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# PALESTINE EXPLORATION FUND.

Patron-THE KING:

## Quarterly Statement

FOR 1906.



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#### THE

## PALESTINE EXPLORATION FUND.

#### NOTES AND NEWS

#### Died

ON THE 25TH OCTOBER, 1905,

## MAJOR-GENERAL SIR CHARLES W. WILSON,

K.C.B., K.C.M.G., F.R.S., D.C.L., LL.D., M.E.,

Chairman of the Executive Committee.

A NOTICE, necessarily short, is given in this number of the Quarterly Statement of the late Chairman of the Executive Committee.

It is well for subscribers to the P.E.F. to know by what manner of men they have been served. They cannot know the long, steady, and persistent effort and care which such men bring to this labour of love, and who bring brilliant abilities to bear on a subject dear to them.

At the time of his last illness, Sir Charles Wilson was engaged in the preparation of a work on "Golgotha and the Holy Sepulchre," which is a revised and enlarged edition of the papers on the subject contributed by him to the *Quarterly Statement* in 1902–4. The Executive Committee are completing the publication of this important work, and it is hoped it will be ready for issue early in the year.

Colonel Sir Charles Moore Watson, R.E., K.C.M.G., C.B., M.A., has been elected Chairman (in succession to General Sir Charles Wilson) by the unanimous vote of the Executive Committee. Our

new Chairman passed from Trinity College, Dublin, to the R.M.A., Woolwich, and became Lieut. R.E. in 1866. He served in the Soudan under Gordon. 1874-5, and, besides other services, took part in the Egyptian War, 1882, and was employed in the Egyptian Army till 1886, with rank of Pasha. He has therefore an intimate knowledge of Eastern ways and customs. Sir Charles Watson has for many years been a member of the Committee, and has made the topography of Jerusalem a special study. His latest public service was as British Commissioner-General at the St. Louis Exhibition, where his great ability in organization made the British section not only the best arranged, but the only one complete at the date appointed.

As announced in the last number of the Quarterly Statement, the firman for the excavation of Gezer has expired. Mr. Macalister has returned to England for a holiday, and is busily engaged upon the preparation of the material which he has collected, with a view to publication. An application for a new firman has been made.

The special donations during the quarter to the expenses of the Excavation of Gezer comprise:—Reginald Heber Prance, Esq., £21; Henry Northcroft, Esq., £5 5s; James Melrose, Esq., £5; smaller amounts, £4 18s.; bringing the total up to £1,135 1s. 8d.

A "Palestine Exhibition," arranged by the British Syrian Mission, was held at Brighton during the first few days of November, at which Mr. Macalister delivered a lecture, on November 1st, which, by special request, he repeated the next afternoon. He described the excavations at Gezer which he has so successfully conducted, illustrating his description by slides showing many of the interesting features brought to view. The lectures were well attended. A similar lecture was delivered before the Cambridge Antiquarian Society, at Cambridge, on November 20th.

It is interesting to find that the largest sale of our publications in the past quarter has been for the Vatican Library, of which museum of literary treasures all our more important records now form a part, including the most recent, Painted Tombs at Marissa.

Before his return to England, Mr. R. A. S. Macalister visited Marissa, at the request of the Committee, mainly to ascertain that the painted tombs were still protected from further injury. He took advantage of the opportunity to go over all the details of the interior with the recent book by Prof. Peters and Dr. Thiersch in his hand. The coloured plates struck him as giving a very accurate delineation of the paintings. He also made a close examination of all the inscriptions, and offers, in the present number, a new explanation of the "erotic" inscription which was found in the tomb of Apollophanes.

Among the recent reviews of the Painted Tombs in the Necropolis of Marissa, that by Prof. Schürer of Göttingen in the Theologische Literaturzertung will probably attract the most attention. Prof. Schurer is one of the most competent authorities on Palestine, particularly for the period to which the tombs belong, that his remarks naturally possess great value. He does not fail to point out that the important fact which these tombs have taught us is that we have for the first time learned that Hellenism had set its foot in Idumæa by the end of the third and the beginning of the second century before Christ. The mixture of Idumæan and Phoenician names implies, as he remarks, that the members of the Sidonian colony intermarried with the natives. His criticisms affect points of detail, e.g., the era of Eleutheropolis, and from such an authority are to be welcomed. Prof. Schürer observes, also, that the new evidence has to be taken into account with the results of the excavations by the Fund at Tell Sandahannah (by Messrs, Bliss and Macalister), where further traces of Hellenism were brought to light. For the history of the period, the purely archaeological results are of the first importance, and it must be admitted by all who are acquainted with the historical problems of Palestine, that it is a great gain to human knowledge that the work of excavation has succeeded in producing such valuable evidence. It need hardly be added that the acquisition of material for Palestinian history and archeology is one of the most pressing needs at the present day, and those who have followed the Quarterly Reports upon the Fund's excavations at Gezer will appreciate the desire of the Society to continue the work which has been so successful in the past.

As a result of a recent trip through Palestine and Syria in search of traces of pre-historic man, Dr. Max Blanckenhorn has come to the conclusion that the invasion of the Israelites in the middle of the XIIIth century brought iron, which had hitherto been unknown, into Palestine. It was possible, he thought, that bronze had been introduced there perhaps 800 years previously, but before then only stone implements were known.

The Egyptian statuette which Mr. Macalister found at Gezer Aquarterly Statement, October, p. 317) is attracting considerable attention among Egyptologists. It is believed to belong to the XIIth Dynasty, and we hope to publish in the next number a note upon it from the capable pen of Mr. Griffith.

The Rev. J. E. Hanauer has written to point out that on p. 275 of October Quarterly Statement, 1905, the tomb containing the ossuaries was only about one hundred yards north-west of the buildings at "Abraham's Vineyard," and that the inscription on p. 276 is to be read IVIDS. The rock-scarp which is referred to in that paragraph has now been laid bare for a length of 112 feet all along the space behind the new Greek buildings and between the Ecce Homo Chapel and the Austrian hospice. It is said to be a most imposing piece of ancient work.

The interior of Palestine and Syria, which, until recently, could only be visited under great difficulties and with serious sacrifice of time and money, has, at last, thanks to the efforts of the Hamburg American Line, been made accessible to the travelling public. few months ago an overland tour into the interior of Palestine, such as from Jerusalem, riá Nazareth and Tiberias, to Damascus, was one of great difficulty. The chief impediment to a tour from Jerusalem to Nazareth lay in the complete lack of accommodation. In order to remedy this, the tourist office of the Hamburg American Line has erected hotels at Nabulus and Jenin, fitted up in the most modern manner, where thirty to forty persons can find sure and comfortable accommodation. The German hotels in Nazareth and Tiberias have, on the advice and with the help of the line, been modernized and enlarged. The journey from Jerusalem to Damascus can be made in six days, and this, too, without the trouble of looking after dragomans, servants, and tents, without danger of life or health,

and, above all, at comparatively small expense. Even the country east of Jordan, and also stony Arabia, can be visited without any exertion and with moderate outlay.

A correspondent to the Newcastle Chronicle, November 9, apropos of travel in Palestine, points out, however, that the Haifa line is still a long way from completion, the ceremony which took place on the 15th October being merely intended as a compliment to the Sultan on his birthday, which falls on that date. Even when actually opened for traffic the route, in his opinion, will offer no advantage over the present drive by road to those who visit Galilee from the middle port. The track passes south of Nazareth, between which city and it there is no road for carriages. "It does not go anywhere near Cana, which most travellers desire to visit; and as its nearest station to Tiberias is Sammach, at the south-eastern end of the lake, it is necessary to take row-boats, occupying from one-and-a-half to three hours, according to weather—a somewhat risky connection on such fickle waters as those of the Sea of Galilee. The fact, of course, is that the line, like the Hedjaz line, of which it is a branch, was never planned by the Turkish Government with a view to affording facilities to tourists, but to compete with the French Beyrout-Damascus line in the conveyance of merchandise and grain."

The same writer gives an interesting account of his experience of the comparative facility of travel as contrasted with the difficulties and hardship of a decade or two ago. In April of this year he travelled from Jerusalem to Damascus, and with the exception of the stretch between Khan Lubban and Jenin (Khan Lubban being as far as the new road north has been constructed), he performed the journey in a comfortable carriage as far as Tiberias, whence it was an easy ride to Mezerib, the present terminus of the southern extension of the Damascus-Beyrout Railway, where a conveniently-timed train conveyed him in a few hours to Damascus. The whole journey was not only performed without fatigue, but with a comfort in hotel and camp accommodation that approximated very much to that on a carriage tour in the Tyrol or the Bavarian Highlands.

The Pilgrim line to Mecca, which is now opened as far as Ma'an, a point a little south of the Dead Sea, has, in his opinion, little

likelihood of ever becoming useful to the ordinary traveller, by reason of its track running so far east of the places of attraction in Western Palestine. With the exception, therefore, of the comparatively old French lines from Jaffa to Jerusalem, and from Beyrout to Baalbek and Damascus, including, perhaps, the extension to Mezerib, the railway development in Palestine, he maintains, is practically useless from the traveller's point of view.

The attention of subscribers and others is called to A Table of the Christian and Mohammedan Eras, from July 15th, A.D. 622, the date of the Hejira, to A.D. 1900, price by post, 7d. Also to the Meteorological Observations at Jerusalem, with tables and diagrams by the late Mr. James Glaisher, F.R.S. Tourists and all desirous of accurate information about the climate of Jerusalem should not fail to send for a copy, price 2s. 6d.

The attention of subscribers is also called to a work by Sir Charles Warren, entitled "The Ancient Cubit and our Weights and Measures." He brings evidence to show that all weights and measures (except those of the metrical system) are derived from one source—the double-cubit cubed of Babylonia.

The Museum and Library of the Palestine Exploration Fund at Jerusalem are in the Bishop's Buildings, near the Tombs of the Kings, where the use of a room has been kindly permitted by the Rev. Dr. Blyth, Bishop in Jerusalem and the East. The Museum is open daily, except Sundays, and the Honorary Secretary, Dr. D'Erf Wheeler, will give all information necessary.

The "Flora of Syria, Palestine, and Sinai," by the Rev. George E. Post, M.D., Beirût, Syria, containing descriptions of all the Phaenogams and Acrogens of the region, and illustrated by 441 woodcuts, may be had at the office of the Fund, price 21s.

The income of the Society from September 21st to December 20th, 1905, was—from Annual Subscriptions and Donations, including Local Societies, £733–9s. 8d.; from sales of publications, &c., £217–2s. 6d.; from Lectures, £8–2s. 0d.; making in all, £958–14s. 2d. The expenditure during the same period was

£864 9s. 10d. On December 21st the balance in the bank was £360 10s. 11d.

Subscribers who have not yet paid, will greatly facilitate the Committee's efforts by sending their subscriptions in early, and thus save the expense of sending out reminders, the outgoings on the excavations at Gezer having been a heavy drain on their funds.

Subscribers to the Fund are reminded that, whilst the receipt of every subscription and contribution is promptly acknowledged by the Acting Secretary, they will henceforth be published annually, and not quarterly. A complete List of Subscribers and Subscriptions for 1904 was published with the April number.

Subscribers in U.S.A. to the work of the Fund will please note that they can procure copies of any of the publications from the Rev. Professor Theo. F. Wright, Honorary General Secretary to the Fund, 42, Quincy Street, Cambridge, Mass.

The Committee will be glad to communicate with ladies and gentlemen willing to help the Fund as Honorary Secretaries.

Plaster casts of the fragments of two cuneiform tablets found during the excavations at Gezer can now be had, price 1s. 6d. each. The text and transliteration will be found in *Quarterly Statements*, July, 1904 and 1905.

Subscribers and others may be reminded that the new Raised Map of Palestine, constructed from the Surveys of the Palestine Exploration Fund by the Acting Secretary, is ready. It is on the scale of  $6\frac{1}{4}$  miles to the inch and measures 3'  $6'' \times 2'$  6''. It has already been used with great success by Professors of Old Testament history, and by teachers in Sunday Schools, and may be especially recommended for large classes of students. On view at the office of the Fund; further particulars may be had on application.

In order to make up complete sets of the Quarterly Statement, the Committee will be very glad to receive any back numbers which subscribers do not wish to preserve.

A complete set of the *Quarterly Statements*, 1869-1904, containing the early letters, with an Index, 1869-1892, bound in the Palestine Exploration Fund cases, can be had. Price on application to the Acting Secretary, 38, Conduit Street, W.

Subscribers of one guinea and upwards will please note that they can still obtain a set, consisting of the "Survey of Eastern Palestine" (Colonel Conder); "Archæological Researches in Palestine," in two volumes (Clermont-Ganneau); "Flora and Fauna of Sinai, Petra, and the Wady 'Arabah" (Hart), for £7 7s., but the price has been increased to the public to £9 9s. The price of single volumes to the public has also been increased. Applications should be made to the Acting Secretary.

The price of a complete set of the translations published by the Palestine Pilgrims Text Society, in 13 volumes, with general index, bound in cloth, is £10 10s. A catalogue describing the contents of each volume can be had on application to the Secretary, 38, Conduit Street, W.

The Museum at the office of the Fund, 38, Conduit Street (a few doors from Bond Street), is open to visitors every week-day from 10 o'clock till 5, except Saturdays, when it is closed at 2 p.m.

Photographs of the late Dr. Schick's models (1) of the Temple of Solomon, (2) of the Herodian Temple, (3) of the Haram Area during the Christian occupation of Jerusalem, and (4) of the Haram Area as it is at present, (5) of the Hechel in Solomon's Temple, (6) of the Hechel in Herod's Temple, (7) of the Tabernacle, have been received at the office of the Fund. The seven photographs, with an explanation by Dr. Schick, can be purchased by applying to the Acting Secretary, 38, Conduit Street, W.

Branch Associations of the Bible Society, all Sunday Schools within the Sunday School Institute, the Sunday School Union, and the Wesleyan Sunday School Institute, will please observe that by a special Resolution of the Committee they will henceforth be treated as subscribers and be allowed to purchase the books and maps (by application only to the Secretary) at reduced price.

The Committee acknowledge with thanks the following:

<sup>&</sup>quot;Die Provincia Arabia," by Rudolf Ernst Brünnow and Alfred v. Domaszewski. Vol. ii. Der änssere Limes und die Römerstrassen von el-Ma'an bis Bosra.

NEA ΣΙΩΝ, July-August, Sept.-Oct., 1905, a Greek journal devoted to Palestinian subjects.

<sup>&</sup>quot;Al-Mashrik: Revue Catholique Orientale Bimensuelle."

"Recueil d'Archéologie Orientale," by M. Clermont-Ganneau. Tome VII, Livraisons 4-7. Sommaire:—§ 3. Le Livre de la Création et de l'Histoire. (Suite et fin.) § 5. Un édit du roi Agrippa II. § 6. Inscription grecque et araméenne de Zindji-Dérè. § 7. Fiches et Notules. § 8. Zeus Naos et Zeus Bômos. § 9. La Nativité et le bas-relief de Palmyre. § 10. Une inscription néo-punique datée du proconsulat de L. Aelius Lamia.

See, further, below, "Foreign Publications," pp. 70 sqq.

The Committee will be glad to receive donations of Books to the Library of the Fund, which already contains many works of great value relating to Palestine and other Bible lands. A catalogue of Books in the Library will be found in the July Quarterly Statement, 1893.

For list of authorised lecturers and their subjects, see end of the

Journal, or write to the Secretary.

Whilst desiring to give publicity to proposed identifications and other theories advanced 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 do not necessarily sanction or adopt them.

#### FORM OF BEQUEST TO THE PALESTINE EXPLORATION FUND.

I give to the Palestine Exploration Fund, London, the sum of to be applied towards the General Work of the Fund; and I direct that the said sum be paid, free of Legacy Duty, and that the Receipt of the Treasurer of the Palestine Exploration Fund shall be a sufficient discharge to my Executors.

Executors.	
	Signature
Witnesses	<b></b>

Note.—Three Witnesses are necessary in the United States of America.

Two suffice in Great Britain.

#### MEMOIR.

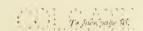
## MAJOR-GENERAL SIR CHARLES WILLIAM WILSON, K.C.B., K.C.M.G., F.R.S., D.C.L., LL.D., M.E.

On the morning of Wednesday, 25th of October, this Society suffered perhaps the severest personal loss it has ever sustained, in the death of our Chairman of the Executive Committee, Major-General Sir Charles William Wilson.

Before the formation of the Palestine Exploration Fund he was already engaged on the Survey of Jerusalem; and his knowledge of the topographical detail of the Holy City, and of all that has been written on the subject, was probably unequalled. Even among the many and vast changes which have been going on ever since his first Survey, he carefully kept himself informed of every change, and of every evidence of the past which building operations might reveal, not only by correspondence, but by personal visits.

Sir Charles Wilson was born at Liverpool, on March 14, 1836. The second son of the late Mr. Edward Wilson, of Hean Castle, Pembrokeshire, he was educated first at St. David's, then at Liverpool Collegiate Institute, and finally at Cheltenham College, from which he obtained the second place in the first open Competition for the Royal Engineers, and his commission as Lieutenant in 1855.

From 1858 to 1862 he was Secretary to the North American Boundary Commission, traversing some of the least known wilds and forests of the American continent, and proving his ability in topographical work. When in 1864 an exact Survey of Jerusalem was undertaken, largely at Miss Burdett Coutts' expense, under the superintendence of Sir Henry James, then Director-General of the Ordnance Survey, Captain Wilson was appointed to carry it out, and virtually gave his own time and labour. The improvement of the water supply was the main object in view, and the survey was extended to the Pools of Solomon, and involved taking the levels from the Mediterranean up to the highlands of Judea and down to the Dead Sea. The task was accomplished shortly before the foundation of the Palestine Exploration Fund, and formed a valuable example of the work to be undertaken. The published





From a Photograph

by Messrs. Maull and Fox.

MAJOR-GENERAL SIR CHARLES W. WILSON, K.C.B., K.C.M.G., R.E.

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results contain an able report by Captain Wilson, not only on the water supply, but on the topography, geology, and antiquities of the Holy City.

In 1866 he was appointed to the Ordnance Survey of Scotland, and in 1867 acted as Assistant Commissioner on the Borough Boundary Commission. In the same year he became a Member of the Committee of the Palestine Exploration Fund.

The Ordnance Survey of the Peninsula of Sinai was undertaken in 1868. For this work the late Captain H. S. Palmer was detailed, but Wilson offered himself as a volunteer; and the work was carried out, in about five months, under their joint direction.

To the published report Captain Wilson contributed chapters on the route of the Israelites after crossing the Red Sea, on primitive and Monastic remains in Sinai, and on the meteorology.

In recognition of his Jerusalem Survey he received the Diploma of the International Geographical Congress, held at Antwerp, in 1871; and in 1872 he was elected a Member of Council of the Society of British Archæology, and F.R.S. in 1874.

On his return to England he became Director of the Topographical Department at the War Office, and Assistant Quartermaster-General in the Intelligence Department, where he remained, now Major, till 1876, receiving a C.B. (civil) in the following year for the organisation of the Department.

He then had charge of the Ordnance Survey of Ireland, and served also on the Royal Commission for the Registration of Deeds and Insurances in that country in 1878.

That year he was appointed British Commissioner on the Servian Boundary Commission, and next year attained the rank of Lieutenant-Colonel, and was appointed Consul-General in Anatolia, which office he held till 1882, undertaking meanwhile special missions to Eastern Roumelia and to the Consulates in Asiatic Turkey, and being created K.C.M.G. He travelled often through rarely visited districts, and acquired a knowledge of many parts of Turkey in Europe and Asia but little known to ordinary travellers. These journeys added much to his archæological opportunities.

Immediately after this came his first experience of actual warfare. He accompanied Sir Garnet Wolseley's force, which landed in Egypt in the summer of 1882, to suppress the Arabi rebellion, and which in less than a month won the decisive battle of Tel-el-Kebir. After the battle Sir Charles Wilson proceeded to

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Cairo at the earliest possible opportunity, and took steps to secure the safety of the Boulâk Museum and the Public Library, posting a guard over them directly the first troops arrived. To this promptitude we may attribute their escape from all damage. He served under the British Consul-General, Sir Edward Malet, and took an active part in the trial of Arabi. He was attached to Lord Dufferin's Commission until his return to England the next year, and received the thanks of the Foreign Office, the medal, and the Khedival star for his services.

When the next expedition under Lord Wolseley, too long delayed, was at last despatched in 1884, but too late to save Khartum, Sir Charles Wilson accompanied it as chief of the Intelligence Department. He was with the advance force under Sir Herbert Stewart when that officer was mortally wounded at Gubât, and then assumed command. His brave attempt to communicate with Gordon and to reach Khartum on a vessel "like a penny steamer," with twenty English soldiers and some undisciplined natives, under a storm of shot, shell, and bullets, on 28th January, 1885, was foredoomed. Khartum, starved, had already fallen, Gordon was dead. The escape of Wilson's little force was a marvel. His own steamer was wrecked in returning, but the party eventually succeeded in rejoining the column. For his services Wilson received the thanks of the Government, two clasps and the K.C.B.

On his return Sir Charles Wilson was in charge of the Ordnance Survey in Ireland, and became Director-General of the Ordnance Survey from 1886 to 1894. In the following year he became Director-General of Military Education till 1898, when he retired, with the rank of Major-General, which he attained in 1894.

Throughout all these varied employments Sir Charles never lost interest in the work and objects of the Palestine Exploration Fund, with which he was always in touch, and when within reach attended the Committees and closely followed everything.

Upon the retirement of Mr. Glaisher, Sir Charles was at once elected Chairman, and devoted himself to the work with incessant care; even when hampered by a serious affection of the eyes, he would have letters and papers read to him and give his advice.

Notwithstanding his brilliant services, and his wide attainments, Sir Charles Wilson was one of the most gentle, courteous, and modest of men. He married, in 1867, Olivia, daughter of the late Colonel Duffin, Bengal Cavalry, who survives him; and leaves a

daughter as well as four sons, three of whom are officers in the Army.

In addition to numerous books and papers already published, Sir Charles Wilson at the time of his last illness had in the press, almost ready for publication, a book on the Holy Sepulchre, bringing together all the evidence affecting the site; this will shortly be published by the Committee of the Fund.

It but remains to say that much as Sir Charles Wilson's loss will be regretted by everyone connected with the Palestine Exploration Fund, it will be felt most keenly by those who saw most of him, and who gained some insight into a character singularly unobtrusive and retiring, but which included not only clearness of mind and natural industry, but that exceptional tenacity of purpose which accomplishes so much; and behind all, a real kindness of heart, which made him thoughtful of the welfare of others.

J. D. C.

#### THE IMMOVABLE EAST.

By Philip G. Baldensperger, Esq.

(Continued from Q.S., 1905, p. 205.)

THE young people show great respect to the elders, and listen rather than join in the conversation till they themselves are grown When anyone of the assembly appears in a new mantle or clothing, some one will remark upon the fine workmanship, and say, "Blessed be the mantle" (مبارك العبا, imbarak il 'abah), and the possessor will reply, "God bless you; be it at your choice" Civility demands that the man should politely decline the offer by saying, "It is worthy of the liberal" ('Alah kad il ajamêd على قد الاجاويد); or, if he accepts, should say, "I am the accepter," (wa'ana kabâlhâ, إنا قباليا). In this case he immediately has the clothing thrown at him, and throws back his old garment, but virtually he owes a greater present. This sort of thing gives rise to differences, which sometimes have far-reaching consequences if the recipient is not more liberal and gives back double the price.

Reciprocal liability extends not only to all members of the family, in the stricter sense (عَارِينَ , 'âyle[t]), but also to the whole kindred (عَارِينَ , hamûle[t]), when the case is of a serious nature, such as murder. Accidents also are borne by the kindred altogether, and when, moreover, a new house is to be built for a new-married couple, every member of the family is expected, either pecuniarily or by work, to help as much as lies in his power. The recognised chief of the family can distribute the work by ordering A to bring so much earth, B to bring so many stones, and C to furnish a number of loads of lime. The women carry water and help by carrying the smaller loads, &c. The Government, of course, knows of this solidarity, and when a crime is committed, and the author escapes, the next-of-kin, or even anyone that can be arrested, is imprisoned till the money is paid, which, of course, is done by every one in equal shares.

Relatives (قرابة, karábe[t]), are not considered as such on the mother's side, and relations by marriage (قرابة, nasábe[t]), are not expected to bear the consequences of feuds, or even to aid. The woman is mostly a stranger in her husband's family, but if she be one of the man's relatives, she is more considered. Uncles from father's side and their children and descendants are 'emûme[t], which may be translated as "complete parentage." Maternal uncles and their descendants are khawûle[t], something like "protectors," and are not considered relatives beyond one generation, whilst the paternal relatives are always such.

The man, as husband, is the zij or jiz (i.e., the pair), and the woman, as wife, remains woman, though among refined people the feminine zije[t] is employed. The common and general expression is mari[t] ( $zi_{re}$ ), woman.

The names of the nearest of kin are almost all monosyllabic words:—

The father	 	ab		اب
Mother	 	im	***	ام
Son	 	ibu		ابن
Daughter	 	biut		بذت
Grandfather	 	sîd		سيد

Grandmother		sit	• • •	ست
Brother	•••	akh	•••	اخ
Sister		ukht		اخت
Great-grandfather	•••	jid	•••	جد
Great-grandmother	•••	jide[t]	•••	جدة
Paternal uncle		'am		عم
Paternal aunt		'ame[t]	•••	äne
Maternal uncle		khâl		خال
Maternal aunt		khale[t]		خالة
Father-in-law	• • •	ḥam		حم
Mother-in-law		ḥamâ[t]		حماة
Paternal (m.) cousin	•••	ibn 'am	• • •	ابن عم
Paternal (f.) cousin		bint 'am		بنت عم
Maternal (m.) cousin		ibn khâl	•••	ابن خال
Maternal (f.) cousin	• • •	bint khâl	•••	بنت خال
Son-in-law	•••	șihirr		صهر
Daughter-in-law	• • •	kine[t]	• • •	كنة
Brother-in-law	•••	silf	•••	سلف
Sister-in-law		silfe[t]	•••	سلفة

Other relatives, as uncle's wife, have no special name, and are designed by "wife of," or "husband of," &c.

There is also the tanabe[t] (abb), a kind of friendship, in some cases as close as relationship. This was often practised in time of war, when some one who had fallen into the enemy's hands could claim tanaby, and was thus saved. The Christian and Mohammedan villagers also had this tanaby between them, and the Mohammedans afforded their Christian tanab protection.

The preliminary consultations are generally held in the assembly, but are conducted in an undertone, so that the others cannot hear it; this is a mekhlâwiye[t] (ii), or secret consultation, which may be proclaimed aloud as soon as the parties agree.

As a rule, the Fellahîn have very loud voices, and, as the deep valleys which separate the mountains earry the sound very well, they call to each other across formidable distances, when European ears are unable to detect anything.

The distance separating the mountains north and south of Urtâs (Batn el-Ekra' and Abū Zeid) is about a mile in a straight line. Now, a camelier passing up on the road singing could easily be heard in the village, but I could not detect conversations between passers and villagers, which the Fellahîn easily understood. To call attention they call out Hay ya . . . . So-and-So, Hay! and when the person addressed has heard, he or she answers, Hay! This calling nadâ (13) is loud, but calm and distinct (to their ears), and they understand every word. The Hebrews also had very loud voices, as we know from several examples, where they called across mountains what they had to say, and were heard. Thus, the most remarkable and seemingly unnecessary case, when Joshua read the law to the people from Ebal to Gerizim. The ease of Jotham, calling down to Shechem from the top of Gerizim, is excusable and easy, as he had to tell his parable, insulting Abimelech, and then flee southwards before the servants of Abimelech could climb the mountain (Judges ix, 7-21). David calling out to Saul across the steep valley of Khreitûn was the easiest task; the voice carries excellently there against the high rocks, and escape is easy (1 Sam. xxvi).

A call of alarm, Dib es-Sôle (رب الصوت) for an attack is made by calling out "Jey! yu Nāss Jey" (جي يا ناس جي). "Here! O people, Here!" If two men meet by night they never pass very near each other, and do not salute, which they always do by day, even when they are strangers. Should one try to approach, the other will call out "Friend or Foe!" kume walla Ṣiḥeb (قرم وأي صاحب). Of course the other will answer, "Saheb" (Friend), and he will receive the answer, "Go your way; night knows no friends!"

Smokers are always ready to help each other, either with

matches, cigarette-papers, or tobacco; they aeknowledge, in fact, that when a smoker is short of tobacco he suffers as much as thirsty or hungry persons. But should a person ask for fire by night, it is manly to say, "Fire in your belly," which is as much as "Mind your own business, and go your way."

The Turks are the masters of the land, but, like all other nations who have passed into Palestine, they speak a foreign language, and only since the last fifty years have they begun to recruit soldiers from the Fellahîn. The soldiers were always from North Africa before this. Conscription was introduced first by the Egyptian, Ibrahim Pasha, when many cut off their thumbs of the right hand or blinded one eye to escape military service. When the Pasha found that there were too many such invalids, he incorporated them into "Thumbless and One-eyed Regiments," and found them to be excellent soldiers. After his retreat. conscription was abandoned for some time, but taken up again by the Sultan Abd-ul-Madjid. Lots were to be drawn-by white and black counters-said to be in the bag in equal numbers. The day of drawing the lots, kur'a[t], was always regarded as a day of universal sorrow-howling, screaming, weeping women always followed in the rear when the young men were led to the village for conscription, Beth 'Atab being generally chosen centre. The young men or boys of 21 years of age were to be present, and, as nobody could tell their real age, they were said to be of age, according to the bribes offered to the "Council of Lots." Those who could afford it had men of 25 who were 15 years old, and represented as being half a year older every year, and those who could not afford to pay anything had boys of 16 declared 21 years old. When the lot was cast—and generally the man was declared to be fit for service-the news was received by new explosions of howling, tearing the hair, and blackening the faces among the women. But the men may be considered stoics in many respects; they show very little of their emotions either for joy or for sorrow; but, although they bow to the nasib (نصيب) Fate, and believe that "a writing which was written" (كثيبة وانكتبت, ktêbe[t] wa-inkatbat) has been their lot from the beginning, they try to escape the service in some way or other. Presenting themselves to the inspectors, some feign deafness, and never answer questions, which is most difficult to keep up till the end; for if he is declared

to be free, and told so, and should show emotion, he is seized at once. The trick of dropping a coin behind is too well known, but perhaps the surest way to entrap them; for money and its sound is as mighty a factor in Fellah-dom as it is anywhere else. Another method, which is rarely employed, is to have a dozen or more bee-stings on the head when going to the drawing of lots, thus appearing before the tribunal with a mighty swollen face and neck. The only son is also free, as well as the eldest of widows' sons, but as there was no civil register for births and deaths till 1880, it was almost impossible for the Turkish-speaking officials to test the truth of statements.

The Fellahîn among themselves rarely denounce each other, even in the case of enmity, for to be a soldier was considered almost as bad as death, and the traitor as bad as a murderer. But this state of affairs was soon changed. When they freed from military service every married man, hundreds of young men married all at once, and were accompanied by their wives to the place where lots were drawn. The lots were drawn five consecutive years, and the young man who may have been freed the first year and the three following by bribing the commissioner, might finally be taken the fifth. So, when no other way was left, men were enlisted en bloc, and deserted on the first favourable occasion. But descriion was not made easy. The young men were taken to Jaffa and sent to Arabia as prisoners; the five years' legal service were doubled, and often further increased, and I know a man who was in Arabia 12 years. Of course, letters were rare and very costly to send, and when they returned from the service they knew little or no Turkish beyond the necessary orders in drilling; so no sympathy between Arab and Turk could have come about.

The recruiting method has been wholly changed by the introduction of obligatory service to everybody, except the indigenous Christians (Bedu, or those living in tents, excluded). By this system, introduced soon after the Franco-Germanic War, the army was organised into "standing troops" ("askar shîhâny) for three to five years, varying according to necessity and new laws; the reserve troops (radif) for the next 10 or 12 years were called periodically to Jerusalem, or Nablûs, or Jaffa, &c., to be drilled for four weeks; and the territorial troops (muhafet), who are called for a service of 10 or 12 days, and finally, the territorial reserve ("existence of the introduced by the introduced soon after the Franco-Germanic War, the army was organised into "standing troops" ("askar shîhâny) for three to five years, varying according to necessity and new laws; the reserve troops (radif) for the next 10 or 12 years were called periodically to Jerusalem, or Nablûs, or Jaffa, &c., to be drilled for a service of 10 or 12 days, and finally, the territorial reserve ("existence of the introduced soon after the Franco-Germanic War, the army was organised into "standing troops" ("askar shîhâny) for three to five years, varying according to necessity and new laws; the reserve troops (radif) for the next

never called upon. The troops of the reserve armies have not been called out in past years, probably for economy. The standing troops, who in Russo-Turkish campaigns were in Turkey in Europe, have since this period been sent to Europe, and have learned Turkish, and by this means have become more sympathetic towards the Turks. If they can possibly manage to remain in Palestine, or at least in Syria, they pay whatever they can to bring it about, and deserters (farrâr) are reduced to almost none, whereas under the old system of sending them exclusively to Arabia they were very frequent. They have now learned to know that military service does not mean certain death, and that, having behaved well, they are sent home again after two and a half to three years. Since they have been called to Europe and Asia Minor-not only in war, but in peace—they have begun to appreciate countries. even more beautiful than Palestine, which they did not know of when they were taken only to the Yemen and the Haj. In spite of the luxury and wealth seen in some countries, they long for their own evil-smelling villages, and for the miserable bridle-paths leading to their homes. Home is home also for the Fellah. As they cannot write, except through the help of the Khatîb, who is sometimes absent, I have occasionally been the scribe for women who wish to write to their husbands, for, since the new universal obligatory service law, married men must serve as well. These letters are mostly salutations from everyone-greeting or salaams from your brother A, and salaams from your cousin B, till all are included in the list of salaams; finally, salaams from the writers of these letters. No political news, or news about the animals, but mainly about marriages or deaths of people of the village.

When, after having served two or three years, the man comes home in old military clothes, a supper is made in his honour; the women go out, like Jephthah's daughter and suite, and sing and dance, singing praises of the returned hero. The soldier, squatting in the middle of the assembly, tells of what he has seen and heard, and mixes in Turkish words or sentences to show his wisdom; then a near relative in the assembly takes away his own turban, or a new one in store ready for the purpose, and puts it on the man's head; next a thôbe is thrown at him, a girdle, and a mantle, till he is transformed again into a real Fellah.

This mode of giving new clothes and adapting the man to the new centre he is going to live in was also a Hebrew custom. When

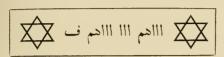
David killed the Philistine Goliath he was brought before Saul, "And when he had made an end of speaking . . . . Saul would let him no more go home. . . . And Jonathan stripped himself of the robe or mantle that was upon him and gave it to David, and his apparel, even to his sword, and to his bow, and to his girdle" (1 Sam. xviii, 1-4).

If the soldier has been to Mecca during his service, he is not entitled to the name of haj, which is only acquired by the person who goes there on purpose to visit the Kaaba. If, therefore, some near relatives call them haj, it is not universally admitted. It has often been stated by eminent writers that the haj wear the green turban as a sign of their accomplished pilgrimage, but this rests on a misunderstanding—the haj does not have a visible sign of his pilgrimage. The green turban is allowed only to those of prophetical descent. The village of Shûkh (شيف), near Hebron, is of such descent; so are some Shûkh in Dâr-el-Sheikh (فيف), and others. The haj ought never to be called by his name only, Ehmad or Hassan become Haj Ehmad and Haj Hassan for ever afterwards, irrespective of their social position, whether prince or porter.

They vie with danger, illness, or death with a certain calm unknown to the general European. The belief in their reception by Mohammed after death in Glory is so strong that the short anguish of passing from life to death is almost nothing. A man dangerously wounded in the quarries near Yazûr, seeing there was no hope to be saved, coolly said, "Turn me to the kible[t] (iii); this is my belief, I lived thus and die with joy to enter into Glory (majd) with my Lord Mohammed, and I hereby witness that there is but one God, and Mohammed his Prophet"—and thus expired. The poor and miserable in days of health will joke and say, "If fasting is a way to Paradise, Paradise must be full of dogs—as they mostly fast"; or the dreary camel-driver will repeat, "Poor in this world, poor in the next"; on the death-bed they are all philosophers, or perhaps, rather, true believers.

When a person is ill, the Khatîb is asked to write a remedy against the disease, and medical men are only called for when there seems to be no hope at all to call them to life again. A fellah sick-room looks more like a public-house than anything else. Nervousness on account of the patient is not in question, and

probably strained nerves are unknown. In the firm belief that events must happen according to their everlasting destination, contagious diseases are no more feared than a simple broken arm. Charms (see figure) are generally employed against the fever, epilepsy, and insanity. Solomon's seal is a charm against every evil, but various other charms are used for diseases.



A charm against fever runs:-

دد طح واح بسم الله الشافي بسم الله الكافي بسم الله المعافي بسم الله الدى لا يضر صع اسمهُ شي في الارض ولا في السماء وهو السميع العليم ص (14 times) ط (14 times) ك (8 times) ع (42 times) الله بمتى الانبيا والمرسلين ان تشفي حامل كتابي هذا عن السنهونة ومن كل شي يضرد بالقلا حول ولاقوة الا بالله العالى العظيم

"In the name of God the restorer of health, in the name of God the recompenser, in the name of God the absolver, in the name of God in whose name nothing harms neither on earth nor in heaven; He is the Hearer, the Omniscient, (14 times) (8 times) (42 times) God, by the truth of the prophets and messengers, heal the bearer of this writing from the fever and from everything harming him. With the pan (?) or (alkali?) change, but the strength is only by God the High, the Mighty."

In another fever case the patient had to stand above a small wood fire, open his girdle, and look in his thôbe by the collar. An old woman, who was a good hand at curing diseases, burned a paper, so that he could inhale the smoke below his thôbe. The inscription was thus:—

There is no God but God, it turned and returned.

There is no God but God, it fired and refired.

لاالله الالله دارة فاستدارة لاالله الالله نارة فاستنارة There is no God but God, around the Throne it turned.

There is no God but God, with God's knowledge it disappeared

Fever is called s'khûne[t] or hamâme[t], in general. Intermittent fever is  $d\hat{o}r[e]$  (...); yellow fever, hammy safrâ; and the malarial-typhoid fever, tarh (lit. to be thrown down); the last word is more properly employed of miscarriage. All these fevers are treated either with verses from the Korân when they are persistent, or with fire, generally with the ramrod put into the fire and burned where the pain seems to abide. In spleen the belly below the ribs is stamped with the red-hot iron. In benign and not very persistent eases, a decoction of kemaindra[t] (a labiate) is given, having the bitter principles of quinine.

The most dangerous disease, which carries away hundreds of fellahîn after the harvest, is the malarial-typhoid fever contracted in the plains of Jordan or Philistia, probably by the use of bad water. More than fifty per cent, of all those who go from the mountains to the plains for harvest are carried away in the fortnight following their return home, and those who escape remain feverish for a very long period. Having had it myself, in company with many others, I speak from experience, as I never lost the fever till about eighteen months afterwards in a journey to Europe. inclined to think that the sir'ah (translated hornets in Ex. xxiii, 28; Deut. vii, 20; and Joshua xxiv, 12) is none other than this fatal epidemic. Hornets are never so bad as to drive away nations, as they only attack the person disturbing their nests, and never to a eonsiderable distance, certainly not more than a hundred yards away; therefore hornets cannot be intended to have helped the Israelites against the Amorites in their invasion of the land, but a disease, as the malarial-typhoid fever, sweeping away hundreds or thousands of those who, from the healthy mountains of Judah and Ephraim, came down to the plain of Jordan and found the warm waters of all the small rivers flowing into the Jordan, whose waters were heated by the distance, and exposed to the unhealthy emanations of the neighbouring Dead Sea. These Amorite armies, who had come down to the plains to oppose the Israelites who were camped in the plains of Shittim, were weakened by the malarial fever; many were dying, "and they had no more spirit in

them" (Josh. v, 1) to resist the Israelites. The Israelites, who were accustomed to the low-lands, could resist the fever, as the modern Bedouin do, by putting a small rag soaked in tar (katrâne) into one nostril and fixed by a thread to the head-dress. When, therefore, the Israelites passed Jordan, the weakened Amorites could not stand the attack, and fled before the siege of Jericho, leaving that city to its own resources.

(To be continued.)

### THE BEDOUIN OF THE SINAITIC PENINSULA.

(Continued from Q.S., 1905, p. 219.)

By W. E. Jennings-Bramley, Esq.

### VI.—Religion.

ALL the tribes in Sinai profess Mohammedanism. They call themselves Maleki, that is, of the broadest sect of Mohammedans, but in reality they are so ignorant of the doctrines and dogmas of their religion that they cannot be said to belong to any particular sect. This is not from indifference, certainly not from scepticism, but simply because they have never had a chance of learning anything of that which other good Mohammedans consider essential to their spiritual well-being. The Bedouin never learns his Koran, for instance; indeed, very few know any of the obligatory prayers. The one or two with whom I have travelled, and who prayed at all, contented themselves with a prayer at sunrise and sunset, and I can only remember having met one man who knew the proper form. Some satisfied their consciences by reciting short sentences, such as Astaffer Allah, when the sun went down. I have never once heard the prayer of ablution, the Wadda, recited. They do not use sand to replace water as the Koran enjoins, and as the Magraby always do. Whether some, when they approach the cultivated spots where water is plentiful, go through the necessary ablution, I am not able to say. I certainly have never seen any do so. Travellers are exempted from these forms, and a Bedouin may, without much straining of the point, call himself a traveller by profession.

A very small percentage go on the Ḥajj. It is too expensive an affair for the ordinary Bedouin. Some, however, combine business and religion in a very profitable manner. Having got together enough money to go to Mecea, they wait there till they find two or three rich pilgrims about to return to Suez and requiring a guide. With these he makes a contract, by which he is paid half the sum agreed to in advance. With this he buys the necessary camels for the party and one for himself; this is generally the cheapest old animal he can find. By slow stages he gets his party to Suez, where the other half of the sum due to him is paid, and he remains the richer by it and all the camels. If he be a wise man, he has taken care of the animals, fed them well, and even the one he bought for himself is now worth more than he gave for it.

They all acknowledge the obligations of Ramadân, but very few keep it strictly. It may be said that the Bedouin are constantly keeping a Ramadân, so habitual is it to them to fast from sunrise to sunset. The Koran exempts travellers from the necessity of keeping the fast; but the Magraby are serupulous in considering the matter as only put off, and will go through with it on their return home, although the proper month be past. The Sinai Bedouin satisfies his conscience by depriving himself of some comfort or luxury, though these words sound out of place in speaking of his life. He will smoke less, and that is about all he can deprive himself of when in the desert.

They are generous by nature and charitable from principle, but they cannot give alms as we do. What they have of food or shelter they share with anyone who needs it, be he a beggar or a stranger. They help each other in times of trouble—a rich man, for instance, will give a eamel to a poor one—and their wants are so few that, given food enough and shelter, which they are bound to offer to him who needs, there is little they require. This very comprehensive charity, which enjoins sharing what they have with him who needs, is a religious obligation, and one of their few definite ones.

Of dogma they know nothing. In fact, all their religious ideas are of the vaguest. They have no priesthood; they never assemble for prayer. None have ever learnt or heard more than what their fathers could tell them of the very blurred traditions handed down to them. They are by nature reverent and ready enough to believe, but they know next to nothing to believe. Of God's existence they

do not doubt, but are satisfied that He is too far above their powers of comprehension for them to do more than just believe in Him. Of Scriptures they have heard next to nothing; they know they exist, and are satisfied that they are true.

An ordinary Bedouin of the Haiwat, with whom I had some conversation on such matters, told me he knew the story of Adam's fall: that Adam had been put into a beautiful garden, and that God (the Melek el-Dunia) had commanded him not to eat corn, but that at the devil's bidding Adam did eat, and was then driven out of the garden. Of Eve or any woman connected with this story this Bedouin had not heard. A future state they look upon as too uncertain to deserve much thought. My friend told me he had heard of a big garden, but it seemed to him very doubtful, and although they firmly believed in the devil, they do not seem to fear any punishment hereafter for their misdeeds on earth. Both this Bedouin of the Haiwat and one of the Huitat spoke, however, with certainty on one point. The souls of those who during their lifetime have not visited Jerusalem, have to go there directly after death, remain there a short time, and then return to the grave. I have not been able to discover the origin of this belief-in fact, it is almost impossible to find out much from them, for they know next to nothing, so little, in fact, that the matter lacks interest to them, not from scepticism or irreverence, as I have said before, but because it is all buried in fog. It is a very different matter when they speak to you of their greatest of all heroes, Abu Zeit. About him and his prowess they will go on for ever, bursting into poetry, never tired of recounting all they know of him; but of angels, prophets, and Scriptural stories generally they know too little to be interested. Of angels I fancy they have never heardthough, of course, evil spirits such as the Jinn are to be met with everywhere and carefully avoided if possible. That they believe in the intercession of saints is proved by the fact that scarcely any Bedouin will pass by the tomb of a sheikh of any importance without going up to it, picking up a twig of Rattan and sticking it into the ground at the head of the grave; then scooping up a little earth at the foot, from a hole made deep by many such scoopings, and throwing it over his shoulder, he will call upon the sheikh to help him. On one occasion, when my man Salama and I were unpleasantly near a threatening danger, scarcely had we escaped and all danger was over, than he remembered with gratitude having prayed at the tomb of a certain saint on our way up the Wâdy. "It was a good thing," said Salama, "for we had the sheikh to help us," and even before we encountered the danger Salama had congratulated himself upon having propitiated the saint. "For," he said, "it is a good thing to have him behind us, taking care of us."

Each family has its own particular saint, generally one of its own ancestors. At his tomb they meet yearly, and spend two days there, feasting, racing, dancing, and enjoying themselves generally. Men, women and children come, and sometimes as many as 50 or 60 will collect together. They fancy the saint is propitiated by the notice they thus take of him, and takes pleasure in their visit. The sheep or goat offered to the Wely is killed on the gravestone of the tomb, and the following words are recited:—

"We have come between thy hands in order that thou shouldest accept (the offering). We pray thee grant our prayer."

If the blood run off the stone, the omen is bad. Also if the camels tethered close by grow restive at the sight of the blood it is considered unlucky. Friday and Monday are the most propitious days for these sacrifices, and even Tuesday at a pinch may be risked. The rest of the week is to be avoided.

Besides these yearly visits, they will also, before starting on a journey, or when they or any of their family are ill, sacrifice a goat to the saint and invoke his protection and aid. The goat is cooked and always eaten by the sacrificer and his friends. If too poor to kill a goat, the Bedouin will do his utmost to prepare something a little better than usual—such as bread made with oil, and invite his friends to eat it in honour of the saint. If at too great a distance from the tomb to be able to go there conveniently, it suffices to dedicate, as it were, the meal to the saint (Neby) by saying that it is given in his honour.

Once, as I was starting on a journey with Suleyman, he hurriedly went off to a sheikh's tomb to promise him a goat should the child he was leaving sick at home be well by the time he returned. This promise he faithfully kept on our finding his child well when we came back from our trip. I myself once proposed offering up a sheep at one of these tombs and giving a feast in gratitude for the protection evidently extended to me by the sheikh. The Bedonius, although they knew me to be a Christian, looked upon my doing so as

absolutely natural, and in no way objected. They have the very vaguest idea of what a Christian is. Of their previous history before they were converted to Mohammedanism, they say they know nothing, except that they and the Yahoudys (Jews) were one.

I do not imagine the benefits to be earned hereafter by dying in battle against the infidel ever enter into their thoughts. Their horizon is so entirely bounded by a life led among their own and friendly tribes, with only occasional intercourse with unfriendly ones, that considerations as to what would happen were they to die fighting with infidels, does not enter into their practical politics; and, as far as I have been able to ascertain, their ideas of any future state are too vague to influence their lives in any way.

I have enquired as to whether they had any legends or beliefs connected with the stars and planets, and was told one very clever man, a Terâbîn, could tell me much, for he made them up himself. The Pleiades are known to them as the seven sisters (saba benat). The North star, or guiding star, they call el-giddi, the little goat. The Magraby will constantly indicate the path you must follow by saying: "Ride for a quarter of the night, keeping the North star on your right eye; then turn, and go on keeping it on your left ear, &c.," and it is actually possible to guide oneself in a rough way by these directions. The Sahel is the star in the West, and they have a superstition that a certain root which they use medicinally against a certain worm which they are liable to get under the skin after drinking bad water, must, in order to be efficacious, be dug up on that side of the bush which is not shone upon by Sahel. Of the big bear, they think the best winter rain months are those when it is high up in the heavens. The camels also, they said, can work hardest at this time, while they are fit for little when the constellation is low on the horizon. This applies to female camels; not much notice is taken of the feelings of the male, who must work equally hard at all seasons and under all conditions.

Often as you walk along rocky ground the Arabs will show you cracks which they declare to have been made by falling stars; they differentiate these cracks from others. They tell you that if you can only get a sword made of the iron of a meteorite you can go to battle with all security, it is bound to kill everything it touches.

Most Arabs will turn to the sun when they say their prayers at sunrise and sunset, but when they bow it is towards Mecca and not

towards the sun. They have told me the evening prayer was to ask God to protect them against bad men through the night, the morning prayer to thank him for having done so. These are none of the regular prayers a Mohammedan should say at stated hours of the day, but sometimes the repetition of one sentence out of these several times over, sometimes some words expressing an individual desire of the supplicant.

They make no images. Certainly Mohammed has forbidden the imitation either in painting or sculpturing of any of God's creation, but I doubt whether the Bedouin knows much of this command. They do make rude drawings of camel and ibex on the rocks, but that is the only attempt of anything of the kind I have ever seen, and they have no images or drawings connected with their religion.

Circumcision is enjoined, and every man is circumcised; but no religious ceremony can be said to sanctify the day on which this is done. In the desert they have no one capable of safely performing the operation. A man—generally a barber—has to be brought from some way off; perhaps it may be a five days' journey. Supposing there are several boys in an encampment of the usual age—generally from five to seven-some Bedouin, going in to one or other of the towns, is told to bring back with him a man who can circumcise. This settled, the news that a circumcision is to take place at such and such an encampment on such a day is sent far and wide, and all the boys collected; the families come with all their friends, these latter bringing presents according to their means, be it a sheep or simply a bowl of rice; but never without something. A great festival is held, consisting of a great deal of galloping about and gun firing. The boys who are to be circumcised are in a tent by themselves, and the women collect round it and drown their cries by their own shrill voices. In this tent the boys remain, looked after by their mothers for a week after the operation. During this week while all are together there is no end of feasting. There is clancing at night, and all that a Bedouin can devise to amuse himself is done. Once when my man Heddah was with me he was most anxious to go to one of these assemblies, but was unable because he was too poor to find any present for the boy's father. Another man I knew rode a day and a night to be present.

In conclusion I may say that there is nothing whatever religious about the ceremony; the Fattah may be, and is probably, recited, and that is all.

### VII.—The Story of Zir.

Of their hero Zir, I tried to take notes while his adventures were being related to me. These seem pointless and incoherent enough, but I will give them as told to me. There may be other more correct versions of his career, but I have not been able to obtain them.<sup>1</sup>

When a youth in his father's tent little was thought of Zir. His father found him no wife, and the warriors counted him not as one of them. But his brother Kleb was married to a wife, a cruel woman, who, seeing that Zir was of no account, told her husband to put him down a well, and so rid them of the useless fellow. Kleb did as his wife bid him, but watched the well, for it pained him that his brother should die and by his hand. Two horses came by, fighting, and it would have been vain to try and pacify them, so furious was the fight; but when Zir called from the bottom of the well, the horses ceased from fighting and were quiet. Then when Kleb saw this he said, "What manner of man is this brother of mine whose voice can stay wild horses in their fury?" and in fear he drew his brother out of the well, and bade him go in peace. And the two kept their flocks together, and all was well till one day Kleb looked up and saw a strange camel feeding on his ground and trampling his crops, and in anger he slew it. Then the woman to whom the camel belonged went to a nephew of hers, and said, "Either Kleb shall give me the sun and moon or thou shalt kill him," and so the nephew went and would have killed him, but Kleb knew what was in his mind by the rattling of his sword in his sheath. "Thou wouldst kill me?" said Kleb. Then in fear the nephew denied it. and Kleb believed him, despite the warning given him by his trusty sword, and he lay down to sleep, and Zir was beside him. And while both slept the nephew came and killed them, and Zir he cut up into pieces and put into a chest and threw it out to sea. And the chest floated many a day over the water, and at last was washed ashore on to an island; and lo, when the men of that island opened the chest, Zir sprang out alive. And the sheikh of the island took Zir as his own herdsman, and Zir minded the mares and foals that

<sup>&</sup>lt;sup>1</sup> [Reference may be made to Schumacher, Quarterly Statement, 1889, p. 189 sq.; Tyrwhitt Drake, ib., 1873, p. 58; Conder, ib., 1878, p. 21 sq.; and especially the detailed account by the last mentioned in his Heth and Moab, pp. 354-359, where the obvious analogies in the stories of Osiris, Perseus, and Dionysus are noted.—Ed.]

belonged to his master. And one day there came a horse out of the sea to the mares, and in time he came again and gave Zir a foal of which he was sire: and once again this thing happened, and he gave him a second foal, and Zir rejoiced, for he knew of what breed these foals were; but soon after the mares and foals were earried away by the Gûm. Then Zir's sorrow was great, and he rent his clothes; but the horse again came out of the sea, and said to Zir, "Mount on my back, and all will be well." And Zir did as the horse said, and they galloped away faster than the wind, and overtook the Gûm, and Zir, single-handed, routed them, and brought back mares and foals. Then was the sheikh, his master, glad, and said unto Zir, "What reward shall I give thee for having done this thing?" And Zir did as the horse secretly bid him, and asked for a hoat, and a spear, and a horse of the flock, and when these were granted, he chose one of the foals, the offspring of the horse of the sea. And he entered the boat and sailed away. Now the horse had told him that whatever might happen to him he should never part with the foal, but when Zir landed and a man offered him a bag of gold for it, he forgot, for the temptation was great, and sold the foal. Then he bethought him what the horse had said, and sailed back and claimed the other foal, and his master gave it to him, and he went back and sought his old home, and in time he found it. But there the trouble was great, for since the day Kleb and he had been killed many evil things had happened. Kleb's wife had married her husband's murderer and he had died, since which time no man had come near the camp. There had been no one to collect wood for the fires or fetch corn for the bread, and the women had mourned, for there was none to defend them. When Zir saw this he collected wood together and made a great fire. Then he asked Kleb's wife where his nephew, Kleb's son, was gone to, and she would not tell him, though the boy was with her, but she said he was her second husband's son, and Zir believed her and wondered how he should find his nephew. So to revenge his brother he sought the relations of the man who had murdered him, and them he slew, from morning till evening slew he them and never tired of slaying, and yet none told him where his nephew could be found. Then someone said "That is he," and pointed out the lad to him; and Zir, seeing the lad was on horseback, said to himself, "If he is my brother's son, he is fearless," and he threw a lump of earth at the horse, who galloped away, but the boy was not afraid. Then Zir threw a

piece of bread at him as he galloped past, and the boy caught it and ate it. Then Zir knew this must be his nephew, for he was brave and a good horseman. And he took the lad's mother, led her to some water, and bade her swear unto him who the lad's father was, and she sware by the water it was Kleb. And when the lad heard this, he jumped on to his horse, and at his uncle's side he turned upon those who said they were his friends and yet had murdered his father, and Zir and he killed them all.

This is the story of Zir as told to me. It may be quite an incorrect version, and probably many links are wanting, but it is a fair specimen of the lack of sequence in the mind of the ordinary Bedouin when he has to grapple with what should be a consecutive narrative. Other stories I have heard are so obviously very poor editions of those Lane has given in full in his book, that it would be waste of time putting them down.

### VIII.—Sacred Tombs and Wells.

Some few important tombs (I myself have only seen two) have small domes built over them to protect them from wind and weather. Inside this little building, which is open on one side, stands the tomb itself, a very plain stone box with a flat top.

They are the repository of all conceivable odds and ends within the power of a Bedouin to collect. Everyone as he passes-for these tombs are invariably close to or on the path leading to a well—casts thereon what available rubbish he may have at hand. No special meaning attaches to the act, except originally a desire to keep the place in memory, which has now grown into a regular custom. This, at least, was the only explanation the Bedouin I questioned could give me. It is difficult for those who have not seen one of these tombs to believe they really can be ornamented by such miscellaneous objects as bits of telegraph wire, empty tins, nails, rags; but so they are. In time they present the appearance of rubbish heaps. At a Neby or Saint's tomb it is usual, in the first place, to pick a branch of rattan and stick it at the head of the tomb, then to take up a handful of earth and throw it over the shoulder, then to stand opposite it and recite the Fatha. I have never seen any kiss the stone, nor bow in any way but that prescribed while saying the prayer. It is next to impossible to discover the original idea connected with such customs; no Bedouin could give me any better explanation than that such was the custom. In the

same way they have a habit in certain places of casting a stone on a heap, generally already high by constant additions. This probably was begun to mark the spot, but the reason why it should be marked has long been forgotten, while the custom still continues in full force. I have not noticed that such heaps surrounded trees, nor do I know of any special kind of tree considered sacred. Any tree associated with any incident, such as a Neby having rested under it, or another having dreamed a dream there, acquires a certain sacredness by association, but they never dance round such trees, or round poles or stones; the Dahea and Harbi are their only dances, and these are danced not only at the Rubich, but whenever there is a fantasia for a marriage or other festivity, or in the evenings of the days spent at a Neby's tomb. On these occasions during the day they have camel races and games. Of one of these I took some photographs. A child was placed on a woman's shoulders, and, standing there, was just of sufficient height to allow a man passing on camel back to seize the handkerchief the child held. Once he had it he galloped away and the others after him. He whose camel was fast enough to overtake the one who had the handkerchief took it and started off, and the rest tried to catch him, and so on. These games and dances are not otherwise connected with religious or legendary ideas, beyond that they are held in honour of, or at the tomb of, a Neby.

Here and there in Sinai you are shown what is described to your as the footprint of some hero. These are generally of gigantic size, as befits a hero, and are yearly becoming larger, for the sand is constantly being vigorously scraped out by devotees, who wish to keep the footprint clear, and thus unintentionally deepen and broaden it. These footprints are almost always those of warriors, not saints, and rouse martial rather than holy thoughts in the beholder. So, for instance, the marks of a warrior's spear, which dragged backwards and forwards as he fought his foes single-handed, has left lines of deeply-cut ruts on the side of the Wady Jervar to the admiration of all subsequent generations. Many wells are said to be haunted. There is such an one on the top of the Jebel Senaina, which once was held against all-comers by a man of the Haiwat and two of his followers. The little water there was in it they wanted for themselves, and fought for it against all who came. But the three have long since vanished -their spirits perhaps haunt the place, for strange sounds are heard there, and convincing proof

that things are not altogether as they should be. Suleiman told me his dog had howled as he approached the well, and on two occasions while eamping close by he had heard the most extraordinary sounds at night, which sounds had caused his dog much fear.

(To be continued.)

## OCCASIONAL PAPERS ON THE MODERN INHABITANTS OF PALESTINE.

By R. A. Stewart Macalister, M.A., F.S.A., and E. W. G. Masterman, F.R.C.S., F.R.G.S.

A HISTORY OF THE DOINGS OF THE FELLAHÎN DURING THE FIRST HALF OF THE NINETEENTH CENTURY, FROM NATIVE SOURCES.

### PART III.

The Wars of Yaman and Kais in the Southern Half of Palestine.

In the end of the eighteenth century the people in the districts of Jerusalem, Hebron, and Gaza were divided into two parts-Kais and Yaman. The sheikh of Kais was the Amîr Hasan el-Waḥaidi, surnamed ed-Daimi; the Bedawîn followers of this chief were the Jabârât, Kalâzîn, Sowarâkah, and 'Amâdîn, and the fellah followers were the Kais of the plains, with their sheikh el-'Azzah and his son Muslah, famous for his strength and generosity, The sheikh of Yaman was the Amîr Âyash el-Wahaidi; his bedawîn followers were the Tayâha, Tarâbîn, Hawaytât, and Bili, and their centres of habitation were partly near Gaza and partly in the Sinaitic desert. The fellah followers of Yaman in the mountains. of Hebron were the family of 'Omar and the sheikh of Dûra, and a large number of fellahîn of Hebron. Tradition ascribes the origin of this division to two brothers, each with a numerous family, between whom a great enmity arose. The brothers are supposed to have been named Kais and Yaman. The opposition between the two parties was such that a stranger coming to a village was first asked whether he were Kaisi or Yamani; on his answer depended whether he would be welcomed or put to death.

On one occasion 'Ayash collected all the bedawîn and fellahîn who had convenated with him, and attacked Ḥasan, with whom were only the small tribe of Jabârât, at Rakhameh, in the district of Gaza¹; he soon captured the tent of Ḥasan and his cattle, and all the property of the Jabârât. But when Ḥasan saw the enemy preparing to seize the wives of himself and his followers, he made a sudden rush among the enemy, breaking open their ranks, unhorsing riders, striking right and left with his sword, and breaking the lines. Thus he was victorious, and the attackers retreated, leaving their plunder. Ḥasan and his followers pursued them till sunset, and he fought so vigorously that his sword clave to his hand, and the number of the slain was reckoned to be 2,800.

After the death of Ḥasan ed-Daimi, his son Sâlim ed-Daimi succeeded him. He frequently attacked the Tayâha and Tarâbîn Arabs.

In his time Muḥammad Agha abû Nabût governed the country. His centre was at Jaffa. Though severe, his rule was just; he endeavoured to suppress robbery and brigandage, and thus made matters difficult for the bedawîn, who rebelled against him. The leader of the rebellion was Sâlim, the head of the Ḥais. When Abû Nabût heard this, he sent secretly the sheikh 'Othmân abû Ghosh, the head of the district of Jerusalem, to make a truce. Then he summoned Sâlim with pretended kindness, and on his arrival received him with every sort of favour. For a long time Sâlim abode in friendship with Abû Nabût, but when the latter had completely gained his guest's confidence he commanded Muḥammad, agha of his troops, who killed Sâlim and threw his body into the sea.

After this, Abû Nabût went with 'Othmân to Jerusalem, which he took and garrisoned. Then he proceeded against the Ķais of the district of Jerusalem, whose chief was sheikh Saʿīd ibn Simḥân of er-Râm. Abû Nabût went with his host to Bîreh, and with him 'Othmân. At Bîreh was a large army of soldiers and fellaḥîn collected, and when Saʿīd heard of it he also proceeded to Bîreh and joined them. Bîreh, it should be said, was on the border between the territories of Saʿīd and 'Othmân. A battle lasting four days ensued, in which Abû Nabût used cannon against the Ķais. On the south side of the village was a strong place called

 $<sup>^1</sup>$  I cannot find this place marked on any available map. The natives tell me it is south of Gaza, – [R.A.S.M.]

et-Taḥûnah (the mill), in which many of the Kais took refuge. The host of Abû Nabût attempted to take it by assault three times, but were repulsed each time with loss. The defenders, however, had placed their powder on a spread cloak in order that it might be easily available for loading their guns, and a chance fire falling on it caused it to explode, whereupon the attackers rushed in and killed them all but one, who was spared; he, however, was afterwards found to be a Christian, whereupon Abû Nabût ordered his arms to be cut off, and he died in five days. At last the cannon of Abû Nabût prevailed; a violent attack was made on Bîreh, involving great slaughter, and the town was captured. Abû Nabût returned to Jerusalem, and there remained, fearing to proceed southward, as he had been obliged to leave behind many of his men at Bîreh. Then he sent for Ibn Simḥân and made a treaty between himself, Ibn Simḥân, and Abû Ghosh. For a long time Ibn Simhân entered and left Jerusalem in perfect safety in virtue of this treaty.

But Abû Nabût once more plotted treachery, and endeavoured to make Abû Ghosh join him. For a long time the latter held back on account of his oath, but at last he agreed, and placed liers in wait at three points in the road to kill Ibn Simhân. One of the officers, however, warned Ibn Simhân of the intentions of Abû Nabût, so he disguised himself as one of the 'ulema, and rode as though he were going to his own country. He passed the first two ambuscades and saluted them with the ordinary formula; they did not recognise him, and let him pass. At the third ambuscade, however, Abû Ghosh himself was sitting on the wall, and he called out "Ibn Simhân, beware! the ambush is in front of you!" This was intended not for him, but as a warning to the liers in wait, who woke up and fired on him, so that he fell dead.

To him succeeded Isma'îl ibn Simhân, his brother, who was brave and fearless likewise, and he collected his men to avenge his brother's death. He seized the governorship over the Bani Ḥârith el-Kablîyah and the Bani Ḥāmâr. Abû Ghosh was weary of the strife, and so Isma'îl was able to slay many of the Yaman. The whole country was filled with wars, murders, raids, and robberies, for the Kais considered the death of the sheikh a great disgrace, especially as he had been killed by treachery.

Before leaving this period something must be said here about the condition of the Nâblus district. This district was divided politically into eight divisions, 1 but in guerilla warfare into but two parts, one under the Sheikhs Mûsa Bek Tukân, Muhammad el-Jerrâr, Haj Muhammad and Sâdik er-Rayân of the Kais faction, and the other part under Husain Bek 'Abd el-Hâdi, Kâsim el-Ahmad, Nimr Agha, and el-Jayusah of the Yaman faction. The bedawîn who lived in the same district allied themselves as follows: The 'Arab es-Sakhr and the Masa'îd with their Amîr Rabbah and Barakat were aiding Mûsa Bek, and the Arabs Ghazzâwîyah and Mashalhab were with Husain Bek. Much fighting and bloodshed were constantly occurring between these rival factions. What increased the evil was that the Government used periodically to send a Wali to collect the taxes, and he, from inability to force his authority, used to befriend one party in return for a money payment, and then lend them his soldiers to assist in fighting and spoiling their rivals. On one occasion Mûsa Bek Tûkân thus hired horsemen and attacked Ķâsim el-Aḥmad at Kuriet Surra, and besieged him there. But Kasim, when hard pressed, made a sudden sortie with all his followers, and attacked the besieging force with such effect that he scattered them, and then pursued both the Wali and Mûsa Bek all the way to Nablus. To escape from his wrath the latter fled to Egypt. Tradition says that on this occasion Kâsim killed with his own sword 295, besides those he shot from afar with his gun. Soon after this Sulaimân Pasha,<sup>2</sup> the governor in 'Akka, was succeeded by 'Abd Allah Pasha, who made great friendship with Kasim el-Ahmad and Husain 'Abd el-Hadi, and gave them the chief authority in the Nablus district. When Sheikh Yusif el-Jerrâr heard this, he and his followers rebelled against 'Abd Allah Pasha and the two beforementioned sheikhs, his subordinates. The Pasha collected an army, and came to the help of his friends, and finally the followers of Jerrar took refuge in the village of Sanur, a place naturally so strong and also so well fortified that after severe fighting and much loss 'Abd Allah was unable to take it and had to raise the siege. And so Jerrâr remained in rebellion against the Pasha for seven years. At length 'Abd Allah called in the aid of the Amîr el-Beshir, the governor of Mount Lebanon, with whose assistance the fortress was taken and entirely destroyed (1830). The district remained under Kåsîm and Hûsain Bek until the coming of Ibrahîm Pasha.

<sup>1</sup> See foregoing list.

<sup>&</sup>lt;sup>2</sup> The successor of the famous Jazzar Pasha.

In 1831, while the country was in this troublous state, Ibrahîm Pasha ibn Muḥammad 'Ali Pasha 'Azîz, general of the Egyptian army, arrived and attacked 'Akka, which he entered after a siege of nine months. All the sheikhs were in great fear of him, and submitted to his rule without fighting. He made special favourites of Ḥusain Bek 'Abd el-Ḥâdi and Ķâsim el-Aḥmad, the two sheikhs of the Nâblus district, and appointed the three sons of Ķâsim sub-governors under himself—Yusif of Jerusalem, Muḥammad of Nâblus, and 'Othmân of Jaffa. Ḥusain and Ķâsim were his associates and advisers, and he used to appropriate the taxation of the country.

The great rising of the fellahîn against Ibrahîm Pasha, which almost succeeded in ejecting him from Palestine, was undoubtedly due largely to his attempt to draft conscripts into his army by lot. This was equally distasteful to the sheikhs of the Kais and of the Yaman. The fanatical section of the Muslims also considered that he was far too considerate to the Christians whom, contrary to the eustoms of previous Muslim governors, he treated with justice and even favour. They darkly muttered among themselves that Ibrahîm himself must be a Christian in disguise. What actually fanned into a blaze the smouldering rebellion is said to have been the following incident: In 1834 Ibrahîm Pasha made an official visit to the Nâblus district, and, as is customary, the leading sheikhs came to meet him to pay their respects. The leaders of the party were Sheikh Ķâsim el-Aḥmâd, the Sheikhs of Jerrâr and Barkawi, the heads of the family of Tukan, Ahmad Agha Nimr and Sheikh Husain 'Abd el-Hadi. The last mentioned, who was looked upon with special favour by Ibrahîm, was riding an ambler, but the aged Sheikh Kâsim was upon a wild, unbroken horse which was careering about. To Ibrahîm it looked merely ridiculous to see an old man so mounted, and turning to Sheikh Husain he remarked, nodding towards Sheikh Ķâsim, "Really, your children, ma sh'Allah, are stronger than you in horsemanship." The venerable sheikh, because he was quick tempered and accustomed, too, all his life to respect from both his birth and his position, resented this pleasantry as the grossest of insults, and forthwith broke out into open rebellion. Returning to his mountain fastnesses in Jabal Nâblus, he roused the already discontented fellahîn, and, it is said, also arranged a plot whereby he hoped his enemy might be destroyed. Ibrahîm Pasha had by this reached Nâblus, and it was

arranged that during his visit to the famous soap works he should be suddenly east into the great caldron of boiling oil. Husain, however, got word of this and hastily withdrew his patron to Jerusalem. Meanwhile the fellaḥîn and bedawîn rose in rebellion from end to end. The soldiers in every part were attacked and small parties massacred.

