$$

Rev. H. R. Whelpton, St. Saviour's, Eastboume (1879)

| $\mathfrak{E}$ | $s$ | $d$. |
| :---: | :---: | :---: |
| 1 | 1 | 0 |
| 1 | 1 | 0 |
| 1 | 1 | 0 |
| 3 | 3 | 0 |

## EDINBURGH.

Collected by Miss Dalgleish, 8, Atholl Crescent, Edinburgh, for the Palestine Exploration Fund, 1880.

Mrs. Marvie Brown, Dunipace House, Larbert . . . 0
Rev. Mr. Logan, Culrozs . . . . . . . . 010 6
Dr. Craig Maclagan, 5, Coates Crescent, Edinburgh . . o $10 \quad 6$
Dr. Duncan, 8, Ainslie Place, Edinburgh. ... .. 1 0 0
Rev. Dr. Stuart, 7, Northmberland Street, Elinburgh. 0106
Hurry Young, Esq., Cleish Castle, Kinross .. .. 010 G
Mrs. Hustie, Luscar House, Dunfermline . . . $\quad 1 \quad 0 \quad 0$
Laurence Dahkleish, Esq., 22, Coates Crescent, Edinburgh 010 G
John J. Dalgleish, Esq., 8, Atholl Crescent, Edinburgh. 010 G
Mrs. Dalgleish, ,, ,
Miss Dalgleish, $\quad " \quad \begin{array}{llllllll} & 0 & 10 & 6\end{array}$
C. A. Mc'Vem, Esq., Woodside, Ashton, Chester ". 0 o 106

Dr. Dow, Dunfermline .. .. .. .. .. $0 \quad 10$ 6
Mrs. Millar, Ballahish, Muckart .. .. .. .. $0 \quad 2 \quad 6$
A Friend $\quad \because \quad . \quad . \quad . \quad . \quad . \quad . \quad 0 \quad \underset{~}{2} \quad 6$
Mrs. Lang, and Miss Duncan .. .. .. .. $0 \quad 7$
880

## EXETER.



## HULL.

## J. D. BELL, M.D. (Hon. Local Treasurer, Hull).



| Oct. 13.—By Cash | .. | . | .. | . | £4 | 3 | 0 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| Nov. 4. | $"$ | $\because$ | . | . | . | 6 | 16 | 6 |
| Dec. 1. | $"$ | . | .. | . | . | 4 | 4 | 0 |

## PLYMOUTH.

Oct. 16.—By Cash .. .. .. .. £5 1 6
Nov. 3. $\quad$. .. .. .. .. 313 6
H. Evers, Esq. (1879)
«Jno. Windeatt, Esq. .
aJ. W. Shelly, Esq. .
aJno. Shelly, Esq.
H. B. S. Woodhouse
Mrs. Woodhouse, for Jerusalem Fund
Collected by II. B. S. Wood-house:--
W. Augear

|  |  | . | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| 6 |  |  |  |  |
| $\therefore$ | $\therefore$ | 2 | 6 |  |
| 0 | 2 | 6 |  |  |
| $\therefore$ | .. | 0 | 5 | 0 |

Oct. 13.-By Cash .. .. .. .. £4 3 0 Nov. 4. ". .. .. .. .. 616 6 Dec. 1. $\quad$.. .. .. .. 4 4 0

$$
\begin{equation*}
\text { .. .. .. .. } 313 \quad 6 \tag{31366}
\end{equation*}
$$

$11 \quad 0 \quad 0$

## LECTURES AND MEETINGS.

Rev. Henry Geary. Proceeds.
Place.
Hitchin
Date.
$\mathfrak{t}^{2} s . d$.
St. Mark's College, Chelvera
Oct. 12

| St. Mark's College, Chelsera | , 16 | . | 3 | 3 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Felsted School .. | 20 |  | 10 | 0 | 0 |
| Uppingham (School). | Nov. 3 | $\cdots$ | 10 | 0 | 0 |
| (Town) . | " 4 | - | 1 | 12 | 0 |
| Brighton . | , 11 | . | 22 | 0 | 4 |
| Shrewsbury (2 lectures) | 23 |  | 12 | 13 | 10 |

Donation from Lecture Lists:-
Shrewsbury Branch of Churcts of England Sunday School
Institute.
1100

## NOTE ON THE BALANCE SHEET.

The Balance Sheet appended shows a considerable falling off in subseriptions. This was to be expected in a time which was entirely occupied with the publication of results.

The expenditure, tabulated, is as follows:-

BALANCE SHEET, 1880.


Esamined and found correot,
W. MORRISON, Treasurer.

# LIS'T OF DONATIONS AND SUBSCRIPTIONS. 

DECEMBER 13TH, 1880, TO MARCH 16th, 1881.

> a denotes Annual Subscriber.
*** If any omission or mistake be obsersed in the following lists, the Secretary will be very glad to be informed of it, and will rectify the error in the next Quarterly Statement.


|  | $\begin{array}{rrr} \mathcal{E} & s . & d . \\ d 89 & 8 & 0 \end{array}$ |
| :---: | :---: |
| $a \mathrm{Ch}$. Ch. Mutual Improvement |  |
| Society, Folkestone | 2 |
| $a$ Rev. T. W. Carr | 110 |
| $a$ Rev. R. W. Churel | 2.00 |
| a Mrs. Cornish . | 0 |
| $a \mathrm{R}$. II. Cooke, Esq. | 1100 |
| aJ. E. Cooper, Esq. | 0 |
| $a \mathrm{H}$. Courtier, Esq. | 106 |
| $a$ Rev. J. L. Carrick | 1100 |
| Spring Hill School .. | $2{ }^{2} 000$ |
| "Rev. R. Callender, 1880-81 | 110 |
| "Mrs. Callender | . 110 |
| a Mrs. G. B. Crewdson. . | . 1110 |
| $\alpha$ W. Cooke, Esq. | 0 |
| rMiss Cheetham | 110 |
| a Mra. Cheetham | 110 |
| Rev. W. W. Clarke | . 200 |
| aW. Codd, Esq. | 110 |
| aGen. A. C. Cooke | . 100 |
| $a \mathrm{Mrs}$ A. M. Corsbio | - 220 |
| aRev. A. J. Cachemaille | 10 |
| $a$ Rev. H. Caddell | . 110 |
| $a$ W. Chureh, jun., Esq. | 0106 |
| a.J. Fenn Clarki, E | .. 1110 |
| aJ. A. Cooper, Esq | 110 |
| aGeneral Cracklow | 220 |
| aRev. A. Carr . | 110 |
| $a \mathrm{G} . \mathrm{C}$. Courthope, Esq. | 11 |
| aMrs. G. H. Cockburn | 010 |
| a Miss Corrie | $1{ }^{\circ} 10$ |
| ${ }_{\text {a Miss G. M. Corrie }}$ | $1 \quad 10$ |
| $a \mathrm{~W} . \mathrm{H} . \mathrm{Camlin}$, Esq. | - 220 |
| aJohn Chapran, Esq. | . 110 |
| $a \mathrm{Rev}$. Geo. Cluristim | . 1110 |
| $a$ Lord Clermont | 10 |
| $a$ Rev. G. B. Carr | 05 |
| $a \mathrm{~J}$. Cundwell, Esq. | 010 |
| aMiss Chambers |  |
| aRev. C. P. Clarke | , |
| aSir A. Cotton |  |
| a-Campbell, Esq. | .. $\begin{array}{llll}1 & 0 & 0\end{array}$ |
| aThomas Chapman, Esq. | 1 |
| a Mrs. C. Drummond .. | 1 |
| aCaptain Drummend |  |
| $a \mathrm{~F}$. A. Drummond, Esq. | 220 |
| aRev. G. W. Dalton, D.J. | . 110 |
| $a \mathrm{Miss}$ Deacon .. | $\cdots \quad 100$ |
| $a$ Rer. R. Drake. | 2 |
| $a \mathrm{M}$. Dutan | 010 |
| $a$ T. H. Dalzell, Esq. | 110 |
| $a$ Rev. 'T. Dalton | 110 |
| C. D. W. Digbs, Eeq. | 210 |
| ${ }_{n}$ Mrs. Davis | - 100 |
| aJ. Duncan, Esy. | . 0100 |