Ibrahîm Pasha soon found himself besieged in Jerusalem. The walls were attacked, but the soldiers of the defenders beat them off. Then some 40 of the fellahîn, led by Subh Shaukah, sheikh of the Fawagharah of Bethlehem, entered the city through the great drain that runs down to Silwan. They suddenly appeared in the midst of the city, and after killing many and causing the rest of the soldiers there to take refuge in the citadel, they began to loot the shops. It is narrated that the Sheikh Subh while carrying on his back a sack of coffee, weighing 30 rotls, was severely wounded by a bullet in the feet, but rather than abandon his prize he got two companions to hold him on each side, and so retired with his followers. So the siege lasted, and after expending much ammunition the attacking party saw that the capture of the city was not possible; accordingly they retired a space, whereupon the defenders made a sudden and unexpected sortie, fired cannon and guns, and pursued the attackers with their horsemen. The attacking party were defeated with great loss, and the soldiers returned to the city victorious.

Sheikh Kâsîm el-Ahmad, then the leader of the popular party, was greatly enraged by this defeat, and he caused the insurgents to return to Jerusalem and renew the siege. At length Ibrahîm Pasha, being in great straits, and, fearing for himself and his soldiers, endeavoured to devise a plan of escape with the aid of Husain Bek, who was still in his company. The latter was, however, also in communication with Kâsim and the sheikhs, and to them professed hostility to Ibrahîm, and encouraged them to fight against him.

Through Ḥusain, and, it is said, by the distribution of bribes amongst the fellahîn leaders, Ibrahîm negotiated for a way to be made open for him, whereby he could escape to Jaffa and thence to Egypt. This was granted, and Ibrahîm proceeded to Jaffa by way of the Wadi 'Ali (Bab el-Wad). On the road Ḥaj Muṣṭafa abû Ghosh, the sheikh of the Yaman, opposed him and slaughtered many of his soldiers, but after a difficult march Ibrahîm succeeded

in reaching Jaffa. With him were Ḥusain Bek and the remnant of his soldiers.

At this juncture Muhammad 'Ali Pasha himself arrived from Egypt to give assistance to his son. When they met they fired so many cannon, both on land and sea, that the inhabitants thought that an earthquake had taken place. The sound of the cannon was heard at a distance of 30 miles. Husain Bek came into the presence of Muhammad 'Ali, who treated him with the greatest consideration, even saying "I have made Ibrahîm Pasha your son"; and Husain, in his turn, gave him assurances that he would force the country to obey the rule of Ibrahîm: whereupon Muhammad 'Ali returned to Egypt. The soldiers were left under Ibrahîm, and Husain sent letters to the followers of Kâsim, ordering them to flee before the Egyptian soldiers as soon as fighting should commence; but at the same time he stirred Kâsim up to rebellion, wishing to lead to his destruction to avenge a private wrong. A battle began at a village called Deir el-Ghusûn, and the people acted according to the instructions of Husain. Kasim, after killing some of those who had traitorously joined the Egyptians according to the orders of Husain, found that opposition was impossible, and Ibrahîm, left master of the country, made Hasan governor of the whole land. At the order of Ibrahîm all the rebellious sheikhs were captured and put to death. Kâsim el-Ahmad (surnamed Kâsim Pasha by Ibrahîm on account of his bravery, a surname by which he is still officially known) and his son, Yusif, took refuge with some bedawîn called Freta bani Sormein, a division of the 'Anuzeh, but they were betrayed by these bedawin, and delivered up to Ibrahim in Damascus, where they were beheaded. Another son of Kasim. Muhammad, was also executed, as well as the Amir, sheikh of Dûra el-Khalîl, 'Ali Rabbah, 'Abd el-Jabbar, abu Şâlih, sheikh of Bani Zaid, Isma'îl, sheikh of the Mujelli of Kerak, Yusif Salamah, of the village of Selûh, and Isma'il ibn Simhan, whom he summoned to Damascus and there put to death. Many of the sheikhs were imprisoned in 'Akka, and the two younger sons of Kasim. who were under age, he sent to Cairo: their names were Ahmad and 'Othmân.

Ibrahîm then set the sons of the sheikhs in the place of their father, but changed their title to Nawaţîr, that is watchmen or inspectors. (The name has since been changed again to Mukhatîr, the selected or chosen men.) Thus, Husain ibn Saʿid Simhan was

appointed "Naţûr" of the northern Bani Ḥârith, and Ibrahîm Muḥammad, surnamed Karalja, to the same office over the southern branch of the district.

These inspectors being appointed, Ibrahîm again ordered a conscription, but without drawing lots. The inspectors seized all the young men except such as paid them bribes. Thus the inspectors became all-powerful, and owing to the loss of bread-winners there was much poverty in the country, especially (at first) among the Muslims. The Christians were not enlisted originally, but one of Ibrahîm's favourite generals being killed at Bethlehem by, it was said, the Christians, Ibrahîm, greatly enraged, ordered the Christians to be enlisted also.

Husain ibn Sa'îd took the opportunity which this new decree afforded to revenge some private grievances against the Christians in the towns under his jurisdiction, especially Jifna and Bîr ez-Zait. Accordingly he seized many of them, and sent them to Alexandria to be soldiers and to work in the warships. On account of the injustice he showed, Naṣr Khalîl, sheikh of Bîr ez-Zait, and Ya'kîb Rahmah and Ibrahîm 'Abdu, the two sheikhs of Jifna, went to Mar'ash, where Ibrahîm was stationed, and complained. In consequence Ḥusain Simḥan was dismissed from the inspectorship of these two villages.

Ibrahîm ordered taxes not only on the fixed property but also on the animals (goats, sheep, &c.). Robbers were powerfully put down everywhere, but, on the other hand, the soldiers of Ibrahîm were found to be great oppressors. As an example, it is stated that they would, when billeted in fellaḥîn villages, insist on cooking the sheep given them for food in the peasant's samn, after which they would wilfully throw it away. Previous to this Ibrahîm had attacked the Turkish army at Hamah and severely defeated them, taking more than 30,000 prisoners.

For the nine years from the capture of 'Akka the country was subject to Ibrahim, that is from 1830 to 1840. In the latter date the English ships came and attacked 'Akka, which they captured in about an hour. Ibrahim fled with his host to Egypt by way of the Ghôr and the mountains of Moab, losing many of his followers on the way, as they were attacked by the people of the districts they passed through.

Brahîm had put a stop to civil war in the country, as he had disarmed everyone except the inspectors. On his departure the

animosity between the Kais and the Yaman broke out again. The soldiers drafted by Ibrahîm were allowed to return to their own homes on the cessation of the Egyptian domination, and a Mutessarif was sent to Jerusalem by the Turkish Government. This official established the inspectors in their places by firman—among them Husain ibn Sa'îd. 'Abd el-Laţîf, son of his cousin Isma'îl, moved by jealousy at this appointment, which had directed that the district (the Bani Ḥârith esh-Shamalîyah) be divided between them, went to war with Ḥusain. The two fought for a full year, after which 'Abd el-Laţîf made a treaty with Ḥaj Muṣṭafa abû Ghosh, the enemy of the Kais. This upset the old tribal division, part of the Kais siding with the Yaman.

In consequence of these changes an affair happened at this time at Ram Allah which well illustrates the state of the country and the strong enmity between the two powerful parties. Up to this Ram Allah and Bîreh, though on the frontier, as it were, were recognised as belonging to the Kais, though some part of the former village, at any rate, was always recognised as Yamanite. For certain reasons, among which was apparently the secret influence of 'Abd el-Latîf, the people of these villages became at this time dissatisfied with the old arrangement, and sent word to Sheikh Mustafa abû Ghosh stating they wished to be under his protection. This Abû Ghosh accepted, and placed them under the guardianship of Yamanites, the chief of whom was the Sheikh 'Abd el-Kâdar el-Kiswaneh, a relative of the powerful Abd el-Latîf. After a time this man began to make a great distinction between the original and the new Yamanites, and to be very unjust to the original Kais of Ram Allah, whose leaders were Yusif Harb and 'Aisa abû Jughub. Seeing this, these men regretted their agreement, and, taking advantage in the great feeling of dissatisfaction caused by 'Abd el-Latîf's alliance with Mustafa abû Ghosh, they sent word to his great rival the Sheikh Husain of their condition. Husain hastily summoned to his assistance the Amîr er-Rabbah el-Waḥaidi of Gaza (the son of the famous Sâlim ed Daimi), his powerful Kais ally. He responded at once, and on his arrival with troops of horsemen, Sheikh Husain advanced with them and his own followers from the Bani Harith esh-Shamalîyah. They captured the village of Ishhîdim, of which Abd el-Latîf had unlawfully taken possession, and proceeded against Ram Allah, which they reached a little before sunset. The inhabitants of this village were still outwardly of the Yaman faction, but secretly wished for victory for the followers of Simhân. The greater number, therefore, put no bullets in their guns. A staunch minority, however, sent urgent messages for help to the Sheikh Mustafa abû Ghosh, who immediately collected all the armed forces of his district as well as his bedawin allies of the 'Awasat. Before, however, he could advance to aid his people the Kais under Simhân had obtained a great victory, many of the Yamanites who showed opposition being killed, others captured, and, it is said, few escaping. The leader of the Yamanites surrendered himself to the Amîr er-Rabbah, and was by this time under his protection. The victorious day was concluded by a great feast and the deep sleep of weariness and satiation. Into the sleeping host Mustafa Abû Ghosh with, it is said, 3,000 fighting men, stole about midnight; a rain of bullets roused the Kais from their slumbers, and bewildered by the flashing of the guns, the victors of the previous evening were scattered in a panic-stricken retreat. Some, unable to escape, took refuge inside or on the roofs of the houses, and among these Amir er-Rabbah with his prisoner and the Sheikh Husain had to defend themselves as best they could. A scene of the wildest confusion occurred, in which the continuous rattle of the guns was intermingled with the shrieks of the women and the howls of the children. After an interval, however, the scattered Arabs and fellahîn on the outskirts of the village, realising the imminent peril of their leaders, rallied again and rushed to their rescue. This first rush was checked by a rain of bullets, but at length, seeking shelter at every possible cover, they began to make headway. A chance bullet at this juncture killed Taha abû Ghosh, Mustafa's brother, and the Yamanites, seeing him fall from his horse, lost courage and commenced a retreat, which speedily became a rout, in which many were shot or speared. It is said that in this affair over a hundred men were killed. The Yamanites of Bîreh, learning of Mustafa's defeat, quietly retreated home again.

After four years Husain and 'Abd el-Latif made peace, and divided the land of the Bani Hârith esh-Shamalîyah between them, as ordered by the Turkish Government. This restored the ancient tribal division to its former shape.

In 1846 Mustafa abû Ghosh collected his men from the Bani Malik, and from Jabal el-Kuds and the east of Jabal Nâblus, together with the Masaid bedawîn and others. His intention was to capture Tayibah, Deir Jerîr, Rummân, and Kefr Malik, which were half

Yaman, half Kais. The sheikhs of the house of Simhân were aware of this plan, and they assembled their kin and allies of the Bani Murrah and the men of Ram Allah and Bîreh to fight against the Yaman. The armies met at Wastiyah, an hour west of et-Tayibah, and after two hours' fighting the Kais were victorious. The Yaman fled and took refuge in Deir Jerîr. Many were slain in their flight. The next day the Yaman asked for a 10 days' armistice, which was granted; during this time the Yaman retreated to Deir Jerîr, which the Kais captured. After these events there was peace between the rival tribes.

However, hostility again broke out between Ḥusain and 'Abd el-Latır, which again caused a rupture among the Kais. The centres of hostilities were er-Ras, the residence of Ḥusain, and Janiyah, that of 'Abd el-Latır. After a destructive conflict lasting three years, the sheikhs of the district met together and made peace. This, however, was followed by renewed warfare between the Kais and the Yaman, which lasted 18 months, during which none dared pass from the territory of the one tribe to that of the other. This led to an interruption of commerce, which caused great misery. At length the Amırs and the inspectors of the two sides met and made conditions of peace, agreeing that none should interfere with the other. The security was left in the hands of Muṣṭafa Darwish el-Khoja, sheikh of the Yaman village of Na'lin, and Saliḥ abu Ḥamdan and 'Ali Shamlah, the two sheikhs of the village of Beit Illu of the Kais.

This peace had an immediate effect in restoring trade, but it did not last more than six months, for then the leader of the Yaman, Mustafa abû Ghosh, with his horsemen of the Awasât, met five Kaisites near Lydd and killed them, seizing their oil and donkeys. Of these men, three were from Beit Illu, and one each from Bîr ez-Zeit and Kabar. When the Kais heard this, they collected together and rushed on the Bani Hamâr and the district of the Khoja, and seized the village of Shabtîn, which they plundered and fortified. When the news reached Mustafa abû Ghosh, he assembled his people from Bani Hamâr to Kuriet Shukbah, and thence sent word to his allies in Jabal Nâblus, Muḥammad el-Jerrâr and Sâdik and their followers, to make war against the children of Kasim el-Ahmad and the family of 'Abd el-Hâdi. The war thus blazed forth in the districts of Nâblus, Jerusalem, Bani Zaid, and Bani Hârith. The allies of Abû Ghosh

were victorious in Jabal Nablus, and so entered Bani Zaid, which belongs to Jerusalem. Three days after his arrival at Shukbah, Abû Ghosh, strengthened by these new forces, attacked Shabtîn. Four hundred men were involved in the fight, which lasted from sunrise to sunset. The attack on the village was unsuccessful, so that he proceeded to Janîyah. At this juncture a messenger from the Mutessarif of Jerusalem, Muṣṭafa Bek Saʿid, met him with an order to stop the fight; but Abu Ghosh at once, in the presence of this officer and his soldiers, rushed on the village, and, having quickly captured it, ordered it to be plundered.

Those who were in Shabtin, hearing the news, lost heart, and went every one to his own place, to protect his home. Mustafa abû Ghosh then reassembled his host and set out for Ram Allah, which he attacked. All the inhabitants fled except one dumb old man, who was killed; the village, however, was not looted, according to the command of Mustafa.<sup>1</sup>

The Kais were in great disgrace, and fear fell on them, and they besought safety from Abû Ghosh; but Sheikh Mûsa Saḥwail, from the village of Abwaiu, of the Bani Zaid, petitioned the Mutessarif of Jerusalem, complaining that the allies of Abû Ghosh had seized all his district and levelled his house, and destroyed many villages. The Mutessarif accordingly ordered preparations for war to be made under the direction of Muṣṭafa Bek Saʿid, and a small armed force, with cannons, proceeded to Jabal Nāblus to break the power of the rebels. Abû Ghosh, hearing of this, quickly withdrew himself from Ram Allah to his own town, Kuriet el-Anab.

The Kais joined Mustafa Bek by his orders at Bîr ez-Zeit, and they advanced, together with the regular soldiers, to 'Atâra, where the Nâblus sheikhs were encamped. On their arrival a fierce contest took place, in which the rebels were defeated and fled precipitately. The Bek with his host ahode that night in 'Atâra, but the fellaḥîn irregulars proceeded to 'Ajûl. The Bek followed, and when he arrived they fought there with the Sheikh Şâdik and his host till evening, when the village was captured and completely looted. In the middle of the night they advanced to 'Arûra and Mezra'a, which they took before daybreak. Then they advanced to Kerâwa,

<sup>&</sup>lt;sup>1</sup> The author of the Arabic account from which these chapters are paraphrased (a native of Bir ez-Zait) was in Shabtin at the time. It is evident, from Finn's Stirring Times, I, p. 397, that these events took place during the governorship of Hafiz Pasha, about 1852-3.

which submitted without resistance, and to Kefr 'Ain, which offered a feeble resistance for but half an hour, after which it was taken by assault and plundered. After this the host entered the villages of Nâblus without opposition, and there followed a universal plunder, each man spoiling the houses of his enemies. Muṣṭafa Bek removed from Atâra to Mezra'a, and thence to Silfît, whence they proceeded northward to Murda.

The fellahîn allies, however, went to Jama'în and to Zaita, north of Murda. Sheikh Muhammad Jerrâr had collected his troops from the country of Sha'rawiyeh and the Beni Sakhr, and they encountered this host, under the leadership of the sons of Kasim el-Ahmad and Hasan Simhân. On hearing that Jerrâr was coming to their help. the inhabitants of Zaita and of Jama'in took courage and attacked the invaders. These last succeeded in capturing Zaita, but Muhammad Jerrâr, unexpectedly coming upon them with about 5,000 foot and 1,000 horse, after a little inflicted a severe defeat upon them. The retreating force was divided into two: one half came to a road in a rocky pass, and there made an effectual stand against the enemy; the other half fled by the plain, and were pursued by the bedawin, and many were slain and robbed. At this moment the soldiers arrived to the assistance of their discomfited allies, which saved the remnant from utter destruction; for when the followers of Jerrar knew that the army of Mustafa Bek had arrived they turned and fled precipitately. The scattered fellahîn rallied and joined the soldiers and followed them, and till sunset the soldiers continued to slay every Yamani that fell into their hands. The Kais allies then reassembled at Murda, where Mustafa Bek was, and there saw that, as the soldiers returned, each carried a head, or an ear, or a hand, or another member, as a proof that he had killed some of the enemy; for Mustafa had offered a reward of two mejidis to each man who had killed an enemy. In all, 350 heads were brought in and piled up like a heap of watermelons, with countless hands and ears. The money with which to reward the soldiers was afterwards collected from the village sheikhs. [The author of the Arabic account was with Mustafa at Murda, and was an eye-witness of this seene. He left for his own village after 103 heads had been piled up.]

Then the Mutessarif sent for the sheikhs and made peace between them, and apportioned the district over which each should rule. The country then continued in peace for seven months. After this a new governor was sent to Jerusalem (1846), named Muḥammad el-Kubrusli. When he learned the ways of the country and the disobedience and rebelliousness of the sheikhs, he sent an order to summon Ḥusain Simḥân to his presence. The sheikh, fearing to travel by day, on account of Abû Ghosh, came by night with a bodyguard of 200 of his kinsmen. The governor received him graciously, gave him robes of honour, and then asked if he would be absolutely submissive to the government. Ḥusain answered, "I am a slave of the slaves of the governor, and I cannot depart from my allegiance to him for ever." The governor, greatly pleased, discussed with him a plan for getting rid of all the sheikhs, seizing their land, and banishing them from the country.

At the time there was great disturbance in Jabal Khalil, and much slaughter and robbery; moreover, the sheikhs were appropriating all the taxes to themselves. So after Husain had spent a month with the governor, he accompanied the latter on an expedition to Hebron. When they reached the city they found that the inhabitants had fortified themselves within it; but after a six hours' siege, the cannon made a breach in the walls, and the soldiers entered the city, which was given over for some hours to murder and rapine. This lasted till the governor put an end to it, and promised safety to the remainder of the inhabitants. The governor remained among the people 20 days, till they had all settled again quietly in their homes.

After this he marched to Gaza, which submitted without opposition, and there made arrangements for future protection of the inhabitants from the oppressions of the bedawin.

Then the governor proceeded to Ramleh and there encamped. He spent a few days in rest, and then summoned the sheikhs of the country to him. These, in great fear, obeyed; but he gave them all costly presents, robes, horses, and weapons. To Mustafa abû Ghosh he gave a high-bred mare, a richly jewelled sword, and good revolvers. He and the other sheikhs, receiving so much attention, were quite deceived as to his real purpose. Husain Simhân, meanwhile, took nothing from the governor, for he was in the plot, which, indeed, was his devising.

After ten days, the governor again summoned Muṣṭafa abû Ghosh, Muṣliḥ el-'Azzah, sheikh of the Kaisiyah el-Taḥtah, and Abd

<sup>&</sup>quot; Coats of honour."

<sup>&</sup>lt;sup>2</sup> A motive for his enmity appears in Finn's Stirring Times, I, p. 232.

er-Raḥman el-Omar, sheikh of the Kaisiyah et-Fôkah, and when they arrived, he again showed them great favour, entertaining each in a special tent. After supper, he surrounded the tents with soldiers. When all was ready, in the third hour of the night, a trumpet was blown, the soldiers rushed in, seized and bound the sheikhs. They were then mounted on common beasts, and conveyed to Jaffa, whence a ship carried them to Constantinople.

The remainder of the sheikhs hearing of this lost no time, but at once handsomely bribed Ḥusain, and were consequently not delivered up. The governor after this made Lydd the centre of administration over the country, and placed Ḥusain in authority. He was absolute master, employing and dismissing whom he chose. Three years afterwards, the governor was dismissed, and succeeded by Edhem Pasha, who confirmed Ḥusain in his rule over Lydd.

After four years, Ḥusain had occasion to visit his own district, the Bani Ḥârith esh-Shamalîyah. On the way he met with Muḥammad, son of Muṣṭafa abû Ghosh, who was lying in wait for him with a band of horsemen near the village of Hadîtha. A skirmish took place, in which the two enemies came face to face, and Muṣṭafa wounded the horse of Ḥusain. He fled without pause all the way to Lydd, so that on arrival his horse fell dead.

This event renewed the struggle between Kais and Yaman. Husain was dismissed in consequence, and returned to his village, er-Râs. Soon enmity once more broke out between him and his cousin 'Abd el-Latîf, and in consequence the Kais themselves became divided. Muhammad abû Ghosh and his adherents followed 'Abd el-Latîf, and Husain, alarmed by the increasing number of his enemies, asked help of Amîr Hasan el-Wahaidi. The Amîr came with 500 horse, and after a little fighting the whole country submitted to him, with the exception of the villages of Janîyah, Beit Illu, Deir 'Ammâr, Jemâlah, Beitin, and half the village of Birch. These villages, taking courage from their nearness to the Yaman district, would not submit. El-Waḥaidi and Ḥusain accordingly prepared to fight these villages, and turned their attention first to the half village of Bireh. The inhabitants fled to Beitîn and there fortified themselves. The allies spent a whole day attacking this village, but were unable to take it; only the bedawin carried off the cattle, which there had not been time to gather inside the

 $<sup>^{\</sup>rm 1}$  Le was evidently dismissed before 1853. See Finn's  $\it Stirring\ Times, I, p. 339.$ 

walls before the first onslaught. After sunset the besiegers retired on account of the intense cold. Next day snow fell.<sup>1</sup> After ten days, the attacking party retired without subduing the rebellions towns.

The relations of the Kais and Yaman continued undisturbed after this abortive conflict, and for four years 'Abd el-Latîf proved himself a formidable rival to Husain. But after that time it chanced that a certain merchant of Jerusalem, named Haj 'Abd Allah en-Neshashîbah, son-in-law of Husain and a very popular man in Jerusalem, went to Beit Illu to collect certain debts there due to him. While there he was waylaid at night just outside the house he occupied, and was killed. Next day the body was carried to Jerusalem, and buried with great manifestations of public grief. The family made an outery and demanded an enquiry, accusing 'Abd el-Latîf as the murderer. The governor summoned him to Jerusalem—a summons that he promptly obeyed, for by this time the fear of the central government had fallen on the sheikhs. When he reached the city, the relatives of the dead man, who were lying in wait for him, fell on him on the road to the government house and beat him so unmercifully that, though rescued by the soldiers, he died in a few minutes. With him was a relative who was also beaten and severely injured. The government provided medical assistance, and he recovered; but, in order to break the power of the sheikhs finally, he was shut up in prison, along with Mahmûd ibn Isma'îl, the brother of 'Abd el-Latîf. Husain was then put in command of the entire district of the Bani Hârith.

After nine months, a petition on behalf of Sheikh Maḥûmd was presented to the government. He was in consequence released, but prevented from holding any office in the country.

About this time a serious quarrel broke out between the two halves of the village of Bîreh. The leaders were respectively 'Ali Fauz and Amîr esh-Shammâr, both of them sheikhs of half a quarter of the district of Jerusalem. (This district is divided into four quarters, each under a sheikh, and sometimes the quarters were further sub-divided into half quarters, with a sheikh over them.) About 43 men were killed in the riot, and an officer was

<sup>&</sup>lt;sup>1</sup> This probably fixes the date of these events in 1854. Just before this (1853) much fighting took place S.W. of Jerusalem between 'Abd cr-Raḥmân hhû Ghôsh and 'Othmân el-Laḥhâm (Einn's Stirring Times, I, pp. 266, 305, 371, 398).

promptly sent with soldiers to suppress the disturbance. After five months, however, it broke out again, and 65 men were killed; whereupon the government sent soldiers, who seized the sheikhs and 30 of their relatives, and sent them to 'Akka to serve at forced labour. There most of them died. This took place about 1857.

Husain, having now no rival, became more and more oppressive, showing no compassion to the poor or weak. From Bîr ez-Zait, as from other villages, he demanded extortionate taxes; the village named refused to pay, and in order to avert violence, Mûsa Naṣr went to Jerusalem and petitioned (with the consent of certain sheikhs of our district) that Sheikh Maḥmûd Isma'îl should be given part of the territory. This was granted by the government, and Maḥmûd was given part of Bani Ḥârith, including Bîr ez-Zait.

After this, civil war broke out among the Kais, led by Sâliḥ 'Abd el-Jabbâr and Mûsa Saḥwail, the two sheikhs of Bani Zaid. After 20 days of disturbance, Mûsa Saḥwail was turned out of the district, and Sâliḥ became sheikh in his place. Mûsa Saḥwail complained to Therayah Pasha, Mutessarif of Jerusalem, who summoned Sâliḥ to an investigation. The inhabitants of Bani Zaid testified to the injustice of Mûsa Saḥwail, and confirmed it by the evidence of Maḥmûd Kasim el-Aḥmad, whereupon Mûsa Saḥwail was banished from Jerusalem, and was obliged to take refuge with Mustafa abû Ghosh, who had by this time escaped from the castle of Widdin, where he had been imprisoned thirteen years, and was now in hiding from the government.

But at that time the Waḥâdi and 'Othmân el-Laḥḥam, sheikh of 'Akûb, raided the village of Eshû'a, which belonged to Abû Ghosh. They captured the village and massacred all they laid hands on. When Abû Ghosh heard this, he collected his followers and rushed on the Kais gathered together to the west of the village, and after fighting from daybreak till midday they recaptured the village. There was great slaughter on both sides.

Now peace was restored between Ḥusain and Maḥmûd, and they agreed to unite in oppressing their district, and to collect large sums of money from it. Again they demanded a heavy tax from Bir ez-Zeit, and again the inhabitants refused to pay. The sheikhs then collected against them the Bani Ḥârith, and they fought for five days. At the end of that time, after some loss on both sides, the people of Bir ez-Zeit succeeded in beating them off.

<sup>1</sup> That is, of the district of Bir ez-Zait, the village of the Arabic writer.

Then another violent conflict broke out in the district of Bani Murrah, between Sheikh Maḥmûd abû Mubârak of Silwâd and 'Abd el-'Azîz el-Ansawîyah of el-Mazra'a. Ḥusain and Maḥmûd came to the help of the former, Salaḥ 'Abd el-Jabbâr to assist the latter. The seat of the conflict was at Silwâd and Yebrûd. The fighting lasted two months, and many were killed on both sides. But after this a new governor came to Jerusalem, who ordered the fighting to cease, and commanded the destruction of all strongholds and fortifications. He also commanded each of the sheikhs to be confined to his own district.

Shortly afterwards, command from the Sultan 'Abd el-'Aziz came to the effect that the sheikhs should all be dismissed, and Turkish officials put in their place, and that the taxes should be paid directly to the central government. Thus the country at last obtained rest from the oppression and quarrelsomeness of the sheikhs.

### NOTE ADDED IN THE PRESS.

The following list of governors, with dates, is compiled with the help of Finn's Stirring Times.

'Ali Pasha, 1845.

Muḥammad Pasha el-Kubrusli, 1846—(?).

Muḥammad Ḥâfiz, 1852—17 Dec., 1853.

Yâkûb Pasha, March, 1854—20 Oct., 1854.

Mehmet Kiamil Pasha, 15 Feb., 1855—(?).

It is impossible to be sure of the exact order of the events above recorded, as there is evidence that they are not detailed systematically in the MSS, which we have used.

### THE ACRA.

By SIR CHARLES WATSON, K.C.M.G., C.B., R.E., M.A.

ONE of the questions respecting the topography of ancient Jerusalem which has been frequently discussed in the Palestine Fund Quarterly Statement is that concerning the position of the fortress known as the "Aera" of the Maccabees and Josephus, and the views as regards the place it occupied are as divergent as those concerning the site of the Temple or of the Holy Sepulchre. For

example, Sir Charles Warren and Colonel Conder, whose opinions must always be regarded with respect, have held that the Aera was on the east side of the hill upon which the Emperor Constantine built the Church of the Resurrection, while the Rev. W. F. Birch. who has given long and careful study to the question, is convinced that it was situated on the slope of the hill south of the Haram enclosure.

Having regard to all that has been written upon the subject, it is with some diffidence that I venture to suggest that the Acra was built on a site different to either of the above, and one which, so far as I am aware, has not hitherto been proposed. My excuse is, that a setting forth of my views, even if they are not accepted, may be of some help to those who take an interest in the topography of Jerusalem.

In order to arrive at an opinion upon the subject we have to depend upon the historical statements in the Bible, the Apocrypha, and Josephus, as well as on the actual knowledge of the ground which has been gained in recent years by the surveys made by Sir Charles Wilson, and the explorations carried out by Sir Charles Warren, Colonel Conder, and others. For convenience of reference, I have given below a list of the passages in the ancient writers which bear upon the question.1

<sup>1</sup> The following are the passages in the Bible, the Apocrypha, and Josephus, which refer to the subject :--

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The Bible:
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Joshua xv, 8, 63; xviii, 16.

Judges i, 8, 21.

2 Samuel v, 6-9; xxiv, 18, 19.

2 Kings xxii, 14.

The Apocrypha:

2 Chronicles iii, 1; v, 2; xxxii, 5; xxxiv, 22. 1 Kings viii, 1; ix, 15, 24; xi, 27. Nehemiah iii, 25. Joel iii, 17.

1 Chronicles xi, 4-8; xxi, 18.

1 Maccabees i, 33; iv, 37; vi, 18; vii, 33; xi, 41; xii, 36; xiii, 21, 49-52; xiv, 36, 37.

Josephus: "The Antiquities of the Jews."

Book V, chap. i; chap. ii, 5.

VII, chap. iii, 1, 2.

XII, chap. iii, 3; chap. v, 4; chap. vii, 6; chap. ix, 3; chap. x, 5.

" XIII, chap. i, 3; chap. ii, 1; chap. iv, 9; chap. v, 11; chap. vi, 6; chap. vii, 7.

Josephus: "The Wars of the Jews."

Book I, chap. i, 4.

V, chap. iv, 1; chap. vi, 1.

VI, chap. vi, 3.

As regards the method of examining their statements, I am strongly of opinion that it is not desirable to reject any statement made by them; for, even assuming that they may not always be absolutely correct, they certainly knew a great deal more about the matter than we do, and if we attempt to correct any of their information we should probably be involved in greater error; or, in other words, if a theory is not in accord with what they have written, it is more likely that the theory is incorrect than their statements that appear to contradict it. Take, for example, the assertion made by Josephus, that the hill upon which the Acra stood was cut down so as to make it lower than the Temple, an assertion which is regarded by some as incorrect. It appears to me, on the other hand, quite impossible to reject the fact, and no site for the Acra can be accepted which is incompatible with it.

Before describing the site which I would propose, I would like to enumerate some conclusions regarding the topography of Jerusalem upon which the proposition is based. These conclusions appear to me to be compatible with every statement in the authorities, and it is not necessary to have to explain away any record in order to meet them.

These conclusions are:-

1. From a very early date Jerusalem was a twin town, of which one part was on the western hill, and the second on the eastern hill, the two being separated from one another by the Tyropeon valley.

2. The town on the western hill was Jebus of the Jebusites, the "rest of the city" at the time of David's attack, and the upper city of Josephus.

3. On the eastern hill was the stronghold of Zion of the Jebusites, and the City of David, afterwards called the lower city.

4. The stronghold of Zion, the Millo of David and the Kings, and the Acra of the period of the Maccabees, were fortresses which succeeded one another on one and the same site.<sup>1</sup>

5. The site of these fortresses was between the Temple and the City of David, and higher than both until the hill was cut down by the Asmoneans.

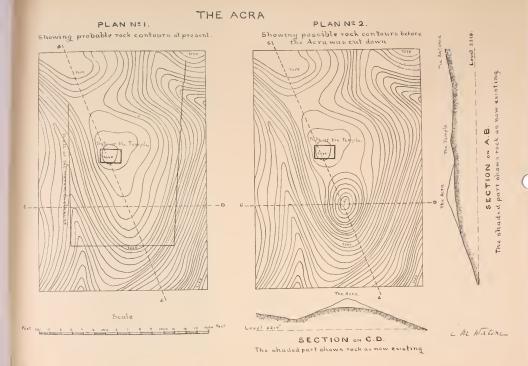
<sup>&</sup>lt;sup>1</sup> In the Septuagint version the word "Millo," in 2 Samuel v, 9, is translated "Acra." The word "Tower," in the book of the Maccabees, is also rendered "Acra." The Septuagint version was probably made before the Acra was cut down in height.

Level 2219. The Antonia The Temple SECTION ON A.B. The Acra

The shaded part shows rock as now existing

[M. Watron

2



- 6. It was north of the City of David, and south of the Temple, and so close to the latter as completely to command it.
- 7. After the Acra was cut down the ground sloped down from the Temple to the City of David. There was then no obstruction between the Temple and the city.<sup>1</sup>

To meet all the necessary conditions, there appears to me to be only one possible site, and this I have shown on the annexed plan. This site is within the Haram enclosure, near the north-east corner of the Mosque of Aksa, and above the great tank known as Cistern No. 8. In Plan No. 1 I have given the probable present rock contours of the hill as adopted by Sir Charles Warren, and given in the plates published with the Jerusalem Volume of the "Memoirs." These contours may not be quite correct, as they are based on limited information, but they are probably not very far from the truth, and they are as accurate as anything that can be obtained at present. These contours, of course, represent the rock after the hill of the Acra was cut down.

In Plan No. 2 I have shown the possible contours of the hill before it was levelled. I have given it a command of forty feet above the highest part of the Temple hill, which appears sufficient to meet the conditions. The two sections show the part of the hill which was cut away, assuming it to have occupied the proposed position. It appears to me that this position for the Acra would explain the reason of the existence of Cistern No. 8, which has a capacity of at least two million gallons. When the fortress was besieged by the Maccabees the garrison could not have obtained any water from outside, and yet there is no mention of their having suffered from want of water, although they had to surrender at

<sup>&</sup>quot;in that work spent both night and day without intermission, which cost them "three whole years before it was removed, and brought to an entire level with "the plain of the rest of the city. After which the Temple was the highest of "all the buildings, now the citadel, as well as the mountain wherein it stood, "were demolished."—Josephus, "Ant.," XIII, chap. vii, 7.

<sup>&</sup>quot;But the other hill, which was called "Aera," and sustains the Lower City, "is of the shape of a moon when she is horned; over against this was a third "hill, but naturally lower than Aera, and parted formerly from the former by a "broad valley. However, in those days, when the Asmonians reigned, they "filled up that valley with earth, and had a mind to join the City to the "Temple. They then took off part of the height of Aera, and reduced it to "be of less clevation than it was before, that the Temple might be superior "to it."—Josephus, "Wars," V, chap. iv, 1.

last for lack of provisions. Possibly Cistern No. 7, another large reservoir, was also used by the garrison.

After the hill had been cut down and the surrounding walls of the Temple enclosure were built by Herod, the surface appears to have been levelled and no trace of the Acra remained. The object of its existence ceased when the new fortress, afterwards called Antonia, was built north of the Temple. Nothing then remained but the name, which, as Josephus informs us, was still applied to the slope of the hill outside the Temple enclosure.

I would observe that in the plans, Contour 2369 and those below it are the same in both plans, the alteration commencing above Contour 2369.

It would be satisfactory if some of the Members of the Fund who take an interest in the matter would state their objections to the proposed site.

# THE EROTIC GRAFFITO IN THE TOMB OF APOLLOPHANES OF MARISSA.

By R. A. Stewart Macalister, M.A., F.S.A.

Or the manifold details of interest which the tomb of Apollophanes of Marissa, at Beit Jibrin, presents, one of the most remarkable is the graffito scratched on the right hand jamb of the entrance to the painted chamber.

It has been discussed by Père Lagrange, in the Comptes rendus de l'Académie des Inscriptions (1902, p. 501); by Dr. Thiersch, in The Marissa Tombs (p. 57); and by Dr. Peters, at p. 75 of the same work. Each of these scholars takes a different view regarding the character and purport of the inscription. Père Lagrange considers it as a deceased wife's address to her living husband: Dr. Peters' theory is somewhat similar, but he supposes the persons involved to be lovers rather than husband and wife, and regards the inscription as being cast in dialogue form. Dr. Thiersch considers the graffito to be erotic rather than funerary, and translates it as the address of a helaira to her lover.

Of the transcription there can be no doubt, though the character is not easy to read. Père Lagrange's copy, as is natural in a first

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THE GRAFFITO IN THE TOMB OF APOLLOPHANES (Reduced 3).

copy of a difficult inscription, contains some slight divergencies, but the transcript given in *The Marissa Tombs* may be safely accepted:—

Οὖκ έχω τί σοι πάθω ἢ τί χαρίσωμαι· κατακεῖμαι μεθ' έτέρου σὲ μέγα φιλοῦσα,

'Αλλά ναὶ τὴν 'Αφροδέτην μέγα τι χαίρω ὅτι σοῦ το ἰμάτιον ἐνέχυρα κεῖται.

'Αλλ' έγω μεν ἀποτρέχω σοὶ εε καταλίπω εὐρυχωρίην πολλήν\* πράσσε ὅτι βούλη.

Μή κροῦς τὸν τοῖχον, ψόφος ἐγηςίνεται· ἀλλὰ ἐιὰ τῶν θυρῶν νεύμασι κεῖται.

Père Lagrange's translation, founded on a copy with the slight differences just mentioned, i is as follows: Je ne puis plus ni sonffrir pour toi, ni t'être agréable; je suis conchée avec tant d'antres, t'ayant gardé mon amour. Muis, par Aphrodite, je me réjouis fort que tu sois en êtat de te vêtir. Car pour moi je m'en vais, mais je te laisse une large aisance. Fais donc ce que tu voudras. Ne heurte pas le mur, cela fevait du bruit, et il te suffit d'un signe à travers les portes.

Dr. Thiersch thus renders: There is nought that I may do [suffer] for thee or wherein I may please thee: I lie with another though loring thee dearly. But, by Aphrodite, of one thing I am very glad: that thy cloak lieth in pawn. But I run away and to thee I leave behind plenty of free room [complete freedom?]. Do what thou willst. Do not strike the wall: that does but make a noise, but through the doors. It lieth in nods [by signs we communicate with one another; let that be our agreement].

Dr. Peters looks upon the penultimate word vectuage as a transliteration of a Semitic word inadvertently introduced by a Semitic writer into the Greek he was composing. He therefore translates it by "sleep" [[7]], and this translation is the pivot on which his rendering of the inscription turns. He regards it as being cast in the form of a dialogue between the mourner (A), the deceased (B), and a comment by the mourner's friends (C). The translation runs thus: A. There is nought that I may do for thee or wherein I may please thee? B. I lie with another (Death) though loving thee greatly. A. But, by Aphrodite, of one thing I am very glad, that thy

¹ ἐτέροης [σ]ε for ἐτέρου σὲ in line I; καὶ for ναὶ, ἐν ἐχυρῷ for ἐνέχυρα in line II; πράσσεό τι for πράσσε ὕτι in line III; ἐπεὶ νέται for ἐγγείνεται, νεἴμα σ' ἴκεῖται for νείμασι κεῖται in line IV.

cloak remaineth as a pledge. B. But I run away and to thee I leave behind free room a plenty. Do what thou willst. C. Do not strike the wall, that does but make a noise. Through the doors she lieth in sleep.

Though very ingenious and not without a certain poetic suggestiveness, the last rendering fails, in my opinion, to command acceptance for three reasons. In the first place, the suggested treatment of veivaai seems over-strained and improbable. Secondly, the contrasting force of à\lambda\lambda in the last line is missed; and thirdly, there are not now and never were, "doors" between the place where the inscription is cut and the graves in the tomb. Such doors are, however, required by the sense put on the inscription by Dr. Peters. Of the other translations I need only say that though they are accurate so far as a rendering of the Greek words goes, they have, at least so it appears to me, an element of incoherence that does not seem likely.

If the reader will examine the accompanying facsimile (which has been traced from a rubbing) he will notice a peculiarity the importance of which has, I venture to think, been missed by those who have essayed to deal with this inscription. The first line is cut fairly straight and horizontal, in bold and well-formed characters. The other lines are more cramped, and drop downward towards the right-hand end. There is nothing in the nature of the place of the inscription which compelled the engraver of the graffito thus to vary the direction of the lines of writing—for instance, there is no obstacle between the right-hand ends of lines I and II that had to be avoided when the second line was being scratched. I think that had the engraver cut all four lines at the same time, she would have written them more uniformly. The general appearance of the graffito at once suggests that the second line was not scratched at the same time as the first.

If we examine the letters more minutely, we can, I think, see justification for going further, and regarding line II as the work of a different hand altogether. Though the style of formation of the letters is the same, they differ greatly in detail. The loops of  $\lambda$  are on the whole narrower; the vertical of  $\Gamma$  turns backward at the bottom; the capital  $\Lambda$  is used in line I, the uncial  $(\lambda)$  in line II. The O is more uniformly small in line II, and the tips of  $\omega$  in line I show a tendency to diverge, in II to converge. These points of contrast seem to me sufficient to suggest that line II is the response to line I. Obviously the inference at once negatives the theory that a funerary

inscription is in question; we have to deal with a pair of lovers, who scribble messages to one another at the place of meeting.

Let us now analyse line III. Sense and probability would lead us to infer that it is the work of the woman, and I think the handwriting bears out the inference. At first sight it certainly looks more like the cramped, badly aligned writing of the man; but I think this is to be explained by unconscious imitation—just as (if a homely simile may be admitted) a peculiar signature in a hotel register may sometimes be observed to influence the style of the half-dozen signatures that follow it, quite independently of the volition of their writers. Let us go through the points of contrast already established. The size of the loops of  $\lambda$  is not very conclusive in this case, but  $\Gamma$  reappears again without its turn; the uncial  $\lambda$  still persists in  $\lambda\lambda\lambda\lambda$ , no doubt under the influence of the same word immediately above, but the capital  $\Lambda$  reasserts itself in  $\pi\delta\lambda\lambda\eta\nu$  later on in the line; the large  $\Omega$  reappears, especially in  $\beta\delta\delta\lambda\eta$ , and so does the divergent  $\omega$ .

Line IV seems to introduce us to a third actor in the drama, distinguished by his angular M's, peculiar R-like K's and T-like \( \Gamma\)'s, with the horizontal stroke passing backward behind the vertical. I think we cannot be far wrong in treating this as a comment scribbled by a person who discovered the love-dialogue, and whose interference frightened the lovers and prevented their continuing their romantic visits to the tomb of Apollophanes. The sense of this line, though very obscure, points in the same direction.

Let us now see what was the contents of this lovers' dialogue. As the gender of \$\phi\lambda\con\sigma\text{unsu}\$ shows, it was commenced by the woman. Not improbably (as Dr. Thiersch suggests) the unfinished tomb was a favourite trysting-place; in any case, she wrote this message where her lover might reasonably be expected to find it—

I can neither suffer aught for thee, nor give thee pleasure; I lie with another, loving thre dearly.

l cannot see on what grounds Dr. Thiersch says, positively, "the ἔτερον of the inscription is clearly not the husband of the writer" (The Marissa Tombs, p. 58), nor is there any obvious reason of regarding her as a hetaira. The most reasonable interpretation for the inscription is surely that it is a dismissal from a woman to her former lover, not because she has ceased to love him, but because she has somehow been forced into an unwilling marriage with another.

In due time the man discovered the inscription, and responded as follows:—

But, by Aphrodite, I rejoice greatly at one thing, that thy clouk lies as security.

This dark saying no doubt refers to some circumstance in the previous relations of the lovers of which we know nothing. We cannot therefore expect it to be fully intelligible; but we can hardly go far wrong if we suppose the "cloak" to have been a love-token or keepsake given to the man in former days, and retained by him in spite of the woman's marriage.

In the woman's answer she repeats the dismissal more definitely:—

But I run away, and leave thee plenty of wide room: do what thou willest.

Evidently she contrasts her cloak, which remains in the lover's hands, with herself, who has gone from him, and assures him that, so far as she is concerned, he is not bound in any way.

How far the dialogue might have gone on, and to what interesting developments it might have been led, it is impossible to say, for at this point it was discovered and interrupted by the inevitable scoffer, who scribbled:—

Don't rap the wall, it breeds disturbance. But it lies in nods through the doors.

The chief difficulty of this line is the word κείται, which, however translated, cannot yield satisfactory sense. I think the reason for the choice of the word is to be sought in the external form of the graffito, on which I shall have something to say presently. The writer wished to find a rhyme to eggetverat; his eye caught κείται at the end of line II, and he could think of no better word. As to the τοίχος, two interpretations have occurred to me as possible. One, which is of course pure conjecture and rather far-fetched, is to the effect that the lovers occupied adjacent houses, and had endeavoured to communicate by actual raps on the partition wall, and that the writer of line IV knew of it, and advised them not to attract attention by such a proceeding. The other explanation, which, perhaps, is also a little strained, but is probably more natural than the first, is to treat τοίχος as the wall of the tomb on which the lovers were scribbling, and the advice not to "rap on the wall" as equivalent to "do not write on the wall." The ψοφος in this case is not the actual noise of rapping, but the disturbance which would result should this clandestine correspondence become generally known. As to veinage κείται, though the sense is badly expressed, it is fairly clear that the writer intends to advise the lovers to be contented with nodding at one another through open doors whenever the opportunity might arise.

This little fragment of Palestinian romance may therefore be

freely rendered thus :-

- A. Naught can I do for thee; I, another's, though loving thee dearly.
- B. Yet am I glad for this, that mine thy token remaineth.
- A. Nevertheless, I am gone: thou art free, so do as thou willest.
- C. Lest they hear thee, rap the wall no more: Nod at one another through the door.

A few words must now be said on the literary form of the graffito. Père Lagrange speaks of it as a poetic composition; Messrs. Thiersch and Peters admit having originally regarded it as such, but seem to have changed their views, on the grounds that it conforms to no known canons of Greek verse composition. But one or two indications (besides the arrangement of long and short lines, referred to by the authors of The Murissa Tombs) seem to show that a metrical form is intended; there are signs that the authors were struggling throughout with the exigencies of verse composition. Such are, perhaps, the plural ενέχυρα in apposition to the singular inition, the use of the rare word experience, and, as already mentioned, the second κείται. Moreover, the rather obvious periodical recurrence of a termination resembling a hexameter ending (with a tribrach substituted for the dactyl) makes a metrical intention a certainty. Each line of the inscription is capable of being divided into two verses, and they yield the following metrical analysis:-

Οῦχ τ΄ χῶ τῖ σοι πὰ θῶ ῆ τῖ χὰρῖ σῶμαι
Κὰτὰ κειμαι μεθ' ετεριου σε μεγὰ φὶ λουσὰ
Αλλὰ ναι την Αφρὰ δὶτῆν μεγὰ τὶ χαιρῶ
Οτὶ σου τὸ τμα τὰν εν εχυρὰ κειται
Αλλ' ε γῶ μεν ἀπὕτρεχ ῶ σοὶ δε κὰτὰ λὶπῶ
Εῦρῦ χῶρὶ ῆν πολ λῆν πρῶι σσε ὅτὶ βοῦλῆ

Leaving the last line alone for the present, we see that the lovers' dialogue is cast in a trochaic metre, with six feet in every verse. The normal scheme seems to be

though except the first no line exactly conforms to it. The fifth comes nearest of the remainder, substituting a tribrach for the third trochee. A spondee is substituted for the second trochee in lines 2 and 3. For the third trochee line 2 (as well as 5) has a tribrach, line 6 a spondee. In most of the lines the fourth foot is a spondee, but a trochee (line 2) or a tribrach (line 4) seems admissible. The termination in a tribrach and spondee (or trochee) is invariable. In lines 2 and 4  $\kappa a \tau a$ - and  $\delta \tau \iota$  are probably to be scanned as trochees, as have also the first two syllables of  $\Lambda \phi \rho o \delta i \tau \eta \nu$ . It is most likely that the false quantities, like the hiatus in lines 1 and 6, are due to the writers' want of skill in verse composition.

The last line is as difficult to scan as to construe. It is in a different metre from the rest—another indication that it is by a different hand:—

I can guess only that this is a feeble attempt at a couple of Iambie trimeters. The first (if we might assume an outrageous false quantity,  $\psi \circ \phi \bar{\phi} \circ$ ) would fall into the scheme of this metrical form. The second seems to have a couple of anapaests—one of them in an inadmissible place—and has a foot short. The author of this line may well have been, as Dr. Peters supposes, a Semite with an imperfect ear for Greek metres and a scanty vocabulary; this would account for the obscurity of his diction. The protagonists in the drama had certainly a better command of Greek, and may well have been native Greek speakers.

There is another graffito, practically impossible to read with any certainty, on the opposite jamb. It contains the name of Myron and Kalypso, and it has been suggested that these are the lovers who wrote the inscription under discussion. I spent a long time over this graffito, the total result of which was the following not very satisfactory conclusions—first, that the transcript given by Drs. Thiersch and Peters, which is also that of Père Lagrange, is

very doubtful; secondly, that if wrong, I could not see how to set it right; and, thirdly, that there is no reason to suppose that it has anything to do with the lovers' dialogue.

I owe acknowledgments to my friend Prof. Ridgeway for allowing me, while preparing this paper, to consult him, and for some valuable hints.

### GEZER AND MEGIDDO.

By R. A. Stewart Macalister, M.A., F.S.A.

It has happened that the excavating work of the Palestine Exploration Fund has hitherto been confined to Jerusalem and the southern parts of Palestine, and till quite recently no attempt had been made to conduct a systematic exploration of any site in the northern regions of the country. The German and Austrian Societies, by their excavations at Megiddo and Taanach respectively, have filled this gap, and it becomes an interesting question to decide to what extent the results, so far as they have been published, are comparable with those of our own work. In the present paper we shall devote ourselves to a comparison of the Gezer excavations with those of Megiddo, and in a future article shall deal in the same way with the Austrian work at Taanach.

And first let me indicate a point of contrast wherein the German excavations compare favourably with those of the British Society. Thanks largely to the enlightened munificence of His Majesty the Emperor William, Dr. Schumacher has evidently had ample funds at his disposal, and has been able to employ a far larger number of workmen than was in the power of the representative of the Palestine Exploration Fund. The one donation of the German Emperor was considerably greater than the total possible annual outlay of our Society. In consequence, while the Gezer works could never employ more than eighty labourers—except just towards the end, when, by making heavy drafts on the reserve funds, I engaged about ten or twelve more in order to finish some important parts of the work before the termination of the

firman—the Megiddo staff was almost always over a hundred, and sometimes numbered as many as a hundred and eighty-five.<sup>1</sup>

In discussing the results of their work, as compared with those of Gezer, we may consider first the resemblances, and secondly the contrasts. The materials for such comparisons, of course, are still necessarily incomplete, as the discoveries of neither excavation have been fully published. Like our own Quarterly Statement, the Mittheilungen of the Deutscher Palüstina-Verein do not profess to give more than an outline for the periodical information of the supporters of the institution: and even if we personally possessed knowledge regarding the results of the excavation which was not contained in Dr. Schumacher's reports, it would naturally not be proper to make use of it in any way.

The first thing that strikes the reader of Dr. Schumacher's reports, or a visitor to his excavations, is the general similarity between the remains discovered by him and those unearthed at Gezer. The pits are intersected at both places by successive strata of rude walls, laid out, as it would appear, without the slightest regard to convenience of plan or architectural symmetry, and built of rough hammer-dressed stones set in mud.

Among the houses at Megiddo, just as at Gezer, appear baking ovens (at least there seems to be one in the middle of the fine photograph, M.D.P.V., 1905, p. 6); olive presses (the illustration, ib., 1904, p. 49, represents part of an olive press; an exactly similar stone was found built into a wall at Gezer); pottery; rude human figures; and other objects to which many parallels could be produced from the Gezer finds.

So far not much of the pottery has been published, so that it is as yet premature to institute elaborate comparisons between the fietile vessels of the two sites. The jar (M.D.P.V., 1904, p. 54) associated with an infant interment, is exactly like those found at Gezer in the same connexion, and is a typical example of the "Late Pre-Israelite" period, if for the present I may be allowed to retain a term I now regard as objectionable. On the other hand, the vessels illustrated (ib., 1904, p. 50) are curiously different from any associated with infant burials at either Tell el-Hesy or Gezer; they are comparable more with vessels of the so-called Israelite period, and as a matter of fact were not found at a greater depth

<sup>&</sup>lt;sup>1</sup> Mittheilungen des Deutscher Palästina-Vereins, 1905, p. 1.

than two metres (ib., p. 49). This is a very interesting contribution to the problem of these jar-buried infants.

It is becoming increasingly clear that we must carefully distinguish between two classes of jar-buried infants. The first class are sacrifices, to which we may safely assign those found in the high place at Gezer (especially those which display marks of fire on the bones) and those found in the corners of houses, when these are fully developed. There is another class of infant burial, however, of which some specimens were found at Gezer, and at least one (M.D.P.I., 1905, p. 11) at Megiddo: I refer to still-born and premature births. I am informed that it is still the custom of the fellahin of Egypt to dispose of such by burying them under the floors of houses (quite possibly this is a survival of a traditional immolation of child victims). At Gezer both undeveloped and developed infants were found in house walls and corners, the latter generally with a more elaborate deposit of food-vessels, showing that both the original custom and its probable modification were practised.

Especially interesting in this connexion is the example of a foundation sacrifice at the corner of a large tower (M.D.P.V., 1905, p. 10). This was evidently very similar to the sacrificed woman illustrated in the Quarterly Statement (1904, p. 17), differing chiefly in the age of the victim; at Gezer she was aged and rheumatic, at Megiddo about fifteen years. These and other examples show that no age or either sex exempted a person from the chance of being chosen as a foundation sacrifice if other circumstances led to his or

her selection.

Throughout the excavation in many different buildings and levels Dr. Schumacher has found small erect pillar-stones, singly or in rows. These are carefully squared in section, and stand about 3 feet high. Very similar groups and rows (not yet published) were found from time to time at Gezer, though none were so extensive as the group figured M.D.P.F., 1905, pp. 20, 21, and none had the Old-Hebrew masons' marks which give a unique interest to this alignment. Dr. Schumacher seems to regard these as massébôth or sacred pillar-stones, and I myself felt inclined to consider the Gezer specimens in the same light, especially when, as in one case, they formed a row of three standing in the centre of an enclosure not unlike that shown in M.D.P.F., 1904, p. 46. But while abstaining carefully in this paper from controversy, which would be out of

place, I may perhaps venture to record a doubt as to whether these carefully tooled stones are, after all, any more than the lowest stones of ordinary pillars supporting the roof of an ordinary house. In a subject of so much doubtfulness, and where so far there is such a dearth of material from which to deduce facts, there can be little more recorded than personal opinions and impressions, and I am bound to say that my own personal impression would be, that the fact of a stone being tooled and squared is an argument ugainst its being considered a sacred pillar-stone. The prohibition against tooling the stones of an altar in the Book of the Covenant (Exod. xx, 25), and the prejudice against the use of iron tools in sacred buildings at even the comparatively late Solomonie period (1 Kings vi, 7), are here in point. No doubt there is a contrary argument in the building figured in M.D.P.V., 1904, p. 46, which, with its altar and other sacrificial furniture, certainly seems to be a temple of some sort; but it may be, after all, that the squared pillar-stones running in a row down the centre are nothing but the bases of columns supporting the roof. It would to me appear more likely that if these were masseboth in connexion with this sanctuary, that they would be outside the adytum, like Jachin and Boaz at the temple of Solomon.

This criticism, let me repeat, is merely intended as an expression of personal opinion and conjecture, and is not put forward with the least thought of cavilling at or detracting from the value of Dr. Schumacher's work, results, or deductions.

A clay vat, resembling Dr. Schumacher's (M.D.P.1., 1905, p. 23), but much shallower, was found at Gezer, sunk in a plaster floor, as were also many mills, such as that shown in the photograph on the following page. Dr. Schumacher, by the way, is to be congratulated on securing the latter interesting photograph. I have myself long returned to the view that the method shown was the proper way of holding the rubbing-stone, not the reverse way that at one time I suggested.

Let us now turn to the points of contrast between the results of the two excavations.

There are two classes of antiquities that may be unearthed at any site. There are first the objects connected with daily life, cult, warfare, and other common elements; such objects may be expected indifferently in any given mound in the country. There are also objects directly connected with or produced by historical

events happening in the site under examination; clearly these cannot be looked for elsewhere.

Consequently we may leave out of account such Gezerite "finds" as the Castle of Simon Maccabaeus, which could exist at Gezer only and nowhere else, in contrasting the discoveries at the sites now under discussion. If we exclude these, we are left with the cavedwellers and their remains, the immense row of unhewn massébôth, the double stone city walls (at Megiddo the city walls appear to be, to a considerable degree, of brick), the late Assyrian contract tablets, and the extensive evidences of Egyptian influence which have been found at Gezer, and not yet, to judge from the published reports, at Megiddo.

On the other hand, the Megiddo excavation has produced some discoveries to which Gezer has, so far, no parallel to show. Chief among these is the now famous jasper seal bearing the name of Jeroboam, which is, of course, one of the most striking archaeological "finds" of recent years in Palestine. Dr. E. Kautzsch has treated of this discovery exhaustively in M.D.P.V., 1904, pp. 1–14, and facsimiles have been published in various periodicals, among others our own Quarterly Statement, 1904, p. 287.

The remarkable vaulted room, illustrated by a photograph (M.D.P.V., 1905, p. 14), has also no perfect counterpart at Gezer; it corroborates my conclusion that the southern brick gateway of Gezer was vaulted in a similar way, but as yet nothing in even a partially complete state of preservation has been found analogous to this. The curious Egyptian object (M.D.P.V., 1904, p. 55) is also unique so far as Palestine is concerned. The evidently Cypriote statuette (ib., 1905, p. 23) is unlike anything found at Gezer, though some similar but inferior fragments were discovered in the rubbishheap at Tell eș-Şâfi.

Both exervations agree in the main lesson to be drawn from them: Palestine is not, archaeologically, a poverty stricken country. The discoveries that have been made are an indication that greater discoveries may yet be expected, if proper support be accorded to the societies undertaking the work of excavation.

### NOTES ON PALESTINIAN FOLK-LORE.

By Miss Gladys Dickson.

I.—Some Animal Stories.

As Mr. Hanauer has lately introduced the subject of Animal Stories, the present seems a suitable time for sending in the following as my first contribution:—

(1) "A woman went out one day to wash clothes at a spring. As she had no one with whom she could leave her infant boy, she was obliged to take him with her. On arriving at the spot the boy began to fret and cry. The mother searched about for a place where she could put him, and soon discovered a small hole cut in the side of a rock. Into this retreat she placed her child, and then went back to the spring to accomplish her work. The child continued to cry for some length of time, until, tired out, he fell asleep. A little later on the woman finished her work, took up the clothes and went home, forgetting all about her baby. Not long after she had disappeared from view, a she-wolf passed close by where the boy lay, and, seeing he was alone, she went up to him and carried him off into the woods, where she nourished him as her own.

"Years passed by and he grew up into a fine young lad. One day the wolf took him to see her palace, and showed him a number of doors which she told him gave entrance to different chambers. She gave him a bunch of keys, saying, 'I am going away for a time; these keys open all the doors you see here. You may open the doors and examine all the rooms, except the last one in that corner. Take care you do not so much as put the key into the lock.' The young man promised to obey her command, and the wolf took her departure. The lad then set himself to explore the rooms. On entering the first, however, he was astonished to see it contained slaughtered animals. As he proceeded to examine the rest of the chambers the sights that met his gaze increased in horror. When he entered the last chamber but one, and found human bodies lying on the floor, the heads of which had been cut off and were hanging from the ceiling by their hair, he was determined onfinding out what the forbidden chamber contained. He therefore went boldly in, but, instead of the horrors he had seen in the

previous chambers, he saw, hanging up all round the room, swords, knives, and other weapons stained with blood, and on the floor of the chamber, large piles of treasure and great chests containing money. When the young lad saw these things, he exclaimed, 'O! now! know what my mother intends to do with me.' Whereupon he took down one of the swords and went down to the door of the palace to await the return of the wolf. He had not long to do so, for she soon returned, and as she was about to enter her palace the lad struck off her head. He then went back to the forbidden chamber, took all he wanted of the treasure, and went away to spend the remainder of his days in happiness."

- (2) The following is an account of the origin of the gazelle:-
- "A goatherd was returning one evening with his flock of goats from pasture, when he was met by a prophet disguised as a very poor fellah. The prophet stopped him and asked him for one of his goats. The goatherd, thinking he might be starving, picked out a wretched goat, that was on the point of dying, from his flock, and gave it to the prophet. The prophet said to him, 'What is this you have given me? I won't accept it. Give me a fat and a healthy goat.' The goatherd only answered him with abuses, and told him to go. At this the prophet turned and went on his way, saying as he did so, 'Before the sun shall rise again your goats will all have turned into gazelles.' The goatherd laughed on hearing these words and drove his goats to a clump of fig trees, where he lay down with them for the night, and was soon fast asleep. Just as daylight was breaking he was suddenly awakened by a curious noise. Jumping up to find out what it was, he saw, to his amazement and horror, his goats all bounding off, one by one, each in the shape of a gazelle. As the last one disappeared from his view, he cried, 'That man was a prophet who met me yesterday evening. Why did I not give him what he asked for ?"
- (3) "Many years ago there lived a very great and wise king. He was greatly beloved by all his subjects and all animals and birds, to whom he always showed great kindness.
- "One day all the beasts and birds assembled together and held a great consultation as to how they could repay this king for all his past kindness to them, or show him their gratitude in some way. It was at last decided that each of them should bring the king a gift of his own choice.

"The day arrived for the presentations, and they all, from the largest animal to the smallest bird, brought their gifts. As the lark is the smallest bird, she was the last to bring her present. On approaching the king she said to him, 'Please do not be angry with me when you see what I have brought you, but I cannot afford anything better, nor am I able to earry anything larger.' Then she produced her gift, which consisted of an olive leaf. The king was so pleased at her frankness that he took a feather and threw it at her. It alighted on her head, and the moment it did so there appeared a crown of feathers in its place. 'This,' said the king, 'is the best token I can give you of my regard of your humility and honesty.'"

### DEAD SEA OBSERVATIONS.

(Continued from p. 159.)

By Dr. E. W. G. MASTERMAN.

AUTUMN VISIT TO 'AIN FESHKHAH, 1905.

ALTHOUGH I had much looked forward to paying this visit on my return to Palestine, I was unfortunately unable to leave Jerusalem at the last moment, and Mr. Hornstein very kindly again undertook the duty on our behalf.

The visit was made on Nov. 11th, from Jericho. Weather was fine, temperature of atmosphere at 9 A.M., 80° F., wind from S.E. The 'white line' running from N. to S. along the sea was somewhat faint.

The barometric readings were—November 10th, Jerusalem, 3 p.m., 27.6; November 11, 'Ain Feshkhah, 9. A.M., 31.4.

During the summer months the level has fallen  $18\frac{1}{2}$  inches at the 'observation rocks,' and  $20\frac{1}{2}$  inches at the rock in the pool. The actual level is, however, at the former point,  $4\frac{1}{2}$  inches higher than the measurement made (October 26) in the Autumn of 1904. At the pool the measurement is, on the other hand,  $\frac{1}{2}$  inch lower; but there are various factors which make the latter measurement inexact, and the measurements here are worth little when the pool is, as now, so very shallow.

No animal life of importance was noticed. The reeds, usually so flourishing at this time, were less abundant than usual, through the partial drying up of many of the springs.

#### RAINFALL AT JAFFA.

Our correspondent, Mr. J. Jamal, forwards the following report of his meteorological observations:—

The amount of rain which fell in Jaffa during the winter season, commencing from October 22nd, 1904, and ending April 26th, 1905, was as follows:—

4	days in	October, 1904		2:65 inches	
9	,,	November, 1904		3.68 ,,	
13	,,	December, 1904		5.96 ,,	
14	,,	January, 1905		4.17 ,,	
9	,,	February, 1905	• • •	4.54 ,,	
10	٠,	March, 1905		2.00 ,,	
4	>>	April, 1905	**1	.50 ,,	
	-				
63	days .			23.50 inches	

The first rainy day in the season was October 22nd, 1904. The last day was April 26th, 1905. The amount of rain which fell during the season was 23½ inches in 63 days, against about 15½

inches in the preceding season in 44 days. Thus showing 8 inches more this year than in the former one.

### NOTICES OF FOREIGN PUBLICATIONS.

Die Provincia Arabia, auf Grund zweier in den Jahren 1897 und 1898, unternommenen Reisen und der Berichte früherer Reisender, beschrieben von Rudolf Ernest Brünnow und Alfred v. Domaszewski: Zweiter Band, Der äussere Limes und die Römerstrassen von el-Maran bis Boşra. Strassburg: Karl J. Trübner, 1905.

For an account of the scope of this sumptuous work and its conspicuous merits, geographical, archaeological, and aesthetic, readers may be referred to the review of the first volume in the Quarterly Statement for October, 1904, pp. 397 ff. Here I need only tetstify that the wide view and thorough treatment of detail which characterised the first volume are sustained throughout this second; and indicate the departments of the general subject with which it deals,

As the title indicates, the learned authors have confined their archaeological researches in Edom, Moab and Gilead to the period of the Roman and Byzantine Empires. But the geographical labours of Professor Brünnow, his triangulation and cartography of the regions outside the limits of Colonel Conder's Survey, his careful description of the general and detailed features of the land, and his collection of place-names, render the work invaluable to students and historians of every one of the ages through which these border-lands and their motley of peoples have passed.

The second volume is neither so large, nor does it contain so many illustrations as the first: for the first included the eity, cemeteries, and high places of Petra, while the largest archaeological subject treated in the second is the far less considerable remains of Meshettâ. The proportion of treatment and the care with which it has been carried out are, however, the same in this volume as in its predecessor. The letterpress is, except for a few routes in Gilead, as adequate in quantity and thorough in quality. There are 174 autotypes from photographs, three double-plates in heliogravure; a autotypes from photographs, three double-plates in henogravure; a large photographic plate; 5 double-plates with ground-plans; and 142 zincotypes (drawings and ground-plans) by Paul Huguenin-There are no maps; these were given in the first volume. In this we have a statement and tables of the geodetic observations from which the maps were constructed, and tables of the very numerous barometric observations; an appendix of additions and corrections to both volumes, a supplementary biblography, and indices. Other appendices give the data (including inscriptions) of a journey between Damascus and Jerusalem in May, 1897; inscriptions, copied by the authors, in Jerash and Der'ât; a description of Kaṣī el 'Abyaḍ in the Ruḥbe; the data of the present reviewer's journey from el-Kerak to Mâdebâ, for comparison with those of the authors' on the same track; an account of the Berlin reproduction of the Meshettâ remains; and Père Germer-Durand's survey of the Roman road between Bostra and Philadelphia.

The body of the volume covers sections V-VII of the whole work (of which a third volume is yet to appear). Section V (pp. 1-103) deals with the outer limes from el-Ma'an, some 147 miles northward to el-Kastal. It would be difficult to imagine a more complete representation of this eastern frontier of the Empire. Every constituent of it is described, photographed and measured. The photographs alone—of the rampart itself, 'a simple breastwork

of picked stones, unmortared and packed with sand'; of the ruined camps, forts and towers at intervals along it, and of the surface, masonry-embankments, and bridges of the connecting roads—form the most impressive testimonies ever given to the modern world of the strength of Imperial Rome: the genius, the organisation, the vigilance and the incalculable labours with which this alone of all empires on that frontier of the desert, and utterly unaided by nature, disciplined the nomads and beat back the wild surges of Arabia. Very instructive, as well as impressive, are Professor v. Domaszewski's descriptions, with ground plans and partial restorations, of Da'jâniya, a typical Roman camp of Diocletian's time, or somewhat later (311); of Lejjûn, originally built for a cohort, but adapted to the use of 4,000 men; of Umm er Raşâş; of Kaşr Bsher, which an inscription attributes to Diocletian's reign, and calls 'castra praetorii Mobeni' (praetorium here signifying a building designed for the official journeys of the governor and other officers of the Empire), and of el-Kastal, a camp or fortified quarters, with its praetorium not within the walls, but standing apart.

From among the always interesting details I select these: the great altar, or altar-platform, outside el-Lejjûn, 21 metres square and 3½ high, built on vaults, and reached by a flight of stairs; the great watchtower Abu Rukbe, which a quotation from Langer assigns to the ancient Moabites, though our authors give no opinion as to the origin; the confirmation of the Byzantine character of the ruins of Umm er-Raṣâṣ; the confirmation of the double name Kal'at ed-D-aba'a, K. el-Belṣâ; the identification of the Roman military quarters of Ziza, not with the Saracen and modern Zîzâ, but with el-Kastal, one hour to the north.

Section VI (pp. 105-176) consists of a detailed description of el-Meshettâ (as Dr. Brünnow spells the name), profusely illustrated, and a discussion of the date of the buildings. Dr. Brünnow supports Dr. Selah Merrill's objections to Fergusson's theory, that the builder was Chosroes II; it is improbable that a Persian king should have raised such a pile of masonry in this region, the more so that there are no Persian remains even in Damascus. But he does not agree with Dr. Merrill that the ruins are those of a monastery erected by a Byzantine emperor. Professor Musil's discovery of many castles in the desert, each in the midst of comparatively good pasture ground, and the fact that the Roman limes runs to the west of them all, render these buildings attributable

only to Arabs, and the probable work of the Ghassanide princes, aided by Byzantine architects. Both Meshettâ and Kaṣr eṭ-Ṭubâ are therefore Arabic, but pre-islamic, and Dr. Brünnow argues that the prince who built the latter may have been the Ghassanide el-Ḥâriṭ ibn Gabala, and that his son Abu Karib el Munḍir (569–582) was the possible founder of el-Meshettâ. In an appendix he answers Strzygowski's argument for referring it to a Ghassanide indeed, but of an earlier date.