Carried forward 157 15 0

| Brought forward | $\begin{array}{rrr} £ & \text { s. } & d_{0} \\ 157 & 15 & 0 \end{array}$ |
| :---: | :---: |
| Mrs. Dykes | 50 |
| $a$ Rev. W'. H. Davey | 010 |
| Herbert Dalton, Esq... | $10 \quad 00$ |
| aBishop of Đover . . | 1 |
| aRev. John Dymock | 0 |
| $a$ Rev. W. W. Dickenson | $\stackrel{2}{2}$ |
| a Miss Envs | 100 |
| $a$ W. R. Ellis, Eeq. | 110 |
| $a$ Miss Orr Ewing | 010 |
| $a$ W. Ewing, Esq. | 10 |
| aW. Ewart, Esq., M.P. | 100 |
| $a \mathrm{~W}$. Quartin Ewart, Esy. | 100 |
| aJ. Eden, Esq. | 1 |
| Rev. F. J. Eld (10 year: | 515 |
| a Andrew Elliott, Esq... | 010 |
| Rev. W. Edwards | 1411 |
| $a$ Miss Ann Everard | 10 |
| a Miss C. Edwards | 5.50 |
| $a \mathrm{Mrs}$. Fremlin | $\begin{array}{lll}2 & 0 & 0\end{array}$ |
| $a$ Major Farquharson | 010 |
| aRev. A. R. Faussett | 1 |
| aJ. Fildes, Esq... | $\begin{array}{lll}1 & 1 & 0 \\ 5 & 0 & 0\end{array}$ |
| aC. F. Fellows, Esq. | 5 |
| $a$ Rev. F. II. Freeth | 1 |
| aRev. M. T. Farrer | 5 |
| $a$ Rev. J. T. Fowler ... | 1100 |
| Rev. Canon France-Hay | 50 |
| $a \mathrm{Rev}$ A. 31. Foster | 10 |
| $a$ Rev. A. Fuller | 10 |
| $a$ General Forlong | 110 |
| $a$ Rev. R. W. Fiske | 05 |
| $a \mathrm{E}$. Flecker, Esq. | 010 |
| $a$ D. W. Freshfield, Esq. | 1 |
| $a$ Rev. A. Furneaux . | 1 |
| $a \mathrm{R}$. Foster, Esq. | 010 |
| $a \mathrm{Rev}$. Ot. H. Fielding | 010 |
| $a$ Rev. G. R. Fleming | 22 |
| aG. P. Griffith, Esq. | 010 |
| $a \mathrm{Mrs}$. Greenfield ( $a 11.1$.s.) | 61 |
| $a$ Rer. A. G. Girdlestone | 010 |
| aJ. V. Gregory, Es: | 010 |
| aE. W. Gere, Esq. | 10 |
| aP. II. Gosse, Esq. | - 220 |
| a Mrs. George |  |
| a William Gibb, Esq. | 010 |
| J. Gilchrist, Esq. . | 100 |
| asir Daniel Gooch, Bart. |  |
| aJ.'Graham, Esq. | - 100 |
| $a \mathrm{Col}$. Gawler | 11 |
| $a$ Rev. A. B. Grimaldi . . | 11 |
| $a$ Miss Garnett |  |
| a Miss Garratt |  |
| a ${ }^{\text {Strs }}$, Germon | 010 |
| J. Eustace Grubbe, Esq. | 5 |

Carried forward $25017 \quad 5$


Carried forward 331711


Carried forward $425 \quad 1 \quad 2$

| Brought forwa | $\begin{array}{rrr} \mathcal{E} & s_{0} & d . \\ \text { rd } & 125 & 1 \end{array}$ |
| :---: | :---: |
| aMrs. Orlebar . | 110 |
| $a \mathrm{H}$. M. Ormerod, Esq. | $10 \quad 00$ |
| Rev. Dr. Pusey | 15150 |
| aD. Prigg, Esq., 1879-80 | 100 |
| $a \mathrm{Rev}$ Canon Pearson .. | 100 |
| aJ. H. Plowes, Esq. | 110 |
| $a$ Rev. J. Penrose | 100 |
| $a \mathrm{H} . \mathrm{F}$. Pease, Esq. | 110 |
| a A. Peckover, Esq. | 310 |
| $a$ Rev. G. T. Pilcher | $\because \quad 20$ |
| aJ. R. Pilling, Esq. | 0106 |
| $a$ Rev. W. Peterson | 0100 |
| $a$ D. M. Peebles, Esq. | 100 |
| aMiss Peard .. | 1100 |
| Miss Peacho | $100 \quad 0 \quad 0$ |
| $a$ W. A. Parlane, Esq. . . | 0106 |
| $a \mathrm{~A}$. Pope, Esq. . . | 100 |
| aC. Eyre Parker, Esq... | 110 |
| aE. M. Parker, Esq. | 110 |
| aH. Peto, Esq. . . | 100 |
| $a \mathrm{Honble}$. Mrs. Clara Paley | $010 \quad 6$ |
| $a$ Rev. J. Pryor . . . | 110 |
| $a$ Rer. G. Robson | 0106 |
| $a \mathrm{Mrs}$. Rouse | $0 \quad 50$ |
| $a$ Rev. W. A. Rouse | 012 6 |
| $a \mathrm{Miss}$ Relton | 110 |
| $a$ Rev. A. M. Rendell | 110 |
| $a$ A. J. Roberton, Esq. | 0106 |
| $a$ Dr. Rogers .. | 100 |
| aJ. N. Robertson, Esq. | 110 |
| $a \mathrm{~W} . \mathrm{H}$. Rylands, Esq... | 110 |
| aJ. Robertson, Esq. . | $\begin{array}{llll}0 & 2 & 6\end{array}$ |
| $a J . ~ F . ~ R a w d o n, ~ E s q . ~$ | $0{ }^{1} 106$ |
| $a$ Rev. C. Robinson | 010 |
| $a$ Rev. O. Read | 110 |
| $a W$. D. Robinson Douglas, | Esq. 1000 |
| aArthur Russell, Esq. . . | $010 \quad 6$ |
| $a \mathrm{~W}$. Ross, Esq... | 100 |
| $a \mathrm{Rev} . \mathrm{W} . \mathrm{P}$. Rorison .. | 110 |
| $a$ Rev. Fleming Stevenson | 113 |
| aMiss Sutherland .. | 0106 |
| aJ. C. Sharpe, Esil. | 110 |
| aW. Sykes, Esq. | $\begin{array}{lll}0 & 5 & 0\end{array}$ |
| $a$ Rev. C. Scott . | $0 \quad 106$ |
| $a H$. Stokes, Esq. | 100 |
| $a \mathrm{Rev}$ R. Steel . . | 110 |
| $a \mathrm{Col}$. Stuart | 110 |
| $a$ Rev. R. Scott | 110 |
| $a$ R. J. Snape, Esq. | 0 |
| a William Standering, Esq. | $\begin{array}{lll}2 & 2 & 0\end{array}$ |
| aEugene Stock, Esq. | 0106 |
| $a$ Henry Stear, Esq., 1881-8 | $5 \quad 50$ |
| aJ. A. Saunders, Esq. . | 0106 |
| $a$ W. Spottiswood, Esq. | 100 |

Carried forward $60215 \quad 5$


|  | Brought | t forward | $\begin{array}{rrr} \mathfrak{E} & s_{0} & d_{0} \\ 682 & 11 & 5 \end{array}$ |
| :---: | :---: | :---: | :---: |
| $a \mathrm{Dr}$. Vaughan .. .. .. 1110 | Miss Yates |  | 11 |
| aSir. R. Wilbraham .. .. 1 | $a \mathrm{Col}$. Yule | .- .- | 20 |
| a Miss Ward ( $a$ 1l. 1s.) .. 61010 | aW. B. Young, Esq. | .. .. | 11 |
| $a \mathrm{G} . \mathrm{F}$. Watts, Esq. .. . 110 | a Mrs. Baring Young | : | 11 |
| aMiss Yates .. .. . 1 | Total 68714 |  |  |
| Carried forward 682115 |  |  |  |

## LOCAL SOCIETIES.



## BODMIN.



## BRIGHTON.

Receipts.
Rev. F. T. Hill .


Henry Hebbert, Esq. .. .. 110
C. Bellingham, Esq. .. .. 0100
H. C. Malden, Esq. . . .. 1

Rev. C. E. Douglass .. .. 1 1, 0

Payments.
Transmitted, March 10th, $1881 \begin{array}{ccc}£ & \kappa & d \\ \text { \& } & 13 & 0\end{array}$

## DUNEERMILINE.


(ieorge Birvelt, EXy. .
Rev. Jitmes Brown, loochgelly
Rev. Mr. Crawford, Limekilns
John Duncanson, Esiqu... .
Rev. Antrew Grahmm, Cross. Lnter .
William Inglis, Raq.
1)anicel Lamond, Kaq.