Section VII (pp. 177-246) traces the Roman roads between el Kastal and Boşrâ. The most important contents are the ruins (Byzantine or early Moslem?) of el-Muwakkar, the tombs of el-Kahf (already described by Col. Conder), the sepulchral buildings of el-Kuwêsime, Conder's el-Jûcismeh, "most probably of the Antonine age"), and Ķaṣr es Sahl; a brief summary, with large photographs, of the buildings at 'Ammân, and Trajan's road from 'Ammân to Boṣrâ. Along this the discovered milestones and their inscriptions are noted, parts of the surface of the road and the bridges are photographed. The following are the most notable points:—el-Ḥadîd ('perhaps Hatita of the Peut. Table, Adittha of the Not. Dign.'), the perhaps pre-islamic castle Kal'at ez-Zerkâ and Hau, the remains of a well-built town (Gadda), all on the Zerkâ, within fifty minutes of each other. For the stretch from Hau to el-Hab (five hours from Boṣrâ) the report of Robinson Lees (Geographical Journal, 1895) is given. Brünnow himself proceeded from Hau to Jerash, and traces also the Roman road (with milestones of Trajan, the Antonines, Septimius Severus, Constantine and Julian) from 'Amman to Jerash. As in the case of 'Ammân, only some photographs of Jerash are given and a list of the relevant literature. The Roman road is traced by milestones from Jerash to 'Ajlûn, and routes are given from 'Ajlûn to Irbid, Jerash to en-Nâ'ime, and en-Nâ'ime to Irbid, Irbid to Der'ât, en-Nâ'ime to Der'ât, and Der'ât to Boşrâ (this last with photographs of the bridge and road surface across it on the Wady Zêdi). These routes are given briefly, with only notes of the data, the ruins are not described; the geographical observations are useful in districts of which we still know little.

The gratitude of all who work upon the geography or history of the East of the Jordan has been fully earned by Dr. Brünnow and his collaborator. Not the least part of it is due to the care with which the data and opinions of other travellers have been given; and our confidence is won by the authors', sometimes tantalising. reserve in fixing the dates of archaeological remains that have no inscriptions. The rest of the work, promised for next Easter, will be eagerly expected.

The Jordan Valley and Petra, by William Libbey, D.Sc., and Franklin E. Hoskins, D.D., with 159 illustrations. Two vols. New York and London: G. P. Putnam's Sons, 1905.

A few years ago, Dr. Libbey, Professor of Physical Geography in Princeton University, and Dr. Hoskins, of the Syria Mission Beirut, made a tour of forty-one days, with the camp-equipment usual in Palestine, from Beirut, by Sidon, Banias, the Lake of Galilee, Gadara, through Gilead and Moab to Kerak, Tafileh, and Shobek to Petra, and thence by the south of the Dead Sea to Hebron and Jerusalem. Dr. Libbey's purpose was to study the Jordan Valley, and to fulfil a long cherished agreement with Dr. Hoskins, to visit Petra together. Dr. Hoskins' experience of twenty years in Syria rendered him an enviable companion and guide. These lavishly illustrated volumes are a record of the tour. They make vastly pleasant reading. The travellers give a detailed account of their camp, servants, animals, adventures, sport, and impressions by the way. They have the power, which is not common, of letting us see the views over which their eyes roamed, and feel the open air, the scents and the breezes, of what, but for the carelessness of man, is one of the healthiest as well as one of the most interesting lands on the face of the earth. The many photographs distinctly contribute to this end: they are frequently of places and objects not hitherto represented in the now vast collection of pictures of Palestine, and they are always well-chosen, and, with only one or two exceptions, clear and vivid. Another merit of our travellers is their regard for the social life of the people; they record very valuable illustrations of economic processes that have been going on since Palestine was first settled, and a vision of which is absolutely necessary to an appreciation of her history. Among other details of this which I have noted are instances of commerce between the settled population and the Bedouin (pp. 78 sqq.), the gradual passage of a tribe from a nomadic to an agricultural life (177, 252 sq., ii, 19), the effects of the settlement by the Government of foreign colonists (Jaulan and the Turcomans in ch. v, the Circassians, 215 sqq., etc.), which illustrate the similar measures adopted by the Assyrians in Samaria and by

Greeks and Romans there, but especially on the East of Jordan; the fact of three harvests a year on some soils (131); a guild of blacksmiths (350); the reason of the survival of solitary large trees (because of their sacredness), where the rest of the woodlands is abused (138); the use of local sanctuaries as "safety deposits" (*ibid.*); oriental custom houses (116 sqq.); the sources of salt (ii, 110), and so forth. Nor are the influences of religion neglected, including the relations of the Greek and Latin Churches (236), and the work of Protestant and Roman missions (132, 175 sq., 127, etc.). There are also glimpses of the increasing Jewish colonies (119 sqq.).

There are many contributions to the geography, geology and history of the land. I may note the descriptions of two fords on the Jordan (128, 137); the approval of the suggestion that Ramoth-Gilead was the later Gadara (171); the description of the canons of the Mojjib and the Ahsa (304); the sketch of the main rifts in the Eastern range, and their issues (32); proofs of the populousness of Southern Moab in ancient times (ii, 7) (compare the similar testimonies of Irby and Mangles and other travellers); the sudden rise and fall of the desert torrents (ii, 110); the fact that the southern trench of Moab is more frequently called Wady el Aḥṣa than W. el Ḥiṣṣa (7, 278, 284 sq.); the account of Shobek (25 sqq.); but above all the thorough, vivid and profusely illustrated description of Petra itself (two hundred pages of the second volume). I am not competent to judge of the accuracy of this last; but Dr. Libbey's and Dr. Hoskins' accuracy on sites I know, leads me to follow them with confidence through the rocky mazes and bewildering ruins of the Edomite stronghold and Nabatean capital. There is probably no complex of rocks and ruins more difficult to describe. But the authors' "desire towards the place," their enthusiasm for its beauty and history, and the severe labours they bestowed on their investigation of it, have produced a wonderfully clear view, as well as vivid, both of its disposition as a whole and of its very intricate details. Were it only for this, their book will be highly prized by all students, geographical and historical.

I have the following criticisms to offer. Moab is not "the land of the Moabites" (p. 248), but conversely, Moabitis (as the Greeks rightly perceived) is the land of Moab—the name throughout the Old Testament of the people (see article "Moab" in the Enc. Bibl.). The depth of the Arnon canon is not three thousand feet (p. 307), but, as Sir Charles Wilson showed, something under two thousand.

I had not the means of measuring when there, but I am sure that the time needed for the ascent on either side does not represent more; nor is the journey required to cross the canon nearly 'thirteen miles,' or 'five hours' (*ibid.*). On the milestones and other remains in the canon the authors may be referred to Prof. Brünnow's (not, as they write, Brunnow) first volume, and my own Paper in the Quarterly Statement for October, 1904. 'Kerakol,' on the footnote to 316, should be 'Kerakon.'

One rises from the perusal of these volumes, as one does from the more detailed and lengthened researches of Brünnow, with the strong feeling that, if there be all that wealth of ruin, chiefly Nabatean, Roman and Byzantine, on the surface of Moab and Edom, what treasures of these and more remote ages may not be confidently expected from systematic measures of excavation? May the time for these quickly arrive!

GEORGE ADAM SMITH.

Journal des Savants, Sept., 1905. Max van Berchem gives a eareful résumé of the recent study by Bruno Schulz and Strzygowski on the palace of Meshetta. First noticed by Tristram in 1865, this remarkable building has been the subject of considerable attention (cf. Quarterly Statement, 1895, pp. 229 sqq.) on the part of those who have investigated the question of its date and of the school of architecture to which it belongs. As is well known, a large portion of the façade has been recently removed to Berlin, and since then the problem has been again approached, this time by Herr Schulz, the architect, and by the archaeologist Strzygowski. The latter, with characteristic brilliancy and thoroughness, has presented the problem in a new light, and subjected the architectural features to that eritical analysis which marks his former studies. In the course of a comprehensive survey of the numerous parallels and analogies ranging over the whole field of ancient and mediaeval art, he analyses the individual motifs, and proceeds to consider which circle of culture (kunstkreis) can have contributed to the mingled elements which the palace displays. He discovers an art of which Meshetta is a noble example. It is an art which is neither Roman nor Byzantine, neither Syriac nor Persian, but Mesopotamian. The original Mesopotamian art, he argues, has spread through Persia, Asia Minor, to Constantinople, picking up Persian elements on its way; whilst another route has been from Southern Mesopotamia to Egypt, and, through the spread of Mohammedanism, to Spain. To the former of these Meshetta belongs; whence its resemblance in points of detail to Persian features. The conclusion, as van Berchem remarks, is of importance for the date of the building, since it permits us to throw it back. But this problem is closely associated with our historical knowledge of the district, and as a provisional result it seems safe to assign its construction to the period of the Ghassanides. Unexpected though Strzygowski's results may be, they are neither hasty nor ill-supported. Step by step he has worked his way from the classical art of Rome and Italy and Byzantium, meeting continually with phenomena which neither Rome nor Byzantium can explain. Forced to continue eastwards, he has found himself in Asia Minor, Egypt and Syria, in Mesopotamia and Persia, in countries where these peculiarities appear native. To summarise van Berchem's verdict: the idea is not a new one, and the works of Courajod, de Vogüé and Dieulafoy have prepared us for the recognition of the influence of the East upon the West. But no one has hitherto expressed this with a conviction so profoundly supported by facts, and Prof. Strzygowski's work presents opinions which future studies of Oriental archæology cannot ignore. It will undoubtedly be found to be one of the most stimulating books of its kind, not merely for its conclusions upon the special field with which its author is familiar, but for its suggestions on the general relations between East and West during an obscure period of human culture.

Recueil de Archéologie Orientale, tome vii, livres 4-7, § 5. A discussion of a Greek inscription published by Waddington, No. 2556, and Euting (Epigraph. Miscellen., Nos. 115, 116). It is shown to be an edict of Agrippa II, issued against a certain Samsigeramos, of Lebanon, or Anti-Lebanon, who had usurped the sacerdotal power, had robbed the sacred treasury, and had generally acted unjustly. § 9 deals with a Palmyrene dedication of the gods Arsu and Azizu, upon which is represented a naked child seated upon a throne, with his hand to his mouth, whilst one of three women has her hand placed upon his head. To the right stands a man on foot, and two others mounted upon a horse or mule. Already Prof. Clermont-Ganneau (§ 3, p. 34) had observed that the scene presented some striking analogies with the adoration of the Magi, and had asked whether such scenes as these may not have exercised an influence

Echos d'Orient, July, 1905, Papers on "The tradition and Grotto of St. Peter at Jerusalem," by J. Germer-Durand, etc., August, 1905. Description of a fragmentary Jewish epitaph from Nicomedia; a critical review by L. Petit of Strzygowski's Asia Minor, and of his theory that the "Byzantine" style of ecclesiastical architecture is a product of Hittite art.

Revue Biblique, 1905, No. 3. A complete list of plants collected in Arabia Petraea and the lands of Moab, is contributed by Mag. J. Planés. Father Dissard gives a sketch of the migrations and vicissitudes of the tribe of 'Amr, or Banu 'Ukabah, some 135 years ago, the special interest of which rests in the light it throws upon the manner and motives of Semitic movements. The tribe left the neighbourhood of Mecca rather than submit to the increased payment demanded for their annual residence in the locality. In spite of their secret departure, their flight became known, and they were pursued. A conflict took place, in which the Bann 'Ukabah were successful, and they continued their journey. For some years they dwelt to the north-east of Nejd, and then resolved to push northwards, and at length reached the plain south-east of Gaza, and occupied the district to the south-west and south of the Dead Sea for three years. In the fourth they made a successful expedition against Tafileh and Kerak, and finally became masters of the ancient Moab. Their subsequent history was one of internal quarrels and blood-shed, typical of wild Bedouin life; and Father Dissard's narrative is one of exceptional interest for the study of the Bedonin character. It reveals all the qualities and faults of the Arab, for

the nomad is not merely a bandit, nor is he the majestic patriarch which certain writers of all ages have painted him. He cannot adapt himself to other ideas, and above all he will not tolerate foreign domination. He has no intention, as Father Dissard observes, of trying to improve himself or his condition; if the district where he has pitched his tent is not rich enough to support him, he goes to that of another, prepared to fight the inferior tribes, or to make an alliance with those which are his superior. Most significant of all is the entire absence of religious acts in this description of the tribal fights and conflicts, and Father Dissard rightly observes that the Bedouin of the present day, like his ancestors of the time of Gideon, have no religion in the present sense of the word: apart from the belief in an only god and numberless superstitions, he is indifferent to all else. Father Savignac gives a preliminary notice of a small statue found at Ashkelon, representing the upper part of a woman carrying on her back a small child. The indications point to the goddess Isis, influenced by classical mythology, particularly the Tyche or Fortune. It is suggested that this Isis is practically a later syncretistic form of the old Astarte who played so prominent a part at Ashkelon as the Derceto, Venus Coelestis, or Urania.

No. 4. M. Étienne Michor gives a description of the Graeco-Roman antiquities of Syrian origin now preserved in the Louvre, a most welcome contribution, fully supplied with bibliographical and other references. The interesting account by M. Louis of the Elamite antiquities at the Louvre, although falling outside the scope of the Quarterly Statement, deserves particular notice for the author's remarks on archaeological matters. It appears that the oldest specimens of pottery are the finest and most richly decorated; the patterns are not limited to geometrical designs, but include representations of animals and birds; and the general technique is comparable with that of the Mykenaean age. The later specimens show a certain decadence, the cause of which it is not easy to discover. Fathers Savignac and Abel publish a number of new inscriptions (Nabataean, Greek and Latin) discovered in the course of their journey during the spring.

Zeitschrift des Deutschen Pulästina-Vereins, vol. xxviii, part 4. Professor Dalman contributes a careful study of the Wady eş-Swênît. He decides in favour of the spelling Muchmâs (as on the English map), and not Machmas, as is semetimes given; in like manner Hezme, rather than Hizma, is pronounced correct. The head of the wady lies almost due south of Muchmas, and is known at its upper course as Wâdy el-Medîne. There is no trace of the name Wâdy en-Nesîf, but Wâdy en-Nâţûf was found to be applied to an offshoot of the Wâdy el-Medîne. Dr. Dalman points out that the name reminds one of Netophah (2 Sam. xxiii, 29, etc.), but since this is said to be Judaean (1 Chr. ii 54), concludes that the identification cannot be made. The name el-Jave (not el-Ja'i, as in the Name List) is held to have no connection with the Hebrew gai, "valley," but is the ordinary vernacular term for "on this side." Hallet el-Hayye, according to Dalman, is wrongly located in the English maps, and other errors in the survey of this neighbourhood are cited. The article is illustrated by several good photographs, and a new map of the district. Another interesting article in this number is that by Dr. Max Blanckenhorn, wherein he discusses the last earthquake in Palestine, namely, that of March 29-30, 1903

The Biblical World, 1905, I. Dr. N. S. Spoer gives an interesting and detailed description of a Fellah wedding at Siloam, which contains several useful sidelights upon biblical statements; the account of the proceedings are narrated with animation, and one reads with amusement of the eleven-year-old brother of the bride who caused much disturbance by refusing to give his consent to the marriage, for the reason that he had not received enough mejidies! Prof. A. H. Sayce writes on the Hittite inscriptions. The Rev. H. D. Porter discusses the treatment of the olive and wild-olive in the light of Rom. xi, 17.

No. 3. Dr. E. W. G. Masterman contributes an account of a three days tour around the Sea of Galilee.

Jérusalem, July 1905. "Sanctuaires palestinienes: Le Cénacle," by L. Dressaire. "Les Juifs de Palestine: Quêteurs sacrés," by G. Jeandel; description of a Druse wedding (with illustrations), etc.

Altneuland, Nos. 6, and 7, 1905. "Abriss der Geologie Syriens," by Dr. M. Blanckenhorn. "Die Nachbarländer," by D. Trietsch.

Das heilige Land, 1905, iii. Vom Mittelländischen Meer zum See Genesareth; Ain Fara, ein altes kloster der Wüste; Namen und Beinamen Arabischer Bauern eines Dörfchens aus der Umgegend Jerusalems, etc.

### NOTES AND QUERIES.

1. The Site of Zoar.—(1) In biblical topography to ignore the text and to rely on Josephus or on plausible assertion or specious speculation, is to invite disaster. The Bible, as Dr. Grove pointed out, places the cities of the plain at the north end of the Dead Sea; tradition, sprung from Josephus, at the south end. states that Lot's wife became a pillar of salt. Josephus, having heard of one fantastic column of dissolving rock-salt at the southwest border of the sea, believed that it was the veritable salt relic; and wrote: "I have seen (examined) it and it remains to this day." He further located Zoar (Wars, iv, VIII, 4), which, Lot pleaded, was near Sodom, at the south end of the sea, and added (Ant. i, VIII, 3) "the river Jordan not far from Sodom," although the river is 50 miles from the south end. Misled by this careless writer, Eusebius and Jerome (the authors of our Pseudo-Zion and Pseudo-Holy Sepulchre) and the majority (according to Dr. Driver) of recent authorities have to this day been satisfied with the southern site.

Prof. Cheyne, rejecting both northern and southern sites, wonders "at the confidence with which all writers dogmatically decide in favour of one or the other site," at the same time soothing the southerners with Clermont-Ganneau's dictum, "Jebel Usdum is the uncontested representative of Sodom," and cheering me with the admission of being "correct in requiring (Quarterly Statement, 1898, p. 110) the description in Deut. xxxiv to be taken literally, and the hinder sea to be the Dead Sea."

Prof. Driver writes (Hasting's Dict., Zoar): "And, in fact, there are biblical data, which, when carefully considered, appear to support the southern site. To say nothing of Deut. xxxiv, 3, just referred to, it is observable that Zoar is always spoken of as a Moabite town, and never claimed as an Israelite or (Josh. xiii, 15-21) Reubenitetown, as it naturally would be if it lay at the north end of the sea."

"Beware of deceit when thou hearest the name" of Moab, for fraud ever flickers around the term *Moabite*. From Jerusalem came Moabite pottery, then Moabite MSS., both gross forgeries exposed by Prof. Ganneau; from Rabbath Ammou burst the specious claim for the peaceable restoration of the plains of Moab (near Jordan) and the land of Moab (the Mishor of Reuben), as unjustly held by Israel: Jephthah well combated the monstrous demand by word and deed. Now, at last, comes the proposition that the southern site is supported by Zoar "being always spoken of as a Moabite town and never elaimed as an Israelite town," etc. Offhand in 1879 (Quarterly Statement, p. 15) I treated Zoar, as placed in Is. xv, and Jerem. xlviii, in the northern position, never dreaming that in 1902 these chapters would be used to support the southern site. Now the site of Zoar is the crucial question before us. Gibraltar is British, but not in Britain, so at times Zoar may have been under Moab but never in Moab, whose northern boundary was the Arnon (Numb. xxi, 13), after Sihon's conquest.

The word Zoar occurs once in each of the above chapters which treat of Moab, and precisely mention its two great cities "Ar of Moab" and "Kir of Moab"—together with at least 12 cities (e.g., Heshbon, Elealeh, Dibon, etc.) distinctly classed as Israelite (Reuben's or Gad's) in Numb. xxxii and Josh. xiii. Are these 12 also Moabite cities, simply because they are named in the same chapters which condemn Zoar to be Moabite through naming it? They all were doubtless at times under Moab, but while possession may change, position cannot shift a hair's breadth. Jeremiah asks concerning the Ammonites (xlix, 1), "Why then doth Maleam possess Gad, and his people dwell in the cities thereof?" Similarly Moab possessed Reuben. But if Gad's cities did not become Ammonite, why must Reuben's become Moabite? Why must Zoar? Surely not that it may be argued that Zoar was Moabite, therefore it was in Moab: that Moab was towards the south end of the Dead Sea: that therefore Zoar was towards its south end, and could not possibly be at the north end, the position required in Gen. and Dent.! If (catching at a straw) southerners still reply: The 12 cities are named in Israel's Doomsday-book, but Zoar is not; then the answer is, that book does not give an exhaustive list of cities and villages in Israel. Bethlehem (with Tekoa) is not named therein in Judah's list, but Bethlehem nevertheless then existed. The omission of Zoar proves nothing at all, except that it was what its name means, little, too insignificant for record.

(2) It is urged that Ezekiel describes Sodom as being on the right (i.e., the south) of Jerusalem. Prove this and the southern site is established by one text. The prophet writing (and picturing from

Chebar) says precisely (xvi, 46): "at thy left hand... at thy right hand." Is it asserted, as a fact, that Jewish usage invariably means by this expression north and south, and that the person addressed must look due east, so that here Ezekiel could not picture Jerusalem from the north-east, so as to have Samaria on her left hand, and the north end of the Dead Sea on her right? Also is Sodom to be taken literally? If so, how could her captivity return or be received? (See Quarterly Statement, 1898, p. 118.)

When it is said that Dan and other points are not visible from Pisgah, I reply: "certainly not, if you take a wrong Dan, a wrong Pisgah," etc. (see last reference).

- (3) Dr. Driver observes that: "Kikkar does not mean plain but round, and it may thus have been applied to the entire basin in which both the lower Jordan and the Dead Sea lay." Then round would certainly be a most inappropriate name for a surface 80 miles long and 10 broad on an average. Obviously kikkar is applied to an oasis in the Jordan valley. From near Bethel Lot saw the celebrated one—that all of it was well-watered—i.e., the oasis to the south, as thou comest unto Zoar. There was another, out of his sight, named in 1 Kings vii, 46: "the plain (or oasis) of Jordan... between Succoth and Zarthau." "All" in Gen. xiii, 10, does not seem to me an exaggeration. Dr. Driver suggests that the plain of the Jordan, v, 10, 11, is different from the plain in v, 12. Why so? Is the valley of Jezreel in Judg. vi, 33, different from the valley in vii, 1, 8?
- (4) It is said that in Deut. xxxiv. 3, "unto Zoar" implies naturally some distance off, not a place at the foot of Nebo. In the triptyche each portion ends with unto. "The negeb, and the kikkar of the valley of Jericho, unto Zoar"—begins quite 50 miles off—reaches to the kikkar near Jericho. If it went back again to a southern Zoar, 40 miles off, the description would be as absurd as sending the four kings back from Engedi to a southern Sodom.
- (5) Tell Shaghur. This I believe represents Zoar. The name, however, does not affect the north or south site. It is added "Shaghur is not distinguishable from Ras Siaghah." As Col. Conder speaks of it as at our feet, it was, I doubt not, within the field of vision.

Thus I fail to find even one sound argument in favour of the cities of the plain having been at the south end of the Dead Sea, or one sound objection to their position at the north end. Perhaps

some traveller at the end of January will visit Talat el Benât, and, weather permitting, himself view, as far as Dan, the panorama seen by Moses (Quarterly Statement, 1898, p. 118). (The remark "Zoar is associated with places in the northern part of Moab in Jeremiah and Isaiah" needs amendment, Moab being a variable term. Read, "in the northern part of ancient Moab, previous to Sihon's conquest.")

Rev. W. F. BIRCH.

2. Ramet el-Khalil.—During the past year I have twice visited and carefully examined this perplexing structure. The following are the principal conclusions to which I have come regarding it:—

(1) In view of the rudeness of all pre-Herodian architecture in Palestine (as revealed by excavation), it is *primâ facie* unlikely that the structure should be of early date. Nor does the masonry resemble the stone-dressing of Egyptians or any other early civilised nation.

(2) The existence in the walls of lintel stones, threshold stones, fragments with inscriptions and fragments with mouldings, out of place, shows that the walls, as they are at present, were made from the materials of an earlier building.

(3) The mouldings, being rather debased Roman in character, indicate that the earlier building was not of high antiquity.

(4) Tradition speaks of a church of St. Helena as having been erected here. The tradition is at present crystallised round a small, amorphous ruin near the *Ramet*, commonly called Helena's church. This is too ruined to make out much about it, but it looks like anything rather than a church.

(5) The Ramet enclosure itself cannot justly be considered as either ruined or unfinished, for the level of the top of the wall is uniform over its whole length. Of all the classes of buildings in Palestine, it looks like nothing so much as the enclosing wall of a khân.

(6) The masonry seems to me to resemble (but to be superior to) that of Constantine's Basilica in the Russian Church east of the Holy Sepulchre.

(7) The destruction of a basilica and re-use of its stones could hardly take place before the Muhammadan conquest.

(8) The stones were used only so far as they were available, and no new stones were cut on the colossal scale of the re-used blocks. There is no visible reason to suppose that there are, or ever were, large stones of the same kind on the North and East sides of the enclosure. This observation (like all the rest) is subject to correction, when someone has the good fortune to be able to excavate here.

From these conclusions I deduce the following theory respecting the Ramet el-Khalil:—

The basilica of Constantine, mentioned by Eusebius, was not the insignificant building whose ruin is identified therewith, but a grandiose structure whose scale may be deduced from the immense blocks with which it was built. This basilica was destroyed in the early Muslim period, and its material re-used in the erection of a khan, probably on the same site, and probably for the accommodation of pilgrims to the holy places of Hebron. That khan is the structure now known as the Ramet el-Khalil.

R. A. S. MACALISTER.

# TRANSLITERATION OF THE HEBREW AND ARABIC CONSONANTS.

X	or at beginning of
	word omit.
⊇	b.
ュ	b (or bh).
ā	g.
٦	g (or gh).
7	d.
٦	d (or dh).
$\sqcap$	h.
٦	W, V.
7	Z.
П	lı (or lı, never h).
70	ţ.
٦	y.
$\supset$	k.

111101				
٦	k (or kh).			
5	1.			
な	m.			
٥	n.			
D	S.			
ヹ				
5	р.			
Ð	p (or ph)			
ヹ	ş.			
P	ķ (or q).			
٦	r.			
Ü	s (or s).			
vi	sh (or š).			
ī	t.			

' or at beginning of word omit. b. t. ث th. j (or ģ). き h. τ ÷ kh (or b). d. ن ن dlı. r.  $Z_{i}$ S.

sh (or š).

t (or th)

### THE

## PALESTINE EXPLORATION FUND.

NOTES AND NEWS.

### Died

On the 8th March, 1906,

### CANON HENRY BAKER TRISTRAM,

F.R.S., D.D. (Durham), LL.D. (Edinburgh and St. Andrews).

It is with great regret that the Committee have to record the death of Canon Tristram. He had been a member of the General and Executive Committee of the Fund from the date of its installation in 1865, and his numerous works upon Biblical subjects have made his name world-famous. He was born in May, 1822, at Eglingham, near Alnwick, and was educated at Durham School and Lincoln College, Oxford, where he graduated in 1844. In 1847 he began the voyages and travels, the accounts of which are so well known. In 1856 he journeyed through the Sahara; Palestine he visited several times (1858–9, 1863–4, 1872); and it was thus that he gained his unrivalled ac quaintance with its flora and fauna. As a Biblical scholar his "Fauna and Flora of Palestine" is his greatest work, and the volume issued by the Fund (1884) is the standard authority on that subject.

The Annual General Meeting will be held on the afternoon of Wednesday, June 13th. General Sir Charles Warren, G.C.M.G., has kindly consented to preside. Tickets and particulars may be had, on application to the Secretary, after May 1st.

Some time ago the German Emperor put at the disposal of the German "Palästina-Verein" a sum of money for the purposes of the Megiddo excavation, larger than the total possible annual outlay for excavation of our own Society. We learn from the last published Mittheilungen of the "Verein" that His Majesty has supplemented this donation by a further gift of £1000. It is on the labours of the Palestine Exploration Fund and its officers that all the work of its Continental competitors is founded; but the pioneer society will, it is to be feared, drop behind, unless some supporters arise to emulate the enthusiasm and liberality of the Emperor William.

The special donations during the quarter to the expenses of the Excavation of Gezer comprise:—Rev. E. L. Adams, £5; Walter Morrison, Esq., £10; James Hilton, Esq., £10; smaller amounts, 5s.; bringing the total up to £1160 6s. 8d.

Since his return to England from the East in November, Mr. Macalister has been busily engaged. Besides the preparation of his final description in detail of such portions of the excavations at Gezer as were definitely complete, he has lectured upon this work to appreciative audiences at Brighton, Cambridge, Oxford, Sunderland, South Shields, Durham, and Newcastle-on-Tyne. As we go to press we hear that lectures have also been arranged for in Edinburgh, Glasgow, and Cork.

A work will shortly be published by Messrs. Hodder and Stoughton entitled, "Bible Sidelights from the Mounds of Gezer," by Mr. Macalister. It is written to show how the results of digging in Palestine should appeal not only to the scientific anthropologist or archeologist but also to the Bible student who has no special interest in these sciences. The book contains a brief synopsis of the work of the Fund from its foundation to the present; a description of the site of Gezer, and the history of the city; and a series of chapters, in each of which some Biblical passage or incident is taken as a motto, and the various discoveries which illustrate it, are described. There are nearly fifty illustrations, and the price has been fixed at 5s.

Before his return to England, Mr. R. A. S. Macalister visited Marissa and took advantage of the opportunity to go over the details with the recent monograph by Prof. Thiersch and Dr. Peters in his hand. His new explanation of the "erotic" inscription was published in the January Quarterly Statement (see also pp. 147, 158), and a number of other suggestions and remarks will shortly be in print. Those who possess "Painted Tombs at Marissa" will be supplied with a copy of the leaflet on application.

We regret to hear the news of the sudden death of His Excellency Yusif Zia Pasha, head of the ancient Jerusalem family of El-Khaldi. The various Imperial Commissioners who have been attached to the excavation works of the Palestine Exploration Fund have all been members of this family. It will be remembered that Mr. Macalister, in his last report from Gezer, acknowledged the indebtedness of the Fund to Yusif Pasha for the courtesy he had invariably shown to its officers.

An interesting report upon the impression and information received on the occasion of a recent (the fourth) visit to Palestine has been forwarded by the Rev. George B. Berry, Vicar of Emmanuel, Plymouth. He writes: "I landed at Haifa, drove to Nazareth. Cana, and Tiberias, spending a night at the first and last of these places, and putting myself into communication with the resident English missionaries there, as well as at Jenîn (to which we proceeded afterwards on horseback), Nablus, and Jerusalem, where I had the pleasure of an hour's conversation with Bishop Blyth, and spent a whole afternoon each with Dr. Masterman (an old friend) and the Rev. J. Hanauer. I find marks of great progress in all directions. at Haifa, Nazareth, Nâblus and Jerusalem, building operations are going forward on a large scale. I noticed several Jewish colonies, specially at Mel-hami, near the new line of railway south of the Sea of Galilee. The railway is in full working order from Haifa to Semakh, at the south end of the Sea of Galilee, but interrupted for the time thence to Damascus by the destruction of some bridges. The railway from Damascus to Mecca is now open to Amman and Maan, east of the Dead Sea. The land is being everywhere brought under cultivation. Ploughing was in full swing all along our route.

The signs of desolation are rapidly disappearing. The influx of Jews into Palestine is uninterrupted, and it is estimated that there are now 70,000 in and about Jerusalem. A new and capital road from Beeroth to Singil was opened last October, leaving only six miles between the southern end of the road from Nâblus and the present terminus of the new road at Singil. The new German hotels at Jenin and Nâblus are very comfortable and convenient, built in a very solid and imposing style. The buildings near Jerusalem, both religious and secular, are constantly becoming larger and more pretentious. Finally, I think there is a great future evidently in preparation for the Holy City and the Holy Land, and, as I believe, the Holy People."

Mr. Hanauer writes to state that in the third paragraph, p. 275, of the Quarterly Statement, Oct., 1905, the first shaft was eight paces west (not south) of the chapel (south-west not south-east) corner; and the other was ten paces further west (not south). The rock-scarp, to which he there refers, is being rapidly covered in. The sudden sinking of the rock has been verified, and it appears that it rises again rapidly until, at the western end of the new building, it is only about two-and-a-half metres below the surface.

The rock-chambers have now been emptied. In one of them there is said to be an accumulation of human bones and skulls. Another appears to have been a stable, since there is a series of thirteen eyes cut in the rock, about a metre apart, in order to receive the tethering ropes. Similar ones were seen in "Solomon's Stables," found by Sir Charles Warren in the cavern south of the Triple Gate (Recovery of Jerusalem, p. 299). Mr. Hanauer suggests that these are the remains of the quarters of a portion of the cavalry which, as we know from Acts xxiii, 23, was at the disposal of the tribune in command at the Antonia. In one of the chambers a curious and grotesque head of a statue was found, of soft limestone and about eleven inches in height. Inside the basement of the new building at the end nearest the Ecce-Homo chapel some very large stones were found, apparently in situ; they appear to form part of some great Roman construction.

A portion of the conduit leading from Birket el-Luma'a (ريركة الماعة) has been found almost 25 paces N.E. of the Pool in the course of digging upon the ground between the Birket and the Nâblus road. It is cut in the rock to a depth of about nine feet. It is of the usual average width, two-and-a-half to three feet. This discovery, for which Mr. Hanauer expresses his indebtedness to Mr. Gregg, supplements the previous account of the unsuccessful attempts to find the conduit (see Quarterly Stutement, 1892, pp. 9-13).

In the Viâ Dolorosa, the ruins just above the scarp and on the declivity are being pulled down by the Greeks. The rubbish is being carried into the Birket Israil, which is rapidly filling up, in the same way that the bend of the valley west of the Jaffa Gate has been filling during the last sixty years. At the latter place a great artificial causeway made of such rubbish runs right across the valley from the south-west corner of the citadel moat to the Nicophorieh road. It is a regular thoroughfare, with houses along its southern side.

Among the changes that have been made in Jerusalem during the past year, Mr. Hanauer mentions that the streets both within and without the city walls are now lit up with petroleum to a considerable distance along the Wâdy Rebâby and the roads to Bethlehem, Jaffa, etc. Also, the Greeks are repairing the Birket Sitna Miriam just outside St. Stephen's Gate. It is said that they intend to build a large covered-in market in the Birket Hamman el-Baṭraḥ (Hezekiah's pool). A long line of new shops has been built inside the city wall, just within the Zion Gate, for the sale of meat. It occupies the site of the former leper settlement of thirty years ago. Near by, in the Armenian property, was found a large vault, apparently mediæval, lying in a general direction north and south. The crown of the vaulting is about twelve feet below the present surface level. The vault itself is about fifteen feet deep.

In Altneuland for November-December, 1905, some account is given of the projected undertakings in Mesopotamia, among them the proposal to make a high road between Damascus and Bagdad. The opening up of Mesopotamia bids fair to be one of the accomplishments of the near future, and if it can be found practicable to

organise a scheme of irrigation, there is no reason why the old homes of culture should not be made as productive as they were once. The importance of the undertaking is indisputable, and its special interest lies in the circumstance that the Assyriologist is the most competent expert who is in a position to show by what means the ancient Babylonians promoted the fertility of their land.

The work of the German Orient-Gesellschaft moves steadily forward. That it was high time that the ruins of Galilee were examined has been proved by the fast disappearance of ruins which had been noticed by travellers only a few years previously. Among the more interesting results of the investigation was the discovery of a typical form of building due to the development of Jewish architectural principles under Roman influence.

The German Palestinian Society have published in the last number of their journal a contribution by the late Reinhold Röhricht: an account of the pilgrimage of Ulrich Brunner in 1470, written partly in Latin and partly in the German of the period. This is probably the last of the many works which this scholar undertook in the furtherance of a study which lay nearest to his heart, and he will be missed by those who have followed from time to time his scholarly researches on the writings of mediæval pilgrims.

It may be well to mention that plans and photographs alluded to in the reports from Jerusalem and elsewhere cannot all be published, but they are preserved in the office of the Fund, where they may be seen by subscribers. Those which were sent by Mr. Macalister illustrating the excavations at Gezer and which were not reproduced in his quarterly report, have been held over for the final memoir.

The attention of subscribers and others is called to A Table of the Christian and Molammedan Eras, from July 15th, A.D. 622, the date of the Hejira, to A.D. 1900, price by post, 7d. Also to the Meteorological Observations at Jerusalem, with tables and diagrams by the late Mr. James Glaisher, F.R.S. Tourists and all desirous of accurate information about the climate of Jerusalem should not fail to send for a copy, price 2s. 6d.

The attention of subscribers is also called to a work by Sir Charles Warren, entitled "The Ancient Cubit and our Weights and Measures." He brings evidence to show that all weights and measures (except those of the metrical system) are derived from one source—the double-cubit cubed of Babylonia.

The Museum and Library of the Palestine Exploration Fund at Jerusalem are in the Bishop's Buildings, near the Tombs of the Kings, where the use of a room has been kindly permitted by the Rev. Dr. Blyth, Bishop in Jerusalem and the East. The Museum is open daily, except Sundays, and the Honorary Secretary, Dr. D'Erf Wheeler, will give all information necessary.

The "Flora of Syria, Palestine, and Sinai," by the Rev. George E. Post, M.D., Beirût, Syria, containing descriptions of all the Phaenogams and Acrogens of the region, and illustrated by 441 woodcuts, may be had at the office of the Fund, price 21s.

The income of the Society from December 20th, 1905, to March 17th, 1906, was—from Annual Subscriptions and Donations, including Local Societies, £615–3s. 11d.; from sales of publications, &c., £84–13s. 6d.; from Lectures, £17–1s. 10d.; making in all, £716–19s. 3d. The expenditure during the same period was £676–8s. 9d. On 17th March the balance in the bank was £401–1s. 5d.

Subscribers who have not yet paid, will greatly facilitate the Committee's efforts by sending their subscriptions in early, and thus save the expense of sending out reminders, the outgoings on the excavations at Gezer having been a heavy drain on their funds.

Subscribers to the Fund are reminded that, whilst the receipt of every subscription and contribution is promptly acknowledged by the Acting Secretary, they will henceforth be published annually, and not quarterly. A complete List of Subscribers and Subscriptions for 1905 is published with this number.

Subscribers in U.S.A. to the work of the Fund will please note that they can procure copies of any of the publications from the Rev. Professor Theo. F. Wright, Honorary General Secretary to the Fund, 42, Quincy Street, Cambridge, Mass.

The Committee will be glad to communicate with ladies and gentlemen willing to help the Fund as Honorary Secretaries.

Subscribers and others may be reminded that the new Raised Map of Palestine, constructed from the Surveys of the Palestine Exploration Fund by the Acting Secretary, is ready. It is on the scale of  $6\frac{1}{4}$  miles to the inch and measures 3'  $6'' \times 2'$  6''. It has already been used with great success by Professors of Old Testament history, and by teachers in Sunday Schools, and may be especially recommended for large classes of students. On view at the office of the Fund; further particulars may be had on application.

In order to make up complete sets of the *Quarterly Statement*, the Committee will be very glad to receive any back numbers which subscribers do not wish to preserve.

A complete set of the *Quarterly Statements*, 1869-1905, containing the early letters, with an Index, 1869-1892, bound in the Palestine Exploration Fund cases, can be had. Price on application to the Acting Secretary, 38, Conduit Street, W.

Subscribers of one guinea and upwards will please note that they can still obtain a set, consisting of the "Survey of Eastern Palestine" (Colonel Conder); "Archæological Researches in Palestine," in two volumes (Clermont-Ganneau); "Flora and Fauna of Sinai, Petra, and the Wady 'Arabah" (Hart), for £7 7s., but the price has been increased to the public to £9 9s. The price of single volumes to the public has also been increased. Applications should be made to the Acting Secretary.

The price of a complete set of the translations published by the Palestine Pilgrims Text Society, in 13 volumes, with general index, bound in cloth, is £10 10s. A catalogue describing the contents of each volume can be had on application to the Secretary, 38, Conduit Street, W.

The Museum at the office of the Fund, 38, Conduit Street (a few doors from Bond Street), is open to visitors every week-day from 10 o'clock till 5, except Saturdays, when it is closed at 2 p.m.

Photographs of the late Dr. Schick's models (1) of the Temple of Solomon, (2) of the Herodian Temple, (3) of the Haram Area during the Christian occupation of Jerusalem, and (4) of the Haram Area as it is at present, (5) of the Hechel in Solomon's Temple, (6) of the Hechel in Herod's Temple, (7) of the Tabernacle, have been received at the office of the Fund. The seven photographs, with an explanation by Dr. Schick, can be purchased by applying to the Acting Secretary, 38, Conduit Street, W.

Branch Associations of the Bible Society, all Sunday Schools within the Sunday School Institute, the Sunday School Union, and the Wesleyan Sunday School Institute, will please observe that by a special Resolution of the Committee they will henceforth be treated as subscribers and be allowed to purchase the books and maps (by application only to the Secretary) at reduced price.

The Committee acknowledge with thanks the following:-

- "Report of His Majesty's Commissioners for the International Exhibition, Saint Louis, 1904," from the Secretary of the Royal Commission.
- "Les Ennemis d'Israël, Amorrhéens-Philistines," Antoine Dard.
- "The Land Far Off, The Narrative of a Tour through Palestine and Egypt," from the author, A. E. Booth.
  - "Al-Mashrik: Revue Catholique Orientale Bimensuelle." P. L. Jalabert on forgeries and forgers; P. H. Lammens on the names in the Lebanon, &c. The versatility of this Arabic journal is seen in the inclusion of articles on speculation and commerce (by Lessain), the first voyage of an Oriental in America, 1668-1683, by P. A. Rabbath, and the same writer's contribution on Christian traditions in America before Christopher Columbus.
  - NEA ΣΙΩΝ, November-December, 1905; January, 1906.
  - "Echos d'Orient," January, 1906: "Les Monastères doubles chez les Byzantins," by J. Pargoire; "Pour l'Histoire du Christianisme en Orient," by G. Bartas; "Faux Bronzes Byzantins," by S. Petridès, &c., &c.
  - "Altneuland," November-December, 1905, contains a very full account of the steps taken for the education of the Jewish young in Jerusalem. By the Rector Eberhardt.
  - "Notes de Mythologie Syrienne," by M. René Dussaud, sections ii-ix, with Index.
    - Recueil d'Archéologie Orientale," by Ch. Clermont-Ganneau.

      Tome VII, Livraisons 8-12. Sommaire:—§ 11. La relation de voyage de Benjamin de Tudèle. § 12. Le pèlerinage de Louis de Rochechouart. § 13. Fiches et Notules: Inscriptions judéogrecques d'Alexandrie. § 14. L'Heracleion de Rabbat-Ammon

Philadelphie et la déesse Astéria. § 15. Une nouvelle inscription Nabatéenne de Bostra. § 16. Une ghazzia romaine contre les Agriophages. § 17. La fête de l'empereur Hadrien à Palmyre. § 20. Inscriptions grecques de Palestine. § 21. Nouvelles inscriptions latines et grecques du Haurân. § 22. Inscription samaritaine de Gaza et inscriptions grecques de Bersabée.

See, further, below, "Foreign Publications," pp. 154 sqq.

The Committee will be glad to receive donations of Books to the Library of the Fund, which already contains many works of great value relating to Palestine and other Bible lands. A catalogue of Books in the Library will be found in the July Quarterly Statement, 1893.

For list of authorised lecturers and their subjects, see end of the Journal, or write to the Secretary.

Whilst desiring to give publicity to proposed identifications and other theories advanced 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 do not necessarily sanction or adopt them.

FORM OF BEQUEST TO THE PALESTINE EXPLORATION FUND.

I give to the Palestine Exploration Fund, London, the sum of to be applied towards the General Work of the Fund; and I direct that the said sum be paid, free of Legacy Duty, and that the Receipt of the Treasurer of the Palestine Exploration Fund shall be a sufficient discharge to my Executors.

	Signature
Witnesses -	

Note.—Three Witnesses are necessary in the United States of America.

Two suffice in Great Britain.

#### THE IMMOVABLE EAST.

By Philip G. Baldensperger, Esq.

(Continued from Q.S., 1906, p. 23.)

The fever to which I have referred (p. 22 above) is particularly dangerous. The inhabitants of the low lands, however, are not so susceptible to it as the black colonies in the Ghôr, and the Egyptians in Philistia too can resist its sweeping attacks. In 1890-91, when the railway works had to be carried on across the swampy grounds from Nâ'aneh to Artûf, in the Wady es-Surar, and especially at the bridge of the Murab'a, the fellahîn of the region fell victims to the tarh by hundreds, and Egyptians had to be employed. Shehme(t), south of 'Akir, is reputed so unhealthy that, as the fellah saying goes, even the birds lose their feathers if they pass through the region.

Various kinds of fevers and other ailments are mentioned in Deut. xxviii, 21 sq., 27 sq.: "the Lord shall make the pestilence cleave unto thee, until He have consumed thee from off the land, whither thou goest in to possess it. The Lord shall smite thee with consumption, and with fever, and with inflammation, and with fiery heat, and with the sword (marg. drought), and with blasting, and with mildew; and they shall pursue thee until thou perish . . . . the Lord shall smite thee with the boil of Egypt, and with the emerods (marg. tumours, or plague boils), and with the scurvy, and with the itch, whereof thou canst not be healed. The Lord shall smite thee with madness, and with blindness, and with astonishment

of heart."

The comparisons which are made below (p. 98) are of course purely tentative.

[See on these terms, Driver, International Critical Commentary: Devteronomy, ad loc., and Enclyc. Biblica, s.v. "Diseases."-Ed.]

Translation.	extreme burning.	inflammation.	fever.	blasting.	mildew.	pestilence.	shepin mişruim botch of Egypt.	emerods.	seab.	madness.	blindness.	itch.	astonishment of heart.	shabbephelh consumption.
	:	:	:	:	:	:	im	:	÷	÷	:	;	:	:
	jarhŵr	dalleķeth	<i>ķaddahatlı</i>	shiddaphón blasting.	yérákón	יולטלו דֶּבֶּר	shehim misra	william, برجائن	gåråb	shiggá'ón	incuarón,	heres	timmáhón	shalihepheth
Hebrew.	ב <u>ר</u> ר.	上がない	לובעיי	שְׁבְּפֵּנוֹ	ירכון	ָ הְיָהְ	שְׁתִין מִצְּרֵיִם	ָּבְיּלְים בְּיִירָי	لل لا	arar.	لإؤارزا	בנס	البهتائ	שְּבְיפֶּרוּ
	:	•	:	:	S	:		:	:	:	:	:	:	:
	is sklume(t)	Jes dore	tarit	سانه الله الماري المارية ا	Elected en-muktu(t)	23 dubar	jup-an-qui	youth basin	jarb	jenún	Las 'ama	Eharás	سائن عاعين	skalika(t)
Arabic.	wile is	666	75	رج اصفر	النقطة	7;	hist inden-Nil	ilmer.	draft rit	jenún	3	thoras	日でい	شچة.
	:	:	:	:	:	:	:	:	:	:	:	:	:	:
								:	:		:	:	:	:
English.	Fever in general	Intermittent fever	Malarial-typhoid	Cholera	Epilepsy	Boils	Botch of Egypt	Piles, emerods	Itch	Madness	Blindness	Dumbness	Pestilence	Hooping-cough

but a mother will refuse to give matter for inoculation from her child for fear of losing her own. hasbe[t], measles are also very frequent. hasbe[t], en-nokta[t], epilepsy is a disease inflicted by the karine(t) (i), which is the double spirit (especially of women), for pouring water over the threshold of the door without "naming God," on a Friday, or pouring water to quench the fire (see Q.S., 1893, p. 206). The karine[t] appears either as an owl, or as a Jewess, sometimes as a camel, or a black man. The Khatîb writes the talisman (a), which must be as long as the patient. Often the first talisman is not efficacious and a second one has to be written, and even this one may not be followed, for the sin is great, since it has been committed on a Friday. A woman can even communicate it to her husband; they must cease all intercourse.

To preserve children against such disease it is well to take the following:—

- (1) The head of a serpent salted and dried, and sewed into the white cap of the child; the serpent is heyye[t] (حية), and means also the living, and hence the child will live.
- (2) Wheat-grains, threaded on a string, and sewed into the cap. For wheat is 'ashe (عيش) and means also life; and so God is willing that the child should live.

Against lunatics, mejnûn (), the well-known cures of el-Khudr and those beaten by stars (madrub nijm), the eggs of the Egyptian vulture are employed. Consumption (sill) is treated by fiery nails, either applied on the breast or on the back, between the fifth and sixth vertebræ. Malaria and typhoid fever, (waham are also similarly treated by fire by burning with the iron on the crown of the head or on the secret parts. In order to cure rheumatism (khezâm), into 100 or 150 pricks made with a pin one must put garlie juice, and if it is bone, khezâm el-addem, a red-hot packneedle must be pushed into the flesh till it touches the bone. This is often treated by rubbing, i.e., by massage, marj () or dalk (), and they sometimes stamp on the back, the patient lying down with face to earth. Nausea (dokha[t]) is cured by roasted coriander, kuzbara[t] (mixed with honey)—a tablespoonful daily

(forty days' long!). Hooping-cough (shahka[t] is cured by binding the axis-bone of a wolf as tight as possible to the neck of the patient, and then with the back of a knife pressing on the neek, whilst saying three times, "In the name of God, and in the name of the she-wolf" (بسم الذيبة). Cholera was treated by an old Bedawy woman, with the aid of the excrement of a dog and a parasitic plant (جعدة, ja'adeh), which grows on bushes; these were boiled together, and the patient was instructed to drink several quarts. Paralysis (falj) is cured by the red-hot iron, the universal cure; abscesses (dabar), by applying beet or raddish leaves.

The Fellahîn are good surgeons—jabber (جنر) sticks are bound round the broken limb and plastered over with dough, hair, and eggs.

Hydrophobia (sa'ar) is supposed to be the spirit of a demon passing through the mad dog (kalb mas ûr , see LK) to the bitten person: consequently it is treated by the use of verses of the Koran, which must be pronounced by a special sheikh who is expert in the business. A sheikh in Lydd, who receives such patients, puts them in an isolated room and in secret performs sundry exercises unknown to the world. If the patient excretes young dogs (demons) about the size of hornets, there is nothing to be done, and seven months later the patient dies with all the horrors of hydrophobia, but if the demon-phenomenon does not appear, he is saved. The tree-lupine (میلامون salamône) is taken in decoetion. Two of our servants were bitten by a mad jackal. The one, a Fellah, bitten on the naked skin, died within seven weeks, raging and foaming, in the room where he was shut up; the other, a Madany, was bitten through the pantaloons, and was wholly cured; although one was a Moslem and the other a Protestant Arab, both refused to be treated by our medical doctor, but went to the sheikh with the above-stated result.

Serpent bites are also treated by reciting verses from the Koran when the first remedy does not seem to be efficacious. Quantities of milk are given the patient till he vomits it quite yellow. This they say is evidently the poison. As they believe all serpents to be poisonous, they are often misled by the result of a cure from the bite of a harmless kind. The charmer, if one happens to be present, sucks the wound; this is certainly a very good plan and may prove efficacious. A charmer in Philistia once showed me his gums, which

were spotted red and white; they appeared as though detached from the teeth, so inflamed were they. This, he told me, was the result of sucking the poison from wounded persons. This custom appears to be alluded to in Job (xx, 15 and 16). The horn of the Cerastes, possessed by some charmers, is invaluable. They rub it in milk and give it to the patient, and this, in their estimation, is very potent. Erysipelas (abu d'ghain ابو دغيم) is cured by borrowing a caldron (it must not be bought) which has belonged to a family for several generations; the soot is then taken and scattered on the sore cheek. Ophthalmia, and all kinds of affections of the eye, have innumerable cures. As a matter of fact it is a terrible local plague, and has its headquarters in Lydd. Ramad, ophthalmia, in general is cured by the juice of aloes. Tomatoes are also applied, or from the yolk of egg a plaster is made and applied to the closed eyes. Kohl may be used to strengthen the eyes towards the end of the disease. Several more fanciful ingredients are also resorted to, e.g., the gall of a raven. For women and children alum and the white of an egg are sometimes mixed together and applied to the eyes on cotton; for men add clover (قرنفل, karunful). Chronic diseases are to be treated with fire; one lights the tinder (sûfûn) and places it against the temple. Or else one may take two eggs of an owl and prick a needle into each; one needle will rust, the other will not, and it is the former which is found to be serviceable for ophthalmia. Inflammation of the eye ('ain mabzûle[t]) is treated by hanging a red glass bead (مير دم, hajjar dam) above the eye to draw out the inflammation. The bloody feathers of young pigeons are sometimes squeezed on eyes which have been hurt by a blow.

As poisons they sometimes use rahj (رهبي), arsenic, or corrosivesublimate slimâny (ماليماني) to poison a rival. I knew a man who had poisoned his brother in connivance with his sister-in-law. The criminals married afterwards. Some sheikhs are said to have used a euphorbia (مالية), hilba) against Turkish officials, who suffered grievously for weeks afterwards. When an officer went to visit them one day, he said: "Please none of your hilba business, we will arrange matters to the satisfaction of every body."

Oil and honey constitute a kind of universal pain-expeller. Oil is used for bruises and wounds, and is taken for divers unknown inward diseases. A man once asked the prophet Mohammed what

was a good thing to take for colic. "Take honey," said the prophet, but still the illness persisted; "take honey," insisted the prophet, yet there was no relief, and at last, after the seventh question, when seven small warm pebbles from the oven were added, the colic at once disappeared.

Scald-heads are very common among the fellahîn, sometimes also among the women. The bald-head is called kar'e (قرعة), but the scald-head has the same name. It is believed to be contagious, and they are very careful not to put the cap of a scald-head on their heads, though as a rule head-dresses are not easily exchanged, as the fellah takes off his turban only to sleep. Shoes, on the other hand, are very frequently changed, especially at feasts, when the shoes remain at the entrance. It is rare for a fellah to touch his shoes.

Leprosy, as also scald-head, is often supposed to be caused by the Gecko : abu brais (ابو بريص), and leprosy is called barass. Few lepers remain in the villages, but are mostly found round the principal towns in the passages mostly frequented by pilgrims; in Jerusalem at the Jaffa Gate, in Ramleh on the Jerusalem road, and so forth. They are also called "the poor," simply masákin (عساكد), and the fellahîn very readily give them alms of the fruits or wares which they may be earrying to town. Every visitor to Jerusalem has seen the miserable men and women, stretching their fingerless hands and imploring alms in a piteous hissing voice, squatting down with their stick and tin pan along the road. They live in separate colonies, but come to towns for their living. This hideous disease is not so contagious as was supposed, for the lepers' asylums established in Jerusalem by different missions have carried on the work for more than thirty years now, and none of the sisters and hospital aids have ever become lepers, though almost in daily contact and living under one roof. Complete cures, on the other hand, are, so far as I am aware, unknown.

(To be continued.)

# THE BEDOUIN OF THE SINAITIC PENINSULA.

(Continued from Q.S., 1906, p. 33.)

By W. E. Jennings-Bramley, Esq.

#### IX .- Jinn and Ghoul.

THE same well, Bir el-Senaina, near the Pilgrim road, has also an evil reputation. Once one of the Bedouin going that way saw a woman sitting alone beside the road. As he drew near she called out, and begged him to lift her on his camel, and let her ride to the well; and he would have done so, only the camel would not approach her. The man, angered by the beast's obstinacy, hit it over the head. Then it knelt down, but only on one of its forelegs, but advance it would not. "Since it will not move towards you, come here," he called to the woman; and when she rose to her feet to do as he bid her, he saw that one of her legs was shaped like that of a donkey, although the other was like a woman's. Then terror seized him, and before she could mount he had made his camel spring up, and the beast, only too anxious to be off, galloped away. woman, however, had had time to seize it by the tail, but that could not stop it. All the skin remained in her hand, but the camel and the man on his back escaped, and once they had crossed the Pilgrim's road they were safe, for the Jinn might not go beyond, and sat on a hill watching them, and wailing because they had escaped from her.

Suleiman had met a Kurd who had actually managed, with the help of four other Kurds, to kill a Jinn. His description of her was most accurate. Her hair was like horsehair. "She had teeth as long as my camel stick," he said, "and her mouth was in proportion," he added, spreading out his arms to the widest extent. Most probably the Jinn in question was some wretched old woman sitting by a well, and whose hideousness suddenly roused the fears of the Kurds.

These Ghouls inhabit the hills. They are a small people, very much like the northern gnomes: they work underground, coming

out at night, and are almost always bent on mischief. They can take any shape that pleases them, such as a stone over which you may stumble, or a branch that may fall on you. In fact you may safely ascribe any accident to the malicious influence of a Ghoul. In the Jebel Racha, near Snez, I have been shown cracks in the rock through which the Ghouls come and go. In the Jebel el-Ghoul, in the Wâdy Haisie, and in the Wâdy Roubra, strange sounds are heard, which can only be accounted for by the presence of Ghouls. Dogs are particularly sensitive to their proximity, and generally warn the traveller by howling. I was once too tired to move on as far as prudence should have dictated, and camped for the night near a haunted hill. Poor Suleiman felt very keenly all that we were risking, but consoled himself by remembering that fully thirty years had elapsed since these particular Ghouls had been up to mischief, and possibly they might leave us unharmed, which they did. The Bedouin have the same idea of the efficacy of silver in killing Ghouls as the Germans have in their legends, where the silver bullet is always resorted to. The only animal I have heard them attribute any sort of supernatural power to is the hyena: they fancy it can draw people away to its haunts, and there devour them. As a proof of this I was told the adventures of two men on the Haj. On waking up, one found his friend was missing. He looked about and came on the spoor of a hyana; fearing something had happend to his friend, he followed up this spoor for some hours, and at last, when well on the hills, caught sight of the man he was looking for, in the very act of entering a cave, at the mouth of which stood the hyana luring him on to destruction. The man seemed under mesmeric influence and incapable of defending himself. Luckily the other promptly put a bullet through the hyana's head, and so saved his friend.

The road to Snez from Nekel is at times infested by these brutes. I heard of one unfortunate man who would not take the advice of those at Nekel, who told him not to attempt the journey unarmed. He had defended himself against seven men with the pole he carried, and feared no hyanas as long as he had that with which to beat them off. The palms of his hands and bits of torn clothing, with the pole, broken, lying beside them, was all that was found of him by the next passers-by. The spot where such a thing has happened, or where a man has been murdered, is often, but not necessarily, marked by a heap of stones. At all events, as no one

ever passes without repeating the story, there is no fear of its being forgotten. It becomes the legend of the place, and can be freely embroidered.

There is a romance connected with the Jebel el-Rîd (Rîd, "to like"). It is the traditional trysting-place of a man of the Hassana and a girl from the Riddian. History tells one little of these lovers except that, not deterred by the distance each had to come to find the other, they used to meet on this hill, which is at least a three days' walk from either point.

All over the desert Arabs will tell you stories about mysterious palm-groves, of which the only traces are the stalks of the date-trees, the Jered, of which they say they find many brought down by the rains from places where no palms can be seen. On the east side of Sinai as you stand with the gulf of Akabah between you and Hakel, I was shown a spot where once a man was hunting ibex. Following one of these, and not noticing where he went, he went down and down a cañon until he suddenly came upon an open space where, to his astonishment, he saw a grove of palm-trees and, under their shade and beside a clear stream, groups of girls playing among themselves. At first his astonishment made it impossible for him to speak; he was tired and hungry, and he found dates in plenty piled up at the foot of the trees. Of these he ate, and drank of the water: then seeing there were no men, but only girls in that strange place, he felt he could rest in peace. One of the girls pleased him more than the rest, and her he married, and the days passed by happily. He hunted the ibex, of which there were plenty, and gave the girls to eat. Only one thing was strange to him, he saw no men, and the girls said they knew none, although there was evidence that men were not unknown to them. One day, in hunting the ibex, he strayed further than usual from the palm-grove, and the noise of his gun attracted a man, who turned out to be the real husband of the girl he had married. This man drove him out of the valley back to the world above, and never again has he been able to find his way there, though he has searched and searched for the cavern which led to it. Once finding one of the spots he had passed on his way there, he lay down twigs along his road so that he might know it again, but on the third night of his journey onward all the twigs he had laid down were collected and placed in a little heap beside his head, so then he knew the spirits were about him and were preventing him from finding the way, and he gave up searching.

## X .- Dreams and Fancies.

The Bedouin have an implicit belief in dreams. Suleiman, for instance, dreamt one night that a man appeared to him. Next day as we rested by a well, a man did make his appearance. This pleased Suleiman very much. "Was the man good or bad? was he likely to be useful to us or not?" I asked. "Dreams could not be expected to tell us that," said Suleiman. Next day the man ran off, leaving us in the lurch, and I protested against the usefulness of Suleiman's dream; but he explained to me that I was altogether wrong in expecting so much; it was in no way the business of a dream to enter into such detail. On one occasion he dreamt his camel had bitten him. A month after his cousin died. The connection between the two events must be obvious to the most confirmed sceptic. The worst of these dreams are, that when considered unfavourable, it is with difficulty you can persuade a Bedouin to travel the next day. They will also do their best to prevent you going in any direction to which your camel or theirs has shown any objection. I remember Suleiman's relief on one occasion when, for reasons unconnected with the camel, I changed my mind and took another road; he felt certain the camel had the best of reasons. probably we should have met with evil had we persisted.

They share with all Orientals, I might say with all Southern nations, a firm belief in the effect of the Evil Eye. It is always a breach of good manners to admire anything belonging to another, be it his child or his camel, without prefacing the compliment by some safeguard. After that any remark becomes innocuous. My man told me that, only a short time before, he had ridden up to a well, and a man there had admired his camel: "He might just as well have shot it at once," explained Suleiman, "it died two days after." It is to protect them against this evil eye that they hang bits of leather round their camel's neck, but why leather is a protection they could not explain to me, only adding that the piece of leather to be efficacious must have touched the earth, and that therefore the sole of a sandal was one of the best things to choose. In fact I have found it in most cases impossible to trace back to the original cause of a superstition, so entirely ignorant are they them--elves of it. They are vague and have no curiosity on any subject beyond the cares of their daily existence, and if some exceptional

Bedouin collects his thoughts sufficiently to attempt a consecutive narrative, it is almost impossible to follow him, so incapable is he of any sequence of ideas.

### XI.—Stone Circles.

I have questioned them on the stone circles which are found all over Sinai, but have never been able to elicit anything more precise than an indifferent opinion that they might be burying grounds, they did not know and certainly cared less. No legends seemed to attach to them, the only thing remarkable about them to a Bedouin being that anyone should take any interest in them.

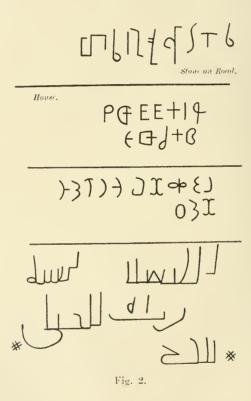
At Umerfan I found 56 of these circles on the top of a hill, and from 60 to 100 on the eastern slope. These circles, though varying in size, are as a rule about 30 ft. in diameter, and the walls 4 ft.



Fig. 1.

high. I doubt their having been covered in, the amount of débris lying in them and about not being sufficient to have been formed by anything like a roof. In the centre of each circle are to be found the remains of a small stone enclosure, tomb or altar, or whatever it may have been, in the shape of an irregular oblong box, one side being 8 ft. long, the other 5 ft.; at one end 2 ft. wide, at the other 1½ ft. In the outer circle there is almost always one single large pointed stone considerably higher than the rest, which is built up of smaller dressed stones; where the stone is of sufficient thickness it stands alone, otherwise two are used, the space between being filled with débris. In one of the large circles on the summit of the hill I found nothing that could suggest their having had any entrance, while those on the slope were in many cases nothing but

ruins, indicating their circular shape, and two uprights, evidently the sides of the doorway, with sometimes the stone lintel still on them. I remarked several groups of three together in a row so built that the inner circle touched the two outer ones. Is it possible that the circles above were tombs, while these lower ones with doorways were dwellings? The stones with which many are built are such as show by their shape the action of water; at some



time they were spherical, but either owing to the effects of weather, time, or other unknown cause, they have split, and now present the flat surface of the cleavage on one side, and are rounded on the other. Some of them form a natural ornamental pavement of circular patterns. Near these dwellings and tombs there are the remains of walls built, possibly for protection, but from what—an enemy? and for what—cultivation? The ground behind these walls on the

slope is cleared of rock and stone. The walls, 3 ft. high and about 2 ft. thick, were built of two onter layers of long pointed stones, the space between being filled with débris. These walls in one case which I measured were 47 yards long, not in a straight line, but bending at an angle at both ends. I found no trace of pottery, and although many flints were laying about, none that I could see were dressed; as I have had some experience in looking for them, and often found them in the Fayûm, I do not think they would have escaped my notice had they been there.

The stones, which in some cases form a lid or cover to what I take to be tombs, *i.e.*, the sarcophagus-like construction in the circles at the summit, show plainly the action of water in their curves, and must have been chosen on account of their shape from among the other water-worn stones lying about. They are used to bridge over the doorways as well as to cover tombs. Geology must decide at what date these stones can have been worn to the shapes they now have.

Not far from these circles I found a large stone, broken probably by the heat of the sun. I give a copy of the inscription upon it (fig. 1). In the Egma I came upon the ruins of a house, upon the walls of which I found the inscriptions I subjoin (fig. 2).

The Bedouins seem to have no superstitions connected with these ruins. They asked me if my ancestors had built them. If they search for gold there, their only idea is that it may have been buried under the stones by former owners, a very common way of hiding treasure in the East.

(To be continued.)

# OCCASIONAL PAPERS ON THE MODERN INHABITANTS OF PALESTINE.

By R. A. Stewart Macalister, M.A., F.S.A., and E. W. G. Masterman, F.R.C.S., F.R.G.S.

A HISTORY OF THE DOINGS OF THE FELLAHÍN DURING THE FIRST HALF OF THE NINETEENTH CENTURY.

#### PART IV.

Dhaher el Amir and Jezzar Pasha.

At the end of the seventeenth century one Dhaher el Amîr ibn 'Omar el Dhaher rose to fame. He was a member of the tribe of Zaidan, whose headquarters were at 'Akka, Haifa, and Shefa 'Amr. His sons, 'Ali, Aḥmad, and 'Othmân shared his fame, and the whole country from Safed to Gaza came under their control. They had a large government building or serai at Shefa 'Amr, but the seat of their government was at 'Akka.

One of the Mamlûks of Egypt, Aḥmad Pasha (surnamed Jezzar, "the butcher") had been dismissed from Egypt by Muḥammad Bey, and had taken refuge with, and abode for five years under the protection of Dhaher el Amîr. At the end of that time Muḥammad Bey died and Jezzâr returned to take his place in Egypt.

Dhaher el Amîr and his sons revolted against the Turkish Government, and Jezzâr was commissioned by the government to quell the rising, he being chosen on account of the knowledge of the country that he had acquired during his five years' sojourn there. Hostilities lasted for nine months, the victory falling now to one side, now to the other; but finally Jezzâr succeeded in capturing Dhaher and two of his sons, Ahmad and 'Othmân, and sending them to Constantinople. The third son, 'Ali, escaped.

The house of Dhaher's government at Shefa 'Amr was captured by Jezzâr, and 1600 soldiers were quartered there to guard it. To these entered 'Ali, dressed as a Bedâwi. The soldiers did not recognise him, and nicknamed him "Father of Moustaches" (Abu esh-Shanabain); but as soon as he was entered among them he tore off his disguises. The soldiers were panic stricken, some fled, the others 'Ali slew, and after the garrison was scattered he seized the serai and all the horses, weapons, and treasure that it contained, and then went to his tents at 'Akka.'

'Ali now commenced a policy of harassing Jezzâr by small raids on the encampment of the latter, and by interrupting all the trading caravans that were bound for 'Akka. Jezzâr found himself incompetent to deal with him openly, and had recourse to a stratagem. He made a parade of dismissing one of his most important officers, who assumed the rôle of a rebel against Jezzâr, and commenced a series of successful attacks upon the troops of his leader. 'Ali heard of this, and accepting his revolt in good faith, made overtures to the officer for uniting their forces. An agreement was made between them. About ten days afterwards 'Ali was alone in his tent, his men being absent on a foraging expedition, and his treacherous comrade fired upon and killed him. He returned to Jezzâr with his men, and the head of 'Ali. This murder of the sheikh put an end to the power of the family of Dhaher, and led to its dispersion.

It is comforting to learn that Jezzâr happened to discover that the officer who perpetrated this singularly shabby trick had for thirty years himself been under Dhaher el Amîr; whereupon he commanded him to be put to death, for the very sensible reason which he expressed thus: "Thou hast eaten thy lord's bread so long, yet hast been unfaithful to him; how much the more wilt thou be unfaithful to me, who have done nothing for thee?" No doubt the ingenious Jezzâr saw that he could kill two birds with

We give this incident as it is recorded in our MSS. It reads as though the writer implied that 'Ali slaughtered or scattered the whole garrison of 1600 single-handed. We do not deny that he may have done so, but the story reads not unlike the Irish peasants' legend of the giant-killing hero who, when weaponless, and attacked by seven hundred men in front, seven hundred behind, and seven hundred on each side, snatched up the man nearest him by the ankles, and used him as a club to brain all the rest, with the grim sequel that at the end of the combat his "club" has been so worn away that nothing remained in his hand but a pair of shin bones!

one stone—secure the faithfulness of the officer and save the expense of a reward. From what we know of Jezzâr the latter was probably a not unimportant consideration with him.

A weirdly dramatic incident is related which illustrates the social conditions of the country in the days of Sheikh Dhaher el Amîr. There lived in Shefa 'Amr a very beautiful woman, who inspired an illicit affection in one of the sheikh's suite stationed there. He made many evil advances to her; but she was virtuous and repelled him, giving him procrastinating promises. At last he realised that she was putting him off, and threatened to kill her unless she promised to receive him that same night. The poor woman, in despair, saw no course open but to give the required promise. She went home and told her husband, who said that he would kill the man as soon as he put in an appearance. She asked, were it not better to flee from the neighbourhood? but he insisted on remaining, and once more declared that he would kill the disturber of his domestic peace.