John Landale, Eaq.

| 星 | d. |  |  | 1. |
| :---: | :---: | :---: | :---: | :---: |
| 10 | () | James Macfarlane, Esq. | $(1)$ | 11 |
| O 10 | $\theta$ | Mesmrs. W\%. \& J. Mcharen | 111 | \% |
| 05 | 0 | Rev. Alexander Mitehell, D.D. | 1 | $1 ;$ |
| () 2 | 6 | Miss Redford, Cuttlehill Mouse | (1) 10 | 6 |
| () 5 | 0 | William Reid, Esq. | ${ }^{11} 5$ | 11 |
|  |  | John Iross, Esq. | ${ }^{1} 10$ | 11 |
| 105 | 0 | Patrich T. Soutar, Esq. | $0^{10} 10$ | f |
| () 10 | c | Andrew Wallace, Esic.. | 11 | 11 |
| " $\quad=$ | 11 |  |  |  |
| 0 | ) |  |  |  |

## EHINBURGU.

dohn Moyes, 7 , Ainslie-place . .
Mrs. Mill, 35 , Howestreet ..
Mrs. (rallaway, 58, Great Kingstrect.
A. If:milton, 35 , Queen-street
.J. T. Black, 6 , North IBridge . .
Sir Robert (hristison, Bart., 40), Moray-place. .
W. F. Burnley, 24, Ainslieplace.. $\therefore$. . T. T. Brown, Cibmaltar ITouse

Rev. 1)r. II. Bonar, 10, Palmer-ston-road
Rev. 1)r. A. A. Bonar, (ilnsgow IV. Leckie, 11, Carlton-terrace Mrs. Arch Stewart, 10, Ettrick. road
John Watson, 2, Oswald-road.
I. ('. Burrow, Buckstone House, 13urton, Westmoreland
Whn Kemedy, 71, Great Kingstreet.
Rev. W. Tumer, 5, St. Andrewsquare
Moratius Bonar, W.S., 15, Millstreet . .
I. 13. Johnston, Edina Works, Caster-road
F. Caird, 15, Belgrave-crescent

John R. Nordie, 4, Upper Crayst reet.
d. Macandrew, 16, York-place

Wm. Dickson, 38, York-place.
Miss Falconar, Falcon Hall . .
Miss Mackenzie, 16, Morayphace.
F. Brown Douglas, 21, Morayplace .. $\quad \because \quad \therefore$
Tohn Macnair, 33, Moray-place
T. G. Murray, 11, Randolphcrescent
Misses Mure, 10, Damawaystreet.

200 $1 \quad 0 \quad 0$

100
110
010 i
$2 \quad 20$
100
110
100
$010 \quad 0$
100
0 106
110
$010 \quad 0$
100
$010 \quad 6$
$010 \quad 6$
$\begin{array}{lll}1 & 1 & 0\end{array}$
110
$010 \quad 6$
$0 \quad 5 \quad 0$
110
100
$010 \quad 0$
$010 \quad 0$
$010 \quad 0$
100
$010 \quad 0$

Miss Mackenzic, 16, Morny-
place .. $\quad \therefore \quad \therefore \quad 11010$
R. F. Scott, 25, Melville-street 0 i 0

Rev. Dean Montgomery, 17, Atholl-crescent

0 ; 0
Miss WIyld, 11, Lennox-street 100
James Watson, 45, Charlotte-

Rev. W. Makellar, B, ChanlotteW m. Bryce, M. $\mathrm{D}_{\mathrm{D}}, 31$, Charlotesquare. .

110
1011

Miss Ifunter, 5, Great Stuart-

Mrs. Miller, St. Margaret'sT. Chanmers Hama, $7, \ddot{M}$ agdala- " 11 () crescent .. .. 0 - 0
Rev. Dr. Mair, 7, Abbotsford Park
Willinm Lecs,
12, Morningsideplace .. $\quad . \quad \therefore \quad . . \quad 11$ in 0
D. Davidson, Wooderoft ‥ " ${ }^{1} 0$
E. K. Johnston, 12, Churchhill Johnston, 12, Church-
E. F. Johnston, 12, Church- () hill .. .. .. .. 11110
P. M. Ker, 12, Church-hill .. "10 ("
C. Jarrat, 12, Chureh-hill .. 100
R. S. Wyld, LL.D., 19, Inver-leith-row .. .. .. 010 o
Jnmes Syme, 10, Buckinghamterrace .. .. $\quad \ddot{i}$
Mrs. Grainger Stewart, 19, Charlotte-square $\quad$ io
Mrs. George Brown, 10, Doughas-crescent Bandolph.
Mrs. Morison, 12, Randolphcrescent .. .. .. 1 O 0
Mrs. Maitland, 9, Walker-street () is o
Mrs. and Miss Paterson, 3, Contes-crescent .. .. (1) 100
Mrs. Meek, 21, Rutland-square " $\because 6$

## IJIST OF SUBSCRIPTIONS.

Rev. W. Turner, 5, St. fis. $d$. Andrew-8quare $\quad . \quad$.. $0 \quad 10 \quad 6$
Professor Douglas Maclagan, 28, Heriot-row .. .. 1
Dr. Moir, 52, Castle-strect .. 1 o 0
Wm. Lyon, 51, George-street. . 100
Rev. Dean Montgomery, 17, Atholl-crescent $\quad . \quad$.. $010 \quad 0$
Misses Borthwick, 18, Scotlandstreet
.. $010 \quad 0$
P. Miller, 8 , Bellevue-terrace .. $0 \quad 2 \quad 2$

Professor Alex. R. Simpson, 52, Queen-street ..

110
Andrew Usher and Co., West Nicholson-street
Charles S. Inglis, 12, Dick-place $\quad 0 \quad 10-6$
James Sine, Craigmount .. $1 \begin{aligned} & 0 \\ & 0\end{aligned}$
J. A. Jamieson, 14, Buck-ingham-terrace $\quad \cdots \quad$.. $010 \quad 0$
Mrs. Edmond, 21, Comely Bank .

050
R. Mackay Smith, 4, Belleruecrescent

110
T. Anderson $\ddot{\text { Henry }}$ of Woodend, Hay Lodge, Trinity ...
John Turnbull, 58, Frederichstreet
$010 \quad 0$

Scott, Brothers, 126, Princesstreet.
D. Jeffrey, 14, " Randolph-cres cent $\underset{\text { Irs. }}{\text { Wood, }}$ i1, Clarendon. crescent
Rev. Alex. Whyte, 52 Melvillestreet.
Miss Buchanan, 18, Lansdown Crescent
. $\quad . \quad$.
R. Younger, St. Ann's Brewery

David Dickson, W.S., 1, Thistlecourt .. $\quad \ddot{ } \quad \ddot{ }$
W. J. Duncan, Abercromby place 110

Peter Mill, 39, North-bridge ..
Union Hall Religious Mutual Improvement Association, per Mr. Mill
Mr.
Rev. I.
Church Manse, Portobello .. Church Manse, Portobello .
G. C. C., Edinburgh .. $\quad . \quad 6 \quad 0 \quad 0$

The Chisholn March Hall .. 1 o 0
J. T. Wilson, Restatrig $\quad . \quad 010$ 0

Rev. J. Calder Macphail, Pilrig Manse
$0 \quad 5 \quad 0$
John M. Balfour, Pilrig House $010 \quad 6$
Rev. Thomas Main, D.D., 7, Bellevue-crescent .. ..
Mrs. Thomas Smith, Heriot Hill House
$010 \quad 0$

James Carnegic, 16, Windsor- £ s. d. street . . . .. .. 0 5 0
Dr. T. Balfour, 51, Georgesquare. . . .. $\quad . \quad 0 \quad 5 \quad 0$
Gall \& Inglis, 20, Bernardterrace

100
T. Nelson \& Sons, Parkaide .. 100

Miss Macmillan, 7, Fingal-place $0 \quad 26$
Rev. N. Wight, 47, Landerroad .. .. .. .. $0 \quad 2 \quad 6$
Mrs. J. M. Harvey, 16, Chalmers-crescent .. $\quad . \quad 0$
Miss Mowat, the Grange House 010 O
Mrs. Scton, St. Bennets $\quad . \quad 0 \quad 5 \quad 0$
J. H. Wilson (Rev.), 1, Elasttaroad .. .. .. .. 0
Prof. A.H.Charteris, 4, Greenhill Gardens .. .. .. 010 6
Charles Sidey, 21, Chesterstreet. .. .. .. $0 \quad 5 \quad 0$
Alexander Padon, 5, Wart-street 010 0
William Robson, Gillsland-road $0 \quad 5 \quad 0$
John Drybrough, 15, Coatescrescent $\ddot{0}$...
The Bishop of Edinburgh, 10, North Manor-place \& 8 .
James Steuart, W.S., 8, Donneterrace

050
Alexander Paton, 2, Drummondplace
$0 \quad 50$
John Scott-Moncrieff, 19, Lyne-dode-place
$010 \quad 0$
J. R. Stewart, 10, Sulisburyrond

0150
D. Anderson, Moray-place .. 050

Dr. J. H. Baliour, Inverleith House.