Night eame, and with it the intruder. The husband hid himself in an ambush, the woman opened the door. In came the man, and she pretended to make him welcome. She took his arms from him, escorted him to supper, which was ready, and commenced to converse with him, all the time expecting her husband to come out and vindicate her in the way he had undertaken. But no husband appeared, and she took an opportunity of going to look for him. She found the wretched creature, his courage all oozed away, and he not able to stand with fright. Three times she went back to him, trying to persuade him to do his duty by her; but the only satisfaction she got was an order to "go to the man and let him do what he liked and then go about his business."

Forced thus to depend on herself, our heroine returned to the unwelcome visitor, and again entered into conversation, during which she began fingering his gun. Then she took it up and began to look it over. "Truly, strong is the heart of man!" said she. "And it is with this you fight and kill each other?" "Yea, truly," said he. "And how do you use it?" she asked innocently. The owner of the gun began to explain. She, pretending to be stupid, asked so many foolish questions, and handled the gun so awkwardly, that he began to laugh at her. Suddenly, when in his merriment he was thrown completely off his guard, she aimed straight at his heart and shot him dead.

Once more she called her husband, but that worthy was taken with fresh terrors. He absolutely declined to have anything to do with the matter, for now he feared lest he should be held responsible for the murder of one of the sheikh's officials. So his unfortunate wife had to set about the removal of the body. She decided to place it in a certain cave in the neighbourhood, which was commonly said to be haunted by ghouls, and which on that account no one would enter. The only way she could carry it was in a large basket on her shoulder, and to fit it into the basket she was obliged first to dismember it.

Now it happened that that very night some of the family of Sheikh Dhaher were discussing the question whether or not ghouls actually did haunt the cave; some said yes, others, no; and at last 'Ali Dhaher undertook to give his sword as a reward to whosoever would dare to enter the cave and put a certain mark within it. His nephew, a man famous for his bravery, undertook to gain the reward; he was one whom nothing would turn from any purpose which he might take in hand, and he rose at once and made his way to the cave, which he reached just a minute or two after the woman had entered it with her gruesome burden.

The woman naturally thought that this was some one who had discovered the matter, and who had come to take her prisoner. She could see the prince entering at the door, but he of course could not see her, and was unaware of her presence. In the instinct of self-preservation she threw at the intruder the only missile which she could find at the moment—one of the dead man's hands. It struck the prince on the chest. He stooped and picked it up; when he found out what it was, he very naturally paused before entering further into this cave of horrors. The thought of the sword he was to earn, however, roused up his courage, and he advanced a few more paces, but was stopped once more by a blow from the second hand; the feet and head followed. At last he drew his sword, and said, "Whoso thou art in the cave, rebel, or ghoul, or devil, or man, I shall fight with thee! Guard thyself." Seeing there was no escape, the woman made herself known to the prince, told him all the story, and threw herself on his mercy.

The prince, astonished at her bravery, took her back with him to his own relatives, and told his uncle the sheikh what had taken place. The sheikh sent immediately to fetch the husband, whom the messenger found still shivering in his corner. However, he had

to appear before the sheikh, who ended the story by administering poetic justice worthy of a three volume novel. The husband, in spite of his whines that he had nothing to do with the matter at all, and that his wife alone was answerable, was contemptuously ordered to be put to death, and of course the heroine was married to the young man who brought her from the cave. It is to be hoped that Jezzâr Pasha allowed them to live happy ever after.

In 1798 the French army under Napoleon I came against Jezzâr. He captured Jaffa, Ramleh, and Lydd, with all the coast, and besieged Jezzâr in 'Akka, This foreign invasion united for a while the ever-opposing factions of Yaman and Kais; but the people were poorly armed and could make no stand against the well equipped Europeans. 'Akka resisted his efforts, but a detachment of troops was sent under the command of Kléber across the plain of Esdraelon to take Nazareth and Tiberias. The Arab tribe Es-Sabhah and some of the Eastern Bedawin collected a great host to fight against the French. They were quite unable to stand against the French artillery; the famous Amir Rabah, chief of the Beni Sakhr, expressively contrasted his poor spear with the French cannon balls and bullets by saying that he "could not swim in hell with a stick." Were it not for English interference, which compelled Napoleon to raise the siege of 'Akka and to withdraw his troops, the whole country would have lain at his feet.

Suleiman Pasha succeeded Jezzâr. In his time the government was again decentralised among the provincial sheikhs, whom Jezzâr had kept in a very secondary position, under his own domination.

(To be continued.)

<sup>&</sup>lt;sup>1</sup> Napoleon was returning from his unsuccessful attempt to found an empire on the Nile, and hoped to foster a Syrian rising against the Turkish authorities.

#### GEZER AND TAANACH.

## By R. A. Stewart Macalister, M.A., F.S.A.

The results of the excavations at Taanach conducted by Dr. Sellin have been published, so far, in a section of vol. 50 of Denkschriften der Kaiserlich Akademie der Wissenschaften in Wien, forming a brochure of 124 pages, with a goodly supply of photographic illustrations and plates. It is upon this interesting and instructive publication that I draw for material in comparing the results as yet achieved in Gezer with those obtained by the Austrian professor.

In this case also, as in that of Megiddo, I must commence with a contrast unfavourable to ourselves. Dr. Sellin was able to employ a staff of 150 labourers, nearly double the possible maximum at Gezer. The supporters of Dr. Sellin placed about £2000 at his disposal at the beginning of his excavation, which freed him from the necessity of economising in various directions, a necessity that, at Gezer, was always a source of anxiety.

It cannot be too often repeated (1) that no mound should be abandoned till it is thoroughly dug from end to end; the Tell el-Amarna tablets were all contained within a few cubic feet of ground, and unless a mound be exhaustively searched, there is an even chance that some such deposit will be left behind; (2) that few undertakings are more expensive than scientific excavating, and if they are not properly supported it is better for the mound, for science, and for a more generous posterity that they should not be attempted at all; (3) that the minimum funds required for the proper excavation of such a mound as Gezer, within the time-limits of an Ottoman firman, is £350 per measem (three and a half times the total sum which the Fund was enabled to place at my disposal). Some mounds would be yet more expensive. I examined one important and promising mound in Northern Palestine which would require at the very least £500, and the true figure is probably nearer £700 a month.

The advantages for the excavator of the mound of Taanach are much the same as at Gezer. The hill is now unoccupied; no reasonable doubt can be thrown on the identification with the

Biblical city; and a good deal is known from literary sources of the history of Taanach, so that interesting parallels between documentary and archaeological evidence may fairly be expected.

As we study Dr. Sellin's letterpress and illustrations, the essential unity of the Taanach civilisation with that of Gezer impresses us, precisely as we found in examining the results from Megiddo. There are occasional points of contrast which may be accidental, and which might disappear with a more complete examination of both mounds; but the buildings and antiquities of the two sites might be interchanged bodily without any serious confusing of the archæological history of Palestine.

Dr. Sellin records his discoveries in a series of chapters, each devoted to an independent section of the mound. We may take these in order, noting on the way points of contrast and similarity with the Gezer excavations.

1. Trench from the North Side to the Central Plateau.—Here was found the ruin of a tower, resembling in general style the masonry of the Gezer fortifications, though without such an excessive use of small stone fillings as the Gezer walls show. Sling stones indicated that it had at some time been stormed. Some of these were perforated for the thong of the sling; of the many sling-stones from Gezer none showed this detail. The group of stone objects illustrated by Dr. Sellin (fig. 7), consisting of mortars, pestles, and rubbing stones, is exactly like a collection of such objects that might be found in a contemporary structure at Gezer. The pottery from this tower indicates a date somewhere about 1000 B.C.; one (fig. 8 b) is evidently of Cypriote origin. The most peculiar vessel from this building, as illustrated by Dr. Sellin, is fig. 8 f; I do not recall a flat bottomed jug like this found anywhere at Gezer of the date suggested; it looks rather later. The discovery of iron objects shows the given date to be the major limit of the age of the tower. A bone needle case with one needle remaining can be compared with a similar object found in Gezer.

Two parallel rows of standing columns, beside, but older than the tower, raise the same difficulty as was suggested by the similar discovery made by Dr. Schunacher at Megiddo. And here again I confess to a doubt as to whether these *dressed* pillars can legitimately be connected directly with religious worship. At least I hardly think this can be assumed till every other possibility has been considered and exhausted.

Under the level of the tower pottery of 1200 or 1500 B.C. made its appearance; fine bowls with wishbone handles and the "ladder" decoration, and the more definitely Palestinian geometrical patterns, so common in all Palestinian mounds. With them was a rattle, a curious class of object that has not, I think, received the attention they merit. They can hardly be mere toys.

Proceeding further along the trench, Dr. Sellin found two jarburied infants (? foundation sacrifices), an anticipation of the great cemetery he was destined to discover later; and "a monolith 1·30 metres high, 0·40 metre broad, with a round hole in the side; . . . . five stone steps led up to it." Dr. Sellin does not .illustrate this object, which seems from a description to be part of an olive press. A house with a well-beaten mud floor may also be referred to as a comparative rarity, both at Gezer and at Taanach.

- 2. The North-Eastern Fortress.—The occurrence of bossed masonry, to be compared with some of the towers of the outer city wall at Gezer, is the most interesting feature of this structure; and it is a pity that very definite indications of date seem to be lacking. It can scarcely be as old as the very interesting seal cylinder, with old Babylonian cuneiform and Egyptian hieroglyphics side by side upon it, which Dr. Sellin had the good fortune to find within its precincts. The pottery cylinder (fig. 24 in Dr. Sellin's work) has many parallels throughout all the excavations that have been undertaken in Palestine. It is probably a stand for a round bottomed jar. The bottle filler (fig. 25) is a distinctly rarer type of object.
- 3. The North-East Bastion.—A solid tower of masonry, with drafted stones, resembling the supposed Solomonic towers in the city walls of Gezer, and probably of about the same period.
- 4. The North-East Trench.—Here Dr. Sellin made some of his most important discoveries. A very early cemetery of jar-buried infants, some of them evidently, judging from the shape of the jars, antedating those in the similar cemetery in the High Place at Gezer, rewarded his investigation in this part of the mound. Several points of interest are presented by this cemetery—notably their association with a rock-cut altar, much resembling the famous "Zorah" altar—and the find is of the first importance for a study of the rites attending infant sacrifice in Palestine. Noteworthy is the small jar with yellow powder deposited with one of the interments. This may possibly have been incense. A large jar of incense, which had reduced to a yellow sand-like powder (in fact I thought at first that

it was sand), was found at Gezer, not however in the High Place. An important difference is to be noticed between the age of the Gezer and the Taanach infants. All the Gezerite child-sacrifices were new-born infants, save two (not buried in jars) who had attained the age of five or six. The Taanach children included some (jar-buried) who might be about two years. Two of the Gezer infants had been burnt, as had also the older children; the Taanach examples however showed no trace of fire.

A very important distinction between the Gezer and the Taanach cemeteries lies in the association of the Gezer jar-burials with the row of monoliths which is absent in the case of Taanach. Of course we must always remember the possibility of a Puritanic destruction of the Taanach stones, though this does not seem so probable an event in the northern kingdom as in the southern. I must in any case express my own indebtedness to Dr. Sellin for having acted on a hint I ventured upon in one of my reports, and taken the trouble definitely to prove the absence of the monoliths in the Taanach mound.

- 5. The Castle of Istar-Wasur.—Here again fortune smiled upon Dr. Sellin; not only did he find a singularly interesting building, but in that building was the first Palestine library yet discovered. The building is specially instructive, as it illustrates the contemporaneous use of masonry structures with rock-cut cellarage; and the combed sherds found within it give us a useful date-level in the history of pottery. The library is instructive and encouraging; it shows that there was communication not only between the Palestine cities and Egypt at the Tell el-Amarna period, but between the individual Palestinian cities themselves; and it carries us a few steps further into that as yet very little known chamber of history which the Tell el-Hesy tablet first unlocked for us. Once more this discovery impresses upon us the necessity for leaving no mound tillevery inch of it has been turned over to the rock. A single cubic foot of earth may contain a prize worth a three years' search; and it may be the foot left untouched!
- 6. The Western Tower.—This building was unusually right-angled for a Palestinian structure. In this excavation were found a handsome specimen of the common form of Cypriote ointment pot, and also Astarte plaques of styles quite different from anything from Gezer. There is a very remarkable variety of these plaques, and it is an interesting question, to which no answer can yet be

given, how far different cities or places show a predilection for different types. A curious figure representing a man riding on a nondescript animal, also found in this part of the tell, is interesting, as it illustrates the antiquity of the Oriental fashion of riding over the haunches of a donkey rather than in the middle of the back. Among the stone objects from this part of the mound are good examples of the curious form of grindstone in which a conical projection in the upper stone fits into a conical depression in the lower.

The Arab Castle.—We may pass this part of the work over in silence, as it is concerned with an archaeological level not found at all in the Gezer mound. Dr. Sellin's work here is a useful contribution to a little known chapter of the history of Palestinian civilisation.

The three Shafts under the Arab Castle.—Several points of similarity and of contrast with the Gezer work resulted from the excavations. A square oil press, figured by Dr. Sellin (fig. 71) is quite unlike the Gezer specimens, which are almost invariably round, though sometimes oblong. Here was found a bronze serpent figure, which Dr. Sellin himself compares with the bronze cobra found in the Gezer High Place.

It is interesting in studying Dr. Sellin's account of these shafts to observe how the development of pottery follows exactly the same course in Taanach as in Gezer, and so far as we can judge is the same at the same period in both places. Thanks to the work of systematic excavation which has been carried on within the last tifteen years not only in Palestine itself but also in the Mediterranean islands and the adjacent countries, we may now fairly claim that the chronology of pottery is on a sound basis, and the dating of the various strata of a city has become almost mechanical. It is to be observed that among the painted sherds animal forms (especially ibexes) seem to predominate over bird figures. The contrary is the case at Gezer.

We may pass more rapidly over Dr. Sellin's other discoveries. The curious upright cylinder, which he calls a *Räucherschale* (fig. 81), while not in every detail resembling anything from Gezer, has its analogies among the Gezer finds. The exact purpose of this class of object is still to seek. The footed bowl (*Libationsschale*, fig. 84) is very common at all periods.

In yet another trench Dr. Sellin found a pair of upright squared

monoliths of the kind to which we have already adverted. Here again one knows not what to think regarding their purpose. Dr. Sellin makes out a good case for their being objects of cult, yet their close association, relatively, with the stone of an olive press seems to suggest that they had some radical connection with it.

In an excavation to the east of the mound Dr. Sellin found, among other noteworthy objects, a small conical seal bearing two stags on the base and a tree (?) between them. An identical motive appeared among seals from Gezer, and it has more than once been alluded to in the reports. Indeed, so frequent is the stag (or some similar horned animal) found upon Gezerite seals, that I had begun to suspect that it was a totemistic device belonging essentially to some family or tribe of which Gezer was one of the headquarters. If this be so, it is very interesting to find the same device recurring at Taanach; indeed, it is interesting in any case.

We need not dwell here on the extraordinary altar, which has already been illustrated in the *Quarterly Statement*, and which is quite one of the most remarkable discoveries yet made in Palestine. In connection with it was found one of the Cypriote Astarte figures (the type with large earrings); one such was found at Tell el-Hesy, but nowhere else in Palestine had the type re-appeared till Dr. Sellin found his at Taanach.

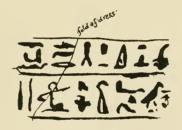
On the whole, the Egyptian influence seems rather less at Taanach than it is at Gezer, which is not surprising, considering the more remote situation of the former town.

Dr. Sellin closes his interesting contribution to Palestinian Archaeology with a series of chapters in which the total results are summarised. As we are not primarily reviewing his work in the present communication, we need not analyse these chapters here. But it is clear even to one who merely turns the pages, and still more to a careful student of his text, that the comparisons which he institutes between the result of the excavations at Taanach and Lachish, with their many points of similarity, and their few, if any, points of contrast, might be extended to Gezer. Civilisation over all Western Palestine is thus shown to have had the same course of development whether we study the North or the South.

## THE EGYPTIAN STATUETTE FROM GEZER.

# By F. Ll. Griffith, M.A.

THROUGH the kindness of the Hon. Secretary, I have had the pleasure of examining a cast of the beautiful little Egyptian statuette found by Mr. Macalister in a pit on the western hill of Gezer, and figured in the *Quarterly Statement* for October, p. 317. The inscription is roughly and carelessly engraved. The hand-copy gives, I think, all that is essential, as shown in different lights,



but is not a facsimile. The characters should be of equal height in each line. It may be read:—

The title of the man in the second line is the most puzzling part. The f is obscured by being engraved along the dividing line, and f is instance of the department," is ill written. The following sign, which must read f f f in the man's name, is extraordinarily deformed; there can be little doubt that the scribe or engraver here began the word f is "bread" or the like to complete the title, and then, as often happens in Egyptian inscriptions, changed his mind either through inadvertence or because

he was exceeding the space allowable, and superposed the  $\int$ . Egyptian "tasters"  $(d\rho w)$  were commonly of the "department of bread" (baking) or the "department of beer" (brewing), and they might belong to the staff or household of a king, or governor, where a large household, or even an army of soldiers, would have to be paid by, or supplied with, provisions and rations of bread and beer.

The scribe has hesitated also in the first line between the full formula with and "may be give (bread, beer, oxen, geese, &c.)" and the abbreviated formula "to the ka of," so producing a hybrid reading or "to the ka of," so producing a

We may now translate the text:—

"May the king give an offering, and (the god) Ptah-Sokar, to the ka of the taster (of the bakery?) Hegab, justified."

This formula is usual on statuettes dedicated in temples or tombs, or perhaps for the cult of ancestors within the house. The workmanship is of the kind found in Egyptian figures of soft steatite. The man is represented seated with his legs crossed in front of him, and the inscription is engraved upon the robe over the lap.

Hegab is a name scarcely to be found later than the XIIth dynasty, the date of which is variously estimated at c. 1900 B.C. or c. 2300 B.C. In the discovery of this little monument, taken in conjunction with the burials in the cave and the stela of Didi-Amûn (Quarterly Statement, 1903, p. 125), Mr. Macalister has secured the best proof yet attained of an entirely new view, that at the time of the XIIth dynasty Southern Palestine about the coast road to Syria comprised a settled Egyptian colony or population, with Egyptian officials, and keeping up Egyptian customs. The absence of embalming noted by Mr. Macalister on p. 316 is in accordance with contemporary usage in Egypt itself. It remains to be seen whether such records can be explained as belonging to members of expeditions who died on their journey, and were buried in a foreign land; anyhow, the clue is most promising, and we may trust the activity and acuteness of the explorer to develope greatly our knowledge of Egypt in Palestine by his fruitful researches.

# THREE OSSUARY INSCRIPTIONS FROM GEZER.

By R. A. Stewart Macalister, M.A., F.S.A.

The three inscriptions here recorded were found on fragments of ossuaries in Maccabean tombs opened just at the close of the excavation, and too late to be incorporated in the report from Gezer.

No. I. This inscription reads בשבוש "Kushkôsh," a peculiar name not found anywhere in the Hebrew Scriptures.



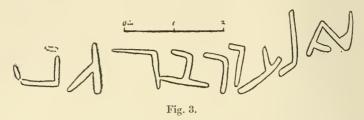
No. II. This fragment is of especial interest, as an illustration of the transition from the old Hebrew to the square Hebrew script.



It contains only the three initial letters of the inscription; careful search was made in the tomb for the rest of the ossuary, but in vain. The letters are yy; the first is distinctly of the later Hebrew alphabet, but the other two are as distinctly of the older.

No. III. This inscription is perfect, but so roughly scratched that it is not easily deciphered. It seems to be ארעזר בר גבי

Eleazar, son of Geni—with considerable doubt with regard to the last name, which might possibly be 122. The name Eleazar has



already been found at Gezer on an ossuary inscription, possibly denoting the same individual.

# THE CRUCIFIXION, BURIAL, AND RESURRECTION OF JESUS.

By Alpheus Davison, Esq., U.S.A.

I HAVE read with considerable interest much of the discussion relative to the location of Golgotha which has been published in the Quarterly Statement of the Palestine Exploration Fund, and 1 have never yet seen anything absolutely positive in the matter; all is more or less inferential and speculative, and in all my reading I have never seen anything more satisfactory on that point than the remarks of Rev. James T. Barclay, in his book entitled The City of the Great King, which is the most exhaustive description of the dear old city and its environs and points of interest that I have ever met with; and although it is now nearly fifty years old, I find it one of the most reliable sources of information relative to the city and its surroundings I have ever gained access to. Dr. Barelay was a Christian minister, a missionary, and United States Consul at Jerusalem for several years. He was evidently an educated, conscientions man, seeking to record only the absolute truth for the benefit of his readers. He believed the place of the crucifixion of our Lord was north of the city, on or near the hill in which the

Grotto of Jeremiah was located, and he occupies several pages of his book in giving his reasons for his view.

But it is not the exact site of the crucifixion that I wish to speak of just now, but the time of the resurrection of Jesus Christ as spoken of in the article on Golgotha on page 58 of the Quarterly Statement for January, 1903, where I find the following:—

The body [of Jesus] was placed in it [Joseph's tomb] because they were pressed for time—the Sabbath was nigh, and the tomb was close at hand. According to John (xix, 39, 40) the body when taken down from the cross was bound "in linen cloths with the spices, as the custom of the Jews is to bury"; and the preparation for burial, though hurried, was apparently complete. Matthew, Mark, and Luke state that the body was wrapped by Joseph in a linen sheet, but mention no spices. All four evangelists describe the visit of the women to the sepulchre on the first Sunday morning: Mark says that "when the Sabbath was past, the women brought spices that they might come and anoint Him"; Luke states that after the entombment they "returned and prepared spices and ointments," and that on the first day "they came unto the tomb, bringing the spices they had prepared."

The above statement, taken in connection with other well-known facts, becomes a mass of incongruous assertions, and in at least one instance absolutely contradicts the sacred record; for Matthew (xxviii, 1) does not say the two Marys went to the tomb on the first day of the week-(Sunday, the day on which the heathen worshipped the sun, is not mentioned)—but he expressly says, "in the end of the Sabbath," or, as the Revised Version has it, "late on the Sabbath day, as it began to dawn toward the first day of the week, came Mary Magdalene and the other Mary to see the sepulchre." Read on to the 7th verse, and it will be seen that Jesus had already risen and left the tomb. Now if He was crucified on the day before the weekly Sabbath, the day now called Friday, and rose again at the time indicated by Matthew, then he only lay in the tomb about twenty-four hours, whereas when the Jews asked Him for a specific sign that He was the Messiah, He said unto them, "An evil and adulterous generation seeketh after a sign, and there shall be no sign given to it but the sign of Jonah the Prophet; for as Jonah was three days and three nights in the belly of the whale, so shall the Son of Man be three days and three nights in the heart of the earth" (Matt. xii, 40). This was a specific sign given to the Pharisees, the leading sect of the Jews in that day, and if He did not fulfil it to the letter, then they had a right to say He was an impostor. How then

shall we harmonise these varying facts and statements? Let us see.

Besides the weekly Sabbath sanctified by God at the creation, and included in the ten commandments recorded by Him on tables of stone, and put in the Ark of the Covenant, He ordained several annual Sabbaths, which were observed more or less strictly by all the tribes until their division into two nations, the House of Israel and the House of Judah (1 Kings xii, 1–16), and by the Jews until the destruction of their temple and city by the Romans (see Lev. xxiii, 4–8, 27–32, 38–41).

It will be noticed that these annual Sabbaths were set on certain days of the month, and hence did not always occur on the same day of the week. Matthew xxvi, 17, 18: Mark xiv, 12; Luke xxii, 1, 2, and the history given by John, all show conclusively that the arrest and trial of Jesus and His crucifixion took place on the preparation day for the Feast of the Passover, called also the Feast of Unleavened Bread, which lasted seven days, the first and seventh being annual Sabbaths, the first occurring on the fifteenth day of the month Nisan, i.e., the first full moon after the spring equinox.

Time and space prevent me from making lengthy statements and quotations to sustain my position; but suffice it to say that the Passover Sabbath that year was observed on the fifth day of the week, now called Thursday, and John (xix, 31), says "that Sabbath was a high day," which would be an inappropriate expression if it had simply been the weekly Sabbath. Hence Jesus was crucified on the fourth day of the week, now called Wednesday, dying about three o'clock in the afternoon. As it was unlawful for the body to hang on the cross over the Sabbath, there was but little time to prepare it for burial; but Joseph of Arimathea seems to have been equal to the emergency, for he obtained from Pilate, the Roman governor, authority to take charge of the body, and Nicodemus came also, bringing a hundred pounds of myrrh and aloes with which to embalm Him; and when they had wrapped Him in clean cloths, they laid Him in Joseph's new tomb, in a garden near by (see Matt. xxvii, 57-61; Mark xv, 42-47; Luke xxiii, 50-56). From all these accounts it is clear that it was a hasty and temporary burial; and, further, it is shown that the women followers were near by watching the proceedings, and when they saw the body laid in the tomb, and the door safely closed by its owner, "they returned to their home or stopping place, as some of them had come from

Galilee with Jesus to attend the Passover ceremonies], and prepared spices and ointments." Now all this was done so late on the preparation day for the Passover Sabbath that there was no time for them to purchase the spices, &c., necessary for the embalming. Neither could they have purchased them, nor would they have prepared them, during the hours of the Passover Sabbath, which extended from sunset on Wednesday evening until sunset on Thursday evening; but from Thursday sunset to next day (Friday) sunset was secular time—the preparation day for the weekly Sabbath—when they had ample time to purchase and prepare the necessary spices, &c., for the embalming—and then "on the [weekly] Sabbath they rested according to the commandment." Now read what Matthew (xxviii, 1) says: "Now late on the [weekly] Sabbath day, as it began to dawn toward the first day of the week, came Mary Magdalene and the other Mary to see the sepulchre" (read on to the 7th verse).

Thus it is plain that Jesus was crucified and died at the very hour when the Passover lamb—of which He was the great antitype—was being slain at the Temple, thus exactly fulfilling the symbol: and that He lay in the grave just three days and three nights—from Wednesday evening to Thursday evening, one night and one day; from Thursday evening to Friday evening, two nights and two days; from Friday evening to Saturday evening (the weekly Sabbath), three nights and three days. Thus He completely fulfilled the only specific sign He gave to the Jews of His Messiahship.

As to the disciples and women going to the tomb early on the first day of the week to embalm the body of Jesus, we have no statement in the New Testament to explain the apparent inconsistency of such a course, especially on the part of the two Marys, who had visited the tomb the previous evening, and were told by the angel that Jesus had risen and gone. Now read Matt. xxvi, 31, 32; Mark xvi, 1-7, "when the Sabbath was past"! What Sabbath? Ignore the chapter heading, and read this statement in connection with the narrative in the preceding chapter, and it will be clearly seen that the Passover Sabbath is here referred to. Then notice that John fails to say anything about the weekly Sabbath and the preparation day (Friday) before it, but passes on to the morning of the first day of the week. Again ignore the chapter heading, and read Luke's statement (xxiv, 1-9) in connection with

his narrative of the crucifixion and burial of Jesus as given in the previous chapter. Now read John xx, 1-18, in connection with his previous account of the burial, and it is plain that he simply omits mentioning anything that occurred in connection with the matter between the time of the burial and the visit to the tomb in the morning of the first day of the week.

To account for the women going to the tomb of Jesus on the morning of the first day of the week, after their experience in their visit the evening previous, I imagine it was something like this: After their return to the city they evidently talked with some of the disciples and other friends, relating their experience, and there was great excitement and evident doubt, if not absolute unbelief as to the correctness of their statement, as is shown in the different narratives; so they planned a visit to the tomb the next morning. The women who had prepared the spices may have been ridiculed for their statement, and urged to take them to the tomb in the morning. That they did so is recorded, but the real reason, in the light of Matthew's statement, is mere conjecture.

Attention may be called to another matter not mentioned in the discussion of the points above referred to, but intimately connected therewith: why did Jesus and His disciples eat the Passover Supper the night before the great body of the Jews ate it? Some have contended that they did not do so, because they could not get a lamb slain by the priests at the Temple, and at the regular time, as their law required, which was the afternoon of the preparation before the Passover Sabbath (Deut. xvi, 5-7). Notwithstanding the contrary assertion, I am fully convinced that the statements of the Evangelists show conclusively that they did eat the Passover Supper the night before the general preparation day when Jesus was erucified (see Matt. xxvi, 17, 18; Mark xiv, 12-18; Luke xxii, 7-15). After their Supper was over they retired to the Garden of Gethsemane, across the brook Kedron, on the side or at the foot of the Mount of Olives, where Jesus spent some time in prayerful agony while His disciples slept, and at the close of which He was arrested and taken before the High Priests, Annas and Caiaphas, and thence to Pilate: but the Jewish officials would not enter the Roman palace, or the Practorium, lest they should become ceremonially unclean, and thus not entitled to eat the Passover Supper (John xviii, 28). This was about noon on the preparation day for the Passover Sabbath for the great body of the Jews (John xix, 14)

but Jesus and His disciples had eaten it the night before, as we have

already seen.

Now two questions arise-Who were in the right, Jesus and His disciples, or the Jews? and, how could Jesus and His disciples procure a lamb slain at the Temple before the general preparation day? I have never found but one reasonable solution of the matter, and that was obtained from a learned Christianised Jewish Rabbi over thirty years ago. His explanation was as follows: Before the Babylonian captivity there were no sects or divisions among the Jews, they being practically all of one mind in religious matters. They had little knowledge of astronomy, and the time of the new moon, by which the times of their festivals were regulated, was ascertained by sending several men out to different points to watch for it about the time it was due. When they came in they were examined separate and apart, and when two of them agreed in their statements as to having seen the new moon in a certain position, that was the time by which the Temple service was regulated. While captives in Babylon many of them learned enough astronomy to be able to calculate the correct time for the appearance of the new moon, and these persisted in observing their festivals at the time indicated by their astronomical calculations; but the old custom of fixing the time still prevailed at the Temple. Hence there was frequently a difference of one to three days in the observance of their festivals by the astronomical party and the Temple adherents, especially when the weather was cloudy, preventing the watchers from seeing the new moon. To accommodate the astronomical party, who were considered to be as conscientious in the matter as the others, the practice at the Temple was so modified as to furnish the Passover lamb at the date indicated by their calculations.

I have often queried with myself as to whether God did not permit the matter to come about as it did for the very reason that it brought about the death of Jesus at the very hour when the Passover lamb—of which He was the great antitype or fulfilment—was being slain at the Temple.

## NOTES ON PALESTINIAN FOLK-LORE.

By Miss Gladys Dickson.

(Continued from p. 69.)

## H.

The following is a list of sounds applied to various animals by the fellaḥîn of Palestine:—

## 1. Camels.

<u> </u>	[mouth only slightly opened; corners of mouth drawn down slightly; tip of tongue pressed against lower teeth; back of tongue against soft palate; breath violently expelled over the tongue; uvula trilled: sound somewhat prolonged]	to cause a camel to kneel for loading or un- loading.
ḥawwal		to cause a camel to rise.
hei hei	[the diphthong pronounced very short]	ditto.
le li	[the $h$ sounded as before]	to cause a camel to move aside.
	2. Horses.	
di' di'	[the i as in machine, but very short, and } stopped by a hem:a or glottal eatch]	to incite a horse on.
húss	[the $h$ very slightly pronounced, the $u$ and $s$ prolonged]	to stop a horse, or to quiet it if restive.
ta', ta'i		to call a colt or filly respec- tively.

cl cl	[tongue pressed between palate and roots of upper teeth, click formed by vibrating one side of tongue]	to incite a horse on.
	3. Donkeys.	
<u>ļ</u> ić	[the vowel prolonged and slightly nasalised]	to incite a don- key on.
tch tch	[click formed by vibrating tongue against root of upper teeth, drawing it away with a sucking motion]	ditto.
ḥa	[forcible intake of breath along the sides of the tongue, the tip of which is pressed against the roots of the upper teeth (here represented by   ). The ka pronounced loud and short]	ditto.
hîsh	[the vowel prolonged and intoned on a gradually flattening note; the sh very short]	to stop a donkey.
krsh	[the r strongly trilled and vocalised]	to quiet a restive donkey-colt.
	4. Cows.	
ħôh		keeping cows to- gether when driving them.
<u>ķ</u> ó	[the $\hat{\sigma}$ prolonged and $vibrato$ , with rapid interruptions of breath] $\left\{ \right.$	to encourage cows when ploughing.
marķ		in milking, to induce an increased supply.
	5. Sheep.	
τô	[the $\hat{\sigma}$ prolonged and $vibrato$ ]	follow.
shou	[the $sh$ prolonged, the $o$ sound just suggested]	driving sheep.

'a 'a	[the vowel pronounced short and rather nasalised] }	
<i>a</i>	[the a prolonged and vibrato]	ditto.
	6. Goats.	
$\bar{P} P P \cdots$	[violent and abrupt emission of breath, causing vibration of lips]	driving goats.
ha hu		calling a goat.
'ei	[pronounced very short and slightly \ nasalised] \	to cause a flock of goats to stop.
	7. Dogs.	
kish	[the sh prolonged and vibrato, with rapid interruptions of breath]	calling dogs.
les-les-les	[rapidly pronounced many times]	calling small dogs.
wisht	[rapidly pronounced]	driving away dogs.
	8. Poultry, &c.	
ti'a ti'a hit bît bît		calling chickens.
cl el	[tongue curved back and pressed against palate, tip of tongue held fast, click formed by vibrating both sides of tongue]	calling poultry, but especially pigeons.
cl cl	[tongue pressed between palate and root of teeth; mouth slightly drawn to one side, click formed by vibrating the tongue on the same side.  This click differs from that used for horses in being more rapid and on a higher note]	attracting partridges when shooting.

## BROWNE'S TRAVELS IN PALESTINE, 1797.

By R. A. Stewart Macalister, M.A., F.S.A.

WILLIAM GEORGE BROWNE spent the years 1792 to 1798 in travels in Egypt and Darfûr, in which latter country he was a pioneer explorer. In the early part of 1797 he made a rapid progress through Palestine, on his way riâ Anatolia to Constantinople, and, though Palestine was evidently a country of secondary interest to him, he made some shrewd observations and recorded some notes that are of considerable value. His adventures are chronicled in a quarto, published in London in 1799, entitled, Travels in Africa, Egypt and Syria, from the year 1792 to 1798. The author reveals himself in his writing as a prosaic and rather cynical man of the world, without a trace of the sentimental feelings that find expression in the majority of books of Palestine travel.

He embarked at Damietta 19th January, 1797, on a little merchant vessel commanded by an Arab. A storm compelled them to lighten the ship by jettison of some of the cargo. After a dangerous voyage of five days he reached Jaffa; apparently the navigator crept along the coast from Gaza, where land was first sighted. Browne thus describes Jaffa:—

It "presents an object rather extraordinary in the Levant, a "good wharf. The situation of the town is so unequal that the streets are paved in steps. The air, formerly deemed insalubrious, "has, by the draining of some adjacent marshes, been rendered perfectly healthy; but, on the other hand, the extensive groves of orange and lemon trees which adorned the vicinity have been destroyed in the sieges undertaken by Ali Bey and his successor, "Abu Dhahab, the latter of which was particularly destructive; the Mamelûks having used these trees for firing. The government is now mild, and the population, gradually increasing, may be estimated at six or seven thousand souls. It is walled, and has two principal gates and a smaller one; the latter and one of the

"former yet remain; the other is shut up. Yaffé (sic) is commanded by an eminence on the north, within musket shot, where Ali Bey pitched his camp. Though there be a small river in the proximity, water is searce, being carried by the women; one of the governors engaged to remedy the inconvenience, but was strangled by order of Jezzâr. Pasha of Damascus, before he could accomplish his purpose. . . . There are three small convents of Christians, Armenians, Greek, and Roman Catholic, and a few Jews. When the French, about 1790, were banished by Jezzâr Pasha from his government [at Acca; see post] several retired to Jaffé (sic), where their consul died the winter before I arrived. It shall be only further remarked that the houses in Jaffé are neatly built with stone, and that considerable quantities of coral are found in the adjacent sea."

Having obtained permission from the agent of the convent at Jaffa to travel to Jerusalem, as a prevention against Arab disturbance, Browne engaged mules for himself and his servant, and set out. He broke the journey for the night at the Franciscan Convent at "Rama" (Ramleh). This building he describes as "commodious and kept in excellent repair." On the second day of his journey he made an early start, and reached Jerusalem about sunset; his servant, having loitered behind, was seized by some Arabs, thrown from his mule, and robbed.

In nothing does "personal equation" show itself so conspicuously as in an account of the first view of Jerusalem. It happened accidentally that I read Browne's book on the same day that I perused an account of a journey to Palestine made in 1850 by the Rev. James Laird Patterson, a Pusevite deacon who at Jerusalem joined the Church of Rome. Thus he records his impressions: "Tuesday, March the 26th, being Tuesday in Holy Week, I (most " unworthily) had the privilege, never sufficiently to be esteemed. of seeing the Holy City. . . . When we reached the brow of [a hill] we were told we should see Jerusalem; but on turning "the angle of a wall, we found yet another crest intervening. "Strung up as we were to the utmost pitch of expectation, this "respite was only the source of its renewal to a painful degree. "At length the moment arrived; we stumbled over the last few " paces of the hill's crest, and the long line of the battlements of "Jerusalem emerged from the valley beneath our eyes. A few " paces forward, to assure us of the truth, and then we fell to the

"ground; . . . . When we spoke again, one said, 'Praise be to "God!' the other, 'I fear to go on!' and so we walked on in "silence gazing . . . . with eyes dimmed with tears of joy, on the "walls and towers of the holiest place on earth."

Browne felt none of these feelings. He was frankly disappointed with Jerusalem, the first aspect of which, he says, "did not gratify "my expectation." Snow was falling when he arrived, which "perhaps made the prospect not so interesting as it might have "proved at a more favourable season." He describes the walls as being built "of a reddish stone"—probably an effect of the setting sun under whose beams he saw them. Of Jerusalem itself he says little, it being "unnecessary to dwell on the description of a city "trivial (sic) in innumerable books of travel." It is interesting to note that already in 1797 the three points which struck an observer of the life of the city were the swarms of mendicants, the power of the religious orders, and the vigour of the trade in relies, crucifixes and the like. By contrast he notes the dilapidated condition of the Holy Sepulchre Church, which "is so much neglected that the snow "fell into the middle; the beams, said to be cedar, are falling, and "the whole roof is in a ruinous state." This is an interesting observation, as it shows us the condition of the structure shortly before the great fire of 1808.

Of the Mount of Olives he merely remarks that it commands the best view of the city, and of the Mosque (which of course he could not enter) he says no more than that "according to the "tradition of the Mohammedans it containt the body of Solomon." The "Tombs of the Kings, so denominated" [Browne is nothing if not critical] made the greatest impression on him of all the sights of Jerusalem. The sarcophagi were then still in situ, and he describes them as having "several ornaments of foliage and flowers. Each "apartment," he continues, "is secured with a massive panneled "door of stone. Great ravages have been made here in search of "treasure."

The snow seems to have been unusually heavy during his visit. It lay "very deep" for twelve or thirteen days.

At Bethlehem "the olive trees are daily decreasing in number, "as they are sacrificed to the personal enmities of the inhabitants, who meanly seek revenge by sawing down in the night those that belong to their adversaries. As the tree is of slow growth, it is "seldom replaced. Such is the charity of Christians in the cradle

"of Christianity." Besides this sarcasm, Browne has nothing of moment to say regarding Bethlehem, the Sealed Fountain, Solomon's Pools, and the Garden of Solomon, all of which he visited. At St. John ('Ain Karim) the Mahommedaus then formed the greater part of the population.

Leaving Jerusalem 2nd March, 1797 (the beginning of Ramadan), he rode to Birch, and the next day to Nâblus. Of this town he says, "The site is remarkable and picturesque, being between two "hills, upon one of which is the eastle. The adjacent country in "general is fertile in vines and mulberry trees, though rather "mountainous." It "has several mosques, and carries on a con"siderable traffic with Damaseus and the coast; there is also a
"cotton manufacture. Jews abound of the Samaritan heresy, but
"the inhabitants are very hostile to Christians."

From Nâblus his route lay by way of Sebasteh to Jenin and Nazareth. The fertility of the land, and by contrast the thinness of the population, impressed him during the first part of the journey. On the way he passed a small fortress "which repulsed Jezzâr "Pasha": this he describes as displaying seven or eight small round towers and having two gates. Evidently this is the castle of Sanûr, afterwards completely destroyed by Ibrahîm Pasha; I know not if any other description survives besides Browne's hasty note. Sebusteh he describes as "a miscrable descred village," but Jenin, which he calls Ginæa, is "a decent town." Nazareth is "a pleasant "village, seated on an easy slope, with a respectable convent; most "of the inhabitants are Christians." During his stay in Nazareth the Samaritans made a raid and carried off some cattle; the Nazarenes retaliated, seizing a spoil of seventeen cattle.

From Nazareth he made his way to Acre, passing on the way a village, where he "observed a sarcophage, now used for watering "cattle, and some scattered fragments of columns."

Browne's descriptions and observations of Acre are of special interest. The events attending the rule of Jezzâr Pasha were still fresh, and no apology is needed for transcribing his words at length:—

"Acré (sic) is fortified with a wall of very moderate strength, having only one gate. It is a pretty large town, but many of the houses are empty; yet the population may be estimated between fifteen and twenty thousand. There remains part of a double fosse, which extended round the town, but is daily dilapidated

"for modern erections. There is no castle or other relique of antiquity.

"The whole force of the city has been changed, being enlarged and adorned with the improvements of the celebrated Achmet Pasha, who has built an elegant mosque and baths, two markets, a palace, and reservoirs for water. There are three khans or places for receiving goods, answering the purpose at once of a warehouse and inn. There are also five or six mosques, a small establishment of the Franciscans, and a Greek and Armenian church. In one of the khans the Europeans lodge.

"A mean tomb has been erected by the Pasha to the memory of the celebrated Shech Daher, close to the sea, and at a little distance from the northern extremity of the wall."

After a remark on the situation and trade of "Acré"—its imports (by Europeans) of broadcloth, lead, tin, etc., and its export of cotton—he proceeds:—

"The long reign of Achmet Pasha el-Jezzâr (the butcher), accom"panied with immense influence and great wealth, might naturally
"lead to conceive that, blending his interests with those of his
"subjects, he would have exalted his authority in promoting their
happiness. On the contrary, the large plain near Acré is left
almost a marsh, and marks of idle magnificence have been
substituted for the useful cares of agriculture. A striking contrast
arises between his conduct and that of the Shech Daher, his
predecessor, who raised Acré from a village to a large town, and
doubled the population of the district.

"Jezzâr was the first governor in the empire who laid a tax on articles of consumption, as wine, grain, and the like. Even meat and fish are materials of import. He has erected granaries, a laudable design, but deficient in the execution, for the grain being ill preserved, and the oldest served out first, it is not only disagree—able as food, but unprolific when distributed for seed to the peasants. These imports form the peculiar revenue of the Pasha; the other resources arising as usual from the tax on land, which amounts to about a twentieth of the rent, the capitation rent on Christians, and the customs, which last in this Government are arbitrary, and neither regulated by the rules of the Porte, nor the capitulations entered into by Europeans. Nevertheless, the chief source of the riches of Jezzâr is the Pashalik of Damascus, which, by means of the usual largesses at the Porte, he contrived to add to his former

"government, a precedent very unusual in the Ottoman Empire. "His military force was once computed at twelve thousand; but at "the time of my visiting Acré, did not exceed four or five "thousand.

"Till the year 1791 the French had factories at Acré, Seidé, "and Beirût. At that period they were all expelled from the "territory of Jezzâr by a sudden mandate, which allowed them only three days to abandon their respective habitations, under pain of death.

"Passing over the common, but just rule of supposing, that in a "quarrel of this magnitude neither party was perfectly free from "error, it may be fit to inquire what motives induced this igno- minious expulsion, when a simple dismission, to be signified by "various other means, would have answered the same purpose.

"To this it can only be answered that the character of Jezzâr is "impetuous, and even capricious, on all occasions. Sometimes a "warm friend, and then suddenly a bitter enemy, equally, to all "appearances, without any adequate reason. As to the conduct of "the French, themselves and the other nations in the Levant accord " so ill, that I have never obtained a very accurate statement of it. "It seems to have originated in the behaviour of a drogueman of "the nation, who having in some way offended the Pasha, was by "his order summarily strangled or hanged. The French remon-" strated, and threatened him with an application to the Porte, "which he did not greatly fear, and he punished as he termed it, their " insolence (in asserting their undoubted right according to the capitu-"lations between them and the Porte) in this concise manner. " Many complaints were made, subsequent to this period, by the "Ministers of the Republic at the Porte, but to no purpose; that "court in fact was otherwise engaged, and it may be doubted " whether it could have punished the Pasha. The events that " followed suspended the prosecution of those claims which, as the " merchants thus suddenly banished had lost much, it appeared " they had a right to prefer; but at length Aubert du Bayet sent a " young officer of the name of Bailli to the Pasha to demand redress " in a tone perhaps rather too high.

"This gentleman on arriving at Acré, April, 1797, wrote a letter in French to the Pasha, which he had the bizarre idea of finding some Levantine drogueman to translate, *verbatim*, in the presence of that personage. The terms, it seems, in which this letter was

"conceived were so bold, that none could be found to present it, and the Pasha, under one pretence or other, refused to see the agent. On this, Bailli retired to Yaffé. The answer Jezzâr sent to the claim of the Republic was, that private merchants were at liberty to settle under his government on the footing of any other nation, but that he would acknowledge no consul, nor consent to offer them any indemnification for the losses of the late factory.

"Jezzâr had early conceived an enmity against that nation, "which was probably increased by those who rivalled them in "commerce."

Leaving Acre, Browne proceeded along the coast (passing on the way several parties of the Pasha's troops, both infantry and eavalry, "which seemed in excellent order") to Tyre, of which he has nothing to say that might not occur to any casual traveller evidently the town and its surroundings have little changed since Browne's visit. He then advanced to Sidon, which he calls Seidé. At Sidon he notices the castle of Fakhr-ed-Dîn [Druse prince, 1595-1634]; the port that was formerly here but filled by Fakhr-ed-Dîn to prevent Turkish ships from entering; the castle of St. Louis; a fragment of the city walls with one gate facing north-east; and the magnificent palace of Fakhr-ed-Dîn, built in the Italian manner, but "now ruinous." He also records a violent earthquake which occurred here in 1785, eausing much loss of life, and succeeded by a plague that almost depopulated the place. He further mentions "a "large tessellated pavement of variegated marbles, representing a "horse, festoons, etc., and in some places tolerably perfect for ten feet " in length [which] remains, close to the sea, on the northern extremity " of the city—a proof of marine encroachment. Many ancient " granite columns are worked into the walls, and some stand as ports "on the bridge leading to the fort. Near the gate of the city is a "small square building which contains the tombs of such of the "Emirs of the Druses as died when Seidé was in their possession."

At the time Sidon was surrounded by mulberry trees, silk being its chief commodity; now oranges have to a large extent taken their place.

From Sidon he proceeded to Kefrawân, where "the Christians "are so much more indulged than in other places, that they can here "enjoy their favourite amusement of deafening each other with bells." Here he has a note on Palestinian wine of the period as follows:—

"As Kefrawân and Mount Libanus produce the best wines of "Syria, it may not be improper to offer a few remarks on that topic. "The white wine made at Jerusalem has a sulphurous taste, and is "very strong; the red somewhat resembles Tent [Spanish Vino " Tinto], and is comparatively mild in its effects. The wines of "Syria are most of them prepared by boiling, immediately after "they are expressed from the grape, till they be considerably "reduced in quantity, when they are put into jars or large glass "bottles (damesjans) and preserved for use . . . The wines thus "managed, are sometimes thickened so much as to lose their "transparency, and acquire a sweetish taste. Numerous are the "kinds made in Syria; but the chief is the Vino d'Oro, or golden "wine of Mount Libanus. This is not boiled, but left to purify "itself by keeping; the quantity produced is small. It is, as the " name implies, of a bright golden colour, and is highly prized, even " on the spot."

At Kefrawân he met one Hassan Jumbelati, "who is one of the "most powerful families among the Druses, and at this time holds "an office under the Emir Bishîr. He is a great drinker, but appears "not unintelligent. He was very inquisitive as to the motives and "history of the French Revolution, and the present religious creed "of that nation; on hearing the detail of which, he however made "no interesting remarks." [!]

He then proceeded to Beirut, viâ Sidon. The approach to Beirut he much admired, though the groves planted by Fakhr-ed-Din had been neglected since his death. "A grove of pines, planted by his "orders, is now reduced to half its former bounds. No trace is found "of the statues which his residence in Italy had enabled him to "collect; nor of the gardens and apartments which he had formed "on the European taste."

Beirnt Browne describes as a small place, "not even walled till "the Russians bombarded it. Jezzâr, on getting possession, built "the walls to give it a more formidable appearance. There are "several towers, but the walls are thin and of no strength . . . . "there is, however, a commodious wharf."

Even in Browne's time the suburbs of the city were almost as large as the city itself. Most of the gardens outside the walls belonged to Christians, who might here hold land, though prohibited from doing so in Acre.

The high tower referred to by Maundrell north-east of the city

was destroyed by Jezzâr, fearing its occupation by an enemy; he afterwards rebuilt it, with smaller stones and less substantially, as a place d'armes for his own soldiers.

European vessels used to anchor off Ras Beirut in summer and in the shelter of the bay in winter. The chief manufactures were then, as now, silk and earthenware pottery.

Provisions in Beirut were dear; the fish from here was more highly esteemed than that from Sidon, as the sea has here a rocky, there a muddy, bottom. The palatable Lebanon red wine could not be transported from the mountain without a licence from the custom house, which increased its price. The cost, however, was only "forty piastres the cantar, or about four pounds sterling the "hundredweight."

The further progress of our traveller in Tripoli, Aleppo, Damascus, and North Syria, is less interesting than are his observations in Palestine proper; and on his journey towards Constantinople he soon leaves the region which is the special province of the Palestine Exploration Fund. In Damascus he makes some interesting economic notes. "So numerous are the fruit trees in the vicinity ".... that those which die and are cut down supply it with "abundant firewood. The houses in Damascus are remarkably "large and commodious, and well supplied with water; of many "the furniture is worth from one to five hundred purses, or from five thousand to twenty-five thousand pounds, in divans or large sophas, of the richest silk, embroidered with pearl, Persian carpets, "mirrors, etc.

"The melingana, a species of solanum [egg plant] is consumed here in such quantities as a common vegetable, that fifty hundred weight is estimated the daily supply of the city."

The following was the price of commodities in Damascus in his time:—

Meat, 36 paras the rotl ("or fourpence sterling the pound avoirdupois.")1

Bread, sufficient for a meal for four persons, 1 para. ("It is very white and good, and remarked to be best when the Janizary Aga, who has a censorial power over the bakers, is not in the city." [!])

 $<sup>^1</sup>$  36 paras would now be about a penny, more or less, and a rotl in Syria is between five and six pounds.

Grapes of the finest flavour, 3 or 4 paras the roțl.

Partridges, 5 paras the brace.

Tame fowls, 4 or 5 paras each.

Pigeons, 4 or 5 paras the pair.

In proceeding to Baalbee he notes the Syriac dialect of Malula. At Zahleh he met "a young man, a Druse, who informed me that "near Balbee, two or three years ago, in digging, the body of a "man was found interred in a kind of vault, having a piece of unstamped gold in his mouth; near him was a number of leaden "plates, marked with characters to them unknown; they were sold "and melted. In another place was discovered a small statue, very "perfect, but I could not learn where it had been deposited.

"Among the mountains [near Zahleh] the people have an air of health not observable in the cities. Magic is credited, and several are accused before the bishop for incantations, producing love or enmity. The pious antipathy between the Greeks and Catholics

" reigns here in all its fury."

Here we may leave our traveller, Some particulars of his life are given in the *Dictionary of National Biography*. He was born in 1768, and graduated at Oxford in 1789. He followed the legal profession, but his writings display considerable acquaintance with, and interest in, medical subjects. After publishing the work with which we have been concerned, he again travelled for two years in Turkey and the Levant. In 1812 he set out for Tartary through Asia Minor and Armenia, but was murdered near Tabriz, in Persia, in 1813.

## NOTES ON THE GEOGRAPHY OF PALESTINE.

By CALEB HAUSER, Esq., Crothersville, Ind., U.S.A.

I. Abel Cheramim.—Of the twenty cities which Jephthah smote (Jud. xi, 33), Abel Cheramim, the Plain of Vineyards (Eusebius:  $\kappa \dot{\omega} \mu \eta \ \dot{a} \mu \pi \epsilon \lambda o \phi \dot{o} \rho o s$ ), seems to have been the northernmost. According to Eusebius the distance between Abel Cheramim and Philadelphia, or Rabbath Ammon, was six miles. North of 'Ammân, though evidently not more than four miles distant from it, the P.E.F. Map shows the large and evidently important ruin of El Kureinein. In this name the Hebrew  $K \check{e} r \hat{a} m \tilde{u} m$  is probably to be recognised.

II. Mattanah.—This was on the route of Israel's journey east of the Dead Sea. The name occurs between Arnon (wâdy Enkeileh) and Nahaliel (wâdy Mâhala) Num. xxi, 13, 18, 19. About equidistant between wâdy Enkeileh and wâdy Mâhala is wâdy Butmah. This name possibly represents the Hebrew Mattanah. Note that we have in close succession the names of four streams: Zered, Arnon, Mattanah, Nahaliel. Eusebius ad vocem Maθθανέμ bears testimony for the identity of Mattanah and Wâdy Butmah. He locates this stream near the Arnon and at a distance of 12 miles from Mâdeba, Κείται ἐπὶ τοῦ ᾿Αρνῶνος ἀπὸ σημείων ιβ᾽ πρὸς ἀνατολὰς Μηĉαβῶν. From the words of Mesha: "And it is I who have built Beth Diblathain and Baal Meon, and I have raised there the . . . the land" (Moabite Stone found at Dhibân), we may infer that Beth Diblathaim was in the vicinity of Baal Meon.

III. Almon Diblathaim (Beth Diblathaim).—According to Numbers xxi, Arnon (Beer), Mattanah, Nahaliel, Bamoth (in the valley), and Pisgah represent important stages in the journey of the Israelites. According to Numbers xxxiii, 45–7 there were on this route three stations: Dibon Gad, Almon Diblathaim, and the mountains of Abarim. Dibon Gad was between Arnon and Mattanah, the mountains of Abarim were between Bamoth in the valley and Pisgah, Almon Diblathaim must have been somewhere between Mattanah and Bamoth. Facing the line of march from Dibon Gad northwards along the ancient road to Mâdeba, we find that the

Israelites, in order to strike Bamoth, must have passed up through the small wâdies between Beth-Baal-Meon and Mâdeba. Here, about one-and-a-half miles from Mâdeba, and between the Nahaliel and Bamoth, we find the ruin et-Teim. How the first part of the name Diblathaim was lost I shall not venture to conjecture. For confirmation of this identification see the next note. Compare also Jer. xlviii, 22.

IV. Jahzah (Jahaz, etc.).—Eusebius places Jahzah, Ἰεσσα, between Mâdeba and Δηβοῦς (Reland: an legundum Ἐσβοῦς), which seems to be Diblathaim or perhaps Dibon. Jerome says: inter Medebam et Diblatei. Going from Mâdeba to et-Teim you have towards the right, at a distance of about two miles, Rujm el-Jâzel. Here Shihon of Hesbon would be apt to encounter the Israelite hosts, marching from Almon Diblathaim to Bamoth. (Num. xxi, 23; Deut. ii, 33; Jud. xi, 20. Compare Joshua xiii, 18; xxi, 36; 1 Chron. vi, 78; and also Jer. xlviii, 21.)

V. Atharim (Ha-Atharim).—The word הַאָּתְרִים, Num. xxi, 1, has frequently been taken for an unusual plural, formed from תורת, equivalent to התרים, "the spies." So, at all events, in the Targum, Samaritan, and other versions. The reading of the LXX, however, is 'Aθαρείν, a proper name. Taking האתרים as a proper name ("the places")—plural of אתר, we may, perhaps, identify Atharim with the "open space" through which, just below the Nukh Ibn Mar, the Wady Abu Teraimeh passes on the route of the old Roman road from Gaza to the Arabah. The name Teraimeh evidently represents Atharim, and the latter seems quite appropriate to this "open space" to which Palmer descended by the Nukb Ibn Mâr. He says: "Descending by this, we found ourselves on a broad open space, which might almost be called a plain, from which several large valleys, the principal ones being called Wady Râmân and Wady Abu Teraimeh, flow down into the Arabah" (Desert of the Exodus, p. 419). The requirements of the narrative in Numbers are satisfied.

VI. Et Meshásh.—Colonel Conder (Tent-Work in Palestine) states: "Ten miles from Beersheba we came upon another ruined town, with two wells, also containing water. The place has lost its old name, and is now only known as El-Meshâsh, 'the waterpits.' It must have been a very important town," etc. That important town was Μάψης (written also Μάψις and Νάψις), enumerated in the old

eeclesiatical Notitia between Aeropolis and Elusa. The name certainly survives in Meshâsh, as the loss of the p is not unusual. This identification is also confirmed by the Geographical Tables of Ptolemy. While the longitude of Elusa is there given at  $65\frac{3}{6}^{\circ}$  and that of Malatha at  $65\frac{3}{4}^{\circ}$ , that of  $Ma\psi\dot{\eta}$  is  $65\frac{2}{3}^{\circ}$ ! The latitudes given are, though obviously unreliable, sufficiently near to correctness; Elusa  $30\frac{5}{6}^{\circ}$ , Malatha  $30\frac{1}{2}^{\circ}$ , Mapse  $30\frac{5}{6}^{\circ}$ .

VII. Juzer (Jaazer).-The P.E.F. Map shows Jazer at Beit Zerâh, near El Âl and Hesbân. Is not this an untenable identification? The Israelites once in possession of Heshbon, would Moses have sent to spy out (Num. xxi, 32) so near and strategically so unimportant a place as Beit Zerâh represents? The true Jazer was worthy of the Ammonites' defence against Judas Maccabeus, after, coming from the south, he had completely defeated them (1 Mace. v, 8). As a city of Gad, Jazer might have been situated near Heshbon, south of Wâdy Hesbân (Josh. xxi, 39); but according to 1 Chron. xxvi, 31 it was in the Land of Gilead. Jazer was perhaps the most important city of Gilead (Josh. xiii, 25), important because of the rich pastures of the surrounding region (Num. xxxii, 3), which was called the Land of Jazer (Num. xxxii, 1), and contained the "villages" of Jazer (Num. xxi, 32). Though after taking Jazer the Hebrews fought their next battle at Edrei in Bashan (Num. xxi, 32, 33), Jazer was evidently on the southern border of Gilead, and even regarded as a region distinct from Gilead proper (Num. xxxii, 1, 3); so also Joab, numbering the Israelites, came to his second encampment at Gilead, still a considerable distance southwest of Edrei, after removing from the vicinity of Jazer, from his first encampment at Aroer (2 Sam. xxvi, 5, 6) over against Rabbah (Rabbath Ammon, Josh. xii, 25). So Jazer must have been near Rabbath Ammon. Eusebius (ad vocem Ἰάσήρ) places it 10 Roman miles to the west of Philadelphia, i.e., Rabbath Ammon (or, ad voc. 'Aσώρ, 8 miles), and (at the head of a large stream which is received up into the Jordan) 15 Roman miles from Heshbon. Ptolemy also places Γάζωρος (the same as Ἰάζωρος, which, in Josephus, is the Ιαζήρ of 1 Mace. v, 8) one-fourth of a degree north of Heshbon. All these indications point to the important ruin Kh. Sâr, near Seetzen's Jazer; Sîr (Kh. es Sirah ?), Ain es-Sîr, at the head of Wâdy Sîr; Kh. Sâr is, presumably, therefore the site of ancient Jazer.1

<sup>&</sup>lt;sup>1</sup> [See, however, on this identification, Cheyne, Ency. Bib., col. 2341.]

VIII. Gemmaruris.—Ptolemy places  $\Gamma \epsilon \mu \mu a \rho o \hat{c} \rho rs$  at  $65\frac{5}{6}^{\circ}$  E. and  $31\frac{1}{6}^{\circ}$  N.; compare Mapses,  $65\frac{2}{3}^{\circ}$  E. and  $30\frac{5}{6}^{\circ}$  N. This enables us to locate Gemmaruris at Kh. Jeimar, almost due north of En Rimmon.

IX. Ina.—Ptolemy places Damascus at 69° E. and 33° N.,  $I\nu_a$  at  $68\frac{1}{2}$ ° E. and 33° N. Beit Ima, between Damascus and Bânias, seems to be the representative of Ina.

X. Gadora.—Ptolemy locates Gadora in Corlesyria, in such relation to Seythopolis and Pella, that we may identify it with the ruin Kufr ed-Durra. The longitudes and latitudes are: Seythopolis,  $67\frac{1}{3}^{\circ}$  and  $31\frac{1}{12}^{\circ}$ ; Pella,  $67\frac{2}{3}^{\circ}$  and  $31\frac{2}{3}^{\circ}$ ; Gardora ( $\Gamma d\hat{\epsilon} \omega \rho a$ ),  $67\frac{3}{4}^{\circ}$  and  $31\frac{1}{3}^{\circ}$ .

XI. Salton Bataneos.—This Salton, the Σάλτων Βατανέως of the Notitia Altera Ecclesiastica (Reland, p. 218) and the Saltum Votaneos (or Votanios) of the Latin Notitiae (Reland, pp. 224 and 227) received its name from the place represented by the ruins called Batâneh, situated between Es-Salt and the Jordan. This and the following identification have reciprocal support.

XII. Canothas.—The Canothas ( $Kavo\theta\acute{a}s$ ) of the Notitia Altera Ecclesiastica, written Canafados and Canastados (ft instead of f) in the Latin Notitie, enumerated just before Salton Bataneos, may easily be identified with Umm el Kenâfid near El 'Âl. Ptolemy, enumerating in roughly consecutive order from north to south, lets  $Kav\acute{a}\theta a$  follow after Philadelphia; but the latitudes and longitudes assigned to the two places are not correct relatively. Heshbon, however, is assigned to the same degree of longitude as  $Kav\acute{a}\theta a$ .

XIII. Zanatha.—A glance will reveal that the latitudes assigned by Ptolemy to places in Arabia Petræa are unreliable. The longitude, however, of Zanatha is that of Petra,  $66\frac{3}{4}$ ° E; Dhânah represents this Zanatha.

## NOTES ON PALESTINIAN ARCHÆOLOGY.

By Colonel C. R. CONDER, R.E., LL.D., &c.

## I .- THE TOMB OF APOLLOPHANES.

I VENTURE to suggest that a text of such length would not have been carved in a tomb, after the death of the unhappy lady, merely to record an illicit affection for a lover; and also that the meaning has been obscured by the mistake in carving the last word but one. The translation may perhaps be:—

- "There is nothing I would not suffer or do to please thee. I, who loved thee dearly, lie by another."
- "But, by Aphrodite, I am very glad of this—that thy cloak lies safe."
- "But I am gone far from thee, and I leave much room. Do what you think right."
- "Do not hew the walls to make a noise. Yet beyond the doors she lies with ghosts."

I understand neumasi to be mis-spelt for pneumasi.

Whatever the allusion to the cloak may mean, it seems that this lady was not buried beside her first husband, but probably in the tomb of the second, and that she may have married the latter to please the former. The last two lines Mr. Macalister regards as distinct from those that precede. To me they seem to be intended to satisfy the humble request that she might not be disturbed by any further burials in the tomb.

This perhaps suggests the custom of the Levirate, or marrying the next of kin to the dead. It may be objected that the tomb is not Jewish but pagan; but the Levirate custom is not peculiar to Jews, being very widely found in Asia, and even in Africa and Polynesia, among various races. It is possible that this also explains the allusion to the cloak, for (see Ruth iii, 9) spreading the cloak over the widow seems to have been the symbol of accepting the Levirate duty, just as loosing the shoe was the symbol of its rejection. The poor lady thus rejoices to think she had done her duty—probably bearing a child, to be reckoned as that of the first husband. To Jews and Greeks alike, it was of the greatest importance that a son should be born to look after the father's tomb.

"You must do what is right" was answered, by whoever carved the text or the last two lines, and she was thus left in peace. But the writer expresses his belief that her spirit is not in the tomb, but with other spirits beyond the doors of the sepulchre, or beyond the Gate of Death.

## II.—THE LACHISH TABLET.

In the First Volume of the Babylonian Expedition of the University of Pennsylvania, Part II, No. 147, Prof. H. V. Hilprocht gives an excellent copy of the original of the Lachish Tablet, now at Constantinople. He gives no translation, and does not mention any as having been made from his copy. Two whole words appear on one edge, and the ends of others on the other edge, and various strokes, not clearly visible on the cast, are shown. This—on account of the cuneiform writing—makes great difference in parts of the text, and a continuous and probable meaning can be easily obtained. The following appears to me to be the result:—

## Obverse.

- 1. (Amil) Rab-ba tsaba-tam
- 2. (ana) Rab-saku
- 3. a-na Sep-i-ca am-cu-ut
- 4. lu-u ti-i-di i-nu-ma
- 5. tu-ra-tu-na Dan-Adda
- 6. A Zi-im-ri-da
- 7. Bu-khi-ri uru û
- 8. Nas-can ku-mi
- 9. Dan-Adda a-na Zi-im-ri-da
- 10. Sa-ku uru-ya sipru mi
- 11. (t)is-par mi a-na ya-a-si
- 12. a-na ili-mi

- \_\_\_\_
- 1. Sani-e Abd û III sana-tim
- 2. û III ti-annu a-sup-par
- 3. Maru-ma mi A-na-cu
- 4. uś-śir-na eli Mat
- 5. sa Sarri û a-na ya-si
- 6. Beli-ni u-sa-par (a-me-tim?)
- 7. A a-di-mi u-ti-ru-u-nu
- 8. sa zikar enu-ca

- 1. Chieftain of host
- 2. To Chief head man
- 3. At thy feet I bow
- 4. Do not you know now
- 5. our decision? Dan Hadad
- 6. and Zimrida (are)
- 7. Chosen ones of the city, and
- 8. Is set up instead
- 9. Dan Hadad for Zimrida
- 10. Head man of my city. What message?
- 11. What sent you to me
- 12. (for information !)
- Reverse.
  - 1. The other is a slave, and in three years
  - 2. also thrice I have sent word.
  - 3. What fellow is this? I
  - 4. command for us about the land
  - 5. of the king, and to me
  - 6. our lord has sent orders.
  - 7. and when will they restore
  - 8. what thy master has decreed

<sup>1 [</sup>See below, Notes and Queries, p. 158.]

- 9. sa u-ra-ad uru-ca
- 10. ana Pa-a-kid û us-sir-su
- 11. а-па ра-пі-уа й
- 12. Rab-sa-ku AN-Sam-e-si
- 13. ana e-bal-su

- 9. That thy city must obey
- 10. as to the ruler? And he has ordered him
- 11. to my presence, and
- The chief head man of the Sun God
- 13. to convey to him.

Edge.

14. A-me-ti an-ni-ti

14. These orders.

The characters and language alike are similar to those of the Tell Amarna texts. It appears that the "Sun God" is the King of Egypt, as in other cases, and the writer perhaps was an Egyptian. But, as in all the other letters, the names show that the minor officials were native Canaanites. The style (compared with other letters) shows a superior addressing an inferior official. When a superior is addressed the writer says, "I bow seven times at thy feet," or "I am the dust of thy feet."

It appears that the city of Lachish was rebellious, and for three years had set up a head man called Dan-Hadad, instead of the Egyptian nominee Zimrida (whose name is also Canaanite, like the Sabean *Dhimriyadd*); but it was unfortunate for Zimrida to be thus reinstated, because we know, from his own letters and those of the King of Jerusalem, that he was attacked in Lachish, and finally killed by his own servants—that is to say, by the party in Lachish which had previously dispossessed him, according to the present text.

## III .- THE ARAMEAN ALPHABET.

Among various points of interest which arise from the publication of the texts discovered during the American explorations of Nippur, in the valuable work by Prof. H. V. Hilprecht, is the evidence afforded, by dated texts, of the history of the Aramean alphabet, whence the modern square Hebrew is derived.

The two great branches of the alphabet—the Western or Phoenician, and the Eastern or Aramean—had hardly begun to diverge by 700 B.C., but by 425 B.C. they were very distinct. To the first class belong the later Phoenician, the Alphabet of Israel, and the Samaritan; to the second the Hebrew, the Palmyrene, the Nabathean, and the North Arab scripts. In the Talmud (T. J. and T. B. Sanhedrin) the first is called the *Libonai* or Lebanon writing, and the latter the *Ashuri*, Assyrian or "square." The sacred books were written in the latter, while the former was the civil character west of the Euphrates. The *Ashuri* was said to

have been brought from Babylonia by Ezra, and the characters there used, in his time, were approximately similar to those whence square Hebrew has developed. It would seem that they were employed by merchants, and the decay of form was due partly to hurried writing, and partly to the use of paper and ink. Thus on monuments, and seals, and coins, the old western alphabet may have continued in use long after the Ashuri or Aramean was the character for scrolls.

The tablets of the reigns of Artaxerxes I and Darius II, found at Nippur, are written in cuneiform, by scribes who were evidently hurried, and whose characters are often incorrect or slovenly. The documents refer to various agreements, and receipts, connected with the business of the sons of Murashu. In several cases dockets in the Aramean language and character have been written with ink on the tablet, and in two instances (Nos. 66a and 71) this docket was traced on the clay, and remains fairly distinct, though scrawled hurriedly, with letters often badly defined. The attached alphabets will serve to show the changes that occurred, between 680 and 425 B.C., in this character: the various forms of one letter in its recurrences; and the close connection between this Aramean script and the later square Hebrew and Palmyrene alphabets. The number of our dated inscriptions is still so small that the new evidence is of value.

Similar Aramean dockets were known before the Nippur excavations on yet earlier cuneiform tablets. In the British Museum the contract of a certain Menahem, for the sale of three slaves, is docketed בלמבות Another, concerning the loan of 10 shekels at 25 per cent. to Mannuki Arbela, bears on the edge the docket במכמות A third dates from 680 B.c., and refers to the sale of a slave Hoshea and his wives. The docket on the edge is read—

## מת(ן) אנש..ם זי אדם דנת הושע

"The gift of the man Hoshea, two wives, seven persons,"

including the two daughters, and apparently two sons mentioned in the cuneiform text.

A fourth contract table, about 643 B.C., concerns the sale of a slave named Arbail Sarrat. The docket reads דנת ארבלסר. A fifth is said to be as late as 364 B.C., and concerns the sale of the slave Ishtar-durkali. The docket contains this name, דנת אשתרדרקל. The practice was therefore older than the period of the Persian kings.

The two clear cases found at Nippur contain very roughly-written dockets, on the same principle. They have not as yet been read with certainty. The first (No. 66a) is a contract of the 39th year of

ARA 700 B.C.	AMEAN. 425 B.C.	HEBREW. 100 A.D.	PALMYRENE. 200 A.D.
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Artaxerxes I (425-4 B.c.), being a receipt by the slave of a certain *Eriba* for the produce of half a field. It appears to me to read as follows:—

# 

שטר סאת ארקא זי אריבי בר ארדבלת (ש)נת לט ארתחשסתא

"Account of a seah of land, of Aribi son of Aradbelit. Year 39 Artaxerxes."

It may be remarked that an Aribi or Eriba, mentioned in another tablet of the same period, is called (No. 53) Son of Ardi-NINIB, and among the renderings of this god's name are the Assyrian sounds Belu and Belit, so that he may be the same person. In the cuneiform text the name of Eriba's father is not given.

The other text (No. 71) is also very roughly written, especially towards the end. The cuneiform tablet refers to the 38th and 39th years (of Artaxerxes I), and to the lease of a field by Nabu-Ittanu to Bel-nadin-sumu. The docket appears to me to read—

イカフタナンツ 466

שטר סאת ארקא זי נבואתן (ב)לנדנשם

"Account of a seah of land of Neboithan. Bel Nadansum."

It is remarkable that the Babylonians adhered to the cumbrous cuneiform when the alphabet was available; but the latter was a foreign invention, and apparently not allowed for use in legal documents even in the Greek and Roman ages.

# METEOROLOGICAL OBSERVATIONS TAKEN IN JERUSALEM. By Adolph Datzi, Jerusalem.

THE following tables show the result of meteorological observations taken in Jerusalem in 1904 and 1905, about 2,500 feet above the level of the Mediterranean Sea. They were made at 9 A.M., with the barometer corrected for index error, not for temperature or elevation: --

					Thermometers.	meters.		Rain.	n.				Winds.	ıds.			
Monthly Means.		Barome-	Att.														
1905,		ter.	Ther.	Max.	Min.	Dry Bulb.	Wet Bulb.	Inches.	Days.	ż	N.E	स्र	S.E.	· S	S.W.	;;	Х.Ш.
January	:	27 -530	17	9.84	36.7	14.5	1.14	021.5	=	01	t-	9	0	\$1	55	10	4
February	:	27 -541	74.	50 -3	37.1	0: -T	43.1	089.1	12	0	12	¢1	~	-	10	10	9
March	:	54 - 458	5.1	58.1	7	52 .5	6. 11	012.9	13	0	wgs	-	al.	-	sc.	9	10
April	:	27 -499	19	71.4	52.1	8. 99	2.99	1.390	4	0	03	-h	25	0	90	6	÷
May	:	27 -529	0,0	2.08	58.2	8.02	63	:	:	0	00	¢3	~Jr	0	-	5.5	13
June	:	27 -512	67	8. [8	5.69	9.92	62.3	:	:	0	0	0	೯೦	0	63	¢3	89
July	:	27 - 446	10	85.3	69 -5	81.7	1.99	:	;	23	0	0	0	0	0	೯೦	36
August	:	27 - 450	91	8.98	8.99	82.5	2.9	:		0	9	0	0	0	0	ಣ	01 01
September	:	57.49×	orpe L no	6. 88	6.1 -7	 	2.99	:	:	-	wyti	_	ಣ	0	_	2	Ιΰ
October	;	612.12	1.1	9.08	6.5.69	8-61	62.3	0.850	ĸœ	ಣ	6	ಣ	C.3	0	63	5	10
November	:	27 -629	64	12.4	9. 99	8. 89	9. 99	:	:	01	-71	9	10	-	-	0	9
December	:	27 -536	51	52 · 4	40.7	48.4	14.1	13.720	13	01	9	÷	0.1	0	9	2	4
Year	:	27 -514	63	11.4	53.4	9.99	9.99	34.220	58	12	55	530	35	20	36	90	143

" i.e., the thermometer attached to the barometer itself.

Monthly Mos	-	one	*		Thermo	Thermometers.		Rain.	n.				Winds.	ds.			
1904.		ter.	Ther.	Max.	Min.	Dry Bulb.	Wet Bulb.	Inches.	Days.	z	N.E.	E.	S.E.	si.	S.W.	W.	N.W.
January	27	27 -524	49	50.3	40.1	46.3	8:84	8 .850	91	0	1-	- E	0.0	0	9	***	9
February	27	27 .544	50	57.5	44.2	52.7	48.6	1 -315	2	21	ū	01	1	0	21	10	12
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April	27	674-72	59	9.89	51.5	62.0	2.99	0.980	4	0	92	5	\$5	0	3.5	30	œ
May	27	27 -504	99	2.92	58.3	70.3	8.09	:	:	0	ಣ	21	01	0	4	9	1.1
June	27	27 - 502	73	81 -9	61 •5	77.1	2.99	:	:	Ç1	21		0	0	-	9	15
July	27	27 -418	135	6.1.8	9.49	8.62	8.99	:	:	ಣ	0	0	0	0	10	11	13
August	27	621-426	92	8.98	2. 99	81 -4	65.1	:	:	ಿ	1	-	1	0	22	9	16
September	-12	27 -544	20	01 02 08	61.5	6. 1.2	62.0	:	:	4	01	С	0	0	-	೯೦	20
October	97	27 -588	21	8.08	61.7	9.92	2· 09	0.350	20	4	P?	20	īĢ	1	1	9	6
November	27	27 -579	19	9. 89	50 -9	2.69	54.7	3 -300	7	0	ଟଡ	ಿವ	90	6.5	ဘ	7	9
December	27	27 -554	55	52.4	41.5	9.67	14.4	14.020	11	1	7	೯೦	9	ಬ	ç	t-	6.5
Year	27	27 -512	63	20.3	53.9	65.5	9.99	34 - 485	59	61	80	53	255	1	94	69	133

\* i.e., the thermometer attached to the barometer itself.

## NOTICES OF FOREIGN PUBLICATIONS.

Revue Biblique, Jan., 1906. Prof. Clermont-Ganneau contributes a note on a Samaritan inscription from Gaza. The evidence goes to show that there seems to have been a Samaritan synagogue at Gaza, the foundation of which probably dates from the time of Ptolemy I, Soter (322-285 B.C.). From Eusebius (de Mart. Palaest., viii, 9) it appears that the colony was still flourishing in the sixteenth century A.D. Other Samaritan colonies were settled in the neighbouring villages, at Jabneh and Ashkelon, and in the latter town, Benjamin of Tudela, in his visit in the twelfth century, found 300 families. The Samaritan inscription referred to comprises Exod. xx, verses 2, 3, and half of verse 4, and is preceded by the words "in the name of Yahweh."

An account is also given of fragmentary Greek inscriptions, one of which appears to belong to an imperial rescript from Beersheba, which was fully discussed by Prof. Ganneau in the Q.S., 1902, pp. 268 sqq.

M. Vincent begins a series of studies on the old Canaanite cities on the basis of the excavations by the Palestine Exploration Fund and other societies. It is the first attempt to combine the results of archæological research in order to estimate its bearings upon ancient conditions and life from the earliest times down to the fifth century B.C. After a brief introductory section, M. Vincent briefly sketches the course of recent excavation with typical views of the mounds which have been selected. The stratification and chronology of the ruins are next discussed, and the importance of pottery as a criterion of date is forcibly and rightly emphasised. It is shown how the value of evidence is largely cumulative, and that the archæologist must conduct his investigations upon a number of independent lines (architecture, funereal deposits, &c.), all of which have developed in an orderly manner, and by independently supporting one another, give security to his results. Accordingly, conclusions based entirely upon ceramic remains may be found to be endorsed by the evidence drawn from a totally distinct field, and the provisional dates which

are determined by his knowledge of their development may be absolutely fixed by the happy discovery of epigraphical evidence, the most notable examples of which are the Assyrian inscriptions of the Tell-el-Amarna class (fifteenth century) found at Lachish and Taanach, and the later business documents unearthed at Gezer. By laborious comparative study, points of contact with outside civilisations can be recovered (e.g., with the Ægean culture), and there again the independent results, as regards dates, are found to agree with the equally independent results of the Palestinian excavator. M. Vincent has observed the difficulty of fixing upon a satisfactory terminology for the different Palestinian epochs, and instead of early pre-Israelite, later pre-Israelite, Jewish and Seleucid, he suggests the terms, Indigenous, Canaauite, Israelite, and Jewish-Hellenic. After an interesting discussion of the limits to be assigned to these epochs, he devotes a section to the situation of the Canaanite cities, an extremely important study, which is treated in a thoroughly scholarly and scientific manner.

P. Jaussen, writing on the sacrificial rites of the nomads to the east of the Dead Sea, collects a number of interesting customs, many of which are of very great value for the study of comparative religion. For example, when a new tent is set up for a fresh family, custom demands that a sheep shall be sacrificed to obtain the favour of the "possessor of/the place." The tent-pole is anointed with the blood, and thenceforth the *genius loci* is believed to be appeared. Under one form or another this sacrifice, essentially allied to the widespread foundation-sacrifice, is found to prevail, and is illustrated by several slightly differing customs varying according to the character of the tribe. Other sacrificial rites are practised in connection with marriage negotiations. An interesting example is afforded by the "sacrifice of repudiation." On the one hand, the custom prevails in Egypt (and elsewhere) that the repudiated wife can only be taken again by her husband after she has been married to another husband and formally divorced by him. The nomadic Arabs, on the other hand, allow the husband to reclaim his divorced wife without this necessity, but demand the sacrifice of a victim which renders the re-marriage perfectly valid. Among the various other customs which P. Jaussen describes in his valuable paper, we can only mention four more: The sacrifice after a successful razzia in honour of an ancestor or illustrious tribal warrior: the sacrifice after a dream; the ritual to be observed when a stranger is received

as a member of a tribe; and the "sacrifice of satisfaction," which consists in carrying out a vow or promise made by a tribal ancestor or some noted forefather.

Jerusalem: Jan., 1906. P. J. Germer-Durand writes on the prætorium of Pilate and the house of Caiaphas after St. Cyril of Jerusalem, and contests the traditional view which places them near the Cænaculum. The evidence upon which he relies is the thirteenth and sixteenth Catechism, and with this accords the testimony of the Bordeaux Pilgrim.

An interesting excerpt is given in the same number from the *Energie Française* on the relative positions of France and Germany in Palestine. The rapid progress of the latter is noted, and its political significance does not pass without comment.

Recneil d'Archéologie Orientale, Tome vii, Livraisons 8-12. In section 11 Prof. Clermont-Ganneau discusses some of the problematical names in the account of the pilgrimage of Benjamin of Tudela (see Q.S., 1894, pp. 288 sqq.). In connection with this, reference may be made to the text and translation which M. Marcus Adler is contributing to the Jewish Quarterly Review. Equally suggestive is the study on the pilgrimage of Louis de Rochechouart (1461), which is discussed in section 12; the importance of mediaval evidence for the geography and antiquities of the East merits the fullest recognition. In an inscription from 'Amman (Rabbath-Ammon) recently published by the Fathers Savignac and Abel, allusion is made to the Herucleion, a festival of Heracles which is to be associated with the circumstance that this name is connected with Philadelphia (the classical name of 'Amman') on its coins. In this Heracles, as Prof. Ganneau observes (section 14), we are doubtless to recognise the equivalent of the biblical Milcom, and, proceeding on these lines, he points out that there is numismatic evidence for the existence of a goddess Asteria, also at 'Ammân. He is tempted to suggest, therefore, that Asteria is a Greek adaptation of Astarte, the female companion of Milcom, and recalls the tradition given by Stephen of Byzantium that Rabbath Ammon was once called Astarte. In addition to this, it is at least curious that an Asteria should be known as the mother of Heracles; the goddesses, as he remarks, could be the mother, wife, or even the daughter of the male deity -a fluctuation which Robertson Smith has investigated and explained in the Kinship and Marriage. According to another lengend, Asteria is said

to have been changed into a quail (  $\~op\tau v \xi$ ), and the part played by this bird in the stories of Zeus, Latona, and Asteria has always been a problem; it is ingeniously conjectured that the stories have originated from a philological confusion with the Hebrew k\'or\'e, "the partridge," on the supposition that Heracles-Melkart ( אַרָּאָר ) was taken to be connected with ( ֶרַא ) : the ornithological knowledge of the ancients was not above reproach.

## NOTES AND QUERIES.

1. The Acra.—The new site for the Acra proposed by Sir Charles Watson will stimulate interest in Jerusalem excavations. Josephus, through his statements, at variance with the Bible and 1 Maccabees, has long perplexed topographers. But to try to collocate the Acra on any site once higher than the top of Moriah is to attempt a hopeless task, meet only for Sisyphus.

As objections to the new site are invited, let me tender some remarks. Six conclusions are given as the basis for the site. In No. 3 (Quarterly Statement, p. 52) it is implied that the stronghold of Zion was distinct from the City of David, while in 5 it is asserted that "the site of these fortresses (named in 4 as the stronghold of Zion, or the Acra of the period of the Maccabees) was between the Temple and the City of David." Similarly, in 6, "it (the site of Acra) was north of the City of David."

In the annexed references, however, the Bible states that David (2 Sam. v, 9) and the people (1 Chron. xi, 7) called the stronghold the City of David, while 1 Maccab. i, 33, adds that "Then builded they the City of David with a great wall... and made it a stronghold (Acra) for them."

If these statements do not tally with Josephus, then so much the worse for that arch-errormonger.

That the stronghold of Zion was the City of David and the Acra of Maccabees seems indisputable. If to save the face of Josephus the City of David be located on the new site (then, as supposed, higher than Moriah), how would this agree with 1 Kings viii, 1, "bring up the ark . . . . out of the City of David, which is Zion," into the Temple. We should expect to read bring down.

Rev. W. F. BIRCH.

2. Two Places called Acra.—I was much interested to read Sir Charles Watson's account in the last Quarterly Statement about Acra, although I differ from it. May I be permitted to add my views, in the hope that by every new theory we may come a step nearer the true site, until farther explorations are permitted to be earried on at Jerusalem?

From accounts given by Josephus it appears there were two Aeras in the lower city, one west of the Temple and north of the upper city, which was reduced by the Hasmonæans to a less elevation than it was before, that the Temple might be superior to it (Josephus, Wars, v, 4, 1).

The other was the fort, or Acra of the Jebusites which David took and called the City of David. Later it became the site of the palace of Helena, the mother of Monobazus, whose palace was in the midst of Acra, or fort (Josephus, Wurs, v, 6, 1, 3). The Prophet Gad told David to go up to the threshing-floor, and therefore the fort or Acra of the Jebusites, was lower than the threshing-floor or site of the Temple.

The Acra west of the Temple stood no doubt near or at the site where Sir Charles Warren and also the late Dr. C. Schick placed it; whilst the Acra south of the Temple was where the Rev. W. F. Birch also believed it to have been; and so we may get in time more reconciled to Josephus.

J. M. Tenz.

- 3. The Apollophanes Inscription. My contentions regarding the Apollophanes graffito (which I fear I did not express with sufficient clearness) were as follows:—
- (1) There are no "doors" between the place of the inscription and the place of the dead, so that the Ouplin of the inscription cannot refer to such.
- (2) It is not a formal funerary epitaph, but a graffito. It does not refer to any dead person at all, but to two living, man and woman, and it was ent by them in alternate lines.
- (3) Not the last two lines, but the last alone, is of different origin from the rest.

I am afraid I cannot follow Col. Conder's rendering of the Greek, as it presents the following difficulties to me:—

- (1) Où  $\kappa$  e  $\chi w$   $\tau'$  oor  $\pi a \partial w$   $\eta'$   $\tau e$   $\chi a \rho' \sigma w \mu a e$  is a negative sentence; "There is nothing I would not suffer or do to please thee" is a double negative, that is affirmative.
  - (2) Φιλοῦσα is present; "I who loved thee dearly" is past.
- (3)  $E\nu\dot{\epsilon}\chi\nu\rho\sigma\nu$  means] "security" in the special sense of a pledge, not in the general sense of safe.
- (4) Έγὰ μὲν ἀποτρέχω σοὶ ἐὲ καταλίπω εὐρυχωρίην means "I run away and leave thee room," not "I am gone from thee and leave room."
  - (5) Kpow means "I knock, tap, strike," not "I hew."
- (6)  $\Pi \nu \epsilon \hat{\nu} \mu a$  means primarily breath, then spirit, but not ghost, the natural word for which would be  $\phi \dot{a} \sigma \mu a$  or  $\sigma \kappa \dot{a}$ .

[There are some obvious mistakes in accentuation in the copy of the inscription on p. 56. Oi  $\kappa$   $\epsilon \chi \omega$  should be  $oi\kappa$   $\epsilon \chi \omega$ ,  $i\gamma$   $\tau \epsilon$  should be  $i\gamma$   $i\gamma$  in line 1;  $i\gamma \omega$  should be  $i\gamma \omega$ , and  $i\gamma$  should be  $i\gamma$   $i\gamma$  should be  $i\gamma$   $i\gamma$  should be  $i\gamma$   $i\gamma$  should of course be "dactyls."]

R. A. S. MACALISTER.

4. Carthage and Gezer.—In a recent description of "Carthage of the Phœnicians in the light of Modern Excavation," by Miss Mabel Moore, an interesting account is given of some of the discoveries made by the White Fathers upon this ancient site, which at once recall similar discoveries in Gezer. In the necropolis of St. Louis was found an amphora containing the skeleton of a child, the head occupying the base whilst the feet touched the orifice. The vase had evidently been broken in order to introduce the body, and the broken parts had subsequently been re-united (p. 82 sq.). In another grave, from the niche at the head of the skeleton were found a large vase resting upon an inverted cone, two small shortnecked jars, two small phials, and a patera of reddish earth (p. 87). One long funerary amphora contained the bones of an adult and of a child, whilst at the bottom of it were the calcined remains of another child, accompanied by a drinking vessel, a pot blackened by

the action of fire, and a silver ring (p. 103). The model of a duck found at Gezer (Q.S., 1904, p. 217) finds an analogy in a white earthen model of a dove with an arched handle reaching from the tail to the neck; the liquid was poured in at an opening on the tail, and emptied from the bird's beak (p. 111 and figure facing p. 60). A singular feature of the necroplis of Jebel Khani was the presence of square and circular cup marks which were found on the surface of the rock above the tombs (p. 122). Finally, an interesting terracotta mask was found which represented the face of a man wearing bronze rings in his ears and a leaden or silver ring in his nose, the latter is analogous to the Hebrew nézem, and was evidently an ornament not confined to the female sex alone (p. 142).

S. A. C.

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NEW YORK: Rev. Putman Cady, F.R.G.S., Amsterdam.

Rev. A. F. Schauffler, D.D., New York.

President G. E. Merrill, D.D., Hamilton.

Rev. J. Zimmermann, D.D., LL.D., Syracuse.

Rev. Dana W. Bigelow, Utica.

Daniel H. Ayers, Troy.

Ohio: Rev. E. Herbruck, Ph.D., Dayton. Prof. Wallace N. Stearns, Ph.D., Berea.

OREGON:

Pennsylvania: Rev. James Morrow, D.D., Philadelphia.

Prof. T. C. Billheimer, D.D., Gettysburg.

Prof. R. L. Stewart, D.D., Lincoln University.

RHODE ISLAND: Wm. Gammell, Esq., Providence. TENNESSEE: Prof. Collins Denny, D.D., Nashville. WEST VIRGINIA: Mrs. Arthur Lee, Elkins.

#### WALES.

ABERGELE: S. H. Harrison, Esq., F.R.G.S., Cartrefle.

ABERGAVENNY:

BANGOR: Professor T. Witton Davies, B.A., Ph.D., "Bryn Haul." GLYN NEATH, S.W.: Rev. J. L. Thomas, M.A., Pont Neath Vaughan.

LAMPETER:

LLANDUDNO: Rev. C. T. Astley, Bryn Celyn.

MOUNTAIN ASH, S.W.: Rev. Owen Jones, Maes-Caradoc.

SWANSEA: Joseph Hall, Esq., Grosvenor House.

# AUTHORISED LECTURERS FOR THE SOCIETY.

#### AMERICA.

- Professor Theodore F. Wright, Ph.D., 42, Quincy Street, Cambridge, Mass., Honorary General Secretary of the Palestine Exploration Fund for the United States. His subjects are as follows:—
  - (1) The Buried City of Jerusalem.
  - (2) Discoveries in Palestine.

#### ENGLAND.

- The Rev. Thomas Harrison, F.R.G.S., St. John's Vicarage, Dewsbury Moor, Yorks. His subjects are as follows:—
  - (1) Research and Discovery in the Holy Land.
  - (2) Bible Scenes in the Light of Modern Science.
  - (3) The Survey of Eastern Palestine.
  - (4) In the Track of the Israelites from Egypt to Canaan.
  - (5) The Jordan Valley, the Dead Sea, and the Cities of the Plain.
  - (6) The Recovery of Jerusalem.
  - (7) The Recovery of Lachish and the Hebrew Conquest of Palestine.
  - (8) Archæological Illustrations of the Bible. (Specially adapted for Sunday School Teachers.)
- The Rev. Charles Harris, M.A., F.R.G.S., 7, Pelham Grove, Sefton Park, Liverpool. (All Lectures illustrated by lantern slides.) His subjects are as follows:—
  - (1) Modern Discoveries in Palestine.
  - (2) Stories in Stone; or, New Light on the Old Testament.
  - (3) Underground Jerusalem; or, With the Explorer in 1895.
    - Bible Stories from the Monuments, or Old Testament History in the Light of Modern Research:—
  - (4) A. The Story of Joseph; or, Life in Ancient Egypt.
  - (5) B. The Story of Moses; or, Through the Desert to the Promised Land.
  - (6) c. The Story of Joshua; or, The Buried City of Lachish.
  - (7) D. The Story of Sennacherib; or, Scenes of Assyrian Warfare.
  - (8) E. The Story of the Hittites; or, A Lost Nation Found.
- The Rev. W. O. E. OESTERLEY, M.A., B.D., Glenroy, Royston Park Road, Hatch End. His subjects are as follows:—
  - (1) Palestinian Scenery.
  - (2) Trades, Callings, and Customs of Palestine.
  - (3) The Gezer Excavations.
  - (4) Semitic Inscriptions.
  - (5) Greek Inscriptions.

(All illustrated by lantern slides.)

#### SCOTLAND.

The Rev. James Smith, B.D., F.S.A., F.R.G.S., St. George's-in-the-West Parish, Aberdeen. (All Lectures are illustrated with lantern slides, many of which are coloured.) His subjects are as follows:—

- (1) The Palestine Exploration Fund.
- (2) A Pilgrimage to Palestine.
- (3) Jerusalem-Ancient and Modern.
- (4) The Temple Area, as it now is.
- (5) The Church of the Holy Sepulchre.
- (6) A Visit to Bethlehem and Hebron.
- (7) Jericho, Jordan, and the Dead Sea.

#### WALES.

The Rev. J. LIEWELYN THOMAS, M.A., Aberpergwm, Glynneath, South Wales. His subjects are as follows:—

- (1) Explorations in Judea.
- (2) Research and Discovery in Samaria and Galilee.
- (3) In Bible Lands; a Narrative of Personal Experiences.
- (4) The Reconstruction of Jerusalem.
- (5) Problems of Palestine.

N.B.-All Lectures are illustrated by specially prepared lantern slides.

ROMAN CATHOLIC Institutions may be glad to have the name of a Catholic Lecturer on subjects connected with the work of the Fund—

The Rev. Hugh Pope, O.P., Hawkesyard Priory, Rugeley, Staffs.

Application for Lectures may be either addressed to the Secretary, 38 Conduit Street, W., or sent to the address of the Lecturers.

#### THE

## PALESTINE EXPLORATION FUND.

#### NOTES AND NEWS.

The Annual General Meeting of the Palestine Exploration Fund was held on June 13th at the Royal Institution, General Sir Charles Warren, G.C.M.G., K.C.B., F.R.S., in the Chair. There was a large attendance, and the greatest interest was shown in the account of the work which had been accomplished by the Fund. Mr. R. A. S. Macalister gave a summary of the results of his excavations, and added a few timely remarks upon the destructive methods of dealers and their agents, pointing out the serious harm which is being wrought owing to the foolishness of wealthy travellers. A full report of the proceedings will be found below (pages 170–182).

In the *Home Words* (Jerusalem) for May, Dr. Masterman comments upon the remarkable rainfall during the present season. Although up till the middle of last December the district was threatened with a water famine, and actually had had in Jerusalem a total fall of less than an inch, the total fall for the season is up to the present 37.95 inches and will certainly be over 38 inches—the highest fall in a single season since many years. But it is not only the amount of rain which has been noticeable, it is the extraordinarily heavy downpours, accompanied by thunder and lightning, which have made this season, especially the month of April, conspicuous. "At the beginning of the month," says *Home Words*, "we witnessed with sympathy the discomforts of many travellers, who, caught in the violence of the storm while touring through the land, were obliged either to abandon their tour or to travel for days with soaking tents and dripping clothes."

The Damascus Railway to Beyrout was actually blocked with snow in the Lebanon, and indeed the last part of April became like a part of boisterous February. Even since then there were at least two storms, of what people sometimes designate "tropical" violence, on Easter Sunday and Monday. This latter storm raged in the Jordan Valley in a manner quite unprecedented, accompanied by a deluge of rain such as has never within living memory fallen there in mid-April.

The rainfall of April, viz., 5, is the highest recorded except that of 1885 which was 6.5. This season's total of rainfall (37.95) and last year (37.3) forms a marked contrast to that of the previous six seasons which had a mean of 23.6 inches. It is evident that there are alternating cycles of plentiful and scanty rainfalls, and that the land is now in the midst of a plentiful cycle.

Dr. Masterman also reports (in Home Words) that during last April a party of eight German residents of Jerusalem, accompanied by two boatmen, made a most successful boat expedition on the Dead Sea. They left Barakat, at the N.W. corner of the lake, on April 7th and sailed along the East shore touching at the Wady Zerka Ma'an, Wady Mojib, Ginetri, Wady Kerak and the Leisân. They then crossed to the Western side, visited 'Ain Jidy, the ruined fortress of Masada, Jebel Usdum, and then returned North again. They found abundant evidence of the rise of the level of the water at a recent period, a change which is witnessed at the Northern end by the gradual submergence, and now complete disappearance, of the peninsula of Rejum el-Bahr, as well as other changes. Although rumour reported all kinds of disaster as having befallen these adventurers, the expedition passed off with complete success, and they returned safely to their starting-place on April 19th. The lowest temperature they experienced was 54 F. (at night); the highest (in the shade) 97 F. One of the most interesting discoveries was that of a path up the Wady Zerka to the famous hot springs; also they made their way a long way up the Wady Mojib.

Prof. Bacon and Dr. Cropper have just returned from an expedition E. of the Jordan, the most interesting result of which is their discovery of a good path running for miles along the remains of an

old Roman road, from the hot springs in the Wady Zerka Ma'an to the bridge on the Jordan. This they followed for several hours. It was probably the route by which Herod the Great travelled from Jericho to these springs. This would appear to be by far the best route by which to reach this interesting and romantic place.

"In the month of May," remarks Dr. Masterman, "we have all been rejoicing in unusually pleasant and cool weather. The rainfall has been '99, and that has only twice been exceeded; very often May is the first of the entirely rainless months. The cool breezes also have contributed to make the weather most enjoyable. In Artas and Bethlehem there was, from all accounts, a really terrific hail storm, the hail stones were locally reported to have been each the size of a pigeon's egg, and each hail stone to have had St. George's image pictured on it!"

It is reported that a small passenger steamboat connected with the railway is now launched in the Lake of Galilee. Although not yet running, it will very shortly be in order, and the passengers will be able to go from Semakh (the railway station on the Lake) to Tiberias in the railway company's steamer.

In the Earl of Cromer's Report on the Finances, &c., of Egypt and the Soudan in 1905, it is announced that Mr. Jennings-Bramley has been appointed Commandant and Inspector with full control over the affairs of the Sinaitic Peninsula, Mr. Bramley has a perfect acquaintance with Bedouin Arabic and the customs of the natives, and was sent last year to settle the numerous inter-tribal disputes which had arisen among the restless inhabitants. It is now proposed to carry out various improvements: "a well-equipped and efficient camel corps will be organized; a rest-house will be built at Nekhl; some money will be spent on the purchase of trees and implements for gardening, the construction of sakias, the improvement of the water-supply at Tor, and the construction of a small dam at Khor el-Arish, where it is hoped a large area of land will be capable of being placed under cultivation. A mosque, barracks, and police-station are to be built at Nekhl. There is every reason to hope and believe that by the adoption of these measures a distinct improvement will soon be visible in the condition of the Sinai Peninsula. It is probable that somewhat later

the construction of a telegraph line, and possibly of a road for motor cars, to Nekhl, will be considered." The Blue-book contains a short account of some of the more interesting legal institutions in the Peninsula, to which Mr. Jennings-Bramley refers in his series of contributions to the *Quarterly Statement*.

The old Turkish bath inside St. Stephen's Gate has recently been pulled down, and a new building is in course of erection. It is said to be owned by the Greek Convent. To the old bath the legend was attached that it was built for the benefit of Belkis, queen of Sheba, by Solomon. The story that she had goat's feet, and the sequel, is recounted by Arab writers, and there is an allusion to it in the Koran (Sur. xxvii.). Mr. Hananer, who sends the above information, points out that on p. 90 in the last number of the Q.S. (last paragraph) the accidental omission of the words "and others were" before "found" may lead to the erroneous inference that Solomon's stables were in the cavern to the south of the Triple Gate.

"Golgotha and the Holy Sepulchre," the last work of the late Major-General Sir Charles Wilson, K.C.B., K.C.M.G., F.R.S., D.C.L., L.L.D., &c., is now ready. In this work the late Chairman of the Executive Committee of the Palestine Exploration Fund has brought together for the first time all the evidence which the most exhaustive research enabled him to collect bearing on the subject of these Holy Sites; and probably no man living had at once so intimate a knowledge of all investigations in the modern Jerusalem, and so complete an acquaintance with what has been written about the Sites from the time of Constantine onwards. The price of the work (demy 8vo) is 6s., by post 6s. 4d., and cheques should be made payable to the order of George Armstrong, Acting Secretary to the Fund, and crossed "Coutts & Co."

Mr. Macalister's work, "Bible Sidelights from the Mounds of Gezer," is now ready. It has been written to show how the results of digging in Palestine should appeal not only to the scientific anthropologist or archæologist but also to the Bible student who has no special interest in these sciences. The book contains a brief synopsis of the work of the Fund from its foundation to the present, and a description of the site of Gezer, and its history. See below, p. 234 sq.

Messrs. Hodder and Stoughton have also published for Dr. Bliss a book entitled "The Development of Palestine Exploration." Its author has the twofold qualification of scholarship and practical experience in Palestine exploration; the results of the latter having been already published in a work that is well known to all students of the subject. In the present volume Dr. Bliss makes no attempt to offer a detailed account of the results of this prolonged research. What he aims at is to tell the wonderful story of the quest as a whole—"the shifting point of view of travellers from age to age; the displacement of the Classic Geographer by the credulous pilgrim; the gradual evolution of the pilgrim into the man of science"—these are some of the prominent subjects with which Dr. Bliss has dealt. The story is one of wider human interest, and does not belong exclusively to archaeology or any of the numerous sciences that are its handmaids.

The Committee have gratefully to acknowledge the gift, by the Author, to their Library, of Prof. Flinders Petrie's handsome volume "Researches in Sinai" (John Murray).

A new railway to connect Jenîn, Nablûs and Jerusalem is talked about in Palestine. It is urged that this line, by joining the Haifa railway at Afûleh, would be of great assistance to traders, but many anticipate that objections will be raised on aesthetic and sentimental grounds.

It is of interest to record that one of the small raised maps of Palestine, the advertisement of which appears on p. 167 below, has recently been ordered for the Fiji Islands.

It may be well to mention that plans and photographs alluded to in the reports from Jerusalem and elsewhere cannot all be published, but they are preserved in the office of the Fund, where they may be seen by subscribers. Those which were sent by Mr. Macalister illustrating the excavations at Gezer and which were not reproduced in his quarterly report, have been held over for the final memoir. The attention of subscribers and others is called to A Table of the Christian and Mohammedan Eras, from July 15th, A.D. 622, the date of the Hejira, to A.D. 1900, price by post, 7d. Also to the Meteorological Observations at Jerusalem, with tables and diagrams by the late Mr. James Glaisher, F.R.S. Tourists and all desirous of accurate information about the climate of Jerusalem should not fail to send for a copy, price 2s. 6d.

The attention of subscribers is also called to a work by Sir Charles Warren, entitled "The Ancient Cubit and our Weights and Measures." He brings evidence to show that all weights and measures (except those of the metrical system) are derived from one source—the double-cubit cubed of Babylonia. See below, pp. 182 sqq.

The Museum and Library of the Palestine Exploration Fund at Jerusalem are in the Bishop's Buildings, near the Tombs of the Kings, where the use of a room has been kindly permitted by the Rev. Dr. Blyth, Bishop in Jerusalem and the East. The Museum is open daily, except Sundays, and the Honorary Secretary, Dr. D'Erf Wheeler, will give all information necessary.

The "Flora of Syria, Palestine, and Sinai," by the Rev. George E. Post, M.D., Beirût, Syria, containing descriptions of all the Phaenogams and Acrogens of the region, and illustrated by 441 woodcuts, may be had at the office of the Fund, price 21s.

The income of the Society from March 17th to June 16th, 1906, was—from Annual Subscriptions and Donations, including Local Societies, £221 12s. 4d.; from sales of publications, &c., £146 17s. 8d.; from Lectures, £17 14s. 6d.; making in all, £386 4s. 6d. The expenditure during the same period was £409 13s. 9d. On 16th June the balance in the bank was £377 12s. 2d.

Subscribers who have not yet paid, will greatly facilitate the Committee's efforts by sending their subscriptions in early, and thus save the expense of sending out reminders, the outgoings on the excavations at Gezer having been a heavy drain on their funds.

Subscribers to the Fund are reminded that, whilst the receipt of every subscription and contribution is promptly acknowledged by the Acting Secretary, they will henceforth be published annually, and not quarterly. A complete List of Subscribers and Subscriptions for 1905 was published with the April number.

Subscribers in U.S.A. to the work of the Fund will please note that they can procure copies of any of the publications from the Rev. Professor Theo. F. Wright, Honorary General Secretary to the Fund, 42, Quincy Street, Cambridge, Mass.

The Committee will be glad to communicate with ladies and gentlemen willing to help the Fund as Honorary Secretaries. The following gentlemen have kindly consented to act:—

The Rev. John Arnott, M.A., for Stirling, N.B., in succession to the Rev. W. Ewing, removed to Edinburgh.

J. Langfield Ward, Esq., M.A., for Bath, in succession to General Warren Walker, resigned.

Subscribers and others may be reminded that the new Raised Map of Palestine, constructed from the Surveys of the Palestine Exploration Fund by the Acting Secretary, is ready. It is on the scale of  $6\frac{1}{4}$  miles to the inch and measures 3'  $6'' \times 2'$  6''. It has already been used with great success by Professors of Old Testament history, and by teachers in Sunday Schools, and may be especially recommended for large classes of students. On view at the office of the Fund; further particulars may be had on application.

In order to make up complete sets of the Quarterly Statement, the Committee will be very glad to receive any back numbers which subscribers do not wish to preserve.

A complete set of the *Quarterly Statements*, 1869-1905, containing the early letters, with an Index, 1869-1892, bound in the Palestine Exploration Fund cases, can be had. Price on application to the Acting Secretary, 38, Conduit Street, W.

Subscribers of one guinea and upwards will please note that they can still obtain a set, consisting of the "Survey of Eastern Palestine" (Colonel Conder); "Archæological Researches in Palestine," in two volumes (Clermont-Ganneau); "Flora and Fauna of Sinai, Petra, and the Wady 'Arabah" (Hart), for £7 7s., but the price has been increased to the public to £9 9s. The price of single volumes to the public has also been increased. Applications should be made to the Acting Secretary.

The price of a complete set of the translations published by the Palestine Pilgrims' Text Society, in 13 volumes, with general index, bound in cloth, is £10 10s. A catalogue describing the contents of each volume can be had on application to the Secretary, 38, Conduit Street, W.

The Museum at the office of the Fund, 38, Conduit Street (a few doors from Bond Street), is open to visitors every week-day from 10 o'clock till 5, except Saturdays, when it is closed at 2 p.m.

Photographs of the late Dr. Schick's models (1) of the Temple of Solomon, (2) of the Herodian Temple, (3) of the Haram Area and Justinian's Church, and (4) of the Haram Area as it is at present, have been received at the office of the Fund. The four photographs, with an explanation by Dr. Schick, can be purchased by applying to the Acting Secretary, 38, Conduit Street, W.

Branch Associations of the Bible Society, all Sunday Schools within the Sunday School Institute, the Sunday School Union, and the Wesleyan Sunday School Institute, will please observe that by a special Resolution of the Committee they will henceforth be treated as subscribers and be allowed to purchase the books and maps (by application only to the Secretary) at reduced price.

The Committee acknowledge with thanks the following:-

- "Researches in Sinai," from the author, Prof. W. M. Flinders Petrie.
- "Die Mosaik-karte von Madeba," by P. Palmer (Jerusalem), edited by Prof. Guthe (Leipzig).
- "Al-Mashrik: Revue Catholique Orientale Bimensuelle." Mag. J. Ghanimé writes on the popular proverbs of Bagdad; Dr. H. Negre on Syrian food, &c., &c.
- "Man's Responsibility, or How and Why the Almighty introduced Evil upon the Earth," from the author, Thomas G. Carson.

NEA ΣΙΩΝ, February-April, 1906.

- "Echos d'Orient," March, 1906.
- "Recueil d'Archéologie Orientale," by Prof. Clermont-Ganneau. Tome VII, Livraisons 13-15. Sommaire:—§ 24. Fiches et Notules: Le dieu Ethaos.—Le "prince héritier" en phénicien et en hébreu. "Abblos.—Le comte Patricius.—Gérard, de l'Ordre de l'Hôpital, évêque de Balanée de Syrie.—Histoire d'Égypte, de Maqrizi.—Deux projets de croisade des XIII°-XIV° siècles. § 25. Le sier sanctifié. § 26. La Province d'Arabie. § 27. Inscription grecque de Esdoud § 28. L'Expédition américaine dans la Syrie

centrale. § 29. Inscriptions de la Haute-Syrie et de Mésopotamie. § 30. Fiches et Notules: Le comte Anthimos, gouverneur d'Arabie.—Inscription byzantine de Sinope.—L'édit d'Agrippa II.
—Abdalgas et Olbanès.—Ostrakon araméen Cowley.

See, further, below, "Foreign Publications," pp. 234-238.

The Committee will be glad to receive donations of Books to the Library of the Fund, which already contains many works of great value relating to Palestine and other Bible lands. A catalogue of Books in the Library will be found in the July Quarterly Statement, 1893.

For list of authorised lecturers and their subjects, see end of the Journal, or write to the Secretary.

Whilst desiring to give publicity to proposed identifications and other theories advanced 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 do not necessarily sanction or adopt them.

FORM OF BEQUEST TO THE PALESTINE EXPLORATION FUND.

I give to the Palestine Exploration Fund, London, the sum of \_\_\_\_\_\_ to be applied towards the General Work of the Fund; and I direct that the said sum be paid, free of Legacy Duty, and that the Receipt of the Treasurer of the Palestine Exploration Fund shall be a sufficient discharge to my Executors.

	Signature
Witnesses	

Note.—Three Witnesses are necessary in the United States of America.

Two suffice in Great Britain.

# ANNUAL MEETING OF THE PALESTINE EXPLORATION FUND.

The Forty-first Annual General Meeting of the above Fund was held at the Royal Institution, Albemarle Street, London, W., on Wednesday, June 13th, 1906, when General Sir Charles Warren, G.C.M.G., K.C.B., F.R.S., presided and was supported by the following Members of the General Committee:—Lord Eustace Cecil; Col. Sir Charles M. Watson; Rev. Dr. Rogers; Rev. W. J. Stracey-Clitherow; Professor A. Macalister; Rev. Arthur Carr; Mr. J. D. Crace; Mr. Joseph Pollard; Mr. Herbert Bentwich; Mr. Herbert Birch, &c.

There was a large attendance of the public.

The CHAIRMAN.—My Lords, Ladies and Gentlemen,—I will commence the proceedings this afternoon by asking the Secretary to read the names of those Members who have not been able to attend and who have sent letters of regret.

The Secretary.—The following Members of the General Committee have written expressing their regret at not being able to attend this afternoon:—Rev. Canon Cheyne, D.D.; Dr. A. Löwy; Mr. Walter Morrison, The Treasurer; Professor George Adam Smith, D.D.; Rev. Professor A. F. Kirkpatrick, D.D.; Rev. H. Montagu Butler, D.D.; Professor G. Buchanan Gray, M.A.; Mr. James Melrose.

The CHAIRMAN.—The first resolution before us this afternoon, which I will move and which will be seconded by the Secretary, is:—

That the Report and Accounts already printed and circulated be taken as read, approved and adopted.

The Secretary.—I beg formally to second the resolution. The Report and Accounts have been in the hands of the subscribers since April, so they will have had plenty of time to find fault with them.<sup>1</sup>

The Report and Trensurer's Statement, with list of subscriptions for the year 1905, appeared as a separate pamphlet issued with the April number of the Quarterly Statement.

I may say we are fortunate in having as our Treasurer—I say it as he is absent to-day—we are fortunate in having a gentleman who has not only very frequently come to our aid in a moment of difficulty, but is an expert in matters of account and accustomed to deal with business on a very much larger scale than ours. He is most exact in the examination of every item of expenditure, and I think you may feel confident that the money which you subscribe is applied to the purposes for which you are good enough to give it.

The resolution was then put to the Meeting and carried unanimously.

The CHAIRMAN.—The second resolution is to be moved by Sir Charles Watson and seconded by Professor Macalister, that the gentlemen whose names follow be added to the General Committee: The Rev. Professor A. R. S. Kennedy, D.D. of the University of Edinburgh; The Rev. P. A. Gordon Clark; The Rev. William Ewing; Wilson Lloyd Fox, Esq.; Colonel R. C. Hellard, R.E., Director-General of the Ordnance Survey; Archibald C. Dickie, Esq.

Sir Charles Watson.—Sir Charles Warren, My Lords, Ladies, and Gentlemen,-I have much pleasure in rising to propose this resolution. I daresay many who are in this room-at least all who are subscribers-know the constitution of our Society, that the affairs of the Society are managed by a General Committee, of which we have the honour to have His Grace the Archbishop of Canterbury as President, and that they delegate their powers to an Executive Committee; but the attempt has always been to place upon the General Committee as many gentlemen as we could obtain who take a real interest in the work of the Palestine Exploration Fund. Of course it is not necessary for me to say how much information as regards the Bible and Biblical geography has been given by the Explorations conducted by the Fund, but the possibility of proceeding with that work depends to a great extent on interesting people in the work of the Society, and to do that we must have a General Committee who will work for the good of the Society and induce new subscribers to join; that, of course, is the very life-blood of our existence. Old subscribers die off, and we lose their subscriptions; a very few withdraw, but it is always necessary every year to get a considerable number of additional subscribers in order to earry on the work. This year three of the gentlemen whom it is proposed to add to the General Committee

have been for some years local Hon. Secretaries of the Society, and have done much in the way of getting subscriptions and interesting people in the work, and it is, therefore, a very proper thing that their names should be added to the General Committee. Colonel Hellard is now Director-General of the Ordnance Survey. From the very earliest days of the Society the Department of the Ordnance Survey have always afforded the greatest help to the Palestine Exploration Fund. I need hardly refer to the late General Sir Charles Wilson, of whom Sir Charles Warren will speak later, who, when Director-General, gave us the greatest possible assistance. Colonel Farquharson and Colonel Johnston, who sueceeded him, did likewise. Now Colonel Johnston has retired and been succeeded by Colonel Hellard, and it is proposed that his name should be added to the list of the General Committee. The last name which is proposed for addition is that of Mr. Archibald Dickie. Many of you will recognise his name as the able assistant of Dr. Bliss in his explorations at Jerusalem and other parts of Palestine. We owe a great deal to Mr. Dickie for the good work he has done, and I am sure you will all agree that he is a very suitable person to be added to the General Committee. I beg to move that these gentlemen be added to the General Committee of the Palestine Exploration Fund.

Professor Macalister.—I beg leave to second this resolution. After the statement that the Chairman of our Executive has made, there is no need for me to do anything but formally second the resolution.

The CHAIRMAN then put the resolution to the Meeting, and it was earried unanimously.

The Charman.—The Committee regret to record the loss by death of the following Members of the General Committee since the last Annual Meeting, viz.:—Major General Sir Charles W. Wilson, Lord Montagu of Beaulien, Mr. Charles J. Heywood, President W. R. Harper, of the University of Chicago, Rev. Canon Tristram, F.R.S., D.D., M.A., Rev. Cunningham Geikie, D.D., Bishop Bickersteth (late of Exeter). As our oldest Members pass away one by one, it is always painful to record their loss, the loss of our friends who have worked with us and have done so much to keep up the work of the Palestine Exploration Fund. But on

this occasion we have to record the loss of two Members who have been with us almost from the beginning up to the time of their death. The first Member, Sir Charles Wilson, one of our best friends, and who continuously worked in this good cause, started really before the Society was formed, for he went out on the Ordnance Survey of Jerusalem, and did some work there which Miss Burdett-Coutts financed; and he really may be called the father of the excavations at Jerusalem, for he commenced, in various places, the shafts which were afterwards added to and continued in many directions. Then he was selected, when the Fund commenced its operations, to go out to Palestine and ascertain what was to be done, and he and Captain Samuel Anderson went out together and traversed the whole country, making observations, and decided that the best place to commence excavations was at Jerusalem, and that is how the excavations at Jerusalem were started. After that he was engaged in Sinai, and he was constantly connected with the Palestine Exploration Fund subsequently in one way or another. He was Editor of the Pilgrims' Text Society, and as Director of the Ordnauce Survey he assisted very much, and he was also Chairman of the Executive Committee, so that we may say that Sir Charles Wilson really formed part and parcel of the Palestine Exploration Fund during forty-one years. And there are no doubt many here—at any rate there are many throughout the country who feel his loss, not only as a friend, but as one who has helped them in matters with regard to Biblical study. I may say that his book that has now been published on Golgotha is one which is of most intense interest, and has brought together all the facts that can be obtained upon the subject. Then we have also our dear old friend, Canon Tristram, whose loss we have to record. He took another field in the work of the Palestine Exploration Fund, and all those who are interested in the birds and beasts of Palestine know well his writings, and how kindly he wrote. The natives of Palestine also knew him, for he used to go among them in the different parts by the name of abu dakn ("father of the beard"). We may say, really, that he was the father of the zoological branch of the Palestine Exploration Fund, and we have deeply to deplore his loss, because he has been throughout a most consistent friend and supporter.

But as we lose our friends on the Committee, we find that there are ever ready others fully qualified to be added, and on this

occasion the resolution is going to be moved that Mr. Archibald Dickie be elected to the Executive Committee; he was employed with Dr. Bliss, of whose services you all know so well and of whom Sir Charles Watson has already spoken. It will therefore be proposed by Lord Eustace Cecil, and seconded by the Rev. Dr. Rogers that the Executive be re-elected and that Mr. Archibald Dickie be added to the number.

Lord EUSTACE CECIL.—Sir Charles Warren, Ladies and Gentlemen,-When I entered the room I had no intention of making any lengthy discourse on the matter, but I could not refuse to propose, as an old Member of the Executive Committee, the re-appointment of gentlemen to whom we owe so much. We know they are all men of ability and illustrious in the particular knowledge we have come to-day to give our sanction to; and we are all aware that they have used their endeavours to bring this Society to the flourishing state in which it is. I always think a Company is best appreciated and best known by its Directors, and I think this Society may be said to be appreciated and known by the gentlemen who manage it and compose the Executive Committee. I have very great pleasure indeed, as a very old Member of the Society and as a Member of the General Committee myself in former days, in proposing the re-election of the gentlemen in question-I have not a list, but they are very well known-also the name of Mr. Archibald Dickie whom I believe to be very well worthy of the honour I hope you will confer upon him by making him a Member of the Committee.

Rev. Dr. Rogers.—I have very great pleasure and very great confidence in seconding the resolution which has just been moved.

The Chairman then put the resolution to the Meeting and declared it carried unanimously.

The Charrman.—We shall have the pleasure this afternoon of receiving an address on the Excavations of Palestine from Mr. R. A. Stewart Macalister. It is hardly necessary for me to introduce him to you, because most of you, if you have not actually heard him speak, know of the excellent work he has been carrying out in Palestine, but as a matter of form I will now introduce Mr. Macalister to you.

Mr. Macalister.—At a moment when we are eagerly awaiting the answer to our application for a new permit for exploration

in Palestine, it is natural to look back over the work that has been recently accomplished, and to look forward for a little in the endeavour to forecast the probable nature of our future discoveries.

Let me first hastily remind you of some of the principal discoveries made during the past three years at Gezer, with the aid of the slides which will be thrown on the screen. You may remember that four large pits were dug in the mound, the positions of which are as shown in the slide now exhibited. This is prepared from a photograph taken during the last week of the campaign. An area equal at least to the amount dug was perforce left unexamined, the time allowed by the permit being insufficient to dig up the whole mound; and of course what these uncut parts of the mound may cover no man can tell.

Let me illustrate the chances of excavation by briefly describing what was found in these different pits.

The pit to the west contained a most valuable series both of buildings and objects. Among these may be mentioned the south gate of the city wall: the interesting temple, which, as has been thought, seems to have a bearing on the story of the death of Samson; the immense cave, which, with its contents, has been made the subject of a separate monograph (not yet published) that, when printed, will include almost as much material as Professor Petrie's work on Tell el-Hesy; the beautiful XIIth dynasty statuette of "Heqab the taster of the bakery" discussed by Dr. Griffith in the last Quarterly Statement; and the two Assyrian contract tablets.

In the northernmost of the two central pits the chief discovery was the great high place, the most complete and extensive place of early Semitic worship yet unearthed on Palestinian soil. Beside this and other important finds on which I cannot dwell now, I must not omit to mention the unique bronze statuette of the Ashtaroth Karnaim or Two-horned Astarte, which for the first time enables us to realise the conception which was formed of this obscure deity by her worshippers.

The southern central pit yielded another discovery of the first importance—the Castle of Simon Maccabaus, identified as such by the curious imprecation scratched on one of the building stones. Over the ruin of part of this castle was a very extraordinary bath-system, quite one of the most remarkable buildings yet found in Palestine.

In the eastern pit the proportion of interesting antiquities was perhaps slightly behind that in the other pits; yet this also contained one 'find' of great importance—I refer to the now famous Troglodyte Crematorium, which was at the time the first pre-Israelite burial place to be found in Palestine. Since then others have been found in Gezer, Megiddo, and Taanach.

In this connexion I must not omit to call to your attention an important section of the work at Gezer—I refer to the investigation of the tombs surrounding the hill: and perhaps I can best illustrate this by shewing one or two photographs, taken principally by magnesium light, of the various types of tomb-chambers. [Lantern

slides illustrative of the finds were shewn and explained.]

Let us turn now from the past to the future, and consider what are our prospects of success with a new permit if it please the Imperial Ottoman Government to grant it to us. A site has been chosen—for the moment it is inexpedient formally to publish its locality—in which there is every reason to hope for a successful campaign. Remembering that not only at Gezer, but also at Taanach by the Austrians, and Megiddo by the Germans, important discoveries have been made during the past few years, we may look forward with much more confidence than would have been justified five or six years ago, to large additions to our knowledge of ancient Palestine in the near future. I would call to your recollection the great hoard of cunciform tablets from Taanach, and the seal with the name of Jeroboam from Megiddo, as encouragements to the pioneer Society to persevere in its researches.

Other work lies before our Society. In the course of some topographical researches on which I have been just now engaged, I have been much impressed by the uncertainty that still broods over many of the identifications of Biblical sites. Since these were proposed, new criteria have come into existence with the advance of our knowledge of Palestinian antiquities. These criteria must now be applied, and we must expect very important revisions to take place which must ultimately greatly further the study of Bible

history.

This leads me to the last point I shall mention this afternoon—the bearing of Palestine exploration on Bible study. For it is undoubtedly this aspect of the work which appeals to the majority of its supporters. Some of these may complain that the accumulation of measurements of tombs, of facts about pottery and scarabs,

and other antiquities, such as have been shewn on the screen, may be interesting, but have no definite bearing upon their special interest—the Bible and its message. To these I answer, You never know when a fact, apparently of mere archæological interest, may prove full of suggestion for the Bible student. Measurements may lead to important facts on the cubit and objects measured thereby; pottery may lead to important identifications of places; scarabs may illuminate some obscure page by shewing where and when Egyptian influence came in to complicate the course of history, and thus explain references otherwise unintelligible. Who would have expected a basket full of jar handles, stamped with potters' names, to illustrate the Bible? Yet such a collection has smoothed away difficulties in a passage in the Book of Chronicles that has been an enigma to every generation of commentators.

Palestine is not poor in antiquities yet, though the ravages of dealers, their agents and their customers are rapidly making it so. It was a sad day for archæology when about fifteen years ago a tombrobber from the village of Kubab visited Beit Jibrin and awoke the people there to the fact of tombs lying around their village. Had an exploring party attacked the cemetery before then the resulting work would have been one of the most magnificent contributions to archeology ever published. But when the greedy natives were awakened to the treasures around them they neglected their fields for this more lucrative and exciting harvest. During the three months that Dr. Bliss and I were there our short time was completely taken up by the Tell; we opened a few tombs, but the results did not happen to be encouraging. Had we hit upon the tomb of Apollophanes, afterwards discovered by the fellahin, and brought to the knowledge of the scientific world by Drs. Thiersch and Peters, we should have found it with its contents intact. As it was, they were sold to dealers for £50 and dispersed, and we shall never know what treasures that magnificent tomb contained. I have been shown a leaden tablet closely written in Greek but so fragmentary as to be unintelligible. The creature who owned it blandly informed me that he had torn it to fragments, and was selling it piecemeal to tourists at 20 francs the scrap, as he could get more for it that way. When such depredations are going on; when wealthy travellers are, in plain English, such fools as to give large sums of money for objects rendered valueless by being torn from their contexts and mutilated thus; when the craze for that detestable rubbish,

iridescent glass, is causing wholesale destruction in almost every important site in the country; it behaves us to be unsparing of energy ourselves, and to welcome every other exploration agency that shall forestall these sordid thieves and receivers.

But while welcoming kindred societies, let us not drop behind them. We have a great record of work in the past; let us look forward, individually and as an association, to a yet greater record in the future. Let each member take his share of the burden of work. Let half-guinea subscribers, who possibly can, be persuaded, for the next two or three years at least, to give a guinea: let those who cannot see their way to do so, try and persuade at least one friend to become a subscriber to the Society. During the last firman the fund put £100 per month at my disposal, which enabled me to employ 80 labourers: and I think I may fairly claim that the results have been worth the expenditure. This time I ask straightforwardly to be entrusted with £200 per month; to be enabled to employ 160 workmen, like my fellow-explorers at Taanach and Megiddo: and I promise that it will not be my fault if the total results be not of doubled value.

The CHAIRMAN.—Ladies and Gentlemen,—It will be my pleasing duty to ask you to convey the thanks of the Meeting to Mr. Macalister, but before doing so I propose, with your indulgence, to say a few words generally upon the work of the Society. Never since the works have been carried on under the Palestine Exploration Fund have they been carried out more satisfactorily or more systematically than they have been recently under Mr. Macalister. And what I should like to point out is, that during the forty-one years we have been working, each officer has improved upon the one going before, by his mistakes and by his successes, so that now the work is being done in the most approved and systematic manner. And I would support and endorse very strongly what Mr. Macalister has been speaking about-getting things in numbers and averages. It is a most important point in collecting little articles of antiquity, very often not knowing what they lead to, to put them together and bring them into the Museum so that they can be compared. We do not know in what way hereafter we may corroborate many matters mentioned in the Bible, and I am so glad Mr. Macalister mentioned that, because I intended to speak about it even before he alluded to

it. I was very much struck the other day in going over some work of Prof. Petrie's in Egypt, who was one of our officers, with the care with which he had got together thousands of weights in some of his studies, and had taken the averages; and they were of the greatest use to me in getting the correct ideas of certain weights I wanted to find out about. It is the same with all these matters, the importance of getting together these small things, having them ready for comparison, and not putting them on one side. It is really most pleasing to find that the same view is being carried out right through the work from the very beginning. I mentioned that in 1865 Sir Charles Wilson proposed that the excavations should be carried out in Jerusalem. They were carried on for three or four years, until the firman ran out, and then the question arose, what was the best work to be carried on? And I was asked my opinion about it. I said, "There is no question about it whatever that what is wanted is a Survey of Palestine, because what is underneath the ground will remain there until it is excavated, while what is on the surface is being carried away day by day." The consequence was, the Palestine Exploration Fund acting by Colonel Conder and Lord Kitchener carried out a work through which so much has been recovered with reference to the Bible. After the Survey was completed, other works were taken up one after another by Prof. Petrie, Dr. Bliss, Dr. Hull, Mr. Macalister and Mr. Dickie, and others I have not time to mention. But the question now arises, for the future what work shall be done? Now the work carried out by Mr. Macalister in Gezer and other places, although much of what is found is of a time anterior to our historical accounts in the Bible, still there are most important side-lights upon that history—I won't go into them now because Mr. Macalister has mentioned them to you in various ways —the points bearing upon Biblical history. One of the matters I should like to point out to you is that as we go on and find out, and as controversy subsides, there is less and less interest on the part of the public in the work we are carrying on. You know as long as there is controversy people get heated about their opinions, and they will back their opinions and give money to see the work carried through, if only to see whether their opinions are correct or not. When controversy is put on one side in the work that is going on there is less interest, and therefore the more we find out and the more work is done, the less outside interest there will be

in the explorations, and I must ask you to remember that in subscribing to the Fund and helping the Fund, that the more we make clear, the less we are likely to get from the general public, because the less interest there will be taken in the matter. Now one point, I think, that is very interesting to us all, and upon which we want a great deal of consideration is that question of infant sacrifice. At present there is a good deal of speculation about it, but we want more investigations in order to get a clearer idea of the subject of worship in the high places and infant sacrifices which are so often mentioned in the Bible, and of which we know comparatively so little. I am sure that the systematic explorations carried out within the last six years have done an immeuse deal to clear up the curious history of those early pre-Israelite days in Canaan; and a great deal of light has been thrown upon the subject of Jebus, that is the Jerusalem before David and Jericho, by what has been discovered lately, as you have heard from Mr. Macalister. In former days it was not necessary so much to look below the surface, because we thought things would remain, but, as Mr. Macalister mentioned, the fellahin are beginning to pillage the tombs in all directions; so that it is not only on the surface, but below the surface we ought to set to work and do what we can. We ought, if we possibly can, to take up some work which will enable us to examine those places where we think the natives are but too likely to examine the tombs for themselves. There is an immense deal of work to be earried out all over the country; and after what Mr. Macalister said just now about there being new views of things, one feels, although so much has been discovered relating to the Bible, that on many points we have absolutely different views, and that there are places which ought to be examined over again, because we look at matters now in a different light from what we did, and that many points that were not thought about in former days ought to be reexamined. Therefore, I feel that we owe a great deal of gratitude to Mr. Macalister for the way in which he has carried out these excavations and brought so much light, and individually assisted us so much in obtaining a better insight into those disputed points which are mentioned in the early history of the pre-Israelite times. I have great pleasure in proposing a hearty Vote of Thanks to Mr. Macalister for his Address, and for his services in Palestine, which I will ask you to convey to him by acclamation. (Applause.)

The CHAIRMAN.—The fourth resolution is a Vote of Thanks to the Management of the Royal Institution for the use of their Lecture Theatre, and it is to be proposed by Sir Charles Watson and seconded by the Rev. Arthur Carr.

Sir Charles Watson.—This resolution is one which I am sure we shall pass with cordial gratitude. You can all understand it is not very easy to get a hall for an afternoon meeting where magic lantern slides can be shown. There is often very great difficulty in keeping out the sunlight, but in this room they have such a magnificent scientific arrangement that it makes it as dark as night without the least trouble. The room is very suitable for the purpose, and we owe a debt of gratitude to the Management of the Royal Institution for having been so good as to lend us the room for this occasion.

Rev. ARTHUR CARR.—I have very great pleasure in seconding this resolution. It is of immense assistance to our work to have an admirable room like this lent for the purpose on these occasions.

The CHAIRMAN put the resolution to the Meeting and declared it earried.

The Secretary.—There is one other resolution which I am quite sure all of you will agree that we cannot separate without moving and passing, that is a Vote of Thanks to our Chairman for presiding at the Meeting this afternoon. Sir Charles Warren alluded to the work at Jerusalem, but did not mention that we probably know more about the underground Jerusalem from his labours than we do from those of anyone else. It is now so long ago that we are apt to forget to whom we owe these early works of investigation, but none will remain more valuable than the work conducted by Sir Charles Warren himself. I beg to propose that the thanks of the Meeting be cordially given to Sir Charles Warren for presiding this afternoon.

Mr. Herbert Birch.—May I be allowed, sir, to second that. I had the pleasure of being a Member of the General Committee for thirty years, and I have followed the work with deep interest. It is thirty-one years since I camped alongside Colonel Conder, and followed with much interest the map-making. Travelling through Palestine then was much more difficult than it is to-day. Notwith-

standing a strennous life, the details of the examination of tombs left on my mind an indelible impression that it is in those tombs and in the underground excavations that the most valuable matter will probably be found in the future. I have much pleasure in seconding the resolution.

The resolution was put to the Meeting and carried unanimously.

The proceedings then terminated.

#### WEIGHTS FOUND IN JERUSALEM.

CONSIDERATION OF THE ANCIENT SYSTEM OF WEIGHTS, SHOWING THE DERIVATION OF THE STONE WEIGHTS FOUND IN THE EXCAVATIONS AT JERUSALEM IN 1867-1870, AT OPHEL, ROBINSON'S ARCH., &c. (*P.E.F.Q.S.*, 1870, p. 336).

By General Sir Charles Warren, G.C.M.G., K.C.B., F.R.S., R.E.

I have many times attempted to come to some conclusion as to these weights, but have always failed to do so until I tested them by Troy grains, and the later Egyptian Kat, weighing about 145.5 grains Troy. I am now able to show, that these weights are measured by grains Troy, and are to be referred to the Troy pound of 5,760 grains Troy (of 12 ounces), and to the old European Commercial pound of 7,200 grains Troy (of 16 Troy ounces), and that these pounds have been raised to their existing weights at some period (uncertain) from the ancient Tower pound (5,400 G.T.), and from the ancient Hon (6,750 G.T.), both of which weights are familiar to us, as they were our standard weights in England; the Hon having been suppressed in 1326 A.D., and the Tower pound in 1527 A.D. In order to show how this has come about, it is necessary to go somewhat into detailed considerations of the early weights and measures.

(1) Our Troy grain has lost about 1 per cent. in weight: so that originally there were 250 Troy grains to a cubic inch of water.

I propose, first, to show that our Troy grain has lost, in weight, about 1 per cent. since medieval or earlier times, so that in comparing the values of existing weights I will use the original value of the Troy grains. This will save very much in calculations, as the Roman pound will come out 5,184 instead of 5,235 G.T., and the Attic pound as 6,480 instead of 6,544 G.T., as at present, and thus can be compared with the original weight of the Tower pound 5,400, as follows:—

			Ratio.
Tower pound	 	5,400	25
Roman pound	 	5,184	24
Attic pound	 	6,480	30

I shall call existing Troy grains simply G.T., and original Troy grains O.G.T. The present Tower pound in old Troy grains is really about 5,346 O.G.T., and the ancient Tower pound in present Troy grains is 5,454 G.T.

The first test which I make is that of dividing the weight of the ancient Tower pound (5,400 O.G.T.) into the number of cubic inches of water in a cubic foot (1,728), according to the old rule of 80 pounds to a cubic foot. This gives 21.6 cubic inches to 5,400 O.G.T. or 250 O.G.T. to the cubic inch.

Therefore, if the inch has remained constant, the grain Troy has lost the difference between 250 and 252.5 in every 250 grains, or about one per cent. of its weight. And as we may be certain that the inch has not varied perceptibly from the inch deduced from the Great Pyramid base (as will be shown), we may feel sure that it is the Troy grain that has deteriorated in weight.

The Troy grain may have lost weight either through a given portion having been cut off by authority or else through some inaccuracy in the keeping of the standard: but our standards have been kept with such extraordinary accuracy, through so many centuries, that it seems more probable that during the changes from the Tower pound to the Troy pound some portion may have been removed from the weight.

Mr. Donisthorpe in Measures, Past, Present, and Future, makes the following remark: "Our present Troy pound did not exist till 1527, when it was established by Henry VIII, upon what must be described as a disgraceful arithmetical blunder, or a piece of unworthy State dodging and sharp practice, deliberately planned, with a view to extracting a penny in the pound for the Treasury." It

weighed only 6,120 Tower grains (15/16 grain Troy) instead of 6,144 Tower grains, as the Troy pound should have weighed. We thus learn of the weight of one half of the loss being abstracted in one transaction, and if at any other time a penny and a half (36 Tower grains) were abstracted from the weight of the pound, we have the whole loss of 1 per cent. made up. There would be a slight difference in using well water in olden days instead of distilled water, but the difference only amounts to about one grain in a thousand, and is not worth consideration.

I will now give a number of instances, showing that by accepting the Troy grain as defective in weight by one per cent., the comparison of ancient weights and standards closely agrees with existing weights.

		Weight, G.T.	Reduced by 1 per cent. G.T.	Correct weight, O.G.T.
Hussey's estimate of Roman po Clerk's " " Arbuthnot's ", " " Congius of Vespasian	Florence and  Mean	5,240 5,237 5,204 5,240 5,249 5,204	5,182 ————————————————————————————————————	5,184
" " Ptolemy " . " " Enboïc "		5,460	6,492 5,406 9,000 216	6,480 5,400 9,000 216

The various ancient minas and pounds when transferred into cubic inches at 250 grains to cubic inch, come out as 2,592, 43·2, 32·4, 27·0, 30. It may then be assumed that the grain Troy has lost 1 per cent. of its weight and was originally estimated at 250 to the cubic inch.

### (2)—The Ancient Cubit and the Inch.

There is but one ancient cubit. It was the fourth part of the height of a man, and was divided originally into 20 digits, and subsequently into 24 digits, and should naturally measure about 17 inches, allowing about 5' 8" for the average height of a man in early days.

The exact length for practical and commercial purposes had, however, to be fixed arbitrarily with reference to some standard. It was made a rule that a cubit cylinder (i.e., a cylinder of height and radius equal to a cubit) full of water must weigh or balance a given number of standard weights of the period. The weight used for this purpose was a Hon of 6,750 grains Troy (4,000 Rati). 640 Hons were to balance a cubit cylinder of water, giving very closely a capacity of 8 bushels of our old Winchester measure; the half-cubit cylinder holding one bushel, and the quarter-cubit cylinder holding one gallon.

The cubit resulting from this weight of 640 Hons is very nearly <sup>1</sup> the length of the cubit of 24 digits, deduced from the measure of the base of the Great Pyramid, which we knew to contain 440 cubits of 28 digits, and to be 9,068.8 inches in length. This 24-digit cubit is then 17.6666 inches in length, while the cubit from the 640 Hons is 17.59 inches.

In process of time, probably before the era of the Ist Egyptian dynasty, it was found necessary for building purposes in Babylonia and Egypt to establish a ratio between the side of a cube and the height and radius of a cylinder of equal capacity.

Now the true ratio is  $\sqrt[3]{\pi}$ : 1 or 1.4646:1 so that they were involving themselves in all the intricacies of squaring the circle, and it must be admitted that they acquitted themselves admirably as I will explain.

Let us take a cylinder 28 inches in height and radius and a cube of equal capacity, and ascertain what is the double cubit resulting, and the height of a man to be deduced from it.

The side of this cube will be  $28 \times 1.4646$  inches = 41.0088 inches or a cubit of 20.5044; if this be divided into 56 digits we have 1.4646 = .7222 inches and the 24.4646 right will be 17.58 inches

 $\frac{4040}{2}$  = .7323 inches, and the 24-digit cubit will be 17.58 inches,

<sup>1</sup> See further on.

and the height of a man 5′ 10″·32. That is to say, the British inch is bound up with a digit of '7323 inch and the height of a man of 5′ 10″·32, and cannot be separated from these adjuncts. The inch,¹ therefore, is the natural result of taking the height of a man as the standard. Given the height of a man as somewhere about 5′ 10″, the digit or 96th part must be somewhere about '7323, and the unit of measure (in similar terms to the side cube) must be either the inch or multiples or sub-multiples of it. Thus by taking this second measure (the inch) the ancients had no trouble in accommodating their cubes to their cylinders, a cube of 14 palms a side was equal to a cylinder (equal height and radius) of 28 inches a side.

The ancients, however, had no knowledge of the true value of the ratio that the circumference of the circle bears to the diameter, they could only get to it by degrees, and the nearest cube root of  $\pi$  they were able to get at first was  $\frac{53}{36} = 1.472$ ; subsequently they arrived at  $\frac{22}{15} = 1.466$  (which is very near the true value 1.4646) and this value they seem to have used with our 13.2 Belgic foot.