0100
Mrs. Munter, 18 AbererombyJ. Miller, of Leithen, 2, Melvillecrescent
$0 \quad 26$

Rev. Dr. Blaikie, 9, Palimerston. road .. .. .. .. 0
Rer. Dr. Stevenson, 9, Oxfordterrace
$010 \quad 0$
W. J. Ford, 17, Grosvenorcrescent

110
Rev. Dr. Hanna, 16, Magdalacrescent

100
Sir James Fulshaw, Bart, 14, Belgrave-crescent

110
Mrs. Colonel MacDougall, Woodburn, Canaan Lane .. 1110
Rev. D. Simpson, Free Church Manse, Laurencekirk .. $010 \quad 6$
W. G. Dickson, 3, Royal Circus $010 \quad 6$

## LIST OF SUBSCRIPTIONS.

## EDINBURGII LADIES' AUXILIARY.

## Collected by Miss Dalgleish, 8, Atholl Crescent.

John Macfie, Esq., Hope-terrace, $\mathfrak{E}$ s. $d$. Whitchouse Loan, Edinburgh $010 \quad 6$ Miss Clayton
$010 \quad 0$
John J. Dalgleish, Esq., 8, Atholl-crescent, Edinburgh
Mrs. Dalgleish, 8, Atholl. crescent, Edinburgh..
Miss Dalgleish, 8, Atholl crescent, Edinburgh.. ..
Mrs. Marvie Brown, Dunipacehouse, Larbert
$010 \quad 6$

Dr. Craig Maclagan, 5, Coates. crescent, Edinburgh. .
Rev. Dr. Stuart, 7, Northum-berland-street, Edinburgh .
Mrs. Hastic, Luscar House, Dunfermline.
C. A. McVean, Woorlside, Ash- £ s. $d$. ton, Cheshire. .. .. $0 \quad 10$ 6 II. Young, Esq., Cleish Castle, Kinross

0106
Dr. Now, Comely-park House, Dunfermline.. .. .. 010 6
L. Dalgleish, Esq., 22, Coatescrescent, Edinburgh.. .. 010 6
Dr. Duncan, 8, Ainslie-place, Edinburgh .. .. .. 1
Mrs. Millar .. .. .. $0 \quad 2 \quad 6$
Mrs. Lang and Miss Duncan .. $0 \quad 7 \quad 6$
Miss E. C. Stuart .. .. $0 \quad 2$ i
$819 \quad 0$

## HUDDERSFIELD AUXILIARY.

|  | For the Year 1877 | For the <br> Year 1878. | $\begin{aligned} & \text { For the } \\ & \text { Year } 1879 . \end{aligned}$ | For the Year 1880. | Totals. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Allen, Mrs. .. | $\mathfrak{f}$ s. $\boldsymbol{d}$ 。 | $f \quad s . \quad d$. | $\begin{array}{ccc}£ & s . & d . \\ 1 & 0 & 0\end{array}$ | $\begin{array}{lll}\text { £ } & s & d\end{array}$ | $\begin{array}{ccc}£ & s & \\ 1 & 0 & \\ 1\end{array}$ |
| Barker, Menry .. | - |  | $1 \begin{array}{lll}1 & 1 & 0\end{array}$ | $1 \begin{array}{lll}1 & 0\end{array}$ | $2{ }^{1} 200$ |
| Brooke, Edward . . | 110 | 110 | $1 \begin{array}{lll}1 & 1 & 0\end{array}$ | $\begin{array}{lll}1 & 1 & 0\end{array}$ | 440 |
| Brooke, J. A. . | 1 1 0 | 110 | $1 \begin{array}{lll}1 & 1 & 0\end{array}$ | $1 \begin{array}{lll}1 & 1 & 0\end{array}$ | 220 |
| Brooke, Thomas | - | - | $1 \begin{array}{lll}1 & 1 & 0\end{array}$ | 110 | 220 |
| Feugley, C. . | - | 0106 | $\begin{array}{lll}0 & 10 & 6\end{array}$ | 010 | 1110 |
| Hughes, Mrs. (the late) | - | 10 | 050 | 050 | 0100 |
| Hughes, Miss | _- | - | - | 050 | 050 |
| Mellor, Wright | -.. | 110 | 110 | - | 220 |
| Parratt, H. L. ... | .. | 1 | $1 \begin{array}{lll}1 & 1 & 0\end{array}$ | 110 | 220 |
| Wilson, Rev. G. E. | - | - | $\begin{array}{llll}0 & 10 & 6\end{array}$ | 0106 | 110 |
|  | 110 | 2126 | 8120 | 6156 | 1910 |


$1811 \quad 7$

## IPSWICH.



## LeEDS ASSOCIATION.

Alkinson, Ed., Esq., Eldon $\mathfrak{E}^{\&} s . d$. House, Leeds. . .. .. 1 1 0
Atkinson, Rer. A., Andlem Vicarage, Cheshire ‥ $\quad . \quad 1 \quad 0 \quad 0$
Athinson, J. W., Esq., St. John's, Ilkley
$1 \quad 10$
Baines, Sir Edward, Kt., St. Ann's, Burley
Baines, F., Escq., Westwood, Leeds.
Baxter, W., Esq., 7, Parksquare. . .. .. .. $0 \quad 10 \quad 6$
Birchall, Ed., Esq., Park-place 110
Birchall, Mrs., Whiteholme, Clitheroe
Byles, Rer A. Ï. Headingles $\begin{array}{llll}1 & 1 & 0\end{array}$
Conder, Rev. E. R., Leeds .. 100
Cornthwaite, Riglit Rer. Bishop, Springfield llouse ... $\quad$.
Crawford, Mrs., Blenheimterrace .. .. .. 1110
Ferguson, W., Esq., Ridge Houso, Leeds. . $\quad . \quad$.. $\quad 0 \quad 10 \quad 6$
Fraser, Jno., Lsq., Park-square
Good, J. G., Esq., 12, Southparade, Nottingham. il ${ }^{\circ}$
Harris, Miss, Oxton Hall, Tadcaster.
Harvey, T., Esq., Ashwood, Hoad . .
Hayes, Rev. W. A., 3, Mount-joy-place, Dublin $. . . \quad . . \quad 1 \quad 1 \quad 0$
Heaton, Miss, Woodhousesquare, Leeds. . $\quad . \quad$.. $0 \quad 10 \quad 6$
Hey, Rev. Jno., Clifton-lawn, York

110
110
110
$\begin{array}{lll}1 & 1 & 0\end{array}$

Holmes, Jno., Esq., Holmsted,
Rounthay .. .. .. 0106
Jepson, L. G̈., Esq. .. .. 1
Jowitt, Jno., Esq., Harehills .. 110
Lowther, Sir Chas If., Bart.,
Swillington House, near
Leeds.. .. .. .. 220
Maude, Miss, Knowsthorpe Hall .. .. .. .. 1
Metealfe, Geo., Esq., Pateley Bridge .. .. .. 110
Nelson, Henry, Esq., St. Jolm's Cottage $\ddot{J}$ a ${ }^{\text {Rawdon }}$
Rooke, Rev. J. G., Rawdon College, near Leeds .. .. 220
Ryder, C., Esq., Westfield, Chapel, Allerton ... .. 1110
Scatchard, Miss, East Kiswick 0106
Scattergwood, J., Esq., Parksquare. $\quad \cdots \quad \cdots \quad . \quad 0 \quad 10 \quad 6$
Sharpe, Miss (donation) .. 1
Thylor, T. E., Esq., Barnsley .. 110
Willians, J. W., Esq. Head-
ingley.. $\quad . \quad$.. $\quad . \quad 0 \quad 10 \quad 6$
Wood, Rev. F. J., Headingley Pursonage .. .. .. 1110
(For Map).
Holmes, J., Esq., Holmsted, Roundhay .. .. .. 220
Tweedale, Mrs. Kingston terrace

220
$3812 \quad 6$

BALANCE SIIEET (LEEDS).
By Subscriptions and Donations from March 1880 to March
1881 .. .. .. .. 3488
By sale of Greai Map (2 copies) 440

To adrertisement and printing $\quad 1 \quad 9 \quad 9$
Postage .. $\quad . \quad$.. $\quad . . \quad 1 \quad 2 \quad 0$
Stationery and Collector $\quad \because \quad 0 \quad 10 \quad 0$
Remitted to Society, February
11th, $1881 \quad$.. $\quad . . \quad \therefore \quad 30 \quad 7 \quad 0$
Remitted to Society, March
25th, $1881 \quad \ldots \quad \ldots \quad . . \quad 5 \quad 0 \quad 0$
Balance in hand $\quad$. $\quad . \quad 0 \quad 3 \quad 9$

## LIST OF CONTRIBUTIONS.

## MANCHESTER.



## RICHMOND.

## 1880.

Nov. 8. Miss Du Buisson,
Wandsworth Common .. 010 6 Nov. 12. Mrs. Cooke, The Terrace, Richmond .. .. 110 Nov. 20. Lady Augusta Onslow, Down Terrace, Richmond Down ... $2 \quad 20$

Nov. 29. Miss Corbett, Suffield Lodge, Richmond
$010 \quad 0$
Dec. 20. Henry Douglas, Esq.
10, Park Hill, Richmond .. 010 i
To cheque herewith on Messis.
Barnetts \& Co... .. .. \& 14 (1

## TUNBRIDGE WELLS.

General Mutchinson, Howrah House.
Mrs. Randnll, Lansdowneroad .. ..

Miss Gordon, Lausdowne-road 010 (1
W. F. Browell, Esq. . . . 1 1 0

3110

## LIST OF CONTRIBUTIONS.

WESTON-SUPER-MARE。


LECTURES.
Rev. Meviry Geary. Prisced.
Place.
Marlborough College
Tunbridgo Wells (2 lectures)
Speldhurst
Leigh, Tunbridge
Date.
.. Dec. 4, 1880
..
.. ,

Exeter (2 lectures-snow) .
Torquay (2 lectures-snow)
Clifton (2 lectures, not given through snow, but tickets
sold)
Weston-Super-Mare
St. Thomas's, Portman-square
Huddersfield
Croydon
Faversham
Ealing
$\begin{array}{llllrrr} & & & & £ & s . & d . \\ \text { Mr. Bedwell } & . & \ldots & \ldots & 0 & 5 & 0 \\ \text { Rev. T. Carden } & \ldots & \ldots & 1 & 0 & 0\end{array}$
Miss Birchall .. .. .. 1

Rev R. T. Lancaster .. .. 1 | 1 | 0 |
| :--- | :--- | :--- | :--- |

Miss Stokes .. .. .. 0
$\begin{array}{llllll}\text { Earl Ducie } & \ldots & . & . & 5 & 0 \\ 0\end{array}$
$\begin{array}{lccccc}\text { Baron de Ferrières, M.P. } & \text {.. } & \mathbf{1} & \mathbf{1} & 0 \\ \text { J. Middleton } & \text {.. } & \text {.. } & 1 & 1 & 0\end{array}$
Miss Robinson... $\quad . \quad . \quad 0 \quad 10 \quad 0$
Mrs. Wakefield. . . . . . $\quad 1 \begin{array}{llll}1 & 1 & 0 \\ 0\end{array}$


Rev. T. Fenn .. $\quad . \quad$.. $\quad 1$| 1 | 1 | 0 |
| :--- | :--- | :--- | :--- |

Canon Bell
CLIFTON AND BRISTOI.


## LIST OF HONORARY SECRETARIES AND LOCAL ASSOCIATIONS.

Alloa: Rev. Alexander Bryson and Rev. Daniel M'Lean.
Aberdeen: Rev. Prof. Milligan, D.D. Mon. Sec. Ladies' Association, Miss Mary Forbes.
Adelaide: Rev. W. R. Fleteher.
Ambleside: Rev. II. B. Rawnsley, Wray Vicarage.
Anstruther: W. H. Mackintosh, Esq.
Ayr: Robert Murdoch, Esy.
Basingstofe: Rev. W. Marriner.
Bati: Rev. T. P. Methuen.
Bedford : Rev. Canon Haddock.
Belfast: Ref. Dr. Porter.
Birkeniead: Rev. J. 'T. Kingsmill, St. Aidan's College.
Bishop's Waltham: Rev. H. R. Fleming.
Blackburn : Herbert Birch, Esq., and Rev. A. B. Grosart.
Blairgowrie: W. S. Soutar, Esq.
Bodmin : S. Hicks, Esq.
Bolton: George Monk, Esq.
Brecon: Richard Mills, Esq.
Briguton: Rev. C. E. Douglass.
Broadstairs: Rev. J. H. Carr.
Bromley: Rev. W. J. Devereux.
Burnley: Alfred Strange, Esq.
Bury: Hon. Treas.-Rev. Canon J. Hornby ; Hon. Sec.-Rev. W. Walmsley.
Cambridge: W. M. Hicks, Esq., M.A., St. John's College; G. T. Bettany, Esq., M.A., Gonville and Caius.
Canada: Toronto.-Subscriptions are receivel by the Hon. G. W. Allun
Cardiff: W. Adams, Esq., 53, Crockherbtown.
Chelmsford: Rev. G. B. Hamilton.
Cheltenham: Dr. E. Wilson.
Chester: Rev. J. Davidson.
Cimppenimam: A. T. Keary, Esq.
City and County of Cobk: H. S. Perry, Esq., Monkstown.
Clifton and Bristol : Rev. C. H. Wallace.
Croydor: J. W. Janson, Esq.
Darlington: J. P. Pritchett, Esq.
Devonport : J. Venning, Esq.
Dorciester: Rev. Handley Moule.
Dublin: Denis Crofton, Esq. and Rev. G. T. Stokes. 14

Dundee: Robert Mackenzie, Esq.; Hon. Treas.-Alex. Scott, Esq.
Dunprbimine: Rev. A. Graham, Crosegates.
Eastbourne: Rev. H. R. Whelpton.
Edinburgh: Rev. W. Lindsay Alexander, D.D., William Dickson, Esq.
F.R.S.E. and T. B. Johnstou, Esq., F.R.G.S., 16, So. St. Andrew Street.

Eghay: Rev. Morrocks Cocks.
Exeter : Rev. Prebendary Acland, Broad Clyst, and Rev. W. David,
Falmouth, for the County of Cornwall : A. Lloyd Fox and W. P. Dymond, Esq.
Farnwortif:
Fleetwood: G. Curwen, Esq.
Frome: Philip Le Gros, Esq., J. P., North Hill House.
Gateshead:
Gaza: J. G. Pickard, Esq.
Glasgow: Rev. W. P. Dickson, D.D., Rev. Donald Macleod, D.D., and A. B. M'Grigor, Esq., LL.D.
Greenock: D. MacDonald, Esq.
Guildfond: Major-General E. A. Foord, R.E.
Hastinas: J. E. Liddiard, Esq.
Hereford: Rev. F. S. Stooke-Vaughan.
Hertrond: W. M. Armstrong, Esq.
Hitcilin: J. Pollard, Esq.
Huddersfield: Henry Baker, Esq.
Hull: J. P. Bell, Eeq.
Ipswicit: Rev. J. R. Turnock.
Ireland :--Dublin : Hon. Secs.-Rev. G. T. Stokes, Blackrock; Deuis Crofton, Esq. Treasurers.-The Munster Bank.
Jerusalem: Dr. Chaptin.
Kendal: Robert Somervell, Esq.
Kirkcaldy: John Barnett, Esq.
Lancaster: Rev. J. Bone.
Larkhall: Rev. William Findlay, A.M., and Rev. W. P. Rorison.
Leamington : Rev. J. Johnson, M.A., and Rev. H. C. W. Phillips, M.A.
Ledbury: Rev. F. Salter Stooke-Vaughan.
Leeds: Edward Atkinson, Esq., F.R.C.S.
Leicester: Rev. A. A. Isaacs, M.A.
Letth: James Braidwood, Esq.
Lewes: Rep. R. Straffen.
Lichfield : Herbert M. Morgan, Esq. Hon. Sec. Ladies' Association, Mre. Bagnall.
Lincoln: Rev. A. R. Maddison.
Liverpool: S. Lewis, Esq., M.D., 157, Duke Street.
Londonderry: James McCorkell, Esq., Queen Street.
Maidstone: Rev. Thomas Harvey.
Manchester: Rov. W. F. Birch and Rev. Canon Crane. Treasurer:-Oliver Heywood, Esq., Manchester and Salford Bank, St. Ann's Street.
Mansfield: W. Gouk, Esq.
Margate: Rev. G. Collis.
Market Harborovgh : Joseph Nunnelly, Esq.
Melbourne, Australia: Rev. W. Poole.

## LOCAL ASSOCIATIONS.

Meltoy Mowbray: Rev. Arthur M. Rendell.
Melrose: Ralph Dunn, Esq.
Middlesborough: Rev. Edmund Jackson.
Montrose: Mr. Mackic.
Morpetif: Dr. Robinson.
Newabk: Ladies' Committec. Hon. Treas.-Mrs. Tallents; Mon. Sec.-Mrs. G. Hodgkinson.

Newcastee: Hon. Treas.-Thomas IIodgkin, Esq.; Mon. Sec.-W. Lagall, Esq.
Norwich: Rev. W. F. Creeny.
Oxford: Rev. Cunon Ridgway.
Perth: John W. Jameson, Esq.
Pitlocinie: Hugh Mitchell, Esq.
Pifmoutir: J. B. Rowe, Esq., and J. Shelly, Esq.
Ramsgate: Rev. F. Gell.
Reigate: Alfred Putney, Esq., The Woodlands.
Rionmond, Subrey: Henry Douglae, Esq.
Ripox: J. W. Weight, Lieq.
Scarbonough: Rey. J. Bedford.
Sevenoaks: Graham Jackson, Esq.
Shifnal: Rev. A. F. Furbes.
Shrewsbury: Ref. C. H. Drinkwater.
Sissinghithst: Rev. W. Peterson.
Southamptox and Romsey: Rev. Henry C. Hawtrey.
Southesa: Rev. F. Baldey.
Sowerby: Rev. A. L. W. Bean.
St. Albans: Rev. W. J. Lawrance.
St. Andrews: Dr. Lees and Dr. Mitchell.
Stalybbinge: Rev. Dr. Cranswick.
Stroud: T. S. Osborne, Esq.
Sfdeniam and Fokebt IIlle: Rev. William Boyd, l.L.j).
Sydney, New Soutur Wales: Rev. R. Steel, D.D.
Teignifoutir: Rev. II. Hutchins.
Torquay: Rev. Preb. Wolfe.
Warminster: W. Frank Morgan, Esq.
Wells: W. I. Welsh, Esq.
Weston-super-Mare: Rev. II. G. Tomkins.
Weymoutie: G. Ff. Eliot, Eisq.
Whitby: E. W. Chapman, Esq.
Willesden: Rer. J. Crane Wharton.
Wincyester: Miss Zornlin.
Windson: Rev. Stephen IIawtrey.
Wolverimapton: Mr. J. McD., Roebuck.
Woonstock: Ontario.-William Edwards, sen., Esq.
Worcester: Rev. Franciz J. Eld.
Yeovil: Rer. Abel Phillips, Holy Trinity Vicarage.
York: Rev. F. Lawrence.
The Committee will be glad to communicate with gentlemen willing to help the E'und as Honorary Secretaries.