They found it necessary to increase the length of the cubit of 24 digits to 28 digits, because of the numbers they used in squaring the circle, and then they found that a cube on 56 digits a side (the double cubit cubed) was equal in capacity to four cubit cylinders of 24 digits, height and radius. This was the basis of all their measurements and calculations.

In consequence of their taking too high a value for the cube root of  $\pi$ , they have an inch somewhat greater or a palm somewhat shorter than it should have been; the length being (taking the inch as the standard) 20°5044, (cubit from the Great Pyramid 20°6109), but as the Euboïc system gives the cubit almost according to the exact ratio we may assume, I think, that the ancients knew the true value of the cubit, but could not manage to get it nearer than 20°6109 when using linear measure, on account of the necessity for taking a number of cubic inches as the standard which could be divided up readily, keeping to whole numbers.

No doubt the principal reason for keeping to the 20.6109 cubit was that the number of cubic inches in the double cubit cubed is 70,048, and 70,000 (discarding a very small fraction) gives a cubic

The absolute length of the inch was subsequently fixed by the Babylonians as a coordinate the diameter of the Earth.

foot of 2,592 cubic inches =  $12 \times 12 \times 18$ . I give the various results in cubic inches obtained from the several systems, and it will be seen that they arrived at nearly the same number of 70,000 in a very skilful manner:—

Base.	O.G.T. Original Binary system, $(8)^6 \times 67.5$ Euboïc, 2,560 Hon of 6,750	O.G.T.	C.I.
Cylinder		17,694,720	70,778·8
Cylinder		17,280,000	69,120·0
Cube Cube	Eginetan, 2,160 Log of 8,100 Gudean, 60,000 + 10,000 Double cubit cubed, 2 × 20".6109	17,496,000 ——————————————————————————————————	69,984·0 70,000·0 70,048·0

In extracting the cube root of quantities the ancients had far less difficulty than may be supposed, though they could not attain accuracy unless they arrived at their object by repeated multiplications. They could, however, arrive closely at the results they wanted by means of a scale. It is quite an easy matter to construct a scale vertical and horizontal of different values, and by putting up a few cubed quantities, to trace out a curve through the points, from which the cube roots of other numbers may be obtained. Such a scale can be laid out and cube roots obtained with considerable exactitude in a few minutes at the present day. They were probably quite as expert in such manual work as we are now, and they knew a great deal more about the theory of numbers than we, as a rule, do. For example, to extract the root of 3,000 I get as a result  $14\frac{5}{12} = 14\cdot416$ , the root by logarithms being  $14\cdot423$ , difference =  $\cdot007$  inch.

In all their calculations the inch must have been a factor constantly necessary, and no doubt they always carried about with them a note of the ratio which it bore to the cubit.

The inch as deduced from the Great Pyramid is identical with the British inch, and we have all reasons for supposing that there has been no change in its dimensions since the earliest times. F. Petrie says (in *Inductive Metrology*) of the buildings in England where the inch was used, "it seems that the inch now in use has not varied any appreciable amount on the average for centuries."

All that any person required for obtaining the value of the inch at any time was to know the number of digits on which the cubit was based and the fraction giving the ratio between the digit and the inch.

### (3)—The Evolution of the Grain Troy.

Grain by weight: 64 ancient wheat = 32 Rati = 48 ancient barley = 54 old grain Troy = 54.54 Troy.

The earliest standards of weight, so far as we have any information as yet, were grains of wheat or barley, or seeds of Rati, in the ratio of 2 wheat grains to one Rati seed by weight. There is no clear indication as to which was first used, but at present the balance is rather in favour of the Rati. Wheat and barley grow over the districts of Babylonia and about Lake Van, and the Rati (the Abrus precatorius) grows in Arabia, Syria, India, and probably Babylonia.

The earliest method of counting numbers was the binary system of constantly doubling or halving the amount as: 1, 2, 4, 8, 16, 32, 64, &c. And the earliest standard weight, so far as we know, was 64 old grains wheat = 32 Rati seeds (equal to 54 old grains Troy).

This weight is found all over the world. In Europe it is the quarter shekel, the ducat. In India it is the Dharana, Purana, Tank, Pagoda, Varaha.

This method of doubling constantly from one grain was found to be too laborious, and we next find that they took ten fingers of grain, or ten Rati, and made a standard weight of 80 Rati. This weight is found all over Southern Asia, India, and the Levant. It is the Kat of Egypt (135 O.G.T.), the Indian Karsha-pana or pana (copper), the Suvana (gold), the Adalia, 2 Jitals or 2 kani amongst the Indian Moslems. This system of doubling was in primitive times a necessity with measures of capacity, as a cylinder of a cubit height and radius has eight times the capacity of a similar cylinder of half a cubit height and radius. It is generally supposed that cylinders were in use for measures of capacity before cubes.

It is probable that the first measures of capacity did not go by weight of water, but by the number of grains of wheat or Rati they would hold, but of this we have as yet but indistinct indications, in the information that has come down to us. It is possible that the cylinder which held  $a \times 32$  Rati may have held an amount of water weighing  $a \times 40$  Rati, giving a ratio of grain to water as 4:5; at the present day there are 80 pounds of water to a bushel, and about 64 pounds of wheat.

We start our consideration of the grain from the time when a cubit cylinder of 24 digits (17.6 inches), full of water, balanced or weighed a certain number of Rati, which we know from the average weight of the Rati to be about 2,560,000, and we find that by constantly dividing by eight, we arrive at 80 Rati (the Kat), and then to the base of 10 Rati: whilst by continually dividing the content of the double cubit (28 digits) cubed by eight, we arrive at 40 Rati, or a base of 5 Rati. We may then assume that the primitive base for the measurement of a cylinder of water was 10 Rati, and that the standard weight was the Kat: the older weight of 32 Rati being used for weights only: but this use of the Kat or the standard only holds good for those countries where the original binary system was adhered to.

The work of constantly doubling the amount of grain was so laborious that they very soon found a short cut by taking the pint as 5,000 Rati instead of 5,128 Rati, thus reducing their weights by nearly 2 per cent. This accounts for the difference of 2 per cent. between the primitive weights at the present day in India and Egypt.

Original computation:  $80 \times 8 \times 8 \times 8 \times 8 = 327,680$  Rati. Improved computation:  $40 \times 10 \times 10 \times 80 = 320,000$  Rati.

Thus the multiple of 10 was introduced at the sacrifice of 2 per cent. of the weight of cylinder.

Process of arriving at the bushel or talent:

The Euboic talent,

32 Rati, the weight standard.	40 the half Kat.
100	100
3,200 the Tower pound.	4,000 the Hon.
100	80
320,000 or bushel.	320,000

Thus from early times there were 100 divisions (drachmas) to the pound, and 80 pound to the bushel or talent.

We have thus arrived at the Euboïc talent or bushel, equal to a cylinder (24 digits) of half cubit height and radius. The most extensively used of all the world measures, and by all nations, all over the world, except in those parts where the still more primitive method is used of constantly doubling from 10 Rati, as in India.

We have then the following progression for the contents of the several cylinders:

			Multiple.	40	40 Rati =		½ Kat.		•
			100	4,000	,,	=	50	,,	Hon.
1.8	cubit	cylinder	125	5,000	"	=			pint.
14	,,	,,	1,000	40,000	,,	=	500	,,	gallon.
1	,,	,,	8,000	320,000	,,	=	4,000	,,	bushel.
~	27	9.7	64,000	2,560,000	22	-	32,000	2.2	quarter.

(To be continued.)

#### THE IMMOVABLE EAST.

By Philip G. Baldensperger, Esq.

(Continued from Q.S., 1906, p. 102.)

The Arab, at times so sober in words, and at times overflowing with voluble language, whether for praise or (more especially) for insult, indulges in much mimicry, and employs a language of signs with his hands, feet, and face.

Blushing is almost unknown, though I have seen a blush even through their dirty yellow-brown skin. They can tell fibs and lies without flinching, but kadhdháb "liar" is an insult, and only hurled at liars of the most outrageous description. Denial can therefore be expressed by an action, viz., by shaking the index-finger of the right hand from left to right several times. "No!" would be, slightly throwing the head backwards. "Yes!" throwing the head forward, or shutting the eyes a few times in quick succession. "I have nothing at all, not an atom," can be indicated by putting the nail of the thumb to the teeth of the upper jaw and by releasing them by a violent movement of the hand forwards, thus producing a slight sound between nail and teeth. Beckoning with the hand palm downwards is "come"; throwing the fingers forward in the same position is "go." Holding the beard and gazing steadfastly means, "I swear by my beard." Holding the beard and inclining the head sidewards, "please have pity." Touching and twisting the moustache, with furious eyes, "I will avenge myself." To

make a sign of spitting is "too vile for me." Hand on the head and bowing slightly, "at your command." Gathering the fingers point upwards with a slight jerk, "wait a moment." Gathering the fingers point upwards and a movement from shoulder-height to girdle-height, stopping them suddenly, "beautiful!" Throwing the right hand up and down with the index-finger pointed inwards, "dreadful news." Biting the index-finger, point outwards, "don't tell the secret." Putting the same finger stretched up before the lips, "hold your tongue!" Throwing the right hand, slightly hollowed, in a diagonal movement from the right to the left upwards, "it is of no consequence, say what you like!" A slight guttural sound without opening the mouth, "don't be silly." A shrug of the shoulders, "I don't care!" or expressed in words "sixty years and forty days" is much stronger, it means "I do not eare for all the forty days" is much stronger, it means "I do not care for all the consequences." Passing rapidly the upper part of the hand under the chin and throwing it forwards, "bad, useless" for an object, or "I will never consent" for a person. A slight but firm movement with the fist, "he is strong, courageous!" A slight wave of the open hand, all fingers in a vertical position, "fled." A wave with the left hand, "not worth while." Holding both index-fingers with the other fingers closed is a sign of friendship; whilst rubbing them means a quarrel. Putting down the thumb, "suppression, I am stronger." Lifting the turban slightly, "please God! may be be punished." Taking the open part of the dress in the right hand and shaking it, "I have nothing to do with it." When Nehemiah made the rulers of Jerusalem promise to restore the unjust money which they had exacted from their brethren, he says, "I shook my lap and said, 'So may God shake out every man from his house, and from his labour, that performeth not this promise'" (Neh. v, 13).

Uncouth language is also well understood by all kinds of move-

Uncouth language is also well understood by all kinds of movements with the fingers and hands, and often considered as great an insult as with words.

The language on a whole is pure Arabic, and though some letters are differently pronounced in different regions, the fellaḥîn may be called the most learned illiterate people among all the Arabic-speaking people I have met or tested in their own country, extending from Syria by Palestine and all along the coast of North Africa. The Arabic of Mesopotamia is more classical than the Syrian. It is supposed to be the more elegant, but it is in fact as incorrect and ugly to Arabs as Parisian is to French. Amongst Palestinian

fellahîn the Beni-Hassan pronounce the language best. All, it is true, have some vernacular, scarcely a *patois*, but all can talk a correct Arabic, and recite poems of considerable length, which no other peasants perhaps in the whole world can do.

The different villagers have each their peculiar ways of speaking, either in brief and energetic sentences or in slow trailing words, whereby it is known at once to which village they belong. Those of Beth 'Atab have a very energetic language, those of Siloam a lazy one. In Bethlehem they address anybody by "my small brother!" ya kheiyi (يا خيي); in Beth Jâla the salutation runs, ya tanêbi (يا تنايي) "my protector!" in a very singing voice; in Jebel Khalîl it is ya khâl (يا حال) "oh, maternal uncle!" in Kariet Abu Ghôsh, "O . . . . . !" as if looking for some title but never finding any; in the Fluh, "O father of . . . . "! (يا البار) without further title.

In the mountains the people generally own the lands as far asthe village lands reach; there are no lands belonging to the community as a rule. On the other hand, in the plains the lands belong to the inhabitants, and every one possessing oxen with which to plough may claim his share, when it is time to prepare them for sowing. Previous to 1872 there were no deeds proving them to be owners, but tradition was sufficient and respected by everybody. The right of might certainly had also a good deal to do in times past; strong villages simply occupied the lands of the weaker ones, and exterminated the inhabitants in their numerous bloody feuds-now partly disappearing. The fiercest contests that I remember are those of the lordly inhabitants of Kariet-el-Enab, better known as Abu-Ghôsh-against the vile inhabitants of Bethmaḥsir (بیت محسیر) whom they considered little better than slaves, and whom they attacked whenever they tried to maintain their rights in the occupation of the arable lands in the region of Der-Imhessen and thereabouts. It may be added that planted vineyards and olive trees are very seldom contested, and the owners have their deeds (کواشین) from Constantinople.

The villagers of the plains of Sharon and Philistia are usually co-proprietors of all the lands, but when the new law to establish deeds was promulgated, the poorer denied owning any land in order to avoid paying the cost of the deed, and thus became deprived of

their lands; in others they sold their right for a trifle. Beth-dejân sold one-third of its lands to Jaffa Effendis, one-third still belongs to the whole village, and the rest is private property. In Emmaus it belongs to the whole village.

In consequence of these different situations, in those places where the lands belong to everybody, lots are cast as to which family is to occupy which part, thus changing position every year. The kindred divide the lot either by paces or by goad-lengths (, , massass).

A man was murdered on the lands belonging to the village of Katra, on the right bank of the Wâdy, now the boundary line between that village and Mughar (, ); the government seized the elders of the village to find out the murderer, as the law suspects the owner of the ground where the murder was committed, but to escape punishment they denied that they were the owners of the land, and as Mughar is the next village, the government forced them to be owners and gave them deeds. The inhabitants of Katra tried to take their lands back again when the murder-affair was settled, but to no avail.

When the Bedawy incursions were more dangerous than they are now-some fifty years back-the Sheikhs of the plains sought to gather as many men around them as they possibly could, and gave to each family of settlers houses and lands, and even, in some cases, oxen, provided they agreed to be ready: (1) In time of danger to aid in repulsing the invaders; and (2) to work the lands entrusted to them. Generally those settlers had oxen, which fact alone entitled them to as much land as their animals could plough in one season. To illustrate the utility of a pair of oxen, or the value in the eyes of the Sheikh, it is related that a man and his family came to Kbébé with a yoke of oxen (منداري faddûn) and asked for a house and land, and he agreed to plough and sow, and share all general expenses with the villagers. Forthwith a villager, who owned only a house but no oxen, was turned out of his house and the stranger installed in his place. Naturally the turned-out villager protested, as he had built the house with his own hands, but the council of elders would not listen, and only gave way when he promised to become a regular agriculturist. Having been allowed a few days in which to make his arrangements, the stranger received a new lot and had to build a house, which was done by the help of

the whole village. The other man meanwhile set out to Ramleh on a market-day, and having purchased a yoke of oxen, drove them home. But before entering the village, he took away his turban and wrapped it well around the horns of the oxen. Being asked what this meant, he replied, that the ox was evidently the most respected person here, without the ox no home, and because of the ox he was permitted to live in his own house, therefore honour to whom honour is due, and the turban to the head of the family!

A transgressor against the laws of the fellahîn may flee from the village and remain absent for years, till his transgression be either arranged or forgotten, and during his absence his land passes to the neighbours, but he receives it again after his return, though certainly not without trouble.

The Hebrews also possessed arable lands in common, and lost their right by absence, but on their return received them back. So the widow of Shunem returned after an absence of seven years, and found her house and lands occupied, and nobody would restore it to her until after the intervention of the king, who was interested in her experiences, and asked her to tell him all about the prophet's miracle. On hearing her story he ordered that both her lands and income should be given back to her (II Kings, viii, 6).

In small plains, as the plain of Rephaim ("a, bak'at) and the plain of Khadder, the lands always belong to the same owners, and are only separated by landmarks (", rassem, or , rassem, or , hejar et-takhm). In the plains the land-marks are only necessary for the crops, not for the lands, which change masters every year. The gebûl of Deut. xix, 14, was a fixed land-mark, never to be moved, and a curse was on him that removed it (Deut. xxvii, 17).

A yoke of oven is called faddân, but the land also is divided into faddân, which means land that can be ploughed by a yoke of oven in twenty eight days. The land about Emmaus is very heavy, and a faddân is four oven, which plough alternatively in pairs every hour. In most other places the faddân means two oven, and the land they can plough in a season. The salm (\*\*) is the part (lit. share) of a man in a village. This is necessarily different according to the wealth of the village, i.e., the extent of land and the number of

Also called المحافظة kantara(t), lit. a bridge, i.e., that which bridges from property to property.

inhabitants. A me'nah (Liec) is a portion of land measuring forty paces square.

The divisions of land were, no doubt, the same among the Hebrews. The faddân of oxen îs called אֶבֶּיִר חָבָּקָר (1 Sam. xi, 7, 1 Kings xix, 21), and a faddân of land is called אֶבֶיִר שָׂדֶה (1 Sam. xiv, 14).

The ploughing land in general is known as watah (eduction) but it is only in the plains that divisions are made—by lots, or by measures. The prophet Amos, himself a native of Tekoa, probably had the plain of Tekoa in mind when he said: "Thy land shall be divided by line" (Amos vii, 17).

The farms of the lands, whether they are terraces, or broad divisions in the valleys, or on mountain tops, or so forth, have other names in addition to the more general terms. Thus, a complete extent of land, which a man could cultivate with his animals and the help of his family, is a falhat. The shkârat (قيرية) is a small plot of ground given to a widow or such as cannot afford the expenses of animals, and the ploughing and sowing is done with the help of loaned animals, or begged ones, as they call it.

Lands belonging to Mosques, Churches or Welvs are called wakf, and have either been dedicated to the Saint from time immemorial or are even now given to them by the fellahîn. Haram of Hebron is considered to be the richest land-owner. The administrator of these lands is expected to give one-fifth of the total revenue to the service of the Haram. The government has now taken almost all the wakf lands into its hands, and has an Inspector of the wakf in Jerusalem. Nevertheless many less notable saints have their private administrators. The lands of Rubîne are given by 'Abd-el-majîd Effendi from Ramleh to the fellahîn and Bedu of the district. The income goes towards the expenses of the mosque, and during the month of pilgimage (generally in September) an evening meal, consisting of meat, rice and bread, is offered daily to the poor before the administrator's tent. I have seen hundreds of beggars in tattered and torn clothes fall on the big dishes and snatch the food from each other. The tent with the White Standard of Rubîne-white, with the crescent and star, red-is open to every visitor, and he is readily invited if he eares to accept. At the death of the present manager, the rights will pass to his eldest cousin, and so forth, never remaining in one family-from father

to son. The managers (کیل wakîl) of all minor mosques have the

same rights.

It is very difficult to say whether, considering the many revolutions which Palestine has suffered, the people continue to own the same lands for many generations. Some villages near Jerusalem may perhaps have retained possession for centuries. But if we take as an example Urtas, which was a mighty village, and used its right of might, till the men were slaughtered by the inhabitants of a village in the kuse (کدسر), the few remaining inhabitants could not defend more than the lands immediately around the village, and the more powerful neighbours, as the Fawaghry (فواغرد) of Bethlehem, took all they could, thus owning the lands in the next vicinity. In Philistia the smaller villagers have hardly been in peaceful possession for more than thirty years, and bloody contests have occurred yearly, even since the establishment of the legal deeds, merely on account of the illegal action, real or presumed, of the new possessors. There is continual feud between the villages of Khulda and Beth-Mahsîr for the lands around the ruins of Der-Imhesen, El-Masiyeh, Khirbet ed-Jemâl, Im Sarrisse(t), Es-Saffare, etc. As late as 1885, when the inhabitants of Beth-Mahsîr were reaping on the lands of Der-Imhesen, belonging to them, the inhabitants of Khulda fell on them, and began regular warfare. Messengers were sent to the Beni-Malik, i.e., Emmaus, Yalo, Bethmeba, who cried out at the top of their voices: "The Mahasry (inhabitants of Beth-Mahsîr) are slaughtered." The dormant ranks of the old divisions of belligerents were roused, and the "battleline" (عني) was formed, and the armed villagers marched against the enemy, the "Saf" of Abu Ghosh against the "Saf" of Laham. When the Lahamites saw the Beni-Malik advancing, they retired and left the booty which they had gathered, and never appeared again. Naturally, the further the villages are away from the centres of government, the fiercer the contests.

The Christian Churches have also many landed properties, but more especially the Greek Church, and next, the Latin and Armenian Churches. The Greek Church possesses immense olive-yards about Mar Elias, midway between Jerusalem and Bethlehem, in Bethlehem and Beth-Jâla and Jerusalem, the well-known Nicophoriyeh. The vineyards about el-Khadr, St. George's Asylum, are also owned by the Greeks, in consequence, it is said, of a bargain made by the

Abbot and the fellahîn, by paying them a certain sum for all the lands he could see from the convent. The bargain agreed, the Abbot went on top of the convent and showed them the lands. Thus he became owner of a great part of the vineyards and the fine arable lands forming the plain of El Khadr. The convent has many yokes of oxen to cultivate the ground. There are also about a dozen olive trees on the road from Jerusalem to Hebron, marked by crosses hewn in the gnarled old stems, which the Greek convent claimed as their own, and which they received after the ordinary process in the Orient. It is said the Greek Convent possesses deeds written on a gazelle's skin from the Khalif Omar himself, and sealed by a print of his whole hand, confirming them in their proprietorship of houses and lands. The Latins also have bought lands, but, as a rule, they do not date many years back.

The Fellahîn buy and sell their lands, but it is always understood and mentioned in the deeds that the relations desist from all their rights, which in case of foreigners must be paid. This is the "right of redemption," as it is called in Jeremiah xxxii, 8. Ḥaķ il-bidâ (عتى البدا) is always observed, and the sale is never complete as long as the minor relatives are not of age, to signify their will, or renounce their rights; accordingly it is always very difficult to arrange a sale, especially if the family of the seller is very large and comprises many relatives.

(To be continued.)

# THE BEDOUIN OF THE SINAITIC PENINSULA.

(Continued from Q.S., 1906, p. 33.)

By W. E. Jennings-Bramley, Esq.

XII.—Medical Lore, &c.

It is difficult to distinguish between what they consider the medicinal properties of certain things, and what seems to us mere superstition. An Arab who gives his child burnt scorpion to swallow believes he is giving him a medicine whose natural properties are to render him invulnerable to the poison of scorpions; while when he

bathes in the sulphur springs of Gurundel, the same Arab probably considers he is going through an act of mysterious import, and that if he recovers it is due to supernatural agency. One of their favourite remedies is a verse from the Koran written on a scrap of paper sewn in leather and attached to the Meriva. This is supposed to be especially efficacious in diseases of the head or stomach, but it is a preventative in all cases, and is worn as such. Any one can write this; the mere fact of being able to write should, one would think, raise the writer into that class of super-ordinary beings who can be reasonably expected to have super-ordinary powers; but this is by no means the idea: it is the writing, and not the writer, that is considered to have curative and other powers. The Magharby have great faith in a charm of the same kind which protects the wearer against being shot. This is a strip of parchment, cut the length of the intending wearer, and entirely covered with writing. This charm takes about a month to write. Its efficacy is tested on an animal before it is delivered to the buyer. If the animal on which it is tied escapes from the bullet shot at it, the charm is proved to be in good working order, and can be trusted, except when your adversary provides himself with a silver bullet, against which there is no known charm. To be made serpent proof it is necessary to find some Hawi, who mixes sweet oil of the best quality obtainable with a little sugar, and then spits into the decoction, and it is ready for use: that is to say, must be drunk by whoever may be desirous of being serpent proof. Besides the written charms, they are fond of tying hollow stones both to themselves and their children and their camels. A hollow stone is credited with beneficent power, the exact value of which no one seems capable of defining. The Tagea or cap is a favourite place on which to fasten any protective charm.

I am inclined to think that they do not attribute much malicious influence to Iblis (or blis as they pronounce the name). He seems to be a kind of very superior devil, whose name cannot be used familiarly in an oath. Shaitan is much more usual, he being but an evil spirit, but in swearing they will send a man to hell, very seldom to the devil. Iblis is not a person to be mentioned lightly.

I may add that it is very difficult to get them to talk of their beliefs: it is only by being constantly on the watch for a chance expression that you can get on the track of some. They have no professional story tellers, most only care for such stories as deal with the feats of men of their own tribe. None of those I have met had heard of Queen Bilkis, or of any other legendary king or queen.

It would take years of intercourse with them to discover all the small superstitions with which their minds are filled; there are matters it is impossible to question them about, for they would not know what you meant; it is only chance things that suggest them. The women, for instance, believe that if they twist a branch of rattan round a bush, when they pass, and, on returning to it four or five days after, find the branch withered, this is an omen of early death to them.

Less fateful but more practical in its results is the belief that a crooked mahjan or eamel stick if cleaned in the fire and rubbed with butter on a Friday, will easily be straightened. The Ababda, whose camel sticks have curved handles, have discovered the power heat has of making wood pliable, even unhallowed by the sanctity of Friday, but the crooked stick can only be made straight on that day.

Mecca, they told me, was half way to the sun. The people who live where it rises are very black, and suffer much from the heat. They sit under bushes until the sun is far off enough not to burn them. I could gather nothing further concerning these interesting people. All this doubtless sounds fragmentary and scrappy, but I have always found it most difficult to get deeper into any subject, or to make them give me information enough to help me to form some opinion as to the origin of their many superstitions.

#### XIII.—Camels.

I have never heard of any particular song being sung when the tribe is to be assembled for a raid. Word is sent round that on a certain day those willing to join must assemble at such a well. It is only there, and on seeing how many have come together, that plans are laid and the direction to be taken decided on. Joining, or not joining, is voluntary, and it is therefore difficult, until it is ascertained how many fighting men it can number, to decide what foe the company is fit to face.

All the tribes of Sinai depend on their camels, whether for raiding or travelling. The Teacha or Suerka Arabs, it is true, have

a few horses, and the sheikh of a tribe will, if possible, own one, but this is for show more than use, and the whole number of horses among these tribes is too insignificant to be of any account. Their wealth and importance is proportionate to the number of camels they possess. Their very existence depends on the camel; it therefore seems curious that in spite of familiarity, as well as of association of ideas, especially in a people whose aesthetic sense is entirely undeveloped, they should be conscious of the animal's ungainliness. Still, one of the many legends told of the origin of the camel says that, having been created, it was found so ugly and misshapen that it was hastily hidden away in a house, so that none might see it; but the camel-fly, it seems, having been created about the same time, seven of these found their way into the house. These were enough to drive the camel so wild that walls were not strong enough to hold it. It broke loose, and we must suppose that men were not so sensitive to its ugliness as had been feared; they recognised its sterling qualities, and put up with its looks.

Another story says that when first created the camel belonged to the Jews, but Mohammed was not satisfied it should be so. He shut the camel up in a room and went outside. The representative Jew stood on one side, Mohammed on the other. There Prophet and Jew both called, and the camel, who unhesitatingly broke through the wall on the Prophet's side, thus acknowledged him and all Arabs henceforth to be his masters.

The parent stock of all camels now in use are said by the Arabs to have been the three races, the Zerigan, the Ûdiathan, and the Abadiah. What we call a dromedary is simply a well-bred camel whose pedigree should be traceable for five generations. These are called "safi" by the Arabs. They are used for riding, and their value depends on pace, training, and pedigree. The average price of a good four-year old "safi" is from £6-8, although in exceptional cases they may fetch as much as £20; but camels so valuable as that are rare, and must have some very special qualities of speed and size to command such a price. The name safi should, properly speaking, only be given to a camel whose pedigree goes back five generations, but the term is used in a general way for any well-bred riding camel. The enigmatic question always asked when buying a camel is, "Does the camel-stick fall?" This being interpreted means, is the camel a real safi? For the seller, holding the stick grasped in his hand, goes through the pedigree of the animal,

preceding each assertion by a solemn "Wallah," and loosening a finger of the hand holding the stick for each generation he mentions. At the fifth, as the thumb is straightened, the stick falls from his hand, and the camel is declared to be a real safi. Arab public opinion is so severe in the view it takes of any deceit in such matters, that as a rule you may trust a pedigree so assured; and as the family history of a eamel is known to most in a tribe, it would be difficult for a man to deceive unless the rest were in collusion with him. The colour most prized is red, the darker the better. Though the pedigree is considered first, still, in valuing a riding camel, the training it has received is all important. Really good trainers are few in number. The greatest care and patience is required, and a year is not considered too much time to devote to it. The common fault to overcome is a tendency in the young camel to swerve suddenly while going full pace, which swerving is most difficult to sit. Once the riding camel can be trusted to keep a good line while going his fastest, his education may be said to have been successfully completed, for it has not taken so long to teach him the meaning of the different sounds he must obey by stopping, kneeling, rising, going faster or slower.

Calves of good stock are left with their mothers two whole years before any training is attempted. The first year the cow-camel is left to graze and devote herself entirely to her calf; the next year she is ridden, and her calf allowed to follow her, and it is astonishing what distances the young one will go after its mother. The ears of these well-bred calves are sometimes slit, a great disfigurement, but supposed to seal them with the stamp of good blood.

In the case of the oqui, or baggage camel, the same care is not needed. A commoner, coarser, stronger animal, all that is required of it is that its earrying powers should be great. If a cow-camel, its value is also greatly enhanced by its being known to give a large amount of milk, for in the case of the oqui calves a year with the mother is considered enough, and even at four months old, when it begins to nibble shoots, the herdsman will milk the cow daily, the milk being his principal article of food, helped out with roasted corn or maize. Many camels refuse to give milk once the foal has been separated from them. Those who will are quite the most useful animals in the desert, for the traveller is then able to sustain himself with food and drink from the beast he is riding. Milk, however, is a bad substitute for water to quench thirst. If the calf is sold

during the first year, this is always done with the understanding that it shall remain with its mother until it is at least six months old. The ordinary price all through the Peninsula for a young eamel in its first year is £1 4s.

The eamels almost always bear during the Rûbieh. The cow goes thirteen months with calf, and cannot be ridden hard for quite four months before she calves, nor for a year after, so cow-camels are comparatively of little use for riding. The male, at the beginning of the year, while with the females in the wady, is a dangerous animal to meet; so dangerous that, according to Arab unwritten law, you may, should you have entered the wady not knowing vamels are there, kill the beast that attacks you without being held responsible for its value; but should you have been warned that camels are there, and go in and kill an animal in self-defence, you must pay the price at which it may be valued. These questions are decided by the Sheikh. (In the Hajj road in Wâdy Heytan one passes the grave of a man who was killed by his eamel.) Your only chance is to frighten the brute by hitting him as hard as you can over the head. He will charge you, with the intention of throwing you down and crushing you by kneeling on you.

Suleiman told me that once he and another man were made herdsmen to some new camels who were feeding near the Well Rûbia. The boy had gone to bring the camels in, but as he did not return at the time he should, Suleiman went to see what had happened, and found the lad fighting a male camel, just succeeding in keeping him off by continual blows on the head. Suleiman hurried up, and the infuriated beast, too intent on attacking the boy, did not notice him until it had received a stunning blow on the head which felled it, and before it could recover Suleiman managed to get a headstall (rassan) over its head, which he then continued to belabour till he considered the punishment sufficient, or, perhaps, till his arm was too tired to go on. With a good stick it is possible to keep the brute off, but taken unawares your chance of escape is small. At this time of the year the male can go a month without eating.

But to return to the eow-camel and young. If at the end of the first year it is intended that the mother shall breed again, or that she be used as a baggage camel, the calf is taken from her and tied to the tents, as she would be much longer losing her milk were it to be left with her. The greatest care must however now be taken if

the camel is used as for baggage on a journey, for if she be not tethered properly for at least three weeks, she will get loose and find her way back to her young, were she separated from it even by a four or five days' journey. I have known several Bedouin who have in this way temporarily lost their baggage camels, a serious matter in the desert. Camels are certainly the most devoted of mothers. They will low (the Arabs call it Henn) incessantly night and day for at least a fortnight, and it requires an Arab's calm not to be irritated by the continual noise. I once asked an old Arab if he did not mind it. "Why should I?" he answered, "it can't help it;" but that of course was not the point. I was once coming down a small wâdy into the Hajj Road. The long low note of distress which the cow-camel utters when in trouble had warned me of her presence. When I came upon her I was surprised to find her alone. She came up to me, then led the way as it were to some bushes 20 yards off, stopping and looking back to see if I would follow her, lowing all the time. I followed her, and found, lying under the bush, her calf all but dead. I raised it to its feet and held it so that it might suck, but it fell back, and I saw it was too far gone to be saved. My two men came up, and we could lose no more time, as we saw nothing could be done. The poor cow followed us for some time, always slower and slower, but lowing still, in the vain hope we might be persuaded to return and help her young.

The cow-camel generally breeds every third year, commencing when four years old, and giving from 6 to 9 calves during her life. The oqui is a better breeder than the safi, but the safi is always worth more. Sometimes, for instance, two oquis will be given in exchange for one good riding or safi camel.

Among Arabs the camel changes its name every year of its life up to the eighth.

	In the	lst	year it	is called	a Nebarr,
	,,	2nd	,,	,,	Lebeni,
	,,	3rd	,,	,,	Murbut,
	,,	4th	,,	,,	Hejj,
	,,	$5 \mathrm{th}$	,,	٠,	Jeda',
	,,	6th	,,	,,	Rubba,
	,,	7th	,,	,,	Khammas,
and	in the	8th	,,	,,	Seddas.

The word used to signify a young camel in general is *Huar*, or to particularise a male, *Gaûd* is used; if a femalé, *Biker* or *Bakra*, but

Bakra is exchanged for Naqa as soon as the female has borne a calf, and the general term for a male when more than four years old is Jemel. These names are in use I believe among all Arabs, but the fellahîn give no special names to camels after the third year.

It is during its first year that the young camel must face the most serious risks to its life. Should it be born, for instance, the third year of no rainfall, its mother, unable to get green food, has no milk to give it. This third year of drought is the fatal one. After a rainfall the short grasses and plants which spring up in the sand are the best feeding the camel can have, and will last for that year. The next, should there be no rainfall, though these disappear, still there is good food to be had in such shrubs as the Hamthe Guttoff, etc., the previous year's rain and the heavy dews being enough to keep these flourishing. If another year follows without rain, these shrubs will still keep alive, but only afford just enough foliage to keep the herds from starving. If yet another year follows without rain, the tribes must either emigrate to distant feeding grounds, in the hope of finding pasturage, or leave their herds to starve. In many cases, feuds with surrounding tribes leave them no choice in the matter; they have to stay where they are, though it means ruin. Several years ago three successive years of drought left Sinai almost without a camel. The ruined owners had to seek employment elsewhere as herdsmen, and begin life over again. Even in such extreme cases I think it would be difficult to make the Bedouin go beyond the range of his possible experience, for all countries unknown to him are, he believes, in the hands of robbers, and his argument is: what would be the good of saving your eamels from starvation to have them taken from you? I asked some Bedouin this year, if given a recurrence of a long drought, they would accept an offer of the Government, were it made, to take them and their flocks free across the canal to possible pastures on the Suez road, and I saw from their manner that such a way out of the peril was anything but inviting to them. The loss of their flocks means necessarily the loss of everything to the Bedouin, whose only wealth they are; and yet an Arab requires so little, that at the very worst all it means is a year's work in the cultivation.

The young camels do not stand the cold well, and when food is scarce, as it is in such years, they bear it still less, for the fat in it is the young one's chief protection. The herdsmen have to be especially careful in selecting sheltered spots for the nights, which

are often bitterly cold; for when in winter a cold wind is accompanied by rain, all camels suffer very much, and the younger they are, the more dangerous is this damp. Riding camels should be covered with rugs, or, lacking these, with sacks, and when they kneel down, care should be taken that they do not face the wind, but have their backs turned to it.

A third and serious danger to young camels is the number of wolves about. Hyenas seldom attack camels but reserve themselves for donkeys, when not feeding on earrion; but I was astonished to find out how many calves are destroyed by wolves. I have elsewhere related my own experiences of wolves attacking my camels. All the herdsman can do is to sleep in the midst of his flock and keep them in sight all day, but this, in the case of a large flock, is almost impossible, and the wolves are constantly on the watch for any animal that strays away from the rest. Every now and again, when the wolves are reported to be in great numbers in any special spot, parties are organised to shoot them down.

The evil eye is another danger the young camel must face, but it is safe-guarded from that by a hollow stone being tied round its neck soon after its birth. A still more efficacious talisman is the sole, or part of the sole, of a boot—at all events, leather that has touched the ground—but the reason for this I was unable to ascertain, but it is a belief common to Bedouin and Fellahın alike.

The training of the Oqui camel is not so long or difficult a business as that of the Safi. At the end of its second year, when it is called a Murbut, it is broken in to the head stall (resan, rassan); that done, it can be used to carry light loads or for riding, no other pains are taken in breaking them in; they learn as they go.

(To be continued.)

#### NOTES ON THE TOPOGRAPHY OF JERUSALEM.

By the Rev. J. C. Nevin, Los Angeles, California.

I .- The Site of the Acra.

I confess that it is with a degree of timidity, owing to want of access to much of what has been written on the general subject, that I attempt in a measure to comply with the request of Sir Charles Watson at the close of his very interesting article in the January number of the Quarterly Report (pp. 50-54).

I find myself unable to approve of his location of Acra for the following reasons:—

- (1) I cannot find satisfactory proof in the authorities cited—the Sacred Scriptures, the Apocrypha, and Josephus.
- (2) It is so located that it must have overlapped the S.E. corner of the Outer Inclosure of the Temple, which was forbidden to all Gentiles, and any violation of its bounds would have been mentioned and severely condemned. But the whole history of the Temple surely implies that its integrity was preserved. This inclosure was 400 cubits of 18 in., or 500 cubits of  $14\frac{2}{5}$  in., or a stadium of 600 feet on each side, square. It was built before any of Solomon's additions on the south and east were erected, and its sacred bounds ever afterwards held inviolate. Even Herod scrupulously retained them.

To locate this square, I think we have two fixed points which cannot be far from accurate. One is the northern jamb of the Prophet's Gate, the other is the very probable northern end of Solomon's Porch, which was doubtless in line with the northern wall of said Outer Inclosure. This Porch was the "ascent" by which Solomon went up to the Temple for divine service, and which astounded the Queen of Sheba, and started from the main Open Court of the Palace, which lay between the Palace and the southern wall of the Outer Inclosure of the Temple, thus possibly fixing the length of the Porch at about 600 feet.

There is also a possibility that a wall, a few feet high, extended from the S.E. corner of the Outer Inclosure to the Porch, and the surface of the ground on its north side levelled up so as to make an Upper Court north of the Main Court of the Palace. But 1 am inclined to think that the "Upper Court" of the Sacred Scriptures lay inside of the Outer Inclosure, between its northern wall and the "Inner Inclosure" of the Temple.

In passing, I wish to note that the "Court of the Guard" was by the Palace, at the western end of the Main or Open Court, and possibly extended even to the S.W. corner of the Palace grounds, and would be on the same level, east and west, north and south, as the Palace itself. Of course, I am assuming that about 300 feet square of the S.W. corner of the Haram area was the work of Herod, as our great explorers and excavators have so clearly demonstrated.

(3) The wall of this Outer Inclosure was a very strong wall, really making a formidable fortress or stronghold. We know the wall on its western side was, as it is yet, one of remarkable strength. The western 300 feet of its southern wall must also have been equally strong, and the eastern 300 feet of the same, I think we are safe in assuming, was of a construction consonant with the western half. And so we may assume that the eastern and northern walls were also such that a "fox" could not break them down.

Solomon devoted his whole energy to the building of the Temple before he completed his plans for his personal palatial improvements, and naturally sought to make this national structure complete in itself for all purposes of worship and defence. At least, there is nothing in the record to the contrary.

In post-Solomonic days, allusions to the great strength of this stronghold are not infrequent, and how it was at different periods made even stronger. We have positive proof of the strength of the north wall in the fact that it took Herod 15 days to capture it. I think it is clear from Ecclesiasticus l, 1–4, that this was the case in regard to all four of the inclosing walls, and that the "Great Sea" was the water supply for this Temple Stronghold. In the time of Simon, the son of Onias, the "Citadel" had not been built, and, of course, no levelling of the hill had been made. Where, then, did the Citadel, when built, get its water supply, if the "Great Sea" was covered by the Temple grounds at the time of the Citadel's inauguration? Such an event would have given rise to so great a struggle for the inviolability of the sacred courts, that the most indifferent historians could not have failed to record it.

- (4) In all the work of Solomon there is no mention of such a hill, and in Nehemiah's time there is not the slightest intimation in his very particular and detailed account of the work of reparation and of the dedication, that any hill or fortification of any kind (other than the Court of the Guard on the Palace grounds) existed at any point of the southern wall of the Outer Inclosure, and especially at its S.E. corner, near which the Temple repairs ended. But he does make it plain that something of the kind existed at its N.W. corner. There was the "ascent to the Armoury." And in the wall from the Horse Gate to the Sheep Gate there was an "ascent" at a re-entrant angle before reaching the Sheep Gate. (It is searcely necessary to add that there was some kind of a tower at this angle.) Both of these "ascents" point clearly to the fact that there was high ground outside the said N.W. corner, higher than the "Upper Court" of the Temple, and on it a fortification of some kind. Nehemiah's account clearly satisfies me that Acra could not possibly have been anywhere on the south side of the Temple.
- (5) Acra could not have been Millo, towering above the Temple site, because—
  - (a) Araunah could not well have had his "threshing" floor so close to David's residence.

(Allow a remark here on the location of this floor. Wherever it was on the Temple Mount, we can only be sure that it was where the surface of the rock was suitable and the force of the wind available, whether on the highest point or some place lower down.)

- (b) David could not well be said to have gone up from such an eminence to see Araunah lower down, even if the "floor" was located on the very peak, which I am satisfied was not the case.
- (c) Solomon could not be said to have "brought up" the daughter of Pharaoh from this new Millo to his palace below.

Altogether, the suggestion of Sir Charles Watson puts the whole subject into inextricable confusion. I do not wish to be understood as speaking ex cathedra but only from my point of view which, I grant, may be wrong.

But I may be asked, "have you any better solution to offer?" With all deference, I answer that I think I have. I believe that

when a man sets aside the conscientious views of another, he ought to have something to propose instead.

So, without further discussing the views of the learned Author, I will try to present some conclusions which I have come to and held for a number of years. Incidentally, in making this statement, it will be seen that I differ with the article under review in more points than one. First, the stronghold of the Jebusites; the City of David; the Millo, of David, and Solomon, and Joash, and Hezekiah; the house of the mighty men, of Nehemiah; and "the great tower that lieth out," of Sir Charles Warren—are all one and the same locality. And secondly, the early "King's Gardens"; the Rock Zoheleth; and Silla—are all one and the same place.

These identifications make it plain from what point David built round about and inward; and how it was that David went up to meet Araunah, and Solomon brought up Pharaoh's daughter to the Palace he had built for her; and how it was that irascible and petulant invalid Joash, on his way to the Gardens for a change, so aggravated his bearers at the gate of Millo leading down to Silla that they slew him there and then, although they may have had plans to do so later at the Gardens. The remains of two parallel walls pointing straight from the Triple Gate to Millo are suggestive.

Zoheleth.—I think it is as vain for us to hunt for this overhanging Dragon rock at or near the Virgin's Fount, as it would be to hunt for the early King's Gardens there where Adonijah and his coconspirators met to perfect their plans for the Coup d'état, because the earthquake in Uzziah's days utterly obliterated both, as Josephus, I believe, truthfully relates. Zoheleth was destroyed and its destruction blotted out Silla. And yet, I admit that excavations in the valley might discover some remains of these Gardens, if Dr. Schick's pool is not really a part of them.

## 2. General Questions.

The above thought suggests another, which I will state without discussion, viz., I believe the site of the crucifixion and burial of our Blessed Lord was for ever blotted out by the great levelling operations of Titus, during his memorable siege. The procession went out at the Gate Gennath, near Herod's great Palace and Pilate's Judgment Hall, and near by in the N.W. section of the city the sad scene took place, where there was a skull-shaped boulder or, more likely, a more or less inclined flat rock-face on which was plainly discernible some

skull-like configuration. The site of the Tomb of Moses was for ever concealed for a good purpose,—why not that of the Blessed Lord for like reasons. The Holy Sepulchre, Golgotha, Gordon's Tomb, and Conder's Tomb, are all utterly inadmissible. Superstition has located many other places about Jerusalem which have as much claim to be what they are represented to be, as the above have, in their line.

In the early days of David, the subsequent great engineering works in digging ditches and conduits, and making pools and reservoirs and souterrains, etc., were in their infancy. So there was doubtless little done as yet excepting, perhaps, two resorts. Silla was one, and the other was Gihon.

(1) Gihon, of David and Solomon and Hezekiah: the "old pool," of Isaiah; Solomon's pool of Josephus; and the Siloam of to-day—were all one and the same, differing somewhat in construction at different periods.

The water of this pool doubtless, at first, came down the Tyropæon valley from the same spring which now supplies the twin pools at the Convent of the Sisters of Sion.

It was to this pool that Solomon was brought down from Millo for anointing to the office of king, and as he returned, passing up through the city of David, the loud acclamations of the people brought consternation to the conspirators over on the other side of Ophel at Silla.

(2) "The reservoir between the two walls," of Isaiah; the King's Pool, and the Pool of Shelah of Nehemiah; Siloam and the "fortified ditch" of Josephus; and the old pool, of to-day,—are all one and the same.

This identification harmonizes and makes plain all that is said on this point by Isaiah, Nehemiah, and Josephus. It seems like the irony of fate that Dr. Bliss did not discover where the Wall crossed the Tyropœon, when he was burrowing right beside it in his remarkable work at Siloam. He stopped just at this wall. The series of eight steps at the south side of the pool, which he brought to light, beyond all doubt belonged to Isaiah's "gate between the two walls," by which Zedekiah fled,—the way from it leading around the east side of the pool to those other steps which Dr. Bliss unearthed at the east end of the "old dam" wall, and which he rightly divined were pointing straight to the eight steps above mentioned.

The "reservoir between the two walls" was made in the days of Isaiah by Hezekiah. Josephus says the city wall had a "bending above Siloam," *i.e.*, the present "old pool," which plainly indicates its course along the west side of the said pool. And then, he says again, the wall "bent again" towards the East at Solomon's Pool, *i.e.*, the present Siloam, and south of it and between the two pools, including Siloam within and putting the old pool without the city walls

Isaiah calls "the reservoir between the two walls" a mikweh, not a berēkah, the latter being of a more or less artistic construction throughout, while the former was a kind of informal impounding of water in a natural site by simply constructing a dam. This, I think, was the case with this pool, where the wall was carried around a deep gulch for ease of construction at first, at the same time including the old Gihon in the city.

Still, it is said in the more formal record in Chronicles, that Hezekiah made a berēkah and a conduit, which undoubtedly refers to this pool and the rock-cut conduit from the Virgin's Fount.

Notwithstanding Dr. Bliss labours hard (and apparently unsatisfactorily to himself) around the point  $N^2$  to show that the wall crossed on Hezekiah's dam, I am not convinced, and feel satisfied that no wall ever crossed on this dam previous to that of Eudocia. This was truly a "fortified ditch," and was in no need of a wall on the dam. When Eudocia built her wall, the other walls around the pool were equally unnecessary and were not restored.

- the pool were equally unnecessary and were not restored.

  (3) "En Rogel"; "the upper spring of the waters of Gihon"; and the Virgin's Fount,—were all one and the same. The other spring of Gihon was in the Tyropœon, as above.

  (4) "The lower pool," of Isaiah; "the pool that was made," of
- (4) "The lower pool," of Isaiah; "the pool that was made," of Nehemiah; and the pool discovered by Dr. Schick at the Virgin's Fount,—were all one and the same. I would suggest that "the pool that was made" may only refer to the work done in the fount itself.

However, Dr. Schick's pool must have been contemporaneous and of early construction, perhaps made when "the upper pool" (the so-called pool of Hezekiah) was built. I judge this from the fact that they were known to Isaiah as the "upper" and the "lower" pools. They were doubtless Solomonic. The "lower" was made specially for the benefit of the gardens at Silla. But after the destruction of these, the pleasure resort was wholly

transferred to those south of Siloam, and the "second conduit" was built by Uzziah or Jotham (who built much on Ophel) to earry the water to the new location. Dr. Bliss discovered the outlet of this conduit at the eastern end of Hezekiah's dam—just where it would be of service.

Finally Jotham's grandson, Hezekiah, for good reasons abandoned the conduit and "lower pool," "gathered together," or gathered in the waters thereof, "stopped the upper spring of the waters of Gihon" and "brought them straight down on the west side of the City of David" to the old Gihon, and built "the reservoir between the two walls" for the purpose of impounding the overflow of this same "old pool," as Isaiah plainly tells us.

(5) "The upper pool" of Isaiah; the pool Amygdalon of Josephus; and the modern pool of Hezekiah, were all one and the same.

This pool may have been the work of Uzziah, who spent much labour in fortifying the adjacent part of the city. He built the "Corner" tower (tower of the furnaces), the tower at the valley gate, and the tower at "the turning of the wall," where Hippicus afterwards stood. He was a great builder of ditches and pools elsewhere.

But the probabilities are, as stated above, that it was the work of Solomon. At all events, it was in existence, as well as its conduit, in the days of Hezekiah's father, Ahaz.

Whether this pool was outside or inside the second wall is not positively determined, but the best judgment places it outside. If Titus completely demolished the second wall, the pool could be located inside—which the pick and shovel may some day demonstrate.

- (6) "The Broad Wall" cannot be considered in determining the above location. The scripture record makes it plain that this wall only extended from the Gate of Ephraim to "the Corner Gate"—400 cubits in length. And Nchemiah places it between "the tower of the furnaces" and the Gate of Ephraim.
- (7) I therefore conclude that the tower at "the Corner" and the tower "of the furnaces" were one and the same.

What are we to understand by a "corner" in this record of Nehemiah, and, perhaps, elsewhere? If we can satisfactorily answer this question, it will help much in getting a clear idea of Nehemiah's account of his work.

(8) It is my opinion that a "corner" was always a re-entrant angle, and a "turning of the wall" was always a salient angle. Hence I conclude that there was a re-entrant angle at the western end of the "Broad Wall."

A tower at a salient angle was always spoken of as "a tower that standeth out," and a tower at a re-entrant angle was just as invariably a "tower at the corner," or a "corner tower."

(9) In David's day, at least, there must have been two main roads leading to the city from the east, one through the Asmonean gorge and one through the shallow valley now occupied by the street from St. Stephen's Gate.

(To be continued.)

## CITIES IN THE NEGEB, AND TRIBAL BOUNDARIES.

By the REV. CALEB HAUSER, Crothersville, Ind., U.S.A.

COMPARATIVELY few of the Biblical sites in the Negeb have been identified, and some of the proposed identifications are, perhaps, untenable. Rehoboth, Beer-sheba, Sheba, Rimmon, Arad, and Aroer are certainly correctly identified. Very probably Kerioth Hezron, Sharuhen, Jeshua, and Beer-lahai-roi are also correctly located. As to Moladah, Hormah and Kadesh-Barnea authorities differ; although my conviction is, that they have been correctly identified with Khurbet el-Milh, S'baita and 'Ain Kadis. As the arguments on which these identifications rest are well known, I shall not re-state them here. One argument only, that derived from the order of enumeration, the enumeration of these places among others of the Negeb (Josh. xv, 21-32; Josh. xix, 1-8; I Chron. iv, 28-33) ought to be advanced, and that with a new force. If we can identify Eltolad and Chesil near S'baita, and on a line leading to that site; and if we can furthermore identify Ziklag, Marcaboth and Lebaoth in some other direction from S'baita-all in roughly consecutive order,—then the identification of Hormah (named in the lists between Chesil and Ziklag) with S'baita is verified.

We shall attempt to identify first of all the cities of Simeon, Ziklag, Chesil, and others near them; but before addressing ourselves to this task, we shall premise a few preliminary remarks on the Gezrites, one of three desert tribes, against which David, while at Ziklag, waged a war of extermination.

- I. The Gerrites were a tribe distinct from the Geshurites. David waged war against three tribes; else he would not have named three others in their stead, 1 Sam. xxvii, 10. The Gezrites probably dwelt in the region of Wady el-Ghaidherah, in the Badiet et-Tih. This accords well with the fact that the Amalekites of El Paran and the Geshurites of the Desert of Shur are named with them as subjected to David's invasion. We may further ask: Was not Rasa, or Gerasa, a station on the old Roman Road from Jerusalem to Elath, situated just here? The name Gerasa may certainly represent the old Semitic one, and the location seems to be suitable. Rasa was 32 Roman miles from Ailah, or Elath: Robinson reached Wâdy el-Ghaidherah on the second day after his departure from 'Akabah; 15 hours were spent in travelling the distance; which accordingly would seem to be about 38 Roman miles. But evidently Robinson in ascending from the 'Arabah and crossing the hilly country above, did not travel at the regular rate, and furthermore he seems to have had the Roman Road towards the left, and this perhaps reached Wâdy el-Ghaidherah at a place some miles nearer 'Akabah. Here, then, in Wâdy el-Ghaidherah we may find the site of Rasa.
- II. Ziklug.—The Greek has  $\sigma \epsilon \kappa \epsilon \lambda \acute{a} \kappa$  (B),  $\sigma \iota \kappa \iota \lambda \acute{a} \gamma$  (A),  $\sigma \epsilon \kappa \epsilon \lambda \acute{a} \gamma$  (L). This seems to be Ptolemy's  $K a \lambda \gamma v \acute{c} a$ .
- (1) This name actually preserves three of the radicals of the original name—and where shall we find a name more closely resembling Ziklag? The loss of the  $\sigma$  admits of an explanation.
- (2) Ptolemy is enumerating cities on or near the Roman Road from Jerusalem to Elath: Maliatha, Calguia, Lysa, Gypsaria, Gerasa. Calguia, between Maliatha and Lysa, was apparently situated in the territory once belonging to Simeon.
- (3) The position of Calguia is indicated. One important correction is necessary, however. The longitude of Calguia should be  $65\frac{1}{3}^{\circ}$  instead of  $66\frac{1}{3}^{\circ}$ . Comparing longitudes (Maliatha  $65\frac{3}{4}^{\circ}$ , Lysa  $65\frac{5}{6}^{\circ}$ , Gypsaria  $65\frac{2}{3}^{\circ}$ , Calguia  $65\frac{1}{3}^{\circ}$ ), we ascertain that the last-named city was west of the Roman Road by a number of miles. Comparing latitudes we find that Gypsaria was  $\frac{1}{4}^{\circ}$  north of Gerasa,

Lysa  $\frac{1}{2}^{\circ}$  north of Gypsaria, Calguia  $\frac{1}{4}^{\circ}$  (?) north of Lysa. This is inaccurate, but Eboda is on the same degree of latitude as Calguia, Elusa is  $\frac{1}{3}^{\circ}$  north of it. The site indicated is *el-Aujeh*. of enumeration in the lists (Josh. xv, 21-32, etc.) requires such a position near Hormah, or Zephath; which, therefore, is correctly identified with S'baita, near el-Aujeh. From Achish, King of Gath, David, on request, received Ziklag, "the hold to the wilderness," a frontier fortress. Here he was sovereign of all the country round about. At Ziklag, perhaps only at a site like el-Aujeh, in a commanding position far away from Gath, it was possible for David to guard all approach from the south to Gath, and to prevent tidings of the massacre of Amalekites, Gezrites and Geshurites reaching King Achish. Thus David could deceive the credulous king, who believed that David had, as he declared, invaded the Negeb of Judah and his allies, the Jerahmeelites and Kenites; whereas the campaign had really been directed against three other tribes farther to the sonth-west, tribes perhaps friendly to Achish. The narrative 1 Sam. xxix, 11 sqq. also requires a far southern site for Ziklag. Probably the dissatisfaction of the Philistine chiefs, which resulted in the dismissal of David and his men, broke out before the invading armies reached Aphek; perhaps before they had left Philistine territory. But even if David and his men had accompanied the Philistines all the way to Aphek, the return to Ziklag in three days would not be an impossibility. The distance is 100–105 geographical miles; by way of Beth-Horon, perhaps a little less. An early start (which is especially recorded) brought David, early on the second day, near enough to the Negeb for news of the Amalekite raid to reach him. Forebodings, or rumours, of the fate of Ziklag-and forced marches-until the evening of the third day would have brought the little band of hardy outlaws to a site far south of any other that has yet been proposed for Ziklag. The distance travelled in three days must have been very great, since 200 of David's men were so fatigued that they were unable to cross the Brook Besor in pursuit of the raiders.

The present writer once walked a similar distance, 130 geographical miles, in  $3\frac{1}{2}$  days; on another occasion, in 18 hours (two spent in resting) about 60 statute miles.

Among the cities, to which David sent of the Amalekite spoils, mention is made of Hormah and of Ramath of the South, both of them near el-Aujeh. An examination of el-Aujeh would be very

desirable. Perhaps vestiges of the fortifications of Philistine times remain. The ruins of the fort which Palmer mentions (*Desert of the Exodus*, pp. 368 sqq.) are of later date, being of the same workmanship as the church which he examined; but substructions of older workmanship may remain.

as a corrupt expansion of רְתְבֵּבוֹת, suggested by the following name, i.e. Hazar-Susah. The order of enumeration indeed seems to require the location of Marcaboth in this region, near Ruḥeibeh. And unless we may suppose that Rehoboth remained uninterruptedly in the possession of the Philistines, we could not account for its non-appearance in the lists of Simeon's cities. But there is an alternate suggestion—whatever its value—which I venture to make only with great hesitation: Can Merkeb, between 'Ar'ârah and the Dead Sea represent Beth Marcaboth?

IV. Lebaoth.—The list of the Temple of Karnak has Lebau, which occurs there after Gerara (Kh. Umm Jerrar) and Harar (Kh. Abu Jerrah?). Bawaty, south-west of these and near Tel Refah, is therefore a possible site. If we supply the article and read el-Bawaty, all the radicals of the name Lebaoth appear to be preserved. Compare Lachish = el-Hesy, a complete parallel and an accepted instance.

VI. Chesil.—The reading in Josh. xv, 30 of B (BAIOHA = בתיל) A (XACEIP = מיל) and L (CEIEA = יסיל) implies. In Josh. xix, 4 Bethul (בתול) is evidently best supported.

Likewise in 1 Chron. iv, 30 Bethul is, I think, better supported than Bethuel. BAOOYN (B), BAOOYA (A), BAOOYHA (L). Now בתול, implies בתול, implies. The change from Chesil to the familiar Bethel, and then to Bethul, is more probable than the reverse process. Bethel is uniformly rendered  $\text{BaiO}\eta\lambda$ ; variants could not well arise. Having identified Ziklag with el-Aujeh, we are enabled to confirm Rowland's identification of Chesil with Khalasah, some distance north of S'baita. The transposition of the radicals of the name probably occurred in Greek or Roman times. Chesil became Elusa.

VII. Tolad.—Perhaps we may identify this with 'Asláj, less than 9 miles (in a straight line) from Khalasah. The close affinity of t and s (Greek τ and σ, Hebrew ¬ and w) is well known. Thus the Hebrew ¬ appears as ω in the Arabic 'Aslûj. Perhaps we can also account for the change of ¬ (dh) to ¬ (j). Sometimes, though rarely, ¬ is represented by z (j). This, I presume, could be changed to ¬; for the change from Hebrew ¬ to Arabic ¬ occurs. El-'Aslûj cannot represent Ziklag (see P.E.F. Maps); but very probably it is the site of Tolad, or Eltolad.

VIII. Miscellaneous.—The order of enumeration in Josh. xix, 1–7 and 1 Chron. iv, 29, 32, shows that Beer-sheba is regarded as Simeon's metropolis. Here the enumeration begins, and hence it proceeds in a roughly drawn circle through all parts of Simeon's territory. After Beer-sheba we have Sheba and Moladah, the latter at Khūrbet el-Milḥ. Between Moladah and Eltolad three names occur: Hazar-Shual, Balah, and Azem. These were probably situated in the region of Kasr es-Sirr and Kubbet el-Baul. Eltolad, Chesil, Hormah, and Ziklag follow in close succession. Finally, we have Lebaoth (Bawaty), Sharuhen (Tell esh-Sherî'ah), Rimmon (Kh. Umm er-Rummânın), and Ether (Khūrbet Hôra).

IX. Baalath-Beer.—Having ascertained that Hormah and Ziklag were in the extreme southern part of Simeon's territory, we readily recognize in el-Birein the Baalath-Beer, Ramoth of the Negeb, on the southern boundary of that tribe.

X. Simeon's Boundary, it seems, passed southward from Tell 'Arâd along the water-shed, and then between Abdeh and S'baita over to el-Birein, and thence on a natural course to the sea.

XI. Bealoth.—This is not, as some suppose, Baalath-Beer, but (as the list in Josh. xv, 21-32 shows) was situated with other cities

grouped with it, near Kerioth-Hezron and east of Moladah. Bealoth is represented by the el-Beyudh of older maps and the Khurbet Beiyûd of the P.E.F. Map, near Khurbet Kureitein.

XII. Hazor-Hadattah (New Hazor) may perhaps be identified with ez-Zuweirah (et-Tahta) near the Dead Sea, where there are some cairns. The situation is satisfactory, and the Hebrew name may, perhaps, be recognized in the modern Arabic one. By common processes Chazor received vocal assonance (compare Bene Berak = Ibn Ibrâk) and had its first radical (\$\square\$) assimilated to the following one (compare Achzib = ez-Zib) and also received the diminutive form Zuweirah (compare Socho = Shuweikeh). Chadattah became et-Tahta (compare Hachilah = el-Kôlah).

XIII. Shema.—The reading  $\sigma a\mu(a)a$  is best attested; but B has  $\sigma a \vee \mu aa$ . If the latter be correct, the required site is Rujm Selâmeh, near Khurbet el-Milh, or Moladah, which follows in the list.

XIV. Hazar-Gaddah.—Clericus supposed this to be Adadah, and very probably the ruins of Hazar-Gaddah have been taken for those of Adadah, which city could not have been as far north as el-Adadah. The Hebrew 2 often becomes 3, as in 'Amriyeh, Gomorrah. In the list Hazar-Gaddah occurs after Shema and Moladah, and el-Adadah is near Rujm Selâmeh and Khūrbet el-Milh. As the name Hazor seems to survive in Ras ez-Zuweirah, hard by, on the top of which are some cairns, this might possibly be the earliest site of Hazar-Gaddah. Jerome confirms our identification when he states that the place was situated in the extreme eastern parts of the Daroma, overhanging the Dead Sea: in extremis finibus Daromae contra orientem imminens mari mortuo.

XV. Heshmon.—On the edge of the 'Arabah there is a spring 'Ain el-Husab, and near it are some ruins in a suitable position, relatively. Here, perhaps, is also Hashmonah, one of the stations in the wilderness.

Now taking into consideration that this list also (Josh. xv, 21-32) requires the location of Hazar-Shual, Baalah and the ruins of Azem in the region immediately south of Moladah, and also taking into consideration that all the cities so far identified were north of a line drawn from 'Ain el-Husab to el-Birein, it becomes apparent that those first enumerated in the list (verses 21 to 23) were really accrest Edom, and the desert.

XVI. Kab:eel, the first named in the list, may be identified with Kul'at Umm Kuseir, of all sites west of the 'Arabah the

nearest to Petra. The names Kabzeel and Kuseir correspond sufficiently.

XVII. Jagur.—Jebel Hadîreh, near Abdeh, cannot be the site of Hezron, named after Kadesh, as a place on the southern boundary of Judah; probably, however, it represents the  $a\sigma\omega\rho$ , or Hazor, which B substitutes for Jagur. But is B correct in substituting? In Eli Smith's Tables (appended to the first edition of Robinson) el-Jughala occurs as the name of a ruined place, evidently between Kul'at Umm Kuseir and Abdeh, and along the Roman Road.

XVIII. Kinah.—In Eli Smith's Tables, el-Kuleh occurs next to el-Jüghala. This may be Kinah.

XIX. Dimonah.—If B, which has  $\rho \epsilon' \gamma u a$ , be correct, the required site would be, it seems to me, Er-Rakhameh. Palmer, however, was inclined to identify the region in which the ruins and the wâdy of this name are found, with Jerahmeel. Perhaps Regmah was the chief city of the Jerahmeelites.

XX. Adadah:—Wellhausen and Dillmann consider בְּרָעֶרָה a corrupt reading of עָרְעֶרָה 'Ar'ârah, or Aroer. Indeed B's ἀρουήλ seems to imply ערעל 'compare ערער, Aroer); but probably this reading owes its origin to the same conjecture that Wellhausen and Dillmann have recently put forth. Indeed, our contention receives support from the omission by B of the final ¬, which was ignored—omitted because Aroer was, at the time, not known as 'Ar'ârah. Assuming that Adadah is the correct reading, we venture to identify Adadah with the Eboda of later times, which was situated at Abdeh. Adadah, at Abdeh, is also in a suitable position with regard to

XXI. Kadesh (Β, καĉης) Kadesh-Barnea, at 'Ain Kadîs.

XXII. Hazor-Ithnan.—B, aσοριωναιν instead of ασοριθναν (compare Ency. Bib., col. 2295). As Hazor-Ithnan follows Kadesh in the list of Judahite cities in the Negeb, and as Hezron was a place on the southern boundary next to Kadesh, the identity of both (Hazor-Ithnan and Hezron) is more than probable, and these notices assign the city a place between south and west of Kadesh-Barnea. But is there any Hazor in a suitable position? I am of the opinion that Hazor-Ithnan was the predecessor of Lysa at Kharabat Lussân. In a manuscript (dated A.D. 534) in the library of the Patriarchate of Jerusalem (Descrt of the Exodus, p. 552, compare p. 423) Lysa,

appertaining to the arch-episcopate, of Gaza, is also called  $\Lambda \sigma \delta \nu$ , which seems to be a corruption of  $\Lambda \sigma \omega \rho$ . Passing down by way of Kharabat Lussân the boundary would thus follow a natural course.

XXIII. Southern Boundary (in part).—As we have identified Kabzeel with Kul'at Umm Kuseir, we agree with Palmer in identifying the Desert of Zin with the eastern part of the Badiet et-Tîh. Hence we also assign the Ascent of Akrabbim to the region of the 'Arabah, where Robinson supposed it to be. From the 'Arabah the boundary passed along the face of the Magrah Plateau unto a place just south of Kadesh. Here the natural features of the country invited a turning of the boundary southward to Wâdy Lussân. We can thus make Wâdy el-'Arîsh (Shihor) our point of departure, and trace the western part of the boundary backwards to Hezron. We must find, first of all, near Wâdy el-'Arîsh, the site of Azmon.

XXIV. Azmon.—One is tempted to identify Azmon with el-Aujmeh (Burckhardt, Ojmeh), the name of a chain of mountains south-east of Kul'at Nukhl. This, however, is too far south. A satisfactory site exists at el-Uggabeh, and the change from S (2) to G, though uncommon, occasionally occurs (Gesenius). From el-Uggabeh the boundary would very naturally go out unto the River of Egypt, Wâdy el-'Arîsh.

XXV. Karka.—On the strength of the preceding identification we find the next point at the nameless ruins near the junction of Wâdy Garaiyeh and W. esh-Sheraif. In Num. xxxiv, 4, Karka is omitted; because the boundary, following natural features of the country, could not well have passed elsewhere to Azmon.

XXVI. Addar.—That this place was situated at Contellet Garaiyeh (Gypsaria) seems very probable from the following considerations:—

(1) From the language used in describing the boundary here; which, passing along the south side of Kadesh-Barnea to Hezron, and going up to Addar, fetched a compass to Karka, Josh. xv, 3.

(2) Such a boundary would be very natural, since it included all of the broad Wâdy Garaiyeh, the pasturage of which pertained to the city at Contellet Garaiyeh, and

(3) Hezron is omitted in Num. xxxiv, 3. This could be done if there would be no deviation of the boundary from Kadesh to Addar caused thereby. And only if the boundary passed to Contellet Garaiyeh, from Kadesh, could Hezron, at Kharabat Lussân be omitted. We therefore hold that Contellet Garaiyeh (Gypsaria) is the site of Addar or Hazar-Addar.

XXVII. Tamar.—The Tamar of 1 Kings ix, 18, probably (Cheyne, Ency. Bib., col. 4891) for the protection of the commercial road from Ezion-Geber to Jerusalem, seems to be the Thamara of Eusebius and Jerome and the Thamaro of Ptolemy and the Peutinger Tables, a military station. According to Eusebius Thamara was a day's journey from Mapses, on the road from Hebron to Elath. As Mapses was at Khūrbet el-Meshāsh, Thamara (or Tamar) was probably, as Robinson suggested, at the ruins called Kurnub.

May we not hope that the Negeb may be more thoroughly explored and some of its sites excavated in the near future? Suggestions and identifications could be made with greater boldness then. Some must not be ventured now.

# OCCASIONAL PAPERS ON THE MODERN INHABITANTS OF PALESTINE.

By R. A. Stewart Macalister, M.A., F.S.A., and E. W. G. Masterman, F.R.C.S., F.R.G.S.

A HISTORY OF THE DOINGS OF THE FELLAHÎN DURING THE FIRST HALF OF THE NINETEENTH CENTURY FROM NATIVE SOURCES.

(Continued from p. 114.)

## PART V.

'Aķîli Agha.

AHMED EL-JEZZÂR, to whom we have already made frequent reference, was an Albanian by origin. Some domestic troubles caused him to flee to Constantinople in his sixteenth year, where, unable to make a livelihood, he sold himself to Elias Surhîyah, a purchaser of white slaves. From him he was bought by Muḥammad Bek Abu eth-Thahâb, an Egyptian official, and in his service he showed great skill and bravery, so that his master entrusted him with important secrets and important duties. Among these duties was the getting

rid of rivals and enemies, which he accomplished with so much alacrity, that he then gained the nickname of *el-Jezzâr*, "the butcher."

However, one day Muḥammad Bek ordered him to slay one Salih Bek, to whom Aḥmed was under obligations so great, that even he drew the line. When his master saw that Aḥmed did not carry out the order, he had it accomplished by the hand of another. But Aḥmed thought it advisable to make his escape, and accordingly fled from Egypt and once more made his way to Constantinople.