## AGENTS.

The following are the Agents authorised by Local Secretaries to receive, distribute, and sell the publications of the Fund:
Aberdern : Messrs. Wyllie and Sons.
Barnsley: Messrs. T. and C. Lingard, Chronicle Office.
Bath : Mr. R. E. Peach, 8, Bridge Street.
Bedford : Mr. Thompson, High Street.
Birkenhead: Mr. H. W. Allen, 156, Grange Lane.
Bodmin : Messrs. E. and H. G. Liddell, 7, Fore Street.
Bournemouth: Mr. Hankinson.
Bradfond: Mr. Henry Gaskarth, 5, Westgate.
Bhighton : Messrs. H. and C. Treacher, 170, North Street.
Burnley: Messrs. Burghope and Strange, St. James's Street.
Cabrbridge: Mr. Dixon, Market Hill.
Cardiff : Mr. Wm. Jones.
Cheltenifam: Messrs. Westley, Promenade.
Clifton and Bristol : Mr. W. Mack, 38, Park Street.
Cork: Mr. P. Morgan.
Darlington: Mr. Harrison Penney.
Dover: Mr. J. J. Goulden, 176, Snargate Street.
Dundee : Miss Middleton, High Street.
Eastbourne: Mr. Leach, Grand Parade.
Edinburgh: Messrs. W. and A. K. Johnston, 16, So. St. Andrew Street.
Falmoutif : Mr. R. C. Richards.
Frome: Mr. C. J. Sage, Upper Market Place.
Greenock: Messrs. J. McKelvie and Son.
Halifax: Mr. King, North Gate.
Hitchin : Mr. John Palmer, High Street.
Hudderspield : Mr. Alfred Jubb, Estate Buildings.
Holl: Messrs. Leng and Co., 15, Saville Street.
Irvine : Mr. C. Marchland.
Leeds: Mr. Jackson, Commercial Street.
Northampton: Messrs. Taylor and Son, Gold Street.
Norwich : Mr. Heury W. Stacy, Gentleman's Walk.
Perth: Mr. Jno. Christie.
Preston : Mr. H. Oakey, Fishergate.
Reading: Mr. G. Lovejoy, London Street.
Scarborovait : Messrs. G. Marshall and Son, 72, Newborough.
Sevenoaks : Mr. Harrison, High Street.
St. Andrew's : Mr. W. C. Henderson, Church Street.
Weston: Mr. Robbins, High Street.
Whitby: Mr Reed.
Winchester: Messrs. Jacob and Johnson.
Wolverhampton: Mr. J. M'D. Roebuck.
York : Mr. William Sessions.

# LIST OF DONATIONS AND SUBSCRIPTIONS. 

MARCH 16TE, TO JUNE 21st, 1881.
a denotes Annual Subscriber.
** If any omission or mistake be ohserved in the following lists, the Secretary will be very glad to be informed of it, and will rectify the error in the next Quarterly Statement.




## LIST OF SUBSCRIPTIONS.



## LOCAL SOCIETIES.

Acknowledged in detail under special heading.


ERRATUM IN GENERAL LIST OF QUARTERLY STATEMENT FOR APRIL.
For " A. Peckover," read as follows :-


## ABERDEEN

June 15.-By cash .. .. .. £14 2s. 10d.
${ }^{a}$ Rev. John Robson, D.D., 30, Carden-place.. .. .. 0106 $a$ Mr. James Henderson, 1, Car-den-terrace .. .. .. 010 6
${ }^{\text {eFrancis Edmond, LL.D., } 5, ~}$ Albyn-place .. .. .. 1 $a$ Mrs. Edmond, $\quad$, . 100 $a$ Mrs. Johnson, Kinmunday, Skene by Aberdeen .. $\quad . \quad 0 \quad 5 \quad 0$ $a$ Dr. Stewart, Heatheot, Aberdeen .. .. .. .. $0 \quad 10 \quad 6$
aRev. John Davidson, D.D., Manse, Inverurie .. .. 010 6 $a$ Robert Gerard, Esq., 97, Union-street. .. .. 0106 。 aflex. D. Milne, 40 , Abbyn-place 0106 $a$ Mrs. McKinnon, Quecn's Cross $010 \quad 6$ $a$ Miss $\mathrm{Fenwick} \mathrm{Bisset} \mathrm{}$.

Carried forward 7186

Brought forward | $\boldsymbol{E}_{7}$ | s. | d. |
| :---: | :---: | :---: | Brought forward 7186 aRev. Wm. Mearns: D.D., Manse of Ayne .. .. 1

aGeorge Milne, Esq., MeCombie's s-court .. .. .. $010 \quad 6$
$a$ C. J. Burnett, Esq.: Chanonry, Old Aberdeen .. $\quad$.
aRev. Mr. Bannatyne, 5, Rubis- 106
law-place .. .. .. 0

a' $\mathbf{S}^{\prime}$.. .. .. .. 1. 0 0
11136
By two Lectures delivered by
Rev. Dr. Robson on 24th
March and 14th April
.. 528 82
$1616 \quad 2$
Less expenses of two Lectures. . 2134
Total .. .. $14 \quad 210 \frac{1}{3}$

## LADIES' ASSOCLATION.

March 14.-By cash
£ s.d.
Mr $a \mathrm{Mr}$. J. Murray Garden, 145, Crown-street . . . . . $\quad 0 \quad 10 \quad 6$ $a$ T. Marr, Cliff House, Cults . . 1 1 0 aRev. J. A. Maclymont, 4 Albert-street. .. .. $010 \quad 6$ $a$ Dr. and Mrs. A. D. Davidson, 224, Union-street .. .. 0150 aWm. Smart, Esq., 1, Lang. stane-place $\quad \therefore \quad \therefore \quad \therefore \quad 0 \quad 10 \quad 6$ a Mrs. Yeats, Beaconhill, Murtle
aGeorge "Jamieson, Ësq., 30, Albyn-place .. $\quad \because \quad$.. $010 \quad 6$ $a$ Fruncis Agston, M.D., 156,

Union-street .. .. .. 010 6
$a$ Mrs. Murray, Black Neuk, Brig o ${ }^{\circ}$ Balgowrie $\quad \because \quad$.. $0 \quad 10 \quad 6$
$a$ P. Esslemont, Lisq., 17, Silverstreet . . . . . $\quad$. $\quad 0 \quad 10 \quad 6$
aDarid Easton, Esq., Unionbuildings .. $\quad . \quad$.. 0050
aRer. Prof. Black, University $010 \quad 6$
$a$ Prof. Stevenson, M1.1)., 261, Union-street .. .. .. $010 \quad 6$
uTas. Aitken, Esq., 27, Unionplace .. .. $\quad . \quad$.. 0050
.. ..£13 19s. $6 d$.


## LIST OF SUBSCRIPTIONS.

## AYR.

| June 21.-By cash.. |  | . | . |  | £2 1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aytoun, Miss | - | .. | - | . | $£$ 0 |  |
| Currie, D. . | . | . | . | . |  |  |
| Douglas, Campbell .. | . |  | .. | . | 01 | 6 |
| Flint, John | . . | . | . . | . | 01 | 6 |
| Murdoch, R. D. | . | . | . | . | 1. |  |
|  |  |  |  |  | 21 |  |
| Less for P.O. Order. . | -• | . | . | - |  |  |
|  |  |  |  |  | 216 |  |

## BATH.

|  |  |  |  |  | £ | $s$. | d |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| May 27.-By cash | .. | . | $\cdots$ |  | 3 | 2 | 0 |
| June 16.- , | $\cdots$ | . | $\cdots$ | $\cdots$ | 7 | 5 | 6 |
| Mrs. Stainforth | .. | . | - |  | 1 | 0 | 0 |
| Miss Bruce |  |  | $\cdots$ |  | 1 | 1 | 0 |
| Miss G. Bruce |  |  | . |  | 1 | 1 | 0 |



BELFAST.

$\mathfrak{f}$ s.d. Rev. W. D. Killen, D.D, College Park $\boldsymbol{a R e v}$ J. G. $\ddot{\text { Murphy, LL. }} \dot{\mathrm{D}}$., College Park. aRev. Hans Woods, Lisburnroad
$a$ Rev. George Bellis, $\ddot{D} . D ., \ddot{22}$, University-square aThomas Gaffikin, Esq., 7, Queen's-elms. . .. .. $010 \quad 6$

| Brought forward | £ $s$  <br> $\mathbf{3}$ $\mathbf{3}$  |
| :---: | :---: |
| aJohn Megaw, Esq., 23, Col- |  |
| lege-square, S. | 0106 |
| $a$ Wm. Valentine, Esq., J.P., | 0106 |
| aJJames Hind, Esq., J.P., Liso- | 0106 |
| nard | 0106 |

## IIST OF SUBSCRIPTIONS.

BELFAST-Per the President of Queen's College.