Here he made attempts to obtain a footing for himself, but finding them futile, he went to Syria and took military employment under Othmân Pasha, governor of Damascus, a noted enemy of Sheikh Dhaher el-Amîr (see part IV of these articles). Here he became a captain over fifty Albanian foot-soldiers. In this capacity he attracted the attention of Amîr Yusif, governor of Lebanon, who gave him office in Beirût. The governor of Beirût shortly afterwards refused to pay taxes to Lebanon, and declared himself to belong to 'Othmân Pasha. The Amîr, with the aid of Sheikh Dhaher, attacked Beirut, and by means of certain Russian coasting vessels which they pressed into their service, bombarded the town (compare unte, p. 140). Ahmed el-Jezzâr, with his usual regard for his own safety, went over to the winning side and put himself under the protection of Dhaher el Amîr, who gave him great favour and established him in 'Akka. During this period he appears privately to have attempted to get back to 'Othmân's favour, which attempts, perhaps naturally, were not encouraged; but after five years (as we have already mentioned, ante, p. 110), he was called to Egypt by the death of his former master, whom he succeeded in office.

During his stay in Egypt, as governor of the district of Damanhur, he attached to himself the tribe of the 'Ainawiyeh, whose villages were five hours N.W. of Damanhur, and were in this fiscal province. He sent for their sheikhs, gave them handsome uniforms, and flattered them by naming them Hawara.<sup>1</sup> This tribe followed

<sup>&</sup>lt;sup>1</sup> This was the name of an entirely unconnected tribe who lived in Upper Egypt, and who were distinguished above all the Arabs of that region in bravery, horsemanship, and equipments. Tradition says that they were a branch of the Bani Humeir, who made their way to Upper Egypt in a chase of stray camels, and ultimately settled permanently there. It is said that they derive their name from the answer given by them to the Egyptians, who asked whence they came: they said Hawwarah, which means "perplexed."

Ahmed to 'Akka when, in 1778, he was made governor there in order to suppress the rising of his former patron Dhaher el-Amír, and fought with him in defence of 'Akka against Napoleon in 1798.

In or about 1806 Jezzâr died, and was succeeded by Sulaimâr whose rule was much milder than that of his predecessor. He continued the favour shown by Jezzâr to the Hawara; and in consequence many sheikhs came and joined themselves to them hoping to profit by the Pasha's bounty. These generally represented themselves as being connected with the true Hawara of Upper Egypt. One such was Mûsa Agha el-Hâsi, who settled in Gaza: apparently he came from the region of the Fayûm. In Gaza he became a captain over fifty horse.

Sulaimân died in 1814, and 'Abd Allah Pasha, son of his deputy 'Ali Agha el-Ḥaznadar ("the treasurer"), succeeded him. In his time Mûsa Agha was further promoted "so that there walked before him seven riders on pure-bred horses, and upon these the most beautiful trappings; and he was famed for his bravery and generosity." But in 1826–7 (A.H. 1245), the year of the siege of the Castle of Sanûr, he died, leaving three sons—'Ali, 'Akîli and Sâliḥ. 'Ali disappears from history and nothing is known of him; with 'Akîli's life this section of the *History* is chiefly concerned.

In the time of Jezzâr there was a certain Jew called Haim employed as secretary and accountant in the Treasury at 'Akka. This kind of employment had previously been in the hands of Christians of the Orthodox Church; but they had all been dismissed by the government because they were more than suspected of secret dealings with Russia. Sulaimân Pasha² had been adopted by Jezzâr, who had no children of his own, and he had resolved to make him heir. Sulaimân was absent on pilgrimage when Jezzâr died and the Jew Haim kept the news secret for thirty-six hours. The point of this action lay in the fact that the common people did not understand that the Turkish government was behind the seemingly all-powerful governor, but believed that he had full power of taxation, life, and death. Hence when a governor died there was apt to be a reign of misrule, and a period of pillaging and highway robbing till a successor should be appointed. During the thirty-six

<sup>&</sup>lt;sup>2</sup> He is said to have been the son of an Orthodox priest from Kurdestan who was kidnapped and made a Muslim. His father, it is alleged, visited him when he was governor of 'Akka, and he received him secretly but with great honour.

hours Haim privately informed the subordinate governors of the death of their master and with their consent he placed as regent in the barracks a certain Isma'il Pasha, dismissed for some unknown reason from Constantinople and at the time imprisoned in 'Akka. Further, he sent a secret courier to recall Sulaimân, and wrote a letter to Constantinople requesting Sulaimân's appointment in Jezzâr's place.

In due time word came from Constantinople ratifying Sulaimân's succession; Sulaimân returned to 'Akka: and Isma'îl was dismissed. Haim seems to have persuaded Isma'il to make a show of resistance, and having led him into some trap or other made him pay him to let him escape. He fled to Nazareth, but was recaptured, and again lodged in prison in 'Akka, after three months' enjoyment of office as governor.

Like Jezzâr, Sulaimân had no son; he adopted 'Ali el-Ḥaznadar, whom we have already mentioned, as his heir, but the latter predeceased him, and Sulaimân transferred his favour to his son 'Abd Allah, to whom he gave his daughter in marriage.

To 'Abd Allah Haim brought the firman of appointment after the death of Sulaimân. He was a most enthusiastic Muslim-so much so that it was to him a source of perpetual astonishment why God created Christians at all. Haim soon noticed that 'Abd Allah and his associates, who were like himself, were regarding him with no favour on account of his religion. Before long Haim realized that he stood in danger: and though 'Abd Allah's advisers pointed out that he was skilled and trustworthy in his service, he felt that his days were numbered. Accordingly he secretly wrote an inventory of the contents of the treasury of 'Akka, money, jewels, furniture, silver, gold, horse-trappings, weapons, etc., and, knowing that the government had claims upon the estates of Jezzâr and of Sulaiman, he gave the inventory to his brother, with instructions to hand it over to the government if 'Abd Allah should kill him. One night 'Abd Allah sent his soldiers unexpectedly to Haim, and they strangled him and threw his body on the shore, commanding that none should bury him. The brother accordingly handed the register to the government, who promptly presented their claims. This he refused to pay; whereupon Darwish Pasha was sent in 1831 to besiege the castle of 'Akka. The siege lasted five months, without effect upon the walls: but at the end of this time 'Abd Allah capitulated. He desired Muhammad Ali Pasha, the Khedive

of Egypt, to mediate, and undertook to settle the claims of the Turkish government. Muhammad 'Ali Pasha settled the claim with 25,000 purses (of 500 piastres each); a firman of forgiveness and establishment in office was sent to 'Abd Allah, and Darwish Pasha was recalled. When Muhammad 'Ali presented the bill to 'Abd Allah, he refused to pay more than 20,000 purses. Muhammad 'Ali complained to headquarters, but did not get much satisfaction, because the grand vizier feared his power. (He had driven the Wahhabites, who at this time had captured Mecca and created much anxiety in Arabia, out of Jiddah, and it was feared that, if he was given too much power in Syria, he would thus have control of both the Egyptian and the Syrian Haj, and be able to set up an independent Caliphate.) Muhammad 'Ali therefore took the matter into his own hands, and set out against the Turks with 20,000 troops under the command of Ibrahim Pasha, with a fleet of about sixty vessels. The Amîr Beshîr, governor of the Lebanon, joined the Egyptian troops, on account of a gratuitous insult 'Abd Allah had passed upon him some time before. He had come to the Pasha's assistance about 1820, when he was besieging the castle of Sanûr, and his aid had enabled 'Abd Allah to reduce it; but when he came to congratulate 'Abd Allah on his success, the only thanks he received was an order "that that infidel Christian should never see his face." From that moment the Amîr entered into correspondence with Muhammad 'Ali. Accordingly, in 1831, Muḥammad 'Ali besieged 'Akka, and the Amîr sent him a large troop of auxiliaries, and after a nine months' siege he entered and plundered the city and took 'Abd Allah prisoner. He was sent to Muhammad 'Ali, from whom he fled to Constantinople, There he could obtain no office, and after living for over twenty years in the city without occupation he went to the pilgrimage, where he died.

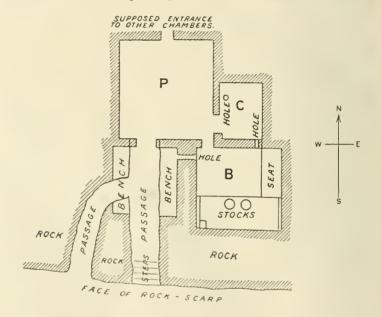
(To be concluded.)

## RECENT DISCOVERIES IN JERUSALEM.

BY THE REV. J. E. HANAUER.

A! REMARKABLE "discovery" was recently made by the Greeks in the Via Dolorosa, at the place where they were clearing out the chambers first discovered by Prof. Clermont-Ganneau over thirty

years ago (full plans and drawings of which appear in his Archæological Researches, Vol. I, pp. 51 sqq.). It is suggested, in fact, that the remarkable set of rock-hewn chambers were the dungeons of an ancient Roman "carcer," like the "Latumiae" at Syracuse, or the "Tullianum" at Rome. The idea is by no means a far-fetched one, and, to say the least, most interesting, though it has been very ingeniously exploited in order to bring in, in the first place, offerings from pilgrims, and in the second to out-do the Sisters of Zion, who own the Ecce Homo Chapel, and the Franciscans who, in like manner, have for a long time past owned the remarkable continua-



tion of the ancient pavement, said to be the "Gabbatha," in the Chapels of the Flagellation just east of the Ecce Homo, parts of which have also been found in this Greek place.

The scarp between the Ecce Homo Chapel and the Austrian Hospice runs from East to West. In the face of this scarp, and just above the great rock-hewn chamber described as having in its N.W. corner a shallow pool with a hole in its bottom communicating with the lowest chamber of all, still full of rubbish and human bones, and having a number of eye-holes in its walls, is the entrance to a roughly cut tunnel or passage 4<sup>m</sup>·85 long, and on an average

 $0^{m}\cdot 90$  wide and  $1^{m}\cdot 40$  high. It slopes downwards towards the chamber P on page 51 of Prof. Ganneau's plan (retained on the diagram accompanying). On either side of this passage, at its northern end, are roughly cut rock benches  $2^{m}\cdot 45$  long,



Passage leading to chamber P.

0m·75 wide, with their upper surfaces roughly 1 metre distant from the ceiling. They suggest similar benches in tombs, but, in support of the theory that we are dealing with a rock-cut prison, we will call them the bedsteads of the jailors, "custodes carceris," who (we will suppose) slept not far from the

prison cells, and near the entrance to the dungeon (*cp.* Acts xvi, 27). Another passage, evidently recently cut through the western bench, comes in from the left from a doorway lately cut in the outer scarp, a few feet west of the tunnel entrance, and at a slightly lower level.

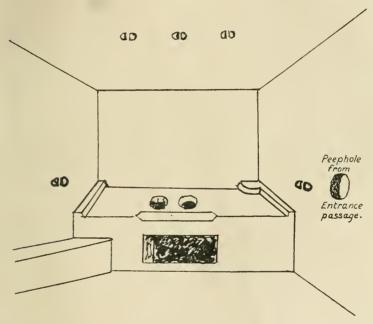


View of the recess.

As this passage does not appear on Prof. Ganneau's plan, there is the probability of its being a modern cutting. The united tunnels lead into a quadrangular chamber (P, see plan). There is an excellent picture of this chamber, the passage and doorways, on page 53 of M. Ganneau's work. Of the doorways seen in that picture, that

to the right shows the entrance passage, whilst that to the left leads into the room marked B on my diagram. In this room is "the discovery" above referred to, but which I suspect to be modern, seeing that there is no mention of it in Prof. Ganneau's book. However, we will examine it.

The chamber B is  $2^{m} \cdot 60$  long,  $2^{m} \cdot 50$  wide, and its greatest height from floor to ceiling is  $1^{m} \cdot 92$ . Occupying the whole length of its southern side is a rock-cut altar-like slab, shelf or table  $2^{m} \cdot 36$  long,  $1^{m} \cdot 00$  wide, and with its surface  $1^{m} \cdot 00$  below the roof. At

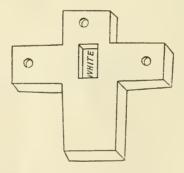


either end there is a small raised ridge of rock, marking probably the original height of the bench before it was, as I suspect, purposely cut down to form the "stocks." On the top, in the S.W. corner, there is a small quadrant-shaped elevation marked on my diagram. About the middle of the northern side, not far from the partly bevelled edge, are two great holes, "the stocks," cut side by side through the slab, which is 0<sup>m</sup>·23 thick. Underneath these holes is a roughly cut quadrangular recess.

This recess is one metre long, 0<sup>m</sup>. 40 deep and 0<sup>m</sup> 53 high. The holes through the slab come through the roof of this recess, and

are each 0<sup>m</sup>·30 in diameter. In the wall right and left of the table-top, and at the height of about one foot above it, are eye-holes cut in the rock, and to which the prisoner's hands are supposed to have been fastened by ropes or chains. In the ceiling over-head are three such eye-holes from which lamps are now suspended, but to which the prisoner's neck was presumably attached. Seeing that we find such eye-holes above and on either side, how comes it, one naturally asks, that in the recess under the slab where the feet "were made fast" there is no such eye-hole, but only an iron staple?

Besides the lamps, icons have now been placed on the stone-table and round the walls of the chamber, which is thus turned into a chapel, and has during the last few weeks been visited by crowds of pilgrims, to whom it is shown as "Habs el-Messih," the Prison of Christ. Returning to the entrance passage, one notices that at the south end of the eastern bench a panel with a cross in relief in the centre has been cut, with a four cornered hole in the middle, and small round holes at the ends of the top and arms. The surface of the panel and cross have been stained to look like the rest of the



rock surface, but the inside of these holes show fresh and white! Close to the other end of the same bench, and in the wall at its back, is a hole through which the resting jailor could look into chamber B, and watch the prisoner inside, or pass in food, &c.

In the eastern wall of chamber P is what looks like a door of the same size as are the others, 1<sup>m</sup> 43 high by 0<sup>m</sup> 73 wide, and with reveals or panelled drafts (see picture, page 53, Ganneau) 0<sup>m</sup> 15 wide round them. It is, however, only open in the upper part, and forms



Eastern portion of Rock-scarp.

a window through which you look into chamber C on my diagram, just east of P and inside the exterior angle between the latter and B where "the stocks" now are. I did not measure chamber C. It is a rough hole about six feet square and seven or eight feet high. Through its floor there is a hole communicating with the great chamber below, which in its turn is similarly connected with the lowest where the human bones, eye-holes, etc., are. Through a peep-hole in the southern wall of chamber C one can look into chamber B. The peep-hole is close to the N.E. corner of the latter, where, at right angles to "the stocks," is a rock-hewn seat 0m ·45 wide, 1m·18 long and 0m·45 high. If the peep-hole be genuine, we may suppose that chamber C was intended as the lurking place of a spy to watch and report on the prisoners. In the northern wall of chamber P is a recess blocked with masonry, and supposed to be an entrance to another rock-chamber or chambers still unexplored.

Should the theory that these rock-chambers, in spite of recent manipulations, are really genuine relics of the ancient Roman prison be correct, as is possible enough, then we may believe that the very lowest of the series with the rock-cut eye-holes and human bones may have been the terrible "robur" or lowest dungeon of all in an ancient prison, where frequently malefactors were left to perish in the darkness. ("Robur in carcere dicitur is locus, quo praccipitatur malefacorum genus" Festus, quoted in Smith's Dictionary of Greek and Roman Antiquities, page 241. "In robore et tenebris exspirare" Liv. XXXVIII, 59; Sallust, l.c. As above and same context.)

I enclose print from my attempt to photograph "the stocks" by flashlight, and also a photograph of the eastern part of the rock-scarp still open to the light. The staircase in fore-ground leads down to the chambers just described, as well as to those underneath. The tall white building in the background is the western wall of the Ecce Homo Chapel.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Having laid the foregoing notes before Dr. Merrill, I have his permission to state that he agrees with me in believing the rock-chambers, minus, of course, possibly recent alterations, to have been part of the ancient prison. The whole scarp and its vicinity is of the greatest importance and interest. I am also enclosing a sketch of "the stocks."

#### DEAD SEA OBSERVATIONS.

(Continued from p. 69.)

By Dr. E. W. G. MASTERMAN.

SPRING VISIT TO 'AIN FESHKHAH, 1906.

THE first visit of the current year was made on April 17th from Jericho.

State of the Weather.—When I left Jerusalem on April 16th the weather was gloriously fine, bright sunshine, a few scattered clouds, and a fairly cool, gentle N.E. wind. Jericho was reached about 5. The whole southern end of the Dead Sea was shrouded in dense, black clouds, against which the sunlit mountains near 'Ain Feshkhah and E. of the Dead Sea stood out in extraordinary brilliance. A storm was evidently brewing: between 5 and 6 the black cloud bank steadily advanced from the S.E., although the wind at Jericho was by then a fairly stiff N.E. breeze. A little before 6 the wind momentarily dropped, then blew E., and then came some violent gusts from the S.E., blowing up the dust around us in thick clouds. A few minutes later a terrific downpour commenced, accompanied by most vivid and rapidly occurring flashes of lightning. storm raged for over three hours, and was one of the most severe remembered in the land. In Jerusalem it was quite remarkable; in Jericho such a storm in April was never known to have occurred before. The whole Jordan valley was shrouded in dense cloud, the lightning at times was continuous, and there were some loud thunder bursts. After half an hour or so the wind dropped and the rain descended almost perpendicularly. The following observations made on the anaroid barometer may be of interest :-

Jerusalem, 10 a.m., 27:52. Inn of Good Samaritan, 2 p.m., 29:34. Jericho, 5 p.m., 30:93: 6.30 p.m., 31:03 (height of storm): 6.45 p.m. (after wind dropped), 31:1: 7 p.m., 31:06: 9 p.m., 31.

By nine the storm was practically over.

The next morning was fine, the air fresh and cool. Some clouds covered the sun for a time in the early part of the day. Breeze

N.W., very slight in morning, later stronger from N.E. In the afternoon two thunder clouds were visible, one to N.E. over the mountains of Gilead, the other N.W. over, apparently, Nablûs. Bright flashes of lightning appeared at times from these, and apparently heavy rain was falling. Between the Dead Sea and Jericho and Jerusalem there was, however, no rain. The atmosphere was very clear, and all the details of scenery on East side of the Dead Sea could be seen clearly.

Results of the previous night's storm were everywhere visible. The stream in the Wady Kelt, which was running freely the previous evening, was quite doubled in volume. In all the other Wadies crossed, although there was no running water, there were evident signs, e.g., uprooted shrubs, washed out banks, piles of accumulated flood débris, of the violence of the flood that had traversed them the previous evening. In the Wady Kumrân the down-rush of water, drainage of el Bukâa, must have been terrific, and it had spread itself over a considerably wider area than in ordinary rainy periods.

The surface of the sea was broken into small uncrested waves, which however gradually subsided as the morning progressed. No regular white line was visible, only a few irregular patches about half a mile from the shore.

The state of the level of the sea was very interesting. At both the 'Observation point' and at the 'rock in the Pool' the level had risen 34 inches since the Autumn observations. This is by far the greatest rise yet recorded on any one rainy season. The previous records were:—

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1901—a rise of 14·5 ins.
1902—a rise of 6 ins.
1903—a rise of 25·5 ins.
1904—a rise of 8 ins.
1905—a rise of 23 ins.
Rainfall previous season, 20·04 ins.
Rainfall previous season, 20·05 ins.
Rainfall previous season, 21·05 ins.
Rainfall previous season, 37·32 ins.
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The unusually marked rise of this season has followed the great rainfall. Up to the time of taking the observations 37.95 inches of rain had fallen.

The pool, which had recently become so shallow, is now deep, as it was some three years ago. It is again full of fish, and the reeds around have grown so thick as to shut off the view of the outlet eastwards to the Dead Sea. The accumulated sedimentary deposit

in the bottom of the pool, which made it once so admirable a 'mud bath' in places, has now been scoured out, and the bottom is clean and stony.

Barometric Observations.—'Ain Feshkhah, 10.30 a.m., 31·44; Jerusalem, 8 p.m., 27·54.

Thermometer.—'Ain Feshkhah, Atmosphere, 81° F.; Water, 80° F. General Observations.—Reeds in a somewhat dried up condition, except in patches, where the young reeds have not yet come to flower. They almost completely cover previously cleared areas. As there were no cattle and no men at the oasis, the process of clearing areas by burning the reeds is at present in abeyance. There was no stream from the Haish el-Mukdâm. The springs at 'Ain en Nahr are plentiful, and rise as high as ever they did.

Many storks, sand partridges and hawks seen, also a gazelle on the plain near Wady Dubr.

A new road has been almost completed, which will enable carriages to avoid the dangerous descent on the old Jericho road just before the plain is reached. This road runs from the Jericho road about a mile below the Inn of the Good Samaritan, following an old and much-frequented path to Nebi Mûsa, and after reaching the proximity of that famous shrine it follows the old Jericho-Nebi Mûsa road to Jericho. From the mountains it traverses the Jericho plain in a perfectly straight direction for between three and four miles. By means of this road several carriages conveyed passengers to the Nebi Mûsa festivals this spring. Some small bridges and culverts are still needed to complete the work.

# NOTICES OF NEW BOOKS AND FOREIGN PUBLICATIONS.

Bible Side-lights from the Mound of Gerer. By R. A. Stewart Macalister, M.A., F.S.A. The publication of this book is well timed. Among the many subscribers to the Fund not a few have, from time to time, shown some impatience with the careful search of the ruins of Gezer and the results recorded in the Quarterly Statement, many of which have appeared to them as merely of

archæological interest. To them old walls, old pottery, old bones, seemed to have nothing to do with the Bible, and to be of no importance in connection with it. But those who read these few pages and examine the illustrations will rise from their perusal with a very different view. It is in the careful examination of evidence, however slight, that valuable knowledge can be gained; and the surmise which is supported by facts is worth much more than the most attractive theories unsupported. Mr. Macalister has shown in his book how the scientific unearthing of an ancient site not only yields evidence confirmatory of Bible narrative, but sheds unexpected light on matters only vaguely alluded to in Scripture or partially understood. His chapter on the "Iniquity of the Amorite" shows by the excavated evidence the nature of the ancient heathen worship, including the sacrifice of children, which the Hebrew prophets so continually denounced. In another chapter he suggests, from the evidence afforded by buildings, the manner of Samson's death. Elsewhere he shows us an example of such a tongue of gold as Achan hid in his tent; and the chapter (IX) in which he deals with the mention, in Chronicles, of the king's potters, whose very names he found on the fragments of broken jars, affords a good instance of how small evidence may prove highly interesting. It is to bring home to Bible readers generally the fact that archæological research in Palestine has a value for them, which is not merely scientific, that the book has been written in simple, untechnical language. It is well illustrated, chiefly by photographs, and by bringing together, in a concise form, the facts which have been gathered on one site, during the last two or three years, and some of the inferences from them, Mr. Macalister has produced in a popular form a very interesting little book.

Mittheilungen und Nachrichten des Deutschen Palüstina-Vereins, 1906, Part I.—This number is occupied with the excavations at Tell Mutesellim during August, 1904, in various parts of the mound. The finds seem to have been of a good average nature: one of the most interesting being a circular enclosure which seems to have been a grave. The report is illustrated with several good photographs.

Part II.—In this number is contained the report of the excavation at the same mound in spring, 1905, the chief discovery of which was the very remarkable series of vaulted tombs with early pottery of about 1800-2000 B.C. It will be remembered that this was found about the same time as the great burial-cave at Gezer, and the pottery illustrated by Dr. Schumacher presents interesting parallels to those discovered in the Gezer cave.

Zeitschrift des Deutschen Palästina-Vereins, xxix (1906), Part II.— This number contains a very thorough study by Pastor Zickermann of the ruin known as Khurbet el Jehud at Bittir, with good photographs of the walls and columbarium: a plan of the structure would greatly assist the comprehension of the very careful and accurate description. Pfarrer R. Eckardt contributes an exhaustive examination of the Bordeaux Pilgrim's account of Jerusalem, and Prof. Dalman a synopsis of the weights found in the excavations at Gezer and elsewhere.

Revue Biblique, April, 1906. The principal article in this number is the continuation of Father Vincent's most valuable paper on the Canaanite Towns, which is the first attempt at a synthesis of the results of the excavations that have been carried out in Palestine since 1890. The present instalment is occupied with a study of the fortifications and the private houses. Father Germer-Durand contributes a note on some antiquities found at Abu Ghôsh, including coins and some Canaanite antiquities, of which one (a terra-cotta head) is figured.

Altheuland. Prof. Warburg writes on the general geographical and internal conditions of Syria in the numbers for February, March, and April. Herr Oetken, in the April number, contributes a short preliminary account of his impressions of Palestine, the disadvantages under which the natives labour, and the steps that are necessary for the amelioration of their lot.

Jerusalem. In the March number P. J. Germer-Durand writes on the columbaria of Palestine; Jules Rudolph on the "rose of Jericho." Salvator Peitavi contributes a number of miscellaneous notes on Syrian superstitions. Belief in the jinn predominates: they take animal form, suffer human passions, live for several centuries but are not immortal. Their favourite abode is the chain of invisible mountains (skaf) which encircles the earth. They are ubiquitous and not necessarily hostile. It is the afrit who is the malicious demon who dwells upon the roofs or behind doors and works mischief. As regards holy individuals, it is curious to find that the man bereft of reason enjoys the liveliest regard. That

sacred places abound is well known. They enjoy a great reputation for sanctity, are usually found on the tops of hills—like the "high-places" of old—and stand first in the native's religious ideas. There, children are consecrated, vows are made, sacrifices are offered, and the holy place (kubbeh, dome; mazar, altar; or mukam, place) is the centre of every local cult. A sacred tree is usually found in the vicinity of the shrines, which may be divided into six classes: (1) ancient sacred places; (2) sites founded upon Christian tradition and often bearing Christian names (Boulos, Paul; Boutros, Peter; Metta, Matthew); (3) unidentified names: Camil, Anin, Balian, Nouran, the sheikh Zeitûn (olive) with his mother, and the sheikh Waheb (giver) with his sister Sadeh; (4) the companions of Mohammed, and celebrated sheikhs of later centuries; (5) saints described by epithets, e.g., "the Persian," "Madianite," "giver of rain," "charmer of serpents;" and finally, (6) sheikhs bearing ordinary names: Abraham, David, Joseph, Ali, Suleiman, Ahmed, etc. Around these holy places have gathered a number of local legends and traditions of the most diverse origin, reminiscent of Jewish, Christian, and Mohammedan belief. Among the great pilgrimages the writer notes that of Neby Mûsa, to the north of the Dead Sea, in Passion Week. Charms and amulets are also described, and Salvator Peitavi's collection ends with a brief description of superstitions regarding lucky days and the reverse.

Records of the Past: March, 1906. The Rev. Dr. Bacon contributes an extremely interesting description, with some excellent photographs, of the Sun-temples of Coele-Syria. This district was visited by the Palestine branch of the American Institute of Archaeology last October. It is estimated that within a radius of twenty miles from Baalbek, on the slopes of Lebanon and Anti-Lebanon, there are at least fifteen ruined sun-temples, the grandeur and beauty of which would have made them famous but for the surpassing splendour of Baalbek. A careful study was made of all the ruins, and many useful observations are here recorded for the first time. It is instructive to observe that the temples belong to the period of Rome's great struggle with Christianity. Three centuries at the utmost is the period of their development, and so long as the pax Romana endured, wealth and agricultural prosperity spread over the whole of the Syrian province. Emphasis is laid upon the great fertility of the land, the wealth of product, and in

particular, the cultivation of the vineyards, which underlies the frequent use of the sheaf and vine upon the carvings of the smaller temple at Baalbek. This seat of nature worship, if it owed its temples to Rome, repaid the debt by sending thither its philosophy, and it is observed that "emperors who found a symbolism of real truth in the thinly-disguised nature worship of the Lebanon mountains, might well lend all the encouragement in their power to native enthusiasm, seeking only to clothe in more philosophic form for themselves and the more enlightened, the rude mythology whose hoary antiquity was no secret to them."

# NOTES AND QUERIES.

- 1. The Apollophanes Text.—Mr. Macalister will excuse my defending my position as to this text:—
- (1) The doors in question I understood to be those of the tomb itself, not between the text and the body, or even the gates of death.
  - (2) I do not feel convinced that the text is merely a graffito.
  - (3) Nor that the last line is really later.
- (4) My rendering is perhaps too free, as the lady says only that she can do no more to please the dead, and that she *still* loves him. The remaining objections seem to me to make little difference in the general result. *Pneuma* is a common word for "spirit," and the meaning, in my belief, is that she rests among the spirits. No doubt *Krouō* means "to hit," "to make a knocking noise." It is the *noise* she objected to, due to further carving or excavation.

C. R. CONDER.

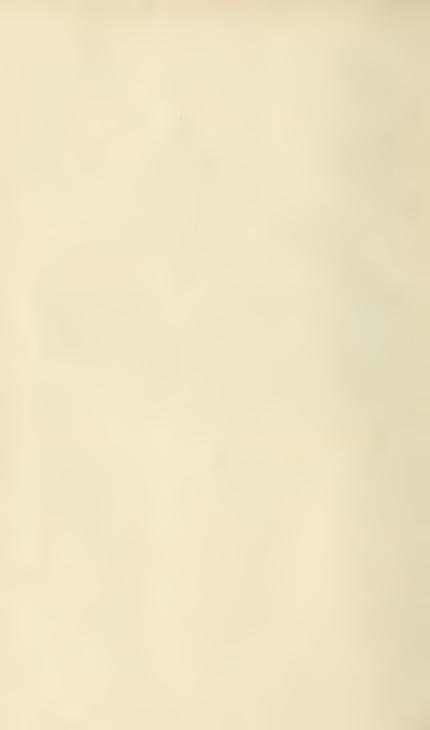
2. The Rev. J. E. Hanauer sends a description of a great stone with cup-hollow on the top, eight inches wide and three deep. This stone forms the *hadd* or boundary-mark between the lands of Artûf and Eshû'a, and stands upon a rock-platform on the bare hill-top to

the north of the former village. At its foot, on the northern side, is a rock-cut wine-press, and a square mortice has been cut into the stone in connection with the wine-press. A yard or so away to the north-west of the block is what is apparently a sunken rock-hewn grave with reveals at the edges to receive a covering-slab. Below



Boundary Stone between Artûf and Eshû'a.

the platform is a cave, the entrance to which is now full of soil. If Eshû'a be Eshtaol, and Ṣar'a be Zorah, Mr. Hanauer observes that this stone, tomb, etc., occupy the position described in Judges xvi, 31.



#### THE

# PALESTINE EXPLORATION FUND.

### NOTES AND NEWS.

The Committee of the Palestine Exploration Fund decided at their last Meeting that, although the new Irade had not yet been received in London, Mr. R. A. Stewart Macalister should proceed to Jerusalem during October to make the necessary preparations for his work. Pending the commencement of new excavations, Mr. Macalister will be occupied in verifying details of recent discoveries in the Holy City and elsewhere. It is probable that he will visit Constantinople to render any assistance that may be required in the arrangement of the objects found in the course of his operations at Gezer, which are about to be placed in the new extension of the Imperial Museum.

It is with very deep regret that the Committee have to record the death of Mr. John Dickson, H.B.M. Consul in Jerusalem, on Wednesday, July 4th. A brief account of his career will be found on another page (see page 268). The following description of the funeral is given in *Home Words* for Jerusalem:—

"The funeral took place on Thursday the 6th July. The procession left the Consulate at 4 p.m., and passing through the grounds of the Russian Palestine Society and down the Jaffa road, arrived at Christ Church at half past four. Both to the Church and thence to the Protestant Cemetery the procession was headed by a body of police, fifty soldiers from the local garrison, and about sixty cawasses. The roads and neighbouring houses were filled

with a reverent crowd of people, who had mostly gathered together to show their respect for one who had for so long been associated with the life of Jerusalem. From the Jaffa Gate to the Church and then back to the Gate the coffin was carried by eight British subjects. At the Church gate they were met by all the local English and German Protestant clergy, the sentences being read by the Rev. Canon Carnegie Brown as they passed up the aisle to the east end of the church. The Psalm was read by the Rev. J. E. Hanauer, the Lesson by the Rev. H. Sykes, Secretary of the Church Missionary Society, and some of the following prayers by the Right Reverend Bishop Blyth. The church was packed to overflowing, the congregation including the Syrian and two Greek Orthodox Bishops, the representative of the Armenian Patriarch. and of the Chief Rabbi, and many other Jews and Christians. All the Consuls then present in Jerusalem attended in full uniform, and went with the procession from the house to the church, and then to the eemetery."

A very representative collection, illustrative of the work of the Palestine Exploration Fund, will be included in the British Government Section of the International Exhibition at Christ Church, New Zealand, which is to be opened on November 1st next. This collection, which was shipped in July, comprises the following:—A complete set of the maps published by the Fund from the original survey of Palestine on the scale of 1 inch to the mile, the Old and New Testament maps on the scale of  $\frac{3}{8}$  inch to the mile, the photorelief map and plan of Jerusalem, illustrating the most recent discoveries; a set of the publications of the Fund and of the Library of the Palestine Pilgrim's Text Society; plans and photographs of the recent explorations by Mr. Macalister at the ancient city of Gezer; casts of inscriptions, contour models of Jerusalem and Sinai, &c., &c. A full description of the Exhibit is given in the British Official Catalogue.

The British Government Exhibit at Christehurch, which is, to a large extent, of an educational character, will be in charge of Captain P. H. Atkins, who was the British Representative for Education at the St. Louis International Exhibition, 1904. It is hoped that the collection sent by the Palestine Exploration Fund will be of considerable interest to the subscribers to the Fund in

New Zealand and Australia, and that it will give a good idea of the work done during the past forty years for the extension of our knowledge of the geography and history of the Bible.

The little steamboat on the lake of Galilee is now actually running. It meets the train from Haifa, which reaches es-Semakh on Tuesdays, Thursdays and Saturdays, and takes passengers to Tiberias and to Tabagha, at the North end of the Lake, for Safed. Although the machinery of the boat is said to be old, the arrangements are good, and it will interest English people to know that the Captain speaks English and Turkish. The proposed carriage road to Safed is, it is said, to be undertaken without delay. It will run from Tabagha via Janneh (Rosh Pinneh) to Safed.

The railway from Haifa to Damascus is not yet finished, but will, it is said, be very shortly completed. The carriages are most comfortable. A large and handsome railway station at the terminus in Damascus has been designed and will be shortly commenced.

Two excellent Hotels have been opened at Nablûs and Jenîn respectively: they should be a special convenience for residents in the land.

In 1870 Messrs Thos. Cook and Son were appointed by the Khedive to act as the Agents of his Government for passenger traffic on the Nile, and they have just issued the 36th Annual Pamphlet of their arrangements. The experience of that lengthy period is made manifest in the new pamphlet by the luxury of the arrangements and the added facilities afforded for travellers in Egypt and the Sudan. No fewer than eleven of Messrs. Cook's steamers are announced to work the various services between Cairo, Assuan, and the Second Cataract during the coming season, while, by an agreement with the Egyptian and Sudan Railways, combined steamer and rail tickets are issued, which will enable Upper Egypt to be visited by those limited in time far more expeditiously than by the leisurely steamer alone. Besides through bookings to Khartoum and Uganda, Messrs. Cook announce several excursions from Khartoum by steamer on the Blue and White Niles. The

arrangements for inspecting the many architectural wonders which, with the exquisite climate, have made the Nile Valley the winter playground of the *élite*, are a model of experienced organisation.

A good deal of excitement has been caused in the Nazareth district by the recent decision to transfer the whole of this political division from the jurisdiction of Beyrout to that of Jerusalem. The curious arrangement has thus come about that, although the intermediate districts of Nablûs and Jenîn belong to Beyrout, Nazareth and neighbourhood stand isolated as a part of the Pashalic of Jerusalem.

The late Chief Rabbi of Jerusalem, Jacob Saul Elyashar, died on Saturday evening July 21st, aged 89 years. His death, although not unexpected, for he had been ailing for some time, was rather sudden at the end. He was born at Safed, and although representing the Sephardim Community in Jerusalem, was partly of Ashkenaz origin, one of his grand-parents being an Ashkenaz. He wrote several books on Jewish literature; he was a strong personality, and much respected as much for his talents as for his energetic endeavours on behalf of the Jewish communities in Palestine.

The Tombs of Marissa receives a full notice in the April number of Revue Biblique, where it is recognized as "a very important contribution to the history and archaeology of Palestine in the last centuries before our era." Several suggestions are made regarding the inscriptions. It may be mentioned that the leaflet containing the result of the investigations by Mr. Macalister at the Tombs last October has been published and can be had on application to the Acting Secretary by those who possess the volume.

R. P. Barnabé Meistermann, O.F.M., in his recent study of the City of David, upholds the tradition which places Zion on the western hill, and seeks to justify it by archaeology and Biblical history.

It may be well to mention that plans and photographs alluded to in the reports from Jerusalem and elsewhere cannot all be

published, but they are preserved in the office of the Fund, where they may be seen by subscribers. Those which were sent by Mr. Macalister illustrating the excavations at Gezer and which were not reproduced in his quarterly report, have been held over for the final memoir.

"Golgotha and the Holy Sepulchre," the last work of the late Major-General Sir Charles Wilson, K.C.B., K.C.M.G., F.R.S., D.C.L., LL.D., &c., is now ready. In this work the late Chairman of the Executive Committee of the Palestine Exploration Fund has brought together for the first time all the evidence which the most exhaustive research enabled him to collect bearing on the subject of these Holy Sites; and probably no man living had at once so intimate a knowledge of all investigations in the modern Jerusalem, and so complete an acquaintance with what has been written about the Sites from the time of Constantine onwards. The price of the work (demy 8vo) is 6s., by post 6s. 4d., and cheques should be made payable to the order of George Armstrong, Acting Secretary to the Fund, and crossed "Coutts & Co."

Mr. Macalister's work, "Bible Sidelights from the Mounds of Gezer," is now ready. It has been written to show how the results of digging in Palestine should appeal not only to the scientific anthropologist or archæologist but also to the Bible student who has no special interest in these sciences. The book contains a brief synopsis of the work of the Fund from its foundation to the present and a description of the site of Gezer, and its history.

Messrs. Hodder and Stoughton have also published for Dr. Bliss a book entitled "The Development of Palestine Exploration." Its author has the twofold qualification of scholarship and practical experience in Palestine exploration; the results of the latter having been already published in a work that is well known to all students of the subject. In the present volume Dr. Bliss makes no attempt to offer a detailed account of the results of this prolonged research. What he aims at is to tell the wonderful story of the quest as a whole—"the shifting point of view of travellers from age to age; the displacement of the Classic Geographer by the credulous pilgrim; the gradual evolution of the pilgrim into the man of science"—these are some of the prominent subjects with which Dr. Bliss has

dealt. The story is one of wider human interest, and does not belong exclusively to archeology or any of the numerous sciences that are its handmaids.

The attention of subscribers and others is called to A Table of the Christian and Mohammedan Eras, from July 15th, A.D. 622, the date of the Hejira, to A.D. 1900, price by post, 7d. Also to the Meteorological Observations at Jerusalem, with tables and diagrams by the late Mr. James Glaisher, F.R.S. Tourists and all desirous of accurate information about the climate of Jerusalem should not fail to send for a copy, price 2s. 6d.

The attention of subscribers is also called to a work by Sir Charles Warren, entitled "The Ancient Cubit and our Weights and Measures." He brings evidence to show that all weights and measures (except those of the metrical system) are derived from one source—the double-cubit cubed of Babylonia. See below, p. 182 sqq.

The Museum and Library of the Palestine Exploration Fund at Jerusalem are in the Bishop's Buildings, near the Tombs of the Kings, where the use of a room has been kindly permitted by the Rev. Dr. Blyth, Bishop in Jerusalem and the East. The Museum is open daily, except Sundays, and the Honorary Secretary, Dr. D'Erf Wheeler, will give all information necessary.

The "Flora of Syria, Palestine, and Sinai," by the Rev. George E. Post, M.D., Beirût, Syria, containing descriptions of all the Phaenogams and Aerogens of the region, and illustrated by 441 woodcuts, may be had at the office of the Fund, price 21s.

The income of the Society from June 16th to September 20th 1906, was—from Annual Subscriptions and Donations, including Local Societies, £155 9s. 4d.; from sales of publications, &c., £138 16s. 1d.; from Lectures, £9 9s. 0d.; making in all, £303 14s. 5d. The expenditure during the same period was £391 12s. 9d. On September 20th the balance in the bank was £289 14s. 4d.

Subscribers who have not yet paid, will greatly facilitate the Committee's efforts by sending their subscriptions in early, and thus

save the expense of sending out reminders, the outgoings on the excavations at Gezer having been a heavy drain on their funds. The special donations during the quarter have been received from:—

Walter Morrison, Esq. ... £20 0 0 J. I. Smail, Esq. ... £10 10 0 J. Hingston Fox, Esq. ... £5 0 0

Subscribers to the Fund are reminded that, whilst the receipt of every subscription and contribution is promptly acknowledged by the Acting Secretary, they will henceforth be published annually, and not quarterly. A complete List of Subscribers and Subscriptions for 1905 was published with the April number.

Subscribers in U.S.A. to the work of the Fund will please note that they can procure copies of any of the publications from the Rev. Professor Theo. F. Wright, Honorary General Secretary to the Fund, 42, Quincy Street, Cambridge, Mass.

The Committee will be glad to communicate with ladies and gentlemen willing to help the Fund as Honorary Secretaries.

Subscribers and others may be reminded that the new Raised Map of Palestine, constructed from the Surveys of the Palestine Exploration Fund by the Acting Secretary, is ready. It is on the scale of  $6\frac{1}{4}$  miles to the inch and measures 3′ 6″ × 2′ 6″. It has already been used with great success by Professors of Old Testament history, and by teachers in Sunday Schools, and may be especially recommended for large classes of students. On view at the office of the Fund; further particulars may be had on application.

In order to make up complete sets of the Quarterly Statement, the Committee will be very glad to receive any back numbers which subscribers do not wish to preserve.

A complete set of the *Quarterly Statements*, 1869-1905, containing the early letters, with an Index, 1869-1892, bound in the Palestine Exploration Fund cases, can be had. Price on application to the Acting Secretary, 38, Conduit Street, W.

Subscribers of one guinea and upwards will please note that they can still obtain a set, consisting of the "Survey of Eastern Palestine" (Colonel

Conder); "Archæological Researches in Palestine," in two volumes (Clermont-Ganneau); "Flora and Fauna of Sinai, Petra, and the Wady 'Arabah" (Hart), for £7 7s., but the price has been increased to the public to £9 9s. The price of single volumes to the public has also been increased. Applications should be made to the Acting Secretary.

The price of a complete set of the translations published by the Palestine Pilgrims' Text Society, in 13 volumes, with general index, bound in cloth, is £10 10s. A catalogue describing the contents of each volume can be had on application to the Secretary, 38, Conduit

Street, W.

The Museum at the office of the Fund, 38, Conduit Street (a few doors from Bond Street), is open to visitors every week-day from 10 o'clock till 5, except Saturdays, when it is closed at 2 p.m.

Photographs of the late Dr. Schick's models (1) of the Temple of Solomon, (2) of the Herodian Temple, (3) of the Haram Area and Justinian's Church, and (4) of the Haram Area as it is at present, have been received at the office of the Fund. The four photographs, with an explanation by Dr. Schick, can be purchased by applying to the Acting Secretary, 38, Conduit Street, W.

Branch Associations of the Bible Society, all Sunday Schools within the Sunday School Institute, the Sunday School Union, and the Wesleyan Sunday School Institute, will please observe that by a special Resolution of the Committee they will henceforth be treated as subscribers and be allowed to purchase the books and maps (by application only to the Secretary) at reduced prices.

The Committee acknowledge with thanks the following:-

"The Book of Genesis," treated as an Authentic Record, Vols. I and II, from the Author, Rev. George Greenwood, M.A. (Trinity College, Cambridge).

"Baedeker's Palestine and Syria." From the publisher, Karl Baedeker, Leipzig.

"The Annual of the British School at Athens," No. XI. Session 1904-1905.

"La Ville de David. La Patrie de Saint Jean-Baptiste, avec un Appendice sur Arimathie." Par Le P. Barnabé Meistermanu, O.F.M.

"Questions de Topographie Palestinienne. Le lieu de la Rencontre D'Abraham et de Melchisédech, avec un Appendice sur le Tombeau de Sainte Anne à Jérusalem." Par Le P. Barnabé, D'Alsace, O.F.M.

"Ancient Tyre and Modern England." From the Author, "Philo-Anglicanus."

- "Lectures on Babylonia and Palestine." By Stephen Langdon, Ph.D., Fellow of Columbia Univ., New York. From the publisher, Paul Gentlmer, Paris.
- "Al-Mashrik."
- "Jerusalem: Jahrbuch zur Beförderung einer wissenschaftlich genauen Kenntniss des jetzigen und des alten Pakistinas." By A. M. Luncz.
- "Echos d'Orient."

See further below, pp. 317 sqq.

The Committee will be glad to receive donations of Books to the Library of the Fund, which already contains many works of great value relating to Palestine and other Bible lands. A catalogue of Books in the Library will be found in the July Quarterly Statement, 1893.

For list of authorised lecturers and their subjects, see end of the Journal, or write to the Secretary.

Whilst desiring to give publicity to proposed identifications and other theories advanced 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 do not necessarily sanction or adopt them.

FORM OF BEQUEST TO THE PALESTINE EXPLORATION FUND.

I give to the Palestine Exploration Fund, London, the sum of \_\_\_\_\_\_ to be applied towards the General Work of the Fund; and I direct that the said sum be paid, free of Legacy Duty, and that the Receipt of the Treasurer of the Palestine Exploration Fund shall be a sufficient discharge to my Executors.

Note.—Three Witnesses are necessary in the United States of America.

Two suffice in Great Britain.

#### THE BEDOUIN OF THE SINAITIC PENINSULA.

(Continued from Q.S., 1906, p. 205.)

By W. E. Jennings-Bramley, Esq.

# XIV. Equipment of Camels.

The saddle generally used for the Oqui is the wilter or pack-saddle, but in many cases this is dispensed with, the rider simply seating himself behind the hump on a sort of cushion he has made by twisting his Abba round it. A rope with a loop at each end is thrown in front of the hump, the folds of the Abba and the weight of the man, whose feet are resting in the loops, keeps the rope in position.

The proper saddle, known as the raburt or shidad, is made by the Arabs themselves, and, simple as it might seem, only three or four men in the whole of Sinai have any reputation as good saddlemakers. The frame-work, which is made of wood (the best of cypress. ithel; others are of tolk), consists of two parts, so cut as to span the back of the camel and end in uprights, between which the rider sits. The excellence of the saddle depends on the exact width of the span of these wooden arches. Each is made in two pieces accurately joined down the middle. The front arch with its upright is called the maher, the one behind the miqudem; these, held together by cross bits strongly bound with raw hide, must be just the right distance apart to fit the camel.

The base of the maker and miqualem should be broad and flat, the broader these are the better will the weight be distributed on the mather, a pad on which the saddle rests. Straps (sair) ending in iron rings (hadama) are thrown both over maker and miqualem. A long rope of camel's hair, ornamented with tassels, which takes the part of girth, is attached to the ring on the one side, passed under the camel, drawn through the ring on the other side and pulled as tight as possible. It is then fastened by means of thin leather straps sewn for the purpose to the ring which is on the

opposite side to that on which the girth is permanently fastened. Like the horse, the camel, when it feels the girths being drawn, blows himself out, and it is therefore necessary to see the rurda or girth is drawn as tight as possible. The Arab is careful when placing the saddle on the animal's back, to put his hand under the muthur to see the padding is smooth. Any crease or lump might cause a sore back or even a boil, and boils, especially, are things to be carefully guarded against, as they are most difficult to cure.

Although some Arabs, the Abubda, for instance, place the saddle so that the hump of the camel is between the maher and miqadem, the right place for it, in the opinion of most Bedouins, is just behind, not on, the hump. That is to say, the maher should span it just where it begins to fall. An ibex skin is generally thrown over the saddle and kept in place by slits through which are passed the uprights of maher and miqadem. This skin protects the camel bags from being worn by constant rubbing on the woodwork of the saddle.

Fastened to the miqualem by a loop and resting on the withers is a pad (mairika), often ornamented with a fringe and tassels of leather, on which the rider rests his knee.

The water skin is fastened to the *miqadem* and *maher*, and hangs just below the saddle, care being taken that it does not hang too low, as the constant shaking and bumping against the side of the camel when the animal trots would end in a leak. The skin is so hung that the mouth is slightly higher than the rest; but I will speak in detail of water-skins further on.

The last thing to place on the saddle before the rider mounts are the camel bags. Made of camel's hair by the Bedouin women, they vary very much according to the tribe of the maker. The best are made by the Moelieh in Northern Arabia. Different colours are used but the pattern is almost always identical. The price of a good pair varies from £2 to £2 10s., but those woven in Sinai of sheep's wool or goat's hair fetch at most £1. Over the bag the Arab arranges his blanket, Abba, or whatever he may have to wrap himself in, and over all he lays the gurd or sheep skin on which he lies at night and sits by day.

In choosing or having his saddle made, the Bedouin considers the proper span of arch for the *miquilem* to be the length of his own fore-arm from elbow to tip of the second finger. That of the *muher* is three to four inches longer.

The two halves of maher and miqudem are kept together by wooden pegs run through the thickest part, just above where they divide to form the arch. A strip of raw hide is bound tightly round the wood and over the peg. Cross pieces hold the maher and miqudem in position and at the right distance from each other, the maher slightly tilted back, the miqudem straight. These cross bars are tied securely with raw hide passed through holes made for the purpose.

The price of an ordinary saddle, headstall, etc., may be calculated to cost £1 12s, to £2 8s.

					s.		£	8.
Saddle					16	to	1	12
Mathûr					2		0	2
Hadama and Sair—Rings and leathers					2		0	2
Adar					2		0	2
Rurda (2)					8	(4s. each)	0	8
Rassan					2		0	2
						-		
				£1	12	e	£2	8

The saddles of the Hegas are of the same shape, but of finer work, and studded all over with nails of brass or nickel, sometimes even richly ornamented with silver. They cost, of course, considerably more than the ones I have described.

#### XV. The Water-skin.

The only thing left to describe is the *jerba* or water-skin, and so much depends on its excellence that it is important the traveller should know how to choose and use it. The goat's is the only hide out of which a water-skin can be made. In Sinai the Bedouin cut a semicircle under and with the tail for a centre. This extends half across the quarters, and the whole carcass is drawn out of this. The slit must then be sewn up, and to do this, the two edges of skin are bound over with braid of plaited date-fibre, about an inch wide, and sewn together, the braid preventing the thread from cutting through the skin, however tightly it may be drawn. It is then salted and put by. There are several ways of curing it. The best is to put three or four handfulls of pomegranate rind (the quantity of rind required depends on

the size of the skin) and water into the skin, and shake it well; then leave it to soak, changing the position of the skin daily, so that all sides may be impregnated with the liquid. Every five days fresh rind is put in. When this has been done three times, and therefore fifteen days have elapsed, the skin is ready for use, but it is best to put in a pinch of desert- (not sea-) salt, and leave that in for two or three days. Before filling with water for use, it must be thoroughly well rinsed, but whatever trouble is taken about this, the water carried in it will have a peculiar flavour for about a month. The older the skin the sweeter the water carried in it, unless, as some Arabs do, a drop of pitch is put in with the idea that it cools the water. That to my mind, however, gives it a most objectionable taste. Before tying up a water-skin to put it by, about an egg-cup full of sweet olive oil must be poured into it to keep the hide supple.

In Sinai folh (acacia) bark is used instead of pomegranate rind, which would have to be fetched from Rasa. It is, however, not so good, nor do skins cured with it last as long.

The Magharbys make the best water-skins. Instead of slitting the quarters and then sewing the skin up, they have a way of breaking the animal's breast-bone, and of passing the whole carcass through the neck without cutting any part of the skin. The legs are knotted together after simply cutting the lower skin of them in strips.

Leaks on the road are closed by Bedouin in a rough and ready way by wrapping a rag round a stick and forcing it into the hole. A safer way is to take a chip of date-palm (they generally carry a piece with them for the purpose), notch it all round and pass it through the hole. The date-palm swells when soaked, and can never fall out.

Needless to say, every Bedouin knows of what paramount importance it is to look after his skins and keep them in good order. When carried on the camel, the mouth of the water-skin must be turned up to prevent its leaking. At mid-day, when taken off the camels, they are always laid on something—branches, or a cloak or skin, anything rather than on the hot sand, and something is thrown over them to protect them from the great heat, which would cause evaporation. The ropes by which they hang must be looked to constantly, as a fall would almost certainly burst the skin, and the loss of the water might, in many cases, mean disaster.

An old skin that begins to leak may often be made serviceable for some time longer by putting *semen* (clarified butter) into it, but the water will have an unpleasant taste for weeks after this has been done.

In buying a skin, it is wise to put it to several tests. It should be blown out and then hit to see if it will resist the pressure. If the skin be that of a female goat, it is important to see the teats have been properly sewn up, or they will leak; often too, though there is no actual leak in the skin, the water will ooze out of some unnoticed seam, the result of a cut or old wound.

Saidi skins are by far the nicest, for they give no taste to the water, but they have the great disadvantage of almost always leaking at the neck. In these the skin is turned inside out, the hair having been removed with Rilga, a plant which has the properties of a depilatory, all other jerbas or water-skins having the hairy side left outside.

After drinking or pouring out water, the skin of the neck must be folded back, and the rope passed three or four times round it, at each turn giving it a vigorous pull. The end is then passed through the last turn of rope and pulled up as tightly as possible.

If for any reason you have two half-emptied jerbas, pour all the water into one, for when half empty, the continual splashing against the dry hot skin causes very rapid evaporation. It is, however, important always to have some water in a skin, in order that it may keep damp, otherwise it will harden and crack. If it is impossible to do this, roll it up while still wet, doubling up the legs inside and using the straps round the neck to tie up the whole.

Beware of mice and rats when putting the skins aside. Jackals and foxes are sometimes troublesome on the road. I have heard of a thirsty fox ripping up a water-skin that had been left unprotected. As to jackals, they will steal the sandals under your head. The only thing to do is to keep the skins as close to you at night as possible.

# XVI. The Care of Camels.

On starting in the morning, when the camels are still kneeling, the ordinary way of mounting is to place the right knee on the saddle, holding on to migadem and maker with either hand while the camel rises. The proper sound keeps the animal quiet while

the right leg is passed over the migadem. Some caniels, however, have a trick of rising before their rider can get his knee on to the saddle. In such cases, or when the camel is so laden that a jump is necessary to clear the packs and get into the saddle, it is wisest to pass the Rassan (head-stall) under the right foot, draw the animal's head down, to the ground if necessary, and keep it down until the spring is made. If the camel is standing when you have to get up (and, in the case of a heavy load it is better to let it get on to its legs before mounting), you must do as the natives do, but this means being bare foot and getting what hold you can of the camel's knee between your big and first toe, or with the hollow of your foot. With a spring you land with your right knee on the animal's neck, and from thence crawl on to the saddle. This is the easiest and most common way of mounting when the camel is standing, some, however, prefer pulling down the camel's neck, jumping on to it, and letting themselves be carried up almost into the saddle by the mere fact of the animal's raising its head. A third way is to clamber on from behind, making a step of the camel's hock. I have also seen a man spring right into the saddle, by simply holding on to the Rurda at the back.

Once on, if the camel be a quiet one, the rider crosses his legs round the *miqadem*; if an uncertain tempered brute, he lets them hang on either side to give himself a better balance.

A good camel will carry an ardeb = 5 bushels, and that over any road, however rough, and, needless to say, many they have to follow are of the roughest.

The day's work generally begins at sunrise, often before. The camels will trudge on till 11 A.M. without a rest. Then they are unladen and turned loose to feed in a wâdy, if possible, if not, in the most favourable spot within reach. The Arabs now make their bread and coffee, and they and their camels rest for one or two hours, according to the length of road before them. Camels will often lie down, preferring rest to food at that time of day. Then they are re-laden and travel on until an hour before sunset, not later, as camels feed badly after sunset, and this is the principal feed of the day. If his master has carried beans or barley for him, it is given on its returning from feeding on the shrubs around, a large basin full of either one or the other. When turned out to feed it is always hobbled, and in hobbling a beginner should be very careful, otherwise he will probably get kicked by the animal

in its efforts to rid itself of flies. A rest of two hours follows the evening meal, then the saddles are put on again and the journey resumed for two or three more, when a suitable spot is chosen and the camels are made to lie down, each Bedouin unloading his own eamel and berecking it, which means that he throws the camel's-hair loop called an aqal round the folded leg of the kneeling camel, and draws the bit of wood, which is fastened to one end of it, through the loop. He thus makes it impossible for the animal to rise and stray away.

A favourite saying among Arabs is "Since my camel is pleased, I am pleased," and this is a true description of their state of mind, for the Arab thinks of his camel long before he thinks of himself, and all his thoughts centre round it. I was once erawling behind a Sheikh up some rocks, when he stepped on to a bush of thistles. The pain, for his feet were bare, made him swear, but as soon as he saw what had pricked him, all he said was "what a pity my camel is not here, he would eat them," for thistles are a very favourite food of camels. Their solicitude about their animals is shown in a most annoying way when you arrive at a spring, for they always let them drink first, and when your turn comes, the water is full of mud, having been thoroughly stamped and kicked and stirred up by the camels.

The bushes on which the camels feed best are the following:—

The Tarfa (tamarisk)—but they should have drunk well before feeding off this, as it is very salt. All kinds of acacias (sial, &c.), are the favourite food of camels when once they know how to manage the long sharp thorns with which the branches are covered. The young shoots, and the bean when it is ripe, are as nourishing as corn, and a camel brought up on acacia, or while feeding on it, is pretty certain to be in good condition—or as the Arabs say—"its bones are dry," and it will go an astonishing time without water. Salem is the low flat-topped acacia from which gum is collected, it grows particularly huxuriantly in the Arabah. Salem and folh are almost identical in appearance. It is useful for feeding goats as well as camels, and the Arabs lop off the branches for them.

Hamth, a small bush growing to a foot or two above the ground. The brown branches covered with a fruit or leaf, so closely attached to the branch that it looks like some fungus growth, would not impress one at first sight as anything but very dry food, but the Bedouin look upon it as excellent for their camels, sufficiently

nourishing to take the place of beans, its disadvantage being that the camels while feeding on it require water pretty constantly.

Guttoff, a largish bush with small round leaves, very salt, is one on which the camels can only feed at certain times.

Sitti, a small thorny bush, on which camels feed well. Thistles and all the small grasses and flowers, which spring up as soon as the winter rains are over, are the most fattening food for the camels, but these they cannot have all the year round, and then they fall back on the shrubs.

The wood of all these shrubs can be used as fuel, except that of the Tarfa, which imparts an unpleasant taste to bread cooked on it. To kindle his fire the Bedouin uses steel flint and tinder, the latter being made from the hanithal, a small melon. when dry is burnt in hot cinders, then, when burned right through, but still keeping its shape, it is taken up and wrapped round in a wet rag, which rag must have been thoroughly washed with soap and be entirely free from any greasy substance. Then melon and rag are thoroughly pounded together, and when dry make excellent tinder. The flower of the shieh is also used, but this is not so inflammable as that made with hanithal. In passing, I may say that the shieh, a small sweet-scented bush, is said to keep away snakes, but, as I have myself killed vipers under them, I am certain there is little truth in this. A third kind of tinder is made by sprinkling water on a rag which is then rubbed on the back of a sheep until a soapy foam is produced. This rag when dry can be used for tinder.

The kind of steel most prized by Bedouins is an old file worked into the proper shape. As to the flint, any will answer the purpose, if it be first flaked so as to have a sharp edge. On this edge the ends of the threads of the tinder must be well opened out, and held down with the thumb, and then the flint struck. Any dry grass to hand, or failing that, some small twigs, are shaped into a sort of rude round nest or basket, into which a little dry camel dung is broken up, the lighted tinder thrown in, and the whole held up to the wind, which very soon fans it into a flame. Fires in camp are only required for cooking, as the protection of the tent is sufficient warmth, but when travelling in the desert the nights are so cold that the heat of a good blaze is almost always welcome, though not always safe, as it attracts attention, a thing most desirable to avoid.

In camp there is no especial arrangement. Everyone pitches

his tent where he chooses, the Mengard or Menzil being so placed that it can be easily distinguished by any strangers arriving in camp from those around it; it is always near that of the Sheikh, very often it forms part of it. The tents are only brought out for the four winter months, in summer they lie hidden in holes in the rocks known only to their owners. For the eight summer months the Bedouins build themselves booths of branches near their patch of cultivated ground, and water their little crop of Indian corn, melons, barley or wheat.

When not travelling they have nothing to do, and will loll about the encampment sleeping and smoking through the day. A Bedouin smokes at all times, travelling or resting. He begins when a child of eight or ten, and the habit becomes so inveterate that he will stand any deprivation rather than that of tobacco. Children even have pipes of their own, and if they have not, they smoke their father's. If tobacco fails, on a journey for instance, they will chop up a bit of the stem of their pipe, and find some satisfaction in the fumes of the nicotine-impregnated wood. Gazelle dung is often a substitute for tobacco, in fact anything that will smoulder answers the purpose; anything rather than nothing is their maxim. In Sinai the tobacco which is smoked comes mostly from Syria, although a little, but very little, is grown in patches on the hillsides. Some Bedouins have stems to their pipes, but by far the greater number smoke out of the bowl, that is, the very short earthen stem of the bowl into which the pipe-stick should be inserted. Some of these bowls are made out of a soft white stone which is found in the country. Very roughly cut, and of a most inconvenient shape, these pipes are often little more than a straight hollow tube, with a perforated piece across the centre, which prevents the substance smoked from being drawn into the mouth. The difficulty of keeping the tobacco, or whatever else it may be, in the tube is great, and can only be accomplished by the smoker turning his face up at such an angle as to place himself well under his pipe.

(To be continued.)

#### WEIGHTS FOUND IN JERUSALEM.

CONSIDERATION OF THE ANCIENT SYSTEM OF WEIGHTS, SHOWING THE DERIVATION OF THE STONE WEIGHTS FOUND IN THE EXCAVATIONS AT JERUSALEM IN 1867-1870, AT OPHEL, ROBINSON'S ARCH., &c. (*P.E.F.Q.S.*, 1870, p. 336).

(Concluded from Q.S., p. 190.)

By General Sir Charles Warren, G.C.M.G., K.C.B., F.R.S., R.E.

(4)—The Four Ancient Systems of Weights and Measures.

I will now give a brief summary of the progress of our weights and measures since early times, down to the 3rd or 4th century B.C.

There have been four principal systems of weights and measures:—

- 1. The original weight system; traces of which can be found at the present day in India, which will not be further alluded to.
- 2. The binary and decimal system, usually called Egyptian or Euboïc.
- 3. The duo-decimal system, used in Egypt and Assyria and called Eginetan.
- 4. The sexagesimal system, used in Southern Babylonia and Persia and brought into Europe by the Phœnicians, which we may call Gudean.

These have all emanated from the content of the old cubit cylinder of 24 digits, or from the old double cubit (28 digits) cubed, which bear to each other the ratio of 1:4.

Systems 2 and 3 are closely connected, in that 32 cubit cylinders (Euboïc talents) are equal to 27 Babylonian talents or cubic feet.

In the Eubore system 2,564 Hon of 6,750 O.G.T. are equal to 2,160 Log (Eginetan) of 8,100 O.G.T., the content of the double

cubit cubed. The number of grains totalled out are, Eubore 17,280,000, Eginetan 17,469,000; so that it is evident either that the grains were unequal if the double cubit was the same, or that the double cubit differed if the grains were equal in weight, the difference being as 80:81. This difference arises principally from the Eubore system discarding, as has been shown, 128 Rati from the 5,128 Rati forming the pint, so as to arrive at the number 5,000 Rati. The difference in practice, however, is so small that 27 Hon would exchange for 20 Log, and the shekels and Kats of both systems were interchangeable.

The principal weights used in Europe and Asia have been in connection with these two systems, viz.:—the shekel, the ducat, the Tower pound, and the Hon of 6,750 O.G.T., suppressed in England in 1325 A.D.

For measures of capacity the Euboïc system gave our cylindrical measures (bushels, etc.), while the Eginetan system gave the Hebrew Bath and Log measures, which appear in Greece and Italy subsequently as Metretes, Congius and Sextarius measures.

The 4th or Gudean system was on a different footing to systems 2 and 3, and seems to have been confined for many centuries to Southern Babylonia and Persia, and possibly Syria, until perhaps the 6th century B.C., when it developed under the Persian supremacy and subsequently spread over the Levant, in the hands of the Phoenicians.

It is, in its later form, strictly on the sexagesimal basis. Six-sevenths of the contents of the double cubit cubed (60,000 cubic inches) were divided into a 1,000 parts to form the double mina of 60 cubic inches, and the mina was divided into 60 parts, cubic inches or shekels. Each shekel was divided into 180 parts, she or grains.

The talent was 60 double mina or 3,600 cubic inches. The cubic foot had not been introduced in those days, so that the date of this system appears to have been after the introduction of the double cubit cubed, but before the establishment of the cubic foot.

There were then  $1{,}166\frac{1}{3}$  double mina to the double cubit cubed and  $43\cdot2$  double mina to the cubic foot, so that it is not readily connected up with the other two systems; but 10 Tower pounds (5,400 O.G.T.) equalled 9 Gudean single minas of 7,500 O.G.T.

In the Euboic and Eginetan systems the Tower pound, Hon and Log, when taken together, are in the ratio of 4, 5, and 6 by weight,

but when the Gudean single mina is added in, the ratios are 36, 45, 54, and 50.

It is desirable to ascertain whether the double mina of Gudea can be referred to the other ancient systems by means of its grains.

All the minas and pounds of systems 2 and 3 can be expressed in whole numbers of ancient grains at the rate of 9 Troy grains to 8 ancient grains. Thus the Tower pound (5,400 O.G.T.) becomes 4,800 A.G., the Hon (6,750 O.G.T.) becomes 6,000 A.G., and the Log (8,100 O.G.T.) becomes 7,200 A.G., but the Gudean mina (7,500 O.G.T.) is intractable and becomes 6,866 Ġ A.G., and no relation can be found for practical purposes between 6,866 Ġ and 10,800 (the number of shé in the mina). If 300 grains are taken to the cubic inch instead of 180, it is not much improved.

Now it is quite evident that when the Gudean mina was brought into the Levant, the sexagesimal system of calculation by  $60 \times 60 \times 180$  would be too laborious in countries where calculations by tens and twelve were in vogue, so that if the Gudean system was to be used some compromise must be effected. But we know that this weight was used extensively, and we have to find out how calculations were made possible.

Now the Eginetan system gives  $222\frac{2}{9}$  (=  $\frac{2000}{9}$ ) grains to the cubic inch, while the Gudean system has the cubic inch as a shekel, but the Gudean system could not adopt the Eginetan number of grains. It is seen that the fraction of the Eginetan number of grains to the cubic inch has 9 as a denominator; what could be more simple, for a compromise, than to divide the ancient grain by 8 and multiply by 9, and thus get rid of the fraction, giving 250 grains to the cubic inch,  $\frac{2,000}{9} \times \frac{9}{8} = 250$ , and at the same time in order to get rid of the excess of the number 3 and for other reasons, to increase all the pounds by  $\frac{1}{15}$  of their weight. But the further

## (5)—THE GUDEAN SHEKEL.

consideration of this subject must be reserved for what has to be

said concerning the Gudean shekel.

On the sitting statue of Gudea found at Telloh (Larsa), in Southern Babylonia, probably contemporaneous with the IVth

Egyptian dynasty, there is a cubit scale cut on the hard stone with great care. There are 16 divisions shown, 63 of which equal the length of the double cubit of the Great Pyramid, and 60 of which form the cubit of Gudea = 39.276 inches (39.211 according to Professor Kennedy).

This double cubit cubed equalled 60,000 cubic inches, and contained 1,000 double minas of 60 cubic inches each. The weight of a cubic inch of water being a shekel weight, and the double mina weighing 15,000 O.G.T.

The weight of the double mina is given by Professor Kennedy,<sup>1</sup> from actual testing as 15,160 G.T., which deducting 1 per cent. gives 15,010 O.G.T.

The weights found are said to have existed at least 2000 years B.C. There is also in the Early Temple accounts at Telloh (dating back at least 2000 B.C.), an account of a subdivision of the shekel (weighing one cubic inch of water) into 180 she or grains of wheat, a subdivision subsequently discarded. Thus we have good reason to suppose that the cubic inch shekel goes back at least to the time of Gudea, in Southern Babylonia. And as Elam and Persia came under the influence of the Accad monarchs, we may assume that this Gudean system may have come into use in Persia at an early date.

Again, we know from the coins of the Persian kings, dating as far back as 518 B.C., that the gold daries weighed two to a cubic inch of water, and that the silver siglos weighed three to a cubic inch of water or Gudean shekel, and the darie of the Lydian kings, dating as far back as 560 B.C., have the same weight.

It is evident that the Gudean shekel had not altered up to the end of the Persian supremacy.

Again, in later times we have the Olympic standard in Greece, of which the pound was the single mina of 7,500 O.G.T. or 30 cubic inches of water.

We have testimony also that the Persian daric had an extensive circulation in Greece (Nen. Anab., i, 3). These coins are supposed also to have been struck in Egypt during the reign of Cambyses of Persia; and there is evidence that the shekel weight of a cubic inch of water was in use, amongst the Phoenicians after the Persian supremacy was overthrown.

<sup>1 &</sup>quot;Weights and Measures," Hastings, Diet. Bib.

We have then good reason for supposing that the Gudean single mina of 7,500 O.G.T., and the shekel of 250 O.G.T. were extensively used in the Levant up to the time of the Ptolemies and Seleucidæ.

We have, moreover, the Roman pound during the Consuls weighing 5,000 O.G.T., probably  $\frac{2}{3}$  of the Gudean pound, and we have the same pound in use in the Greek States in Asia Minor, during the Early Roman period.