## BISHOPS WALTHAM.

| \& $s$. $d$. <br> A. B. Burton Westmeon | Brought forward | $\begin{array}{ccc} \mathbb{E} & s . & d . \\ 1 & 1 & 0 \end{array}$ |
| :---: | :---: | :---: |
| Rectory, Peterfield .. . 0106 | Rev. II. R. Fleming, Cor- |  |
| Rev. W. E. Medlicott, Swanmore Vicarage, Bishops Wal- | hampton Vicarage, Bishops Waltham .. .. . | 010 |
| tham .. .. .. . 010 | Mr. James Padbury, Bishops Waltham | 0106 |

CARDIFF.
June 3.-By cash ................. 10 s.
Witl: the following list.


For January, 1881.


DUBLIN.
Rev. Maxwell Closo .. .. .. .. £2 0

## GUILDFORD.

April 22.-By cash .. .. .. .. $£ 6$ 16s. $6 d$.


LEEDS.
March 28th.-By cash .. .. .. .. £5 0

C. H. Cbarlesworth, Esq., Settle 1. 10

Rev. Er Bittleston, Stainley .. 0106
P.O.O. .. .. .. .. $0 \quad 0 \quad$ 反
$23 r d, 1881$. .. .. 3153

MANCHESTER.


NORWICH.
May 5.-By cash .. .. .. .. £14 19s. 6d.


## STROUD.

| ग. IH. Curpenter, Esq., Cains- | $\begin{array}{ccc} E_{2} & s & \pi \\ 0 & 10 & 6 \end{array}$ | Brought forward | $\begin{array}{ll} £ & s \\ 4 & 1 \end{array}$ |
| :---: | :---: | :---: | :---: |
| S. J. Coley, Kisp., High-stmet. | $(108$ | Mrs Thomas, Wirk-st house. | 1 |
| W. Cowle, Esq., Park-house | 010 | Rev. R. Cr. Walker, Whitehall | 10 |
| W. H. C. Fisher, li-y., Rownemt. | O 10 | Rev... Wilkinom, Brimscombe | ) 10 |
| James Marper, Esq., Ebloy . . | 010 | L. W. Winterbotham, Eisq., |  |
| Thomas Lancaster, Esq, Bown-ham-hwит. . | 1 |  Colleation at Benllami-mpent | 1 l |
| Wi. 11. Manting, Resu., Stanley- |  | Sthonl room . | 100 |
| house.. | 110 | John Libby, Esc. | 10 |
| T. S. Osborne, Esq., Lower-st. | 010 |  |  |
| Carried forwar |  |  |  |

## WESTON-SUPER-MARE.

May 13.-By cash .. .. .. .. \&2 8s.

Dr. Roxburgh ... $0 \quad 5 \quad 0$
Miss Clark, Aldbourne-villa . . 010 6
Miss McAdam .. .. .. $0 \quad 2$ (9
C. Pooley, Esq... .. .. $0 \quad 5 \quad 0$

Mrs. Dalton, Bristol-road .. 0100
Mrs. Temple, Bristol-road .. 02 fi
Rev. M. U. Sterens, Anlaby .. 010 f
Miss Lunell, Chiculdah .. 010 6
216 i


## LECTURES AND MEETINGS.

|  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Abergarenny | - |  | $\cdots$ | (collection) | 6 |  |  |
| Bulton | $\cdots$ | $\cdots$ | $\cdots$ | , | 30 | 17 | 0 |
| Cardift | . | . | . | ", | 7 | 2 |  |
| Romsey .. | $\cdots$ | $\cdots$ |  | , | 3 | 14 | , |
| Southampton | . |  |  | ", | 25 | 7 |  |
| Nowport . | - | . |  |  | 4 | 17 |  |

THE FOLLOWING DONATIONS AND SUBSCRIPTIONS WERE ALSO RECEIVED.

## ROMSEY.



## SOUTHAMPTON.

| SOUTHA |  |  | £ $s$ 。 |
| :---: | :---: | :---: | :---: |
| $a H . T$. Earl, Esq. | . |  | 010 |
| Rer. Thos. Carrick |  | . (Don.) | 010 |
| Rev. A. C. Blunt, 1880-81 | $\cdots$ | .. .. | 2 |

NEWPORT, MONMOUTH.

|  | £ $\boldsymbol{s}$ 。 $d$ d |  |  |
| :---: | :---: | :---: | :---: |
| Henry John Davis, Esq., Tivoli, Stow Hill | 0 | 10 |  |
| William Graham, Esq., Oakfield, Clyther Park. | 0 | 10 |  |
|  | 1 | 1 |  |
| Miss Horncastle, Oakfield, Cacran Park (don.) | 0 | 5 |  |

## ABERGAVENNY.

Rev. - Vigors, Llanreneath Rectory, near Abergaveuny
Rev. J. Rees Jenkins, Wordswell House, Abergavenny

SUPPLEMENTARY (not in above) -


## BIRKENHEAD.

> July $1 .-$ By cash ..
> (Too late for acknowledgwent in General List.)

With the following list.

|  |  |  |  |  |  | $s$. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rev, P. R. Robin | $\cdots$ | . | . | $\cdots$ | 2 | 2 | 0 |
| Rev. W. J. Wingate | . | - | $\cdots$ | - | 1 | 1 | 0 |
| S. Stitt, Esq. | - | - |  | . | 1 | 0 | 0 |

## LIST OF HONORARY SECRETARIES AND LOCAL ASSOCIATIONS.

Allos: Rev. Alexander Bryson and Ref. Daniel M'Lean.
Aberdefn: Rev. Prof. Milligan, D.D. Mon. Sec. Ladies' Association, Miss Mary Forbes.
Adelaide: Rev. W. R. Fletcher.
Ambleside: Rev. H. B. Rawnsley, Wray Vicarage.
Anstruther: W. H. Mackintosh, Esq.
Atr: Robert Murdoch, Esy.
Basingstoke: Rev. W. Marriner.
Bath: Rev. T. P. Methuen.
Bedford: Rev. Canon Haddack.
Belpast: Rev. the President of Queen's College.
Birkenhead: Rev. J. 'T. Kingsmill, St. Aidan's College.
Bishop's Waltham: Rev. H. R. Fleming.
Blackburn : Herbert Birch, Esq., and Rev. A. B. Grosart.
Bealrgowrie: W. S. Soutar, Esq.
Bodmin : S. Hicks, Esq.
Bolton: George Monk, Esq.
Brecon : Richard Mills, Esq.
Brighton: Rev. C. E. Douglass.
Broadstairs: Rev. J. H. Carr.
Bromeey: Rev. W.J. Devereux.
Burnley: Alfred Stimage, Esq.
Hury: Mon. Treas.-Rev. Canon J. Hornby; Hon. Sec.-Rer. W. Walmsley.
Cambridge: W. M. Hicks, Esq., M.A., St. John's College; G. T. Bettuny,
Esq., M.A., Gonville and Caius.
Canada: Toronto.-Subscriptions are received by the Hon. G. W. Allan.
Cardiff: W. Adams, Esq, 53, Crockherbtown.
Chelmsford: Rev. G. B. Hamilton.
Chelteniaim: Dr. E. Wilson.
Chester: Rev. J. Davidson.
Ohippenham: A. T. Keary, Esq.
City and County of Cork: H. S. Perry, Esq., Monkstown.
Clifton and Buistol: Rer. C. H. Wallace.
Croydon: J. W. Janson, Esq.
Darlington: J. P. Pritchett, Eeq.
Devonpoht : J. Venaing, Esq.
Dorchester: Rev. Handley Moule.
Doblin: Denis Crofton, Esq: and Rer. G. T. Stokes.

Dundee: Robert Mackenzie, Esq.; Hon. Treas.-Alex. Scott, Esq.
DunfermLine: Rev. A. Graham, Crossgates.
Eabtbourne: Rev. H. R. Whelpton.
Edinbergh: Rev. W. Lindsay Alexander, D.D., William Dickson, Esq., F.R.S.E. and T. B. Johnston, Esq., F.R.G.S., 16, So. St. Andrew Street.

Egham: Rev. Horrocks Cocks.
Exeter: Rev. Prebendary Acland, Broad Clyst, and Rev. W. David.
Falmouth, for the County of Cornwall: A. Lluyd Fox and W. P. Dymond, Esq.
Farnworth:
Fleetwood: G. Curwen, Esq.
Frome: Philip Le Gros, Esq., J. P., North Hill House.
Gatebhead:
Gaza: J. G. Pickard, Esq.
Glasgow: Rev. W. P. Dickson, D.D., Rev. Donald Macleod, D.D., and A. B. M'Grigor, Esq., LL.D.
Grbenoof: D. MacDonald, Esq.
Guillford: Major-General E. A. Foord, R.E.
Hastings: J. E. Liddiard, Esq.
Hrreford: Rev. F. S. Stooke-Vaughan.
Hertford: W. M. Armstrong, Esq.
Hitohin: J. Pollard, Esq.
Huddrrspield : Henry Baker, Esq.
Holl: J. P. Bell, Esq.
Ipswich: Rev. J. R. Turnock.
Irbland :-Dublin: Hon. Secs.-Rev. G. T. Stokes, Blackrock; Denis Crofton, Esq. Treasurers.-The Munster Bank.
Jerusalem: Dr. Cbaptin.
Krndal : Robert Somervell, Esq.
Kirgoaldy: John Baruett, Esq.
Lancaster: Rev. J. Bone.
Larehall : Rev. William Findlay, A.M., and Rey. W. P. Rorison.
Leamington : Rev. J. Johnson, M.A., and Rev. H. C. W. Phillips, M.A.
Ledbury : Rev. F. Salter Stooke-Vaughan.
Leeds: Edward Atkinson, Esq., F.R.C.S.
Lbicester: Rev. A. A. Isaacb, M.A.
Lewes: Rer. R. Straffen.
Lichfield: Herbert M. Morgan, Esq. Hon. Sec. Ladies' Association, Mrs. Bagnall.
Lincoln : Rev. A. R. Maddison.,
Liverpool: Ven. Archdeacon Bardsley.
Londonderry: James McCorkell, Esq., Queen Street.
Maidstone: Rev. Thomas Harvey.
Manceester : Rev. W. F. Birch and Rev. Canon Crane. Treasurer.-Oliver Heywood, Esq., Manchester and Salford Bank, St. Ann's Street.
Mansfieid: W. Gouk, Esq.
Margate: Rev. G. Collis.
Market Harborough : Joseph Nunnelly, Esq.
Mblion Mowbray : Rev. Arthur M. Rendell.
Melrose: Ralph Dunn, Esq.

## LOCAL ASSOCIATIONS.

Middlesborotgit: Rev. Edmund Jackson.
Montrose: Mr. Mackie.
Morprth : Dr. Robinson.
Nbwark: Ladies' Committee. Hon. Treas.-Mrs. Tallents; Hon. Sec.-Mrs. G. Hodgkinson.

Newcastle: Mon. Treas.-Thomas Hodgkin, Esq.; Hon. Sec.-W. Lyull, Esq.
Norwich: Rer. W. F. Creeny.
Oxford: Rev, Canon Ridgwry.
Perth: John W. Jameson, Esq.
Pitlochrie: Hugh Mitchell, Esq.
Pifmouth : J. B. Rowe, Esq., and J. Shelly, Esq.
Ramsgate: Rev. F. Gell.
Reigate: Alfred Putney, Esq., The Woodlands.
Richmond, Suriey : Henry Douglas, Esq.
Ripon: J. W. Weight, Esq.
Scabborougil: Rev. J. Bedford.
Sevenoars: Graham Jackson, Esq.
Shrewsbury: Rev. C. H. Drinkwater.
Sissinghitist: Rev. W. Peterson.
Southampton and Romsey: Rev. Henry C. Hawtrey.
Southeea: Rev. F. Baldey.
Sowerby: Rev. A. L. W. Bean.
St. Albans : Rev. W. J. Lawrance.
St. Andrews: Dr. Lees and Dr. Mitchell.
Stalybridar: Rev. Dr. Cranswick.
Stroud : T. S. Osborne, Esq.
Sydenham and Forest Mill : Rev. William Boyd, LL.D.
Sydney, New South Wales: Rev. R. Steel, D.D.
Teignmotth: Rev. H. Hutchins.
Torquay: Rev. Preb. Wolfe.
Warminster: W. Frank Morgan, Esq.
Wells: W. I. Welsh, Esq.
Weston-super-Mare : Rev. H. G. Tomkins.
Weymothe : G. Ff. Eliot, Esq.
Whitby: E. W. Chapman, Esq.
Willesden : Rev. J. Crane Wharton.
Winchester: Miss Zornlin.
Windsor: Rev. Stephen Hawtrey.
Wolveriampton : Mr. J. McD., Roebuck.
Woonstock: Ontario.-William Edwards, sen., Esq.
Worchster: Rev. Francis J. Eld.
Yrovin: Rev. Abel Phillips, Holy Trinity Vicarage.
York: Rev. F. Lawrence,
The Committee will be glad to communicate with gentlemen willing to help the Fund as Honorary Secretaries.

## AGENTS.

The following are the Agents authorised by Local Secretaries to receive, distribute, and sell the publicatious of the Fund:

Aberderen : Messrs. Wyllio and Sons.
Barnsley: Messrs. T. and C. Lingard, Chronicle Office.
Bate: Mr. R. E. Peach, 8, Bridge Street.
Bedrord: Mr. Thompson, High Strect.
Brbkenead: Mr. H. W. Allen, 156, Grunge Lane.
Bodmín : Mesars. E. and H. G. Liddell, 7, Fore Street.
Bournemouth : Mr. Hankinson.
Bradford: Mr. Henry Gaskarth, 5, Westgate.
Brighton: Messrs. H. and C. Treacher, 170, North Strect.
Buanley: Messrs. Burghope and Strange, St. James's Street.
Cabrbridge : Mr. Dixon, Market Hill.
Cardipf: Mr. Wm. Jones.
Oifblenemam: Messrs. Westley, Promenade.
Clifton and Bristol: Mr. W. Mack, 38, Park Strect.
Cork: Mr. P. Morgan.
Darlington: Mr. Harrison Penney.
Dovbr: Mr. J. J. Goulden, 176, Snargate Street.
Dunder: Miss Middleton, High Street.
Eastbourne: Mr. Leach, Grand Parade.
Edinburaif : Messrs. W. and A. K. Juhnston, 16, So. St. Andrew Street.
Ealamoutie: Mr. R. C. Richards.
Erome: Mr. C. J. Sage, Upper Market Place.
Grannock: Messrs. J. McKelvie and Son.
Halifax: Mr. King, North Gate.
Hitchin : Mr. John Palmer, High Street.
Huddersfield : Mr. Alfred Jubb, Estate Buildings.
Holl: Messrs. Leng and Co., 15, Saville Street.
Irtine: Mr. C. Marchland.
Leeds: Mr. Jackson, Commercial Street.
Nortimampton : Messers. Taylor and Son, Gold Street.
Nonwion: Mr. Henry W. Stacy, Gentleman's Walk.
Pertif: Mr. Jno. Christie.
Preston: Mr. H. Oakey, Fishergate.
Resding: Mr. G. Lovejoy, London Street.
Soarborovait : Messrs. G. Marshall and Son, 72, Newborough.
a Sefbnoaks : Mr. Harrison, High Street.
St. Andrew's: Mr. W. C. Henderson, Church Street.
Weston: Mr. Robbins, High Street.
Whitby: Mr. Reed.
Winohestbr: Messrs. Jacob and Johnson.
Wolverhampton: Mr. J. M'D. Roebuck.
Fork : Mr. William Sessions.

$$
\frac{c / e^{i / \infty}}{\sqrt{l}}
$$

5


[^0]:    * Tide some admirable remarks on this subject in Professor Porter's "Fire years in Damascus."

[^1]:    * The coin is figured-and disfigured-in the illustrated edition of Farrar's "Life of Christ," p. 366 .

[^2]:    * According to Dr. Kauizsch (Allyemeine Zeitung for April 29th) the German Palestine Exploration Society also sent money for the same purpose,

[^3]:    * See the Athencum, May 14th, 1881.

[^4]:    * Another scal of Hebrew origin, with the legend and a Gigure which has been compared with " the Golden Calf" of Dan, found on the banks of the Euphrates, cannot be cited as evidence, as it may be of the period of the Exile.

[^5]:    * See the Athencum, May 14th, 1881.

[^6]:    * M. Derembourg has suggested that the $N \times 5$ of line 5 is to be identified with the מוצא of the Talmud. See Neubauer, "La Géogrnphie du Talmud," pp. 152, 153. The Talmudical Motsa, however, is described as being near Jerusalem, not as forming part of the city, and as also bearing the Greek name of Kolonia (Atheiraum, May 14th, 1881).

[^7]:    * Dr. Robinson states that the only traveller who had visited Tell Neby Mendeh in his time was Dr. Thomson, of Beyrout, who in 1846 found a ditch running from Orontes to the stream on the west (which he calls el Mukadiyeh). This ditch we did not see, but it possibly exists still rather further south than the point on which we followed the stream. Dr. Thomson especially notices that the Tell was thus isolated on an island between the two streams.

[^8]:    * Lieutenant Conder, writing without books at hand, has here fallen into a slight error. Renan does not think that the Egyptian port is no longer traceable. He supposes that the site generally proposed, and accepted by Lieut. Conder as the Egyptian port, was formerly a part of the island, and that the mole was a redaining wall. He places the Eggptian port farther cast, and supposes that it has now been entirely silted up. (See Renan, "Phanicie," p. 569, and "Memoirs of the Survey;" vol. $i$, sheet $1, \S$ B.) - ED.

[^9]:    * All these names are of contemporaries of Rameses I and II, b.c. 1300.

[^10]:    * Root
    + Hebrew $9 \frac{7}{7} \Pi$, beat out, thrash out, devastate.
    $\ddagger$ Returued to myself.

[^11]:    * The third month, May.
    $\dagger$ The upper part of the Sinjar, called N-al Huali.

[^12]:    * This sentiment is very clearly exhibited in the inscription on the Moabite