#### (6)—THE EGYPTIAN KAT.

We have now to consider the subject of the Egyptian Kat, which in early times was 136 G.T., but in later years increased in weight to 145.4 G.T., and has come down to us in late times in the Cairo Moslem Rotl of 6,912 O.G.T., or 48 Kat of 144 O.G.T.

We may trace the existence of this Kat of 40 to the Troy pound up to recent times.

Kelly's Cambist (1824) tells us of the Cairo ounce of 576 G.T., which equals 4 Kat of 144 G.T.

Dr. Arbuthnot, 100 years ago, tells us of the Rotl of Cairo of 144 drams of 48 G.T., which is 48 Kat of 144 G.T.

Professor Greaves, 250 years ago, tells us the same of the Alexandrian Rotl.

Quiebo eites Makrisi and Mahomed Sephad (of VIIth century), to show that the Moslem pound was 144 drams of 64 grains (64 grains = 48 G.T.).

We have here again an indication of the transformation that took place:

O.G.T. O.G.T. The Kat 135 raised by  $\frac{1}{15}$  to 144.

Tower pound 5,400 ,, ,, 5,760 = 40 Kat, Troy pound. Attic ,, 6,480 ,, ,, 6,912 = 48 Kat, Cairo Rotl.

The question now arises as to when this change took place. At present, we only know of the Troy pound, so far back as the time of Khalif Al Mamun, 814 A.D.

# (7)—The Addition to the Old Pounds of $\frac{1}{15}$ their Weight (Table I and II).

I give two tables. No. I shows how the old pounds of 6,750 O.G.T. (the Hon), 5,400 O.G.T. (the Tower pound), and 6,480

O.G.T. (the Attic pound), have been raised by  $\frac{1}{15}$  together with their commercial relatives the pounds of 16 oz., and the parts of Europe they were common to before the introduction of the metrical system.

It will be seen from the table that the raised pounds have only been found in the civilised world of the Roman period, while the old pounds have been found amongst the Gothic or Barbarian races, and that there are further distinctions.

North of a line drawn from the mouth of the Elbe through Holland, Switzerland, to Venice, the old pounds were to be found. South of this line were to be found the raised pounds. But the Tower pound had its habitat in Germany and Northern Italy, while the Attic pound was found in Poland, West Austria, and West Russia, suggesting two distinct races or kingdoms.

South of the line the Troy pound was found in France, Holland, part of Switzerland, and North Italy, while the Roman pound was found in Southern Italy, up to Florence, Rome, Spain, and Portugal.

It might be reasonable to assume from this that the change was made under the Roman Emperors, were it not that there is another method by which some of these pounds may have been arrived at, which I show in Table II, viz.: by taking for the pound, 96 drachmas instead of 100 of the old pound. This, however, we may be certain of as having taken place when Rome became intimately acquainted with the Measures of Egypt, between 150 and 50 B.C. It may be, perhaps, safe to assume that the adoption of the raised Tower pound making the Troy pound took place throughout the Roman Empire about 50 B.C., but this is no indication of the time when the raising took place in Egypt or Persia, which may have occurred centuries before.

### THE MINA OF 8,000 G.T. AND 80 G.T. STANDARD.

We have now another clue to the raising of the old pounds by  $\frac{1}{15}$  of their weight.

It will be seen in Table I that the Persian pound of 7,500 O.G.T., when raised by  $\frac{1}{16}$  its weight, becomes 8,000 O.G.T., and it will be seen from Table II that a pound of 8,000 O.G.T. cannot have been arrived at by taking 96 drams of any known pound, that it cannot be turned into a pound of ancient grains, and that it is altogether

irreconcilable with the pounds derived from the double cubit cubed, except by deriving it from the Gudean single mina. It is therefore not an ancient pound, but has come into existence some time before 50 B.C. How long before we have no certainty as yet, but it is hoped that the Jerusalem weights will lead us up to the clue.

We have the following weights, said to be of 700 B.C., which seem to be of the 8,000 O.G.T. pound:—

	G.T.	O.G.T.		O.G.T.
700 B.C. Nineveh 2 Maneh	15,984	15,834	166	16,000
Babylonian Talent, 95,904 O.G.T.	15,984	15,834	166	16,000
Naukratis, several Petrie 80-grain st	andard			8,000

Thus it appears that the raising of the pound 7,500 to 8,000 O.G.T. may have taken place in Babylonia as early as 700 B.C. and in Egypt somewhat later.

#### TABLE I.

To show how the original mina and pounds have at some period been raised by adding  $\frac{1}{15}$  of their weight, at the same time that the weight of the grain was changed from  $\frac{2.000}{9}$  to 250 to the cubic inch.

		Rati.	Ancient Grains.	Old Grains Troy.	Old Grains Troy raised	Ounces in pound.	Remarks,
	I	32	45	54	_	_	The Ducat, Quarter Shckel.
	II	80	120	135	144		Purana. The Kat or Kharsha.
Euboïc		4,000	6,000	6,750	7,200		Moslem Miscal Rotl.
Eddoole	1111	<u> </u>	8,000	9,000	9,600	_	See Naucratis and Tanis.
	IV	3,200	4,800	5,100	_	12	Tower pound. All Germany, England, Denmark. E. Switzerland, N.E. Italy,
Half Eginet	an 🔞		_	7,200	_	16	including Venice.
Mina	V	_		5,400	5,760	12	Troy pound. France, England, Holland, W. Switzer-
	VI	_	-	7,200	7,680	16	land, N. Italy to Turin.
	11(	_	= =	4,860	-	12	(Solonian pound. Poland,
Attic Mina	/		5,760	6,480 4,860	5,184	16	W. Austria, W. Russia.
12010 3011111				1,000	9,184	12	Roman pound. Spain, Portugal. South Italy, Rome
	VII	_	_	6,480	6,912	16	and Florence.
			_		6,912		The Moslem Cairo Rotl.
1	$\operatorname{rm} \{$	_	-	7,500	-	-	The Gudean single Mina. Babylonia.
	(	_	_	7,500	8,000		80 standard. Naukratis, Babylon, Nineveh.

The Troy pound is the Rotl of the Khalif Al Mamum of Bagdad, A.D. 814.

TABLE II.

To show how the pounds raised by  $\frac{1}{1.5}$  of their weight may also have been obtained from other pounds by lowering them from 100 to 96 drachmas.

	O.G.T.			0.G	т.	
A.G.	100.	Lowered 96.	Distribution.	Raised 16.	15.	C.I.
4,500	5,409 7,200 5,400 7,200	5,184 6,912	A Babylonian Mina. North of line of Roman civilization in Middle Ages.   Roman pound. Spain and Portugal, S. Italy, Rome, Florence.	5,184 6,912	5,400 7,200 4,864 6,480	1,728
= -	4,560 6,480 6,480		Attie Mina. Poland, W. Austria, & W. Russia. Pound of Sciencidæ in Persia	_ Nil	4,860 6,180	Attie.
=======================================	5,000 8,000	5,760 7,680	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	6,000 8,000 5,760 7,680	5,625 7,500 5,400 7,200	1,800 Gudean. ½ Babylonian
=	7,500 7,500	7,200	Gudean or Olympic pound 16 ounces Troy	7,200	7,500 6,750	Gudean. Euboïe.
5,000	6,750 6,750	6,180	Attic pound The Hon	=	6,480 6,750	Attic. Euboïc.
_	_	_	Found at Naukratis	9,600	9,000	Enboic.

TABLE III.

Weights found at Jerusalem.

To show how they have developed from ancient pounds (*P.E.F.Q.S.*, 1870, p. 330).

I,	G.T. 11.	G.T. 111.	G.T. IV.	O.G.T. V.	O.G.T. VI.	A.G. VII.	Kats. VIII.	Drams 40 O.G.T. 1X.	Χ.
**	7,278 5,698 5,671 2,891	+ 19 -119 ) +133 f + 17	7,272 5,817 2,905	7,200 5,760 2,880	6,750 5,400 2,700	6,000 4,800 2,400	50 40 20	150 120 60	
d	3,049 2,321 1,231 5	+ 19 -105 +22*5	3,030 2,424 1,212	3,000 2,400 1,200	2,812*5 2,250 1,125	2,500 2,000 1,000	-	=	

<sup>&</sup>quot; Hebrew Inscriptions.

## (8)—The Jerusalem Weights.

We are now in a position to consider the bearing the Jerusalem weights have on the subject.

Of the several weights found in the excavations there are six which may be considered in perfect order and nearly up to full weight. These when tested by me (see p. 336, Quarterly Statement, 1870) appear to fall into two series of three weights each, the series having a ratio to each other of 12:5, and the three in each scale having the ratio to each other of 5, 4, 2. It may be purely accidental these two series having the same ratio, but we take them as we find them (see Table III).

I give the actual weights in column II and the several corrections (in III) I have made to bring the weights to what I believe to be the correct standard (in IV). The correction to each is very small, in four cases it is not 0.5 per cent., in one case 2 per cent., and in the extreme case 5 per cent.

In column V I apply the correction of 1 per cent. to all the weights to bring them to old grains Troy, and we now find the weights in the following order: 7,200 O.G.T., the commercial raised pound, 16 oz. of the Troy pound, 5,760 O.G.T. the Troy pound, and 2,880 O.G.T. half the Troy pound. So here we have, for certain, weights of the Troy pound with Hebrew inscriptions.

In the second series we have weights of 3,000, 2,400 and 1,200 O.G.T.,  $\frac{5}{12}$  of the first series.

In column VI I show all these weights lowered by  $\frac{1}{16}$ , and in the first series we have the Hon of 6,750, the Tower pound of 5,400 O.G.T., and half the Tower pound.

In the second series we have weights of 2,812.5, 2,250, and 1,125 O.G.T., from which it is clear that they were not used in this condition as grains Troy.

I now, in column VII, turn all the weights from Troy grains to ancient grains by multiplying by  $\frac{s}{v}$ . The first series are, of course, the well-known old pounds and parts in ancient forms.

The transformation of the second series is most interesting; we have now weights of 2,500, 2,000 and 1,000 grains ancient. So it is evident that this was their original condition before they were raised.

We may gather then from these weights that there were in use in early days weights of 2,500, 2,000, and 1,000 A.G., and at some time the grain ancient was changed to grain Troy, and at the same

time the pounds were raised in weight  $\frac{1}{15}$  of their weight, and that at this time the Tower pound became the Troy pound, and the Hon became the 7,200 O.G.T. (commercial pound of Central Europe). We further have the certainty that the change took place before the destruction of Jerusalem, and in a time when Hebrew characters were in use.

I think there can be no doubt of the correctness of the process to which I have subjected these weights, when I arrive at such numbers as 6,000, 4,800, 2,400, 2,500, 2,000, 1,000, and that now we are in a position to examine carefully all the weights which have not yet been fully diagnosed, we may be enabled to obtain further interesting information as to the use of the Troy pound in early days. I have no doubt that many of the weights found, in recent years, at Jerusalem, Tel Zakarîya, el-Judeideh and Gezer, will be found to belong to a system of which the unit is 180 G.T.  $i.e., \frac{1}{8}$  of 10 Egyptian Kats or 1,440 G.T. (3 oz. Troy).

#### THE LATE JOHN DICKSON, Esq., M.A., F.R.G.S.

THE Palestine Exploration Fund has much cause to regret the death, on July 4th, of Mr. John Dickson, for many years H.B.M. Consul in Jerusalem. He always took a keen interest in the work of the Fund, and was ever ready with sound advice and help in his official capacity, and with warm sympathy and hospitality for those who were engaged on the excavations, which indeed he frequently visited. Born in 1846, he passed through Edinburgh University and entered the Consular Service in 1875, and was first appointed to Mosul, in Turkish Arabia. While on his way there he received orders to remain at Beirut, to fill the post of Vice-Consul, and there he remained for eight years. From there he went as Consul to Damaseus, and was in 1890 appointed to Jerusalem where he took up his duties as Consul in that year. Mr. Dickson's health had been failing for the last two or three years, but except during serious illness, he never relaxed in his attention to duty nor in his kindness to the representatives of the Fund. Mr. Dickson leaves a widow, one son, and three daughters, one of whom has from time to time contributed articles of much interest to these pages.

His loss will be deeply felt by all British residents in Jerusalem.

## GOLGOTHA AND THE HOLY SEPULCHRE.

By A. W. CRAWLEY-BOEVEY, Esq., Bombay, C.S. (Ret.).

THE Committee of the Palestine Exploration Fund have done an important public service to archaeology by publishing the late Sir Charles Wilson's valuable notes on Golgotha and the Holy Sepulchre, a work which was left unfinished at the time of his death. The editing of this work was entrusted to his friend and successor, Col. Sir Charles Watson, R.E., now Chairman of the Executive Committee of the Exploration Fund. The case for and against the traditional sites is set out in this work with a fullness of literary knowledge which has never been equalled, and the following judicial and cautious summing up is likely to find general acceptance on the main issue. "There is no decisive evidence historical, traditional, or topographical for placing Golgotha and the Tomb where they are now shown. At the same time there is no direct evidence that they were not so situated" (p. 120).

If we may accept this finding as the last word on a burning controversy, we shall be in a position to appreciate all the better "the views of those earnest Christians who, for various reasons, find themselves unable to accept the traditional sites as genuine."

These views are well set forth in Chapter X, which many persons will consider one of the most interesting—though perhaps not the most convincing—portion of the book. There are many indications that the writer viewed with strong disfavour all the alternative theories discussed. But the chief fact of public importance to be derived from this chapter is the persistent growth through many centuries of a critical and sceptical spirit regarding the traditional "holy places." This spirit was manifested as early at least as the 8th century, and has continued at intervals down to our own day.

Sir Charles Wilson notices what he terms the "quaint" statement of Willibald, that Calvary was formerly outside Jerusalem, "but Helena, when she found the Cross, arranged that place so as to

be within the City." (Palestine Pilgrims' Text. Hodæporicon, No. XVIII, p. 19.) This statement is, at any rate, remarkable for its very explicit character. It supports the views of those who believe that the traditional or memorial site of the Holy Sepulchre has been transferred from some place outside the walls to the place where it is now shown.

And when it is remembered that scientific criticism by competent explorers did not even commence until towards the middle of the 19th century, it is very remarkable that so many pilgrims and travellers before that time should have shown by their published works that they entirely disbelieved the truth of the traditional Holy Sepulchre. The rejection of the traditional sites led naturally to speculation regarding the true position of Golgotha; and Sir Charles Wilson has well summarised the views of the numerous writers, commencing with Otto Thenius (A.D. 1842), who have identified the hill above Jeremiah's Grotto, called by Gen. Gordon "Skull Hill," as the real scene of the Crucifixion. Whatever may be thought of the writer's criticism, the consensus of modern opinion in favour of this site is very remarkable; and attention may well be invited to the long list of travellers and learned writers who have all expressed their general belief in the identification of this site. The list given by Sir Charles Wilson is by no means complete, and might perhaps have included such well known names and recognised authorities as the Rev. J. E. Hanauer, Dr. Chaplin, Prof. Hull, F.R.S., Mr. Henry A. Harper, Laurence Oliphant, and many others, all of whom have expressed the same opinion. There are, in fact, few spots in Jerusalem connected with the life of Christ which appear to command anything like this consensus of opinion, or on which so much continuous study has been expended; and though Sir Charles Wilson's remarks on the subject are deserving of the utmost respect, it is doubtful whether they will convince any impartial person that what is sometimes called the "green hill theory," or the "Gordon myth," is unworthy of serious attention.

The arguments urged in favour of the "Skull Hill" are thus summarised on p. 115. (1) Its elevation and conspicuous position. (2) Its resemblance to a human skull. (3) Its proximity to the City and to the great road to the North. (4) The Jewish tradition which identifies it with the "Place of Stoning." (5) The tradition relating to the martyrdom of Stephen. (6) The evidence of tombs

in the vicinity—one of which is described "as recalling very nearly the probable appearance of the new tomb of Joseph." There has, no doubt, been much confusion (1) regarding the origin of the name "place of a skull," and (2) regarding the supposed resemblance to a human skull of the hill above Jeremiah's Grotto. Sir Charles Wilson points out with much force that the whole appearance and physical features of this hill have been altogether changed by extensive quarrying during many centuries, and that any imaginary resemblance to a skull in our own day could not possibly have existed at the time of the Crucifixion, or satisfactorily account for the name translated in the Gospel "place of a skull." Dr. Schick suggests that the name "kranion," Calvary, or skull—was probably derived, not from the form of a hill, but from the discovery of a human skull in the place. Some writers say that the skull of Adam was found there. Dr. Schick suggests that the skull found was the skull of Goliath, which David brought to Jerusalem (1 Sam. xvii, 54, xxi, 9). P.E.F. Quarterly Statement, 1901, p. 403. Gen. Gordon called the hill "Skull Hill" not from any re-

semblance in relief or profile to a human skull, but from the form of the ground as represented by a contour on the Ordnance Survey Plan of Jerusalem. These reasons are altogether different from the popular view which connects the name "Skull Hill" with the extraordinary appearance of the rock face shown in the illustration facing p. 115 of Sir Charles Wilson's book. Popular photographs of this limestone cliff taken from one aspect exhibit in a very striking way the resemblance to a human skull. The illustration in Sir Charles Wilson's book, p. 115, hardly conveys any idea of a skull at all. It is quite possible that other causes besides that of ordinary quarrying may have affected the appearance of the "Skull Hill," and contributed to produce the remarkable appearance which it now bears. In Dr. Schick's article, entitled Hill of Jeremiah's Grotto, called by Gen. Gordon "Skull Hill" (P.E.F., Quarterly Statement, Oct. 1901, pp. 402-5), he expressly refers to the possible effects of Earthquake, "perhaps that in the reign of Uzziah" (Amos. i, 1; Zechariah xiv, 5.). Dr. Schick appears to have forgotten that Abbot Daniel (A.D. 1106-7) described this very hill as "a flat rocky ·mountain which split up at the time of Christ's crucifixion: the place is called Gehenna." (Palestine Pilgrims' Texts, Vol. IV.) Whether the name was originally El-Edhemiyeh, as given by Mejred-din, or El-Heidemiyeh "the rent," is uncertain; but the second derivation shows that the idea of a rent or fracture, caused by earthquake, was popularly associated with this spot, and Abbot Daniel's very striking statement shows that this tradition was current at the time that he wrote, circa 1106–7. The crucifixion earthquake seems quite as likely to have produced the fracture referred to as the earthquake which is said to have taken place in the time of Uzziah.

The Garden Tomb is pronounced by Sir Charles Wilson to be "one of the most insignificant in the great necropolis which surrounds Jerusalem, and does not resemble the class of sepulchre which a man of Joseph's rank and position is likely to have had hewn out for himself. Some of the details of the tomb are certainly Christian" (p. 117).

The late Dr. Schick wrote a full account of "Gordon's Tomb," with illustration and plans in a paper dated November 17th, 1891, which was published in the *P.E.F. Journal* of April, 1892, pp. 120-4. He writes "The tomb was originally a rather small rock-cut Jewish tomb, but became afterwards a Christian tomb, not only by its being used again, but by being greatly altered." These alterations and the existence in the interior of Christian symbols necessarily give rise to questions of great difficulty. Reasonable supporters of the Garden Tomb have never denied that some of its present details are "certainly Christian"; but if the tomb be of Jewish origin, i.e., constructed by Jewish hands for Jewish burial, who can now say with any certainty what its original form was, or when the conversion to Christian purposes took place? Gen. Gordon's followers are impressed with the remarkable position and general character of the tomb, which (for those who accept the Skull Hill as the real site of Calvary) exactly meets all the conditions of the gospel narrative, and which is the only tomb yet discovered which fulfils this fundamental condition. They are also struck (a) with its unfinished condition which is plainly visible; (b) its general character and fitness for a private family tomb in a garden; (c) its external surroundings, and comparative isolation from the adjoining necropolis. These points may be mere accidental coincidences, but their cumulative effect has impressed the popular imagination, and no one can deny that they are very striking. The tomb which Col. Conder suggested in 1881 as the real tomb of Christ is pronounced by Sir Charles Wilson to be "certainly Jewish, but its position 600 feet from the assumed site of Calvary

on the knoll, is greater than the narrative of John xix, 17, seems to indicate." In other words, the tomb commonly known as "Conder's Tomb," is not situated "in the place where he was erucified," and this objection seems fatal to Col. Conder's theory about the tomb, though he is the chief authority in favour of "Skull Hill" as the place of crucifixion. Gen. Gordon's opinion of the Garden Tomb was accepted by the late Canon Tristram, D.D., F.R.S., of Durham, the late Dr. Maurice Day, Bishop of Cashel and Waterford, the late Rev. Haskett Smith, editor of Murray's Handbook of Palestine and Syria, 1891, and by numerous living writers who have studied the question on the spot, and published their own opinions for what they are worth. The well-known hymn "There is a green hill far away, without a city wall," by the late Mrs. C. F. Alexander, wife of the Primate of all Ireland, gave expression to the idea which has made the New Calvary famous throughout the world. That hymn, set to music by Gounod, has been translated into many languages, and has contributed to foster the popular view, which though first made famous by Gen. Gordon, was originated by experts like Col. Conder, Dr. Chaplin, Dr. Selah Merrill, and others, before his time. Distinguished modern artists like Mr. Herbert Schmalz,1 and Mr. W. Hole, R.S.A., R.E.,2 have accepted the "green hill" and the Garden Tomb as the most appropriate setting for their well-known pictures, and travellers from all parts of the world have for many years past shown increasing interest in the "Skull Hill" and the rock-cut sepulchre at its foot.

So great was considered the religious and archæological importance of this tomb, that steps were taken in 1894 to purchase by subscription both the tomb and the land immediately surrounding it. The late Archbishop E. W. Benson supported the purchase; and his example was followed by His Grace the present Archbishop Randall Davidson, then Bishop of Rochester, and by the following Bishops whose names alone are a guarantee of soundness of judgment on a most difficult and controversial

<sup>&</sup>lt;sup>1</sup> Painter of *The Return from Calvary*; *The Resurrection Morn*; *Rabboni*; and other celebrated works.

<sup>&</sup>lt;sup>2</sup> Painter of the series entitled "The Life of Jesus of Nazareth," as set forth in 80 pictures, shown in the Rooms of the Fine Art Society, 148, New Bond Street, April, 1906.

subject:—Foss Westcott and Handley Moule of Durham, Hon. and Rev. E. Carr Glynn, Bishop of Peterborough; Bishops of Ripon, Salisbury, Cashel and Waterford, and Neweastle (Australia). Amongst minor dignitaries of the Church who supported the purchase, may be mentioned the late Canon Tristram, D.D., F.R.S., Canons Appleton, Hobson, Lowe, Phillipps, Rev. Preb. Webb Peploe, Rev. Stuart A. Donaldson, Master of Magdalen College, Cambridge, and the Archdeacons of London and Middlesex (1893–4).

The subscribers, donors, trustees and patrons of the Garden Tomb property include many scholars, authors, artists and men of affairs representative of all phases of modern religious thought. The support thus shown does not, of course, imply any belief in the identification of the tomb, or any acceptance of Gen. Gordon's mystical views; but it may be taken for granted that few would have supported the purchase had it not been considered to be of public importance. Apart, moreover, from any question of identification, the Garden Tomb property is considered by many as well worth preservation both as a Jerusalem memorial of Gen. Gordon. and as a site full of archaeological remains of great interest. Gen. Gordon has left on record his belief, "I have still a strong opinion that we shall find the Constantine sepulchre is close to the St. Stephen's Church, outside the Damascus Gate where the cisterns are" (p. 199). This opinion apparently refers to the Garden Tomb site; and whether it be well founded or not, it is surely a matter of public concern that a spot so interesting and so important to archeologists should be preserved in friendly hands for the use and enjoyment of visitors, and for future study and investigation.

### THE DATE OF THE CRUCHINION.

By SIR CHARLES WATSON, K.C.M.G., C.B., R.E., M.A.

MR. DAVISON'S paper dealing with the question of the week-day upon which the Crncifixion took place, which was published in the Quarterly Statement of last April, refers to a subject which has frequently been discussed since very early times. Much useful information respecting it is given in the two following books: Ordo Sacclorum, by the Rev. Henry Browne, published in 1844; and

the Historical Introduction to the Books of the New Testament, by the Rev. George Salmon, Provost of Trinity College, Dublin, the eighth edition of which was published in 1897.

Although various writers have held different views as to the year date of the Crucifixion, it has been almost universally agreed that Friday was the day of the week, the Friday in question being the day of preparation for the Feast of the Passover, i.e., the 14th day of the Jewish month Nisan. Mr. Davison, on the other hand, takes the view that the 14th Nisan in that year was Wednesday, and that the great day of the Feast, the 15th Nisan, was Thursday.

A solution of the question appears to depend upon two kinds of argument, the first astronomical, and the second historical, which mutually help each other. The astronomical argument is based on the fact that the Feast of the Passover was celebrated upon a day that coincided, or nearly coincided with the day of full moon, so that, if we know the day of the Paschal full moon in any year, we may be pretty sure that the 15th Nisan was either that day or the day next to it. As, however, the Jewish day commenced at sunset, it included parts of two of our days; but, for the sake of convenience, it is usual, on making a comparison, to say that the 15th Nisan was the week-day in the Christian calendar, the greater part of which corresponded with the 15th Xisan. For instance, if it is stated that the 15th Nisan in a particular year was Saturday, what is meant is that the 15th Nisan included the twenty-four hours from sunset on Friday to sunset on Saturday, so that it contained about six hours of Friday, and about eighteen hours of Saturday. It is rather important to state this, as I have known persons, who were under the impression that the Jewish day corresponded to the Christian day, in which the former commenced. The point has to be carefully borne in mind when considering the date of full moon, for, if the moon reaches the full after sunset on any day, the Jewish week-day for full moon will be the day following the Christian week-day. I do not propose to discuss the historical arguments for fixing the year date of the Crucifixion, and will only assume that it must have taken place during the time that Pontius Pilate was Procurator of Judaea. This period is generally given as from A.D. 25 to A.D. 35, and though these dates may not be correct to a year, yet the period certainly includes all the years, in which the Crucifixion could have occurred.

The dates and hours (minutes being omitted) of the equinoctial

full moon at Jerusalem for each of the years in question were as given in the following table, which Dr. Downing, the Superintendent of the Nautical Almanac Office has kindly checked, and which may therefore be regarded as correct.

No. A.D. Month. Day, Honr.	3542	70	TT.	Day of Week.		
	Hour.	Christian.	Jewish.			
1 23 2 26 3 27 4 28 5 29 6 29 7 30 8 31 10 33 11 34 12 35	April April April March April	1st 20th 9th 29th 18th 17th 6th 27th 14th 3rd 23rd 11th	10 P.M. 3 P.M. 7 P.M. 5 A.M. 9 P.M. 5 A.M. 1 P.M. 1 A.M. 6 P.M. 11 A.M.	Sunday Saturday Wednesday Monday Friday Sunday Thursday Tuesday Monday Friday Tuesday Monday	Monday, Saturday, Thursday, Monday, Saturday, Sunday, Friday, Tuesday, Monday, Friday, Tuesday, Monday,	

In the above list two dates are given for full moon in A.D. 29, as it is a little uncertain which of these is likely to have been the paschal full moon in that year.

As the day of full moon in the month of the Crucifixion cannot have been on any day of the week except Thursday, Friday, or Saturday, the dates Nos. 1, 4, 6, 8, 9, 11, and 12 need not be considered further. With regard to the remaining five dates we find that full moon was on Thursday (Jewish Calendar) in A.D. 27; on Friday in A.D. 30 and 33; and on Saturday in A.D. 26 and 29.

The actual day of full moon in Nisan in these years being thus fixed, it is necessary to consider what were the probable days observed as the 15th Nisan, the Feast of the Passover. This is not easy, as the Jewish date of full moon was settled by the date of the new moon, which had occurred fourteen days before, and the latter date was fixed by actual observation of the new moon after sunset, so that an error of a day could easily be made. There is also another point which is somewhat obscure. There appears to be a tradition among the Jews that when full moon is on Tuesday, Thursday, or Saturday, that day is observed as the 15th Nisan; but, if the full moon is on Monday, Wednesday, or Friday, then the day following is the 15th Nisan.

If, for instance, we examine the Jewish calendar for the past quarter of a century, we find that in the years 1882, 1885, and 1906, full moon was on Monday, and 15th Nisan was on Tuesday.

In 1881, 1889, 1892, 1895, and 1902, full moon was on Tuesday and the 15th Nisan was also on Tuesday.

In 1898 and 1905, full moon was on Wednesday and the 15th Nisan on Thursday.

In 1884, 1901, and 1904, full moon was on Thursday and the 15th Nisan on Thursday.

In 1880, 1887, and 1894, full moon was on Friday and the 15th Nisan on Saturday.

In 1890, 1893, and 1897, full moon was on Saturday and the 15th Nisan also on Saturday.

In a few exceptional cases the 15th Nisan was observed on the day before full moon; for example in 1888, full moon was on Wednesday and 15th Nisan was on Tuesday, and in 1899, full moon was on Monday and the 15th Nisan was on Sunday.

I do not know the meaning of this custom, nor when it originated, and the only direct allusion to it that I have found is in Hopton's Concordancie of Years, published in 1612. He says, in his treatise on the method of fixing the date of Easter: "The Jews' Easter was "commanded to be kept the 14th day of the first month, called "Abib, which day at even was the Lord's Passover, and the 15th "day should be the holy Convocation. . . . . And this 15th day "is taken for the first day after the first full moon, happening after "the spring equinoctial; which institution the Jews altered, holding "a superstitious opinion of days, and thereby would not keep their "Easter upon a Monday, Wednesday, or Friday, thereby breaking "the commandment of God, like stiff necked people."

There is a paragraph bearing on the subject in an article by Mr. Filipowski on the "Method of Computing the Hebrew Calendar," published in the Lady's and Gentleman's Diary for 1850. In this he says: "The year begins with the month Tisri, it being "the 7th in the year, and is fixed on or immediately after the day "of mean new moon of that month (which always takes place during "the month of September), provided the new moon does not occur "within the last six hours of the day (the day commences and "terminates at 6 p.m.). The new year is not to be fixed on either "of the following days, Sunday, Wednesday, or Friday. "Accordingly, if the new moon happens to take place on either of

"these days, the new year is postponed respectively to the next "following day."

If it is assumed that a similar custom was observed in the first

century, the following is the final conclusion arrived at.

In the year A.D. 26, the 15th Nisan, the day of the Feast of the Passover, was probably Saturday or Sunday.

In the year A.D. 27, the 15th Nisan was probably Thursday.

In the years A.D. 29, 30, and 33, the 15th Nisan was probably Saturday.

Which of these years is most likely to be the correct one is a matter to be decided on historical grounds, but it will be seen that the only year which would suit Mr. Davison's theory would be A.D. 27, and that is most probably too early.

With reference to the last paragraph of Mr. Davison's paper, it will be seen that in the years A.D. 30 and 33, the day of full moon was Friday, and, if the Feast of the Passover should have been observed on that day, the day of preparation should have been Thursday. There may therefore be some force in the argument that, assuming that the Crucifixion took place in one of those years, the last supper of our Lord was eaten on the correct day of preparation, whereas the Jews, for the reason given above, may have postponed it to Friday, the following day.

## NOTES ON THE TOPOGRAPHY OF JERUSALEM.

(Continued from Q.S. p. 213.)

By the Rev. J. C. Nevin, Los Angeles, California.

#### II. - General Questions - continued.

What Josephus meant by saying the Second Wall "went up to Antonia," it seems to me, was that there was simply an incline, "ascent," or stepping up of the surface of the wall to meet the one on a higher elevation, as was the case where the "ascent" occurred at the "corner" south of the sheep gate.

The second wall, starting from the Tower of Hananel (N.W. corner of Antonia), went west across the Tyropeon Valley, and in

this stretch was located the Fish Gate. Turning northwesterly, it kept along the skirt of the opposite hill, till it reached the Gate of Ephraim. Somewhere in this section the "First Gate" or the "Old Gate" was located at a point convenient for travel from the east, as above indicated. I think it is well agreed that the Gate of Ephraim was located somewhere in the line of the street Khan-ezzeit, possibly at the Porta Judiciaria, but I prefer a point farther north, from which the "Broad Wall" ran south-westerly; at least the wall beyond the "Corner Gate" must have had a south-westerly trend, as Josephus distinctly says that at this point where Titus breached the wall, "the narrow streets led obliquely to the wall." I take it for granted that the general direction of the streets then, as now, was north and south, and east and west; so this wall must have trended obliquely to them.

I have spoken of a re-entrant angle at the Tower of Furnaces. The short curtain wall on the east, from this tower to the Broad Wall, was pierced by the "Corner Gate"—the gate that "looketh," possibly so-called because its prospect looked down along the inside face of the Broad Wall.

(10) This second wall continued east from the Tower of Hananel, 300 feet more or less, to the Tower Meah. Thence south by the Sheep Gate to a re-entrant angle, a "Corner," where it turned east down a short declivity and, passing the Horse Gate, ended at or near the northern end of Solomon's Porch.

From the Horse Gate a ramp led down to Cedron Valley. The retaining wall of this ramp I identify with the massive wall discovered by Sir Charles Warren in front of the Golden Gate. When Manasseh built his wall on the west side of Gihon-in-the-valley around to the Fish Gate or Tower of Hananel, this ramp was cut through and a new one constructed so as to lead out by the Golden Gate or its earlier representative.

Gihon-in-the-valley was doubtless the spring water running down the small valley across which the immense Birket Israil was later built, and possibly on the same spot where an older bathing resort existed in early days, and which may have been included by the wall, the greater portion (if not all) of which was wholly on the west side of this valley or ravine.

(11) I am convinced that, leaving off what is modern, we have in Souterrain, No. 29, on the northern edge of the present platform on the Haram Area, the remains of the "five porches" of the "Pool of Bethesda," or Struthius, which was near the Sheep Gate, and will be found immediately north of this Souterrain. It was "over against the middle" of this pool that the legions of Titus erected their banks against the Antonia.

(12) "The Tower of David, builded for an armoury," of Solomon; "the armoury at the turning of the wall" (salient angle at N.W. corner of Outer Inclosure) of Nehemiah; "the Tower," "the Fortress," "the Castle," "the Baris," "the Citadel," "the Aera," "the Antonia" of later writers, were all one and the same location, at the N.W. corner of the present "Platform."

When David "built from Millo round about and inward," his wall doubtless went northward and inclosed the Temple hill and the Acra hill, which latter he fortified—a strong position on south side of the Asmonean gorge, and in after years made still more impregnable by the great reservoir cut out of the rock underneath. And so this fortress continued as an armoury and a stronghold until its final obliteration in modern times.

The term Acra, at first applied to the Citadel hill, was extended in use as a sectional term, so as to include all north of the Temple hill as far as Bezetha, and may even have included that hill in whole or in part.

The palace of Queen Helena was in the centre of this district, probably near the northern boundary of the Haram area, and marked the northern limit of the fire started by the soldiers of Titus after the Temple was taken, just as the palace of her son, Monobazus, marked the southern limit on Ophlas.

Where was this latter palace? I would deferentially point to the confused tower remains discovered by Dr. Bliss at the east end of the old dam of Siloam, as the probable site: the later construction being that of Monobazus, and earlier remains being referable to the palatial resort of Manasseh, contiguous to which we should find the Garden of Uzza and the tombs of Manasseh, Amon and, perhaps, that of Josiah. It would seem Hezekiah was the last king buried in the Tomb of David, and that, too, in the "ascent" of that tomb.

If the Garden of Uzza had any connection with the death of Uzza at the threshing-floor of Nachon or Chidon, and at Jerusalem, as Josephus affirms, it is fair to assume that this point must have been near the site of the "old dam" on the way into "the City of David" by "the gate between the two walls" at Gihon. Since we

are left in the dark on this subject, it seems to me that the above conjecture is close to a fair solution of the difficulty.

If we take the word "Uzza" as a descriptive term—"Strength"—the idea may be "the Strong Gardens," and might reasonably be located on the east side of the S.E. corner of the Haram area, where Sir Charles Warren found "fat earth" and "strong terrace walls." This fact, taken in connection with certain conduits which he also discovered in the neighbourhood of the Birket Israil, apparently pointing south, and if so confirmed, would increase the probability and point to Manasseh as the probable builder of that great pool. Entrance to the tombs would then be by the "Small Postern" on the east side or by the "Single Gates" on the south side, and the "carcasses of the Kings" were stowed away there to the "defilement" of the sanctuary.

(13) Returning now to Acra, I believe that when the Maccabees cut the hill down, they did not level it even with the north court of the Onter Inclosure. They only levelled it down to nearly on a plane with the foundations of the outer city wall. It still had an "ascent" at the N.W. corner of the Outer Inclosure, and the outer North Wall still had an "ascent" at the "corner" to rise to the grade of the wall running south from the Sheep Gate. All this in Nehemiah's day. Even down to Herodian times, on the plain assurance of Josephus, the Antonia stood on an elevation, and at the N.W. junction of the Cloisters had its "stairs," from which Paul made one of his great speeches.

What became of that elevation? First let me call attention to the "fourth" and nameless hill of Josephus, lying north of the Temple. This was a low knoll on the north side of the Asmonean Gorge and separated by a shallow valley from Bezetha. It occupied the N.W. portion of the Haram Area.

When in modern times this area was constructed, this knoll and the Antonia elevation were cut down and the debris used to help in filling up the N.E. corner of the area, burying out of sight the Pool of Bethesda and the Tomb of Alexander, and how much more of great interest only the pick and shovel can reveal.

The mines of John, by which the destruction of the banks against Antonia was accomplished, were also in all probability obliterated.

The citadel, even in Herod's day, did not occupy all the space inclosed by the outer walls. There must always have been a space

on its eastern side where a passage-way from the Sheep Gate existed, and where was the gymnasium "under the walls of the citadel" in which some of the priests spent more time at the "game of discus" than in the service of the sanctuary.

Allow me again to point out that a vast supply of water for the eitadel was directly assured by the large Souterrain (No. 3) under it, and, if necessary, a further supply was accessible in No. 1, if it was ever used to store water.

(14) The "ascent" to the Tomb of David and the "Chasm" of Sir Charles Warren, discovered by him in the wonderful rockeuttings at the Virgin's Fount, are one and the same. It is greatly to be regretted that he was forced to fill up this "Chasm" before a thorough exploration had been made. I firmly believe that the entrance to the Tomb of David would have been found at the bottom of that shaft, and somewhere in the walls of this "ascent" would have been found the entrance to the Tomb of Hezekiah and, perhaps, of other notables buried in that tomb.

I here offer the suggestion that the large amount of debris in the passage of that wonderful work came from the various tombs excavated in that "ascent" and at its bottom, and were utilised in filling up the "chasm" after a fresh burial as far as needed, the surplus being left as a blind to help to conceal the real entrance to the "ascent"

(15) Returning to the Outer Inclosure of the Temple—600 feet square—if I have located it correctly we should find the altar near the S.W. corner of the steps on the south side of the Platform and the chamber Nilsols (of Herod's Temple) over the souterrain under the Sacred Rock.

If it is objected that the lie of the rock would make deep foundations for the Inner Inclosure and for the Holy House itself—I answer that Solomon did not hesitate at the immense depth needed for the West Wall, and he would not be deterred by having to go down perhaps less than one-half of that depth for the other foundations. The positions of the Altar on the threshing-floor of Aramah was a fixed point and all else had to be taken as the necessities of the case happened to require.

If ever excavations can be made, I firmly believe that some part of these deep foundations will be found still in situ.

In the walls of this Outer Inclosure, there evidently was at first only one gate on the south side, situated somewhere in the eastern

300 feet of the south wall; also, one gate on the east side, opposite the East Gate of the Inner Inclosure; two gates on the northern side—one of which was at the "ascent to the armoury," and the other was opposite the gate in the South Wall and called the Gate Miphkad. Along the outside northern wall, opposite the Gate Miphkad, were the guild-halls of the merchants and Nethinim—a fact quite in keeping with the name Miphkad (oversight, control, census, etc.). On the west side, about directly in the rear of the centre of the Holy House, was one gate, Shallecheth, at "the causeway."

The Inner Inclosure was divided into two main courts, "the great court" on the East, and "the priests' court" on the West,

with the Gate Sur, or gate of the foundation, between them.

The Great Court had one gate on the cast, the East Gate; one

gate on the south, "the water gate eastward"; and one gate on the north, "the gate of the guard."

The Priests' Court had one gate on the south, "the water gate";

and one on the north, "the gate behind the guard."

In the days of Jotham—a great builder—a second gate in the east wall of the Outer Inclosure, near its northern end and looking down the Upper Court north of the Inner Inclosure, was constructed by him, and was known as "the new gate," "the upper gate," "the gate of Benjamin," "new gate of the Upper Court," "upper gate of Benjamin," etc. It evidently was a fine, artistic piece of work, and its exedra was used as a kind of Hall of Judgment where "the King sat." It was in this gate that Jeremiah was arrested and charged with desertion.

No doubt a strong guard was maintained, here as well as at the "Gate of the Guard," to look after the peace and good order of the Temple, just as the Palace had its "Court of the Guard" for the safe keeping of the same.

(16) Excuse a digression here to consider for a moment a rather obscure verse in 2 Kings xvi, 18. The explanation doubtless is that Ahaz, in order to make a favourable impression of his great dignity on his royal guest, did not leave the Porch of Solomon, on his way to Divine Service, at the usual point opposite the old and plain East Gate, but kept on to the north end and entered by Jotham's new and ornamental gate, where the guard would possibly receive him with great ceremony; and, for the same purpose, kept on down the "Upper Court" and entered by the "Gate of the Guard" instead of the regular East Gate.

"The covered place" over the Pastophoria in the rear of the Temple where a sentinel announced to the people with a trumpet the beginning and ending of the Sabbath—when to quit and when to begin work—this (sentry box) was transferred to a place over the south wing of the Temple front, overlooking the Palace, for the sole purpose of pomp and parade, as above.

(17) "The stairs of the City of David," of Nehemiah; the "many steps" of Antoninus, from the Temple down to Siloam; the magnificent paved way, or way of steps and landings going up from Siloam, so skilfully brought to light by Dr. Bliss in connection with the pavements discovered by that Prince of Burrowers, Sir Charles Warren, on the west and south sides of the S.W. corner of the Haram area,—are all one and the same.

As Dr. Bliss has very clearly shown, this paved way forked above Siloam, one branch leading down by the last flight of steps to the pool itself, and the other, following along the parapet on the scarp, and by the west wall of the Pool of Shelah, ended at the Fountain Gate.

This identification gives us a very clear and satisfactory view of the march from the Fountain Gate to the Temple on the day of dedication.

Leaving the wall at the Fountain Gate, they went up straight before them upon this grand stairway, or way of stairs, unto the "ascent" (the ramp of the triple gate) leading up to the wall (south wall of Outer Enclosure) which was "above the King's Palace," and entering by the South Gate in this wall, they kept on "even unto the Water Gate eastward," and entering, "stood still" in "the great court" of the Inner Inclosure, where they met the other company coming in by "the Gate of the Guard," and both companies "stood still" in "the Great Court" before "the Gate of the Foundation," to render praise and give thanks unto Jehovah.

Why did they leave the wall at the Fountain Gate?

(a) Because there was no wall on the dam which, if there, would have made it possible and convenient to pass straight on up to "the house of the mighty men"—the old Millo—and from thence, at least, straight to the Triple Gate. The repairs at Shelah were on the west, north and east walls about that pool and not to the dam. In Neh. iii, 15, of the repairs, Shallun repaired this wall as far as "the stairs that go down, etc.," quite a distance away from and not in the same direction as the dam wall.

- (b) The detour by the wall of Shelah would have lengthened the journey even if it had been suitable for the company to pass over, which latter I think was not the case, as this wall was never likely to be attacked and, hence, not so broad; also, much of the remaining portion had the same characteristics, and in the repairs was not left in suitable condition for this purpose.
- (e) But the strongest reason would be in the associations connected with this remarkable pavement, which the dedicators could not overcome and irresistibly drew them to tread "its sacred way."
- (d) In regard to the other company going around by the north, they left the wall at the Sheep Gate, instead of going on to the Horse Gate. They did this for some of the same reasons—especially the associations connected with the way between the Citadel and wall, around to the Gate Miphkad and "the Gate of the Guard."

Then, following the work at the pool, Nehemiah, the son of Azbuk (c. 16) took up the work and carried it on to "the Tomb of David" and "the pool that was made" and "the house of the mighty men"—the old Millo.

(18) Now, as to the repairs about the wall of the Outer Inclosure. The account of these begins at Nehemiah iii, 17, by the Levites. The work commenced on the badly ruined North Wall, and went west to "the ascent to the armoury" at "the turning of the wall"—the N.W. corner; thence south, along the West Wall to the "turning of the wall"—the S.W. corner at the Prophet's Gate, and unto "the corner," the re-entrant angle where the West Wall of the Palace grounds joined the south inclosure wall.

The next division seems to overlook the "corner" and notes the work of Palal as running from the S.W. corner (on the south wall of inclosure) to "the upper tower which standeth out," belonging to "the court of the guard" by the Palace, which would be the tower at the salient angle of this court, at the N.E. corner. There probably was another tower at the S.W. angle of this court.

Then Pedaiah repaired between this tower (not on the wall of the Inclosure, but belonging to "the court of the guard," the northern wall of which must have been in more or less close contact with the Inclosure Wall) and a point opposite to "the water gate eastward" of the luner Inclosure. Here the repairs around the Temple ended.

Then v. 27 goes to a portion of the Outer Wall about the Palace. It was most likely on the south side and the repairs extended to "the great tower that standeth out" at the S.E. corner of the Haram Area, a salient angle "and to the wall of Ophel," which abutted against this "great tower." The existence of a remarkable tower at this corner was noted by the Bordeaux Pilgrim, and I doubt not the existence of a "turris excelsissima" at this angle in the time of Nehemiah.

(19) There is one point in connection with the siege of Jerusalem by Titus, concerning which I wish to make a brief note. It is with reference to "the Exedra between the two gates." I identify this with the Exedra of the Gate Moked. The Exedrae of all the other gates had only one gate each, and that was the outside gate. That of Moked had an inside gate as well as one on the outside; hence, the expression used by Josephus.

Against Moked a "bank" was raised; it was the gate that was partly undermined, and the one first set on fire; and at this point the Roman soldiers gained access to the Holy House.

## OCCASIONAL PAPERS ON THE MODERN INHABITANTS OF PALESTINE.

By R. A. Stewart Macalister, M.A., F.S.A., and E. W. G. Masterman, F.R.C.S., F.R.G.S.

A HISTORY OF THE DOINGS OF THE FELLAUIN DURING THE FIRST HALF OF THE NINETEENTH CENTURY FROM NATIVE SOURCES.

(Concluded from Q.S., p. 225.)

#### PART V.

Likili Agha.

At the siege of 'Akka, the Hawara, disgusted by the incompetence of the pasha and impressed by the invincible and well-disciplined army of Ibrahim, deserted to the Egyptian host in a body. Four years afterwards, however, they joined the great rising of the fellahin against Ibrahim, the history of which has already been related (p. 37 ante). In consequence of this defection Ibrahim

stopped the wages which the governor of 'Akka had till then paid the tribe.

After the expulsion of Ibrahim Pasha, in 1840, the salary was restored to the Hawara, and their leaders, whom Ibrahim had banished to Syria, were recalled. 'Akîli, son of Mûsa Agha, came from Gaza and was made a captain over ten horsemen—in 1843 he was promoted to command fifty.

In 1844, however, Muḥammad Kubrisi became kaimmakām in the district of 'Akka. There was at this time a split in the Latin church at Nazareth, and their Sheikh. Yusif Elias, was dismissed by them. Yusif took refuge with 'Akili, and besought him to intercede in his behalf to the governor. 'Akili's intercession proving useless, Yusif threatened to raise a band of followers and to make trouble, whereupon the Nazarenes restored him to his place. Kubrisi was enraged and accused 'Akili of sedition to the governor. The governor sent for him and ordered him to review his soldiers, and disgracefully dismissed the entire body with contumely and contempt. 'Akili felt this insult, being conscious that his men were superior to the governor's, and he therefore went and joined himself to the Beni Sakhr Arabs, and entered on the life of a robber chieftain.

In 1847 the trouble became so intolerable, that, under pledge of safe conduct, he was brought to 'Akka and interrogated about the misdeeds of the Hawara. He excused them on the ground that they had been trained to fighting, not to merchandise or agriculture; that if the government gave them no bread they would be obliged to rob in order to eat; and that what they had done had been merely with the hope of calling the government's attention to their own condition. The answer was accepted as fair; he undertook to serve in 'Akka district over 75 horsemen, and he guarded the country well against Bedawîn incursions. However, he took the precaution of forming a marriage bond with the Beni Sakhr in order that he might have them at his back in case of his becoming a victim of official treachery.

In 1848 he was appointed by the government to protect Captain Lynch, the leader of the American Survey of the Lake of Tiberias and the Dead Sea; and with the aid of the Beni Sakhr he destroyed a troop of Bedawîn from the 'Adwân and other tribes who had united for the purpose of robbing the party. This act of prowess spread his fame in European countries.

When Kubrusli Agha took Jerusalem, he was promoted to be captain of all the troops of Syria. This was at the time of the Druse rebellior (1852). The authorities openly professed great satisfaction with his services, but secretly were jealous of him, and gave him many dangerous tasks, especially the opening of a road which the Bedawîn had ambushed in the hope of seizing the convoy of ammunition that the Turks were sending. This task he accomplished, with the aid of his Bedawîn allies.

The jealousy of the officials now became active. One night he was seized, bound, chained, and sent by sea to Constantinople, where he was imprisoned for a year in the castle of Widdin, on the borders of Servia. This was in 1853. In the following year, however, he made his escape, disguised, and with a false passport that he had purchased with money which he had borrowed on the voyage to Constantinople from the Latin Patriarch of Jerusalem, who happened to be his fellow-passenger. With a companion whose-acquaintance he made at Widdin, named Hasan Agha, an Albanian, he rode to Salonica, and thence by sea to Asia Minor. Proceeding to Aleppo he recommenced the life of a tent-dwelling marauder: but the government again had need of him. The Crimean war had drained the country of soldiers, and it needed to be policed. Accordingly, in or about 1855, he was reinstated in a government position and salary.

During his eclipse at Widdîn the garrisoning of the district had been in the hands of a troop of Kurds. As soon as he returned to power he stopped the wages of this troop, who in consequence

sought an opportunity of revenging themselves.

Just about this time it happened that the Khedive of Egypt, Said Pasha, had been oppressing some tribes in the Fayûm—the very tribes from among which the family of 'Akîli had sprung. These tribes in consequence emigrated to Syria, and were received by 'Akîli with great hospitality and favour. He united himself by marriage to the daughter of one of their sheikhs, and thus found himself with a large body of relatives under his control.

After the stress of the Crimean war was over, the Kurds stepped forward and accused 'Akıı́li of sedition to the governor of Beirut, stating that he was making leagues with the Arabs, and offering to smite him if the government was not able to do so. This was just what the jealous officials wanted, and the needful order was given.

The Kurds assembled at Tiberias. 'Akîli sent an enquiry to the governor of 'Akka, asking what this move meant, but received no answer; and, guessing that treachery was proposed, he collected all the Hawara and proceeded against them. Some of the Arabs who had sworn fealty to him came to join him, but he did not allow them to fight.

They joined battle: the Kurds with 600 or 700, 'Akîli with not more than 300 or 400. At first the Kurds were victorious, and put to flight a section of 'Akîli's troops: but his brother Sâlih came down suddenly with his horsemen, turned the day, and routed the Kurds completely. This was on March 30th, 1858. Of course, the officials made excuses to 'Akîli for the inconvenience he had been caused, and, of course, 'Akîli saw through them perfectly well.

At the time of the Lebanon rising in 1860, the Damascus Muslims massacred the Christians: the 'Akka Muslims proposed to follow their example, but were prevented by 'Akılı, who swore on oath that whoso should touch a Christian or a Jew he would "chastise him with his sword." On account of this favour Napoleon III. sent him a medal and a pistol. In 1862 the Prince of Wales (King Edward VII.) visited Palestine and was entertained in his tents. 'Akılı presented to the Prince four pedigree Arab horses which, however, the Prince, with thanks, declined to receive. In return the Prince gave him a six-chambered revolver.

In the same year (1862) orders came from the government to increase repressive measures against the Bedawîn; they were to be prevented from encamping in cultivated lands and from levying blackmail. To prevent this, extra soldiers were necessary, and 'Akîli was placed in command of a detachment. When he found that he and his men were expected to wear uniforms he resigned office, saying that they were Bedawîn and could not keep uniforms in order; when another of the Hawara was put in his place he compelled him to resign also. However, after some disputation the point was waived, and 'Akîli was reinstated. He did not, however, hold office long; a dispute concerning the payment of soldiers, in itself trivial, developed into a deadly enmity between himself and the kaimmakâm of Akka. 'Akîli discovered his enemy plotting ingenious devices against his person; he appealed to the governor, but obtaining no satisfaction he resigned office and retired to the district of Tell el-Hesy (1863). Here Sheikh Rabbah

el-Waḥaidi, the Sheikh of the Arabs of this district, married his daughter.

The removal of 'Akîli had an instant effect. Marauding recommenced, and no one was safe; and despite the attempts of the kaimmakâm of 'Akka to settle matters by stirring up one robber tribe against the other, matters became so bad that the governor made enquiries. 'Akîli's successor in office refused with 100 horsemen to guard the Ghôr—a task 'Akîli had accomplished with twenty; and at last, in 1865, negotiations were reopened with the outlaw, who had meanwhile entrenched himself in the recesses of Mount Tabor, and for the last time he was reappointed superintendent and guardian of the district of 'Akka and the Ghôr. The following year, however, he died, near Shefa 'Amr.

#### APPENDIX.

The foregoing account of this distinguished sheikh has been abstracted from the last of the Arabic historical MSS, left by the late Rev. J. Zeller. The task of putting the materials in order has been one of considerable difficulty, the native writer of the account having not the slightest idea of an intelligible arrangement of his facts.

There is little absolutely new in this instalment of the history; Hepworth Dixon has devoted Chap. XVII of his work on the *Holy Land* to 'Aķīli, and has told much the same narrative. He takes, however, a very much less favourable view of 'Aķīli's character than our native historian.

Tristram in one of his journeys visited 'Akîli primarily in order to arrange for an escort, and has left us the following description of his appearance. He was "plainly habited in the ordinary dress of a Bedouin sheikh. A large, stoutly-built man, over six feet high, with rather flat features, nose not prominent, short, smooth, black beard, and a remarkably placid and gentle expression of countenance" (Tristram, Land of Israel, p. 408). Lynch's portrait in his work on the Dead Sea agrees with this description.

The story of Haim the Jew is told in Churchill's *Lebanon*, Vol. III, Chap. XXIII, with some additional particulars, but on the other hand omitting a few details recorded in the present narrative.

The value of the foregoing narrative, however, is not so much

the presentation of new facts, as in the corroboration by an independent native author, writing from oral tradition only, of history already related by European travellers.

The following chronological summary will make the life easier to follow:—

- 1778. Jezzâr Pasha, governor of 'Akka and Sidon.
- c. 1780. The Hawara first came from Egypt.
  - 1799. Napoleon I invades 'Akka. The Hawara fight in its defence.
- c. 1806. Jezzâr Pasha dies.
  - 1811. Mûsa Agha el Hâsi comes from Egypt to Gaza.
  - 1831. Siege of Akka and capture of 'Abd Allah Pasha, the Governor. Desertion of the Hawara.
  - 1834. Insurrection in Palestine against Ibrahim Pasha. The Hawara side with the rebels.
  - 1840. Ibrahim Pasha expelled from Syria. The Hawara reinstated.
  - 1842. 'Aķîli Agha comes from Gaza.
  - 1843. 'Akîli promoted to command fifty horse.
  - 1844. 'Akîli insulted by Muhammad Kubrisi, retires and joins the Beni Sakhr.
  - 1847. Reinstated in government employment.
  - 1848. Accompanies Captain Lynch.
  - 1853. Arrested and imprisoned in Widdîn.
  - 1854. Escapes and recommences robbing.
  - 1855. Reinstated in government employment.
  - 1858. (30th March.) Fight with the Kurds.
  - 1860. Protects the Christians of Nazareth from Massacre.
  - 1862. Visit of the Prince of Wales.
  - 1863. Resigns, removes to Tell el-Hesy and thence to Tabor.
  - 1864. Visited by Tristram.
  - 1865. Reinstated in government employment.
  - 1866 or 1867. Death.

#### MADEBA, M'KAUR, AND CALLIRRHOË.

By J. Cropper, M.A., M.D.

THE following is the record of a short if somewhat exciting journey taken with Prof. B. W. Bacon, of Yale University:—

On April 26th, 1906, after an early inspection of the ancient Mosaic Map in the Greek Church, we left Madeba without the guide who had been promised to us the night before, he having raised his charges twofold and being unmounted. Hoping to get other guides on the way we proceeded to some tents belonging to Madeba people (Christians) an hour distant, near Ma'in. Here we had to wait for an hour and a half, securing in the end two men who professed to know the ground well, but after descending the valley for another hour we sent our precious guides on to the hot springs since they now declared that they knew nothing whatever of M'kaur, though they may have had other and more cogent reasons for thus "crying off." Branching off to the left we climbed a very steep hillside from which we got a fine view to the west, but there was no exact indication of the position of Machaerus. We now know that it would have been better to travel south from Madeba and keeping to the high ground towards Libb, to have swept round to Attârûs, instead of descending the Wady Zerka Ma'in. At the top of this hill we had lunch, but on descending the further side we paid dearly for our ignorance, for we found ourselves obliged to drop down 1,500 feet or so to our former level, along rough ground which was pathless everywhere and often precipitous, causing long detours. Once more in the Wady Zerka, which we descended for about a mile, we struck on several Bedouin tents belonging to the Beni Hameideh, but the only water they had was of a light mahogany colour from the stream below. From this point we took a path leading obliquely up the steep hill side which towered above us. At intervals we passed several tents of Arabs who, however, had only the dirtiest water to offer us-with this our horses tried in vain to quench their thirst. The sun had

come out brightly for an hour or more and our mouths were very parched with the Sirocco, which had been blowing all day. At the last Arab camp we met we got an old man to guide us to M'kaur, who brought us on the way to some ancient cisterns, cut in the solid rock, whence we slaked our thirst with water which, if tasty, was cold and looked clean: this we drew up in a bottle lowered at the end of all the ropes and halters which we could collect. Our steeds eagerly drained the water left in a rough stone basin by the last herd of goats, even kneeling down to reach it in their eagerness, the water being below the general level of the rock.

It was now not far from sunset, but in half an hour more we passed through several shallow wadys and reached the high and irregular but fairly level ground, and soon came upon the remains of the town of Machaerus or M'kaur, consisting of irregular heaps of stones outlining amongst the corn, the foundations of the houses scattered over the undulating plateau, due west of which (by the compass) lay the conical flat topped hill on which Herod's castle was placed, a mile away and on a lower level. This latter, the citadel of M'kaur, where St. John suffered martyrdom, was so well described by Prof. G. Adam Smith in the Quarterly Statement for July, 1905, that I need only refer my readers to his account. We were due in Jericho next day, and had only time to reach Callirrhoë by night, in which we succeeded, though we little imagined how this would be, which was perhaps well, as the sequel will shew.

The sun was fast sinking, in a faint glow of primrose light

The sun was fast sinking, in a faint glow of primrose light behind the bank of cold grey clouds often seen in sirocco weather, above the highlands south of Hebron, while the Dead Sea lay at our feet in sombre solemnity 4,000 feet below—so low was the sun that we had to shade the camera to take the view.

Our guide, though belonging to the same tribe as the local Arabs, hailed from a different section from these on the spot, and thus explained his inability to see us further on our way.

All around the ground was thickly planted with green corn, and following him through this (for there seemed to be no other path) we reached in a few minutes a couple of tents belonging to his relatives at 6.30 p.m., where we were made welcome. Other men soon made their appearance, and bowls of warm goat's milk were handed round. Sprinkling the carpets spread for us with Keating's powder we treated our old guide to some of the same, which he

pronounced to be very good snuff. The water was soon boiling over a fire chiefly made of southernwood (or Shih), and we gave them all tea with raisins and eigarettes: the last two being much appreciated: tea being only valued when sugar is added in enormous quantities. As darkness deepened, the scene became more and more weird, and our position doubly so, as the remains of the small fire now sank and now flickered fitfully, shewing the faces of all, as fresh "kindling" was added. The evening meal, a mess with milk in a large bowl, was then handed round amongst our friends, and having milked all the goats, the wife of our host appeared with her three months' infant, smoking a prodigiously long pipe.

After a lengthy debate as to terms, we seemed to be nearing the end of our bargaining for guides to take us down to the Hot Springs of Callirrhoë, but they insisting that we should place the whole of the money in their hands before starting we rightly demurred, whereupon, thinking that we were at their mercy they raised their price, but in spite of our offering the greater part of this on the spot and the balance at the end of our journey, they proved obdurate. At length feeling that no reasonable settlement was possible, we started off alone into the dark night at about 10 p.m. Taking the wrong path we, of course, soon got into difficulties, the hill side becoming so steep that we could hardly find foothold and our horses refused to move. Realising the danger we ran, our late hosts came after us in great anxiety, imploring our return.

Reaching the tents once again we refused to sleep with them, preferring the open hill side, as we told them, to the company of such people. I upbraided them with their conduct and their want of kindness to their guests, and told them that we would now offer less than before. During this debate my companion knowing little of the language and hardly understanding our vociferation, spent an anxious time fearing violence.

I told them that, if they did not agree to our terms, at day break, we would not give them a single pura for their services, and that, if anything untoward happened to us at night, our blood would be on their heads, and that we intended setting out alone.

To our great surprise my fresh line of action at once began to take effect, and however little risk we ran we were much relieved, for this particular form of amusement, though lively, was becoming rather wearisome. Since our return I have been informed that this was quite the correct line to take, but perhaps the risk was greater than I have suggested, for a large party missed their way in broad daylight only recently.

As a finale I told them that they were quite welcome to throw away 3 mejîdehs, were they so minded; this "argumentum ad argentum" caused them to change their tune completely: they "climbed down" in a double sense, and having received part payment, we set off once more down the mountain side on our descent of over 3,000 feet.

Each step in the above negotiations took a considerable time, and it was now nearly 11 p.m. Taking a path in an opposite direction to our former essay, but 200 yards were covered before the terms were again adjusted. We passed over the steep and almost pathless hill sides, our feet crunching over the dry scoriæ much as when one walks over a newly laid cinder path at home. There seemed to be no vegetation except bushes of the retem broom, over which and on to which we often tripped. In doubt as to the track even our guides needed to make sure of it by striking matches. In other places we found ourselves close to the edge of impossible slopes if not dangerous precipices, while all the while the great valley of the Callirrhoë loomed dimly before us through the darkness, all the more weirdly because of the absence of moon or even stars. The air was sultry and oppressive, and we were so hot that there was real risk in resting for long.

How our guides managed to see the trail we could not imagine, and, in fact, on several occasions they sat down with more speed than elegance, and our own performances hardly need mention in this line: how our horses managed to keep up was a marvel. The numerous stories of robbers, &c., with which we had been regaled were, of course, quite unfounded, for as a matter of fact we saw neither men nor tents nor lights within some miles. The ordinary Bedawi may at times do a little thieving on his own account, but he is as a rule quite as much taken up with his ordinary work as is the average peasant, for in these wild regions who is there to steal from?

Reaching more level ground, we left the path, and our guides soon repeated their old performance, till at last we had perforce to call a halt for three-quarters of an hour, and settle matters once and for all. Our lengthy arguments would not interest the reader, but the upshot of it all was that I agreed by any asseveration they chose, to make good my word on reaching the bottom of the valley. We had no more trouble on this score, but on reaching the precipitous edge of the final and lowest section of the wady, we could not in the dark discern any path down which anything but a monkey or a gazelle could be expected to clamber. So lying down in the open track we had two hours of rest if not sleep, our guides doing likewise. At 4 a.m. the first glimmer of dawn shewed us the path we had sought for in vain, a hundred yards ahead of us, and this proved to be the steepest part of the journey. On descending to the valley a white cascade of hot water bursting out over a huge square mass of black basalt was the first evidence that we had of the hot springs, numbers of which break forth over a considerable area of the north side of the narrow valley, from the soft many coloured limestone of which it is almost entirely composed.

Some of these fountains gush out among thick masses of palm trees, never very tall, or of Arundo donax. Owing to the hot weather, the water did not "steam." The water flowing along the narrow bed of the valley is cold. This meets the water from the hot springs lower down, as mentioned by Josephus—it is thickly banked by reeds. Crossing this stream we reached a small and fairly level camping ground, on the edge of which grew the beautiful and fragrant Moringa aptera, now covered with showers of delicate white and pink blossoms, somewhat resembling the Robinia pseudo acacia of our gardens. Much exceeding the white "retem" broom in height, it is not easy to distinguish it from the tamarisk, which also occurs here. A closer inspection, however, reveals quite the most beautiful and delicately perfumed shrubs found wild in this region. It has often been mistaken for the "retem" (vide Prof. G. A. Smith, Q.S., July, 1905), the scent of which is indeed coarse and overpowering in comparison. I have to thank Prof. Post, of Beyront, for kindly naming a specimen of this sent to him for identification.

On this camp we at once espied our faithful muleteers who, to use the current phrase, were overjoyed at our return, their joy only being equalled by the sorrow they had experienced by our non-appearance the night before—at least so they said, and we for once believed them.

We were now 900 feet below sea level: we had a hot bath at about 110°, i.e., as hot as one can well bear hot water at home or at

Callirrhoë. The water though "mineral" in taste was not unpleasant to drink, and one's feet sank down a foot or more through the crust of lime salts into coarse sandy mud, forming a circular basin for bathing.

The Direct Road from Callirrhoë to Jericho.—After breakfast, at 7 a.m., we started off up the hill side, though it seemed a sheer impossibility to find a road up such a precipice. This must often be the case in really hilly country, and we were more fortunate than Dr. G. A. Smith in having guides who knew of such a route.

Leading our horses, in ten minutes or so, we struck on quite a short but very evident piece of ancient road paved with black basaltic stone, the only piece in fact which we saw until we had reached the crest of the hill after over an hour's climb. Other travellers have mentioned other fragments of road, but it may well be that these have disappeared owing to the crumbling and marly nature of the limestone, which in places takes on most marvellous colouring, yellow, greyish green and even rosy purple.

In marked contrast to this, on the north side of the valley, is the gaunt mass of basaltic formation, which Conder compares to spoil from a coal mine: his whole description of the scene at Callirrhoë is so fine and so true to nature that those who have not read it should certainly do so.<sup>1</sup>

Once the top is reached, the ancient Roman road comes at once into evidence, shewing proof of considerable engineering skill, in well arranged gradients and boundary walls, even where the surface of the road has disappeared. Reaching the Wady Hamâra in three-quarters of an hour more, on the north bank of which the cairn surmounted by a polished granite pillar to the memory of Mrs. Bland who died here in 1868, still in excellent preservation, we lost all trace of the old road, on crossing the stream, probably because in our efforts to keep to level ground we went too far to the west, for after a few hours (slow going) we again came on further remnants of the road and of a bridge crossing a wady, probably the Wady Jedeid or one of its branches. Soon after this we joined the direct road from Ma'in to Jericho, and debouched on the flat plain of the Ghor, where we saw no more traces of it. We were assured that there is now no route along the shore of the Dead Sea, and we can quite believe this, for the rise in the water of the sea has been

so considerable (20 to 30 feet) that the Rujm el-Baḥr is no longer visible, so that were there formerly a road it would now be obliterated.

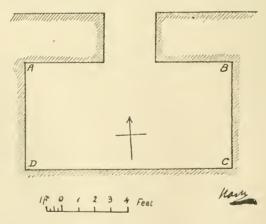
Our journey to Jericho took us 13 hours, but in cooler weather and with good going it should not take over 11 or 12 hours. We saw several swarms of locusts at various points of our journey, and in various stages of development; most of them could only hop and did not fly at all.

# THE SUPPOSED FRAGMENT OF THE FIRST WALL OF JERUSALEM.

By R. A. S. MACALISTER, M.A., F.S.A.

This wall is exposed in a now subterranean chamber in the basement of a house in the *Haret ed-Dawayeh*, close to the figure 67 on the Ordnance Plan of Jerusalem.

The chamber is rectangular, measuring 6 ft. 8 inches by 12 ft.

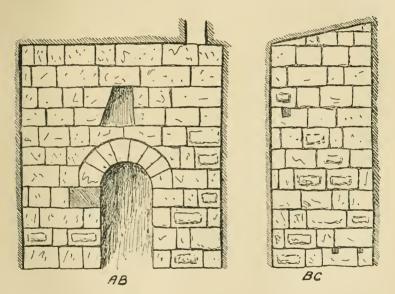


9 inches. The height is about 14 ft. The roof slopes like that of a penthouse. In this there is an orifice, shewn in the elevation AB.

Whether or not the wall CD be, as is supposed, a fragment of the First Wall, the remainder of the building must be contemporary with it, as the four walls bond together, and the masonry is identical. Therefore if this be a portion of the City Wall, the chamber must be a tower chamber.

In the accompanying elevations the masonry joints are given from measurements of each stone so far as they are within reach; not having a ladder, I had to note the positions of joints in all courses above the fifth from the floor by eye.

The courses range from 1 ft. 2 inches to 1 ft. 6 inches in height, the majority being about 1 ft. 3 inches. The stones are of moderate size, the longest being between 2 ft. and 2 ft. 4 inches in length; even this is exceptional. The masonry is much obscured by cement

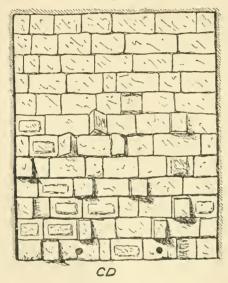


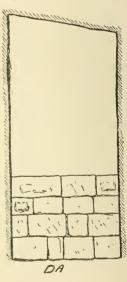
and whitewash that have been applied to the surface, and delicate details of tooling are visible only on one or two stones. The cement layer is so thick on the wall DA that I have not ventured to indicate the joints in the upper courses.

As a general rule the stones are dressed smooth, but some of them have a marginal draft. This is in all cases shallow, never more than one inch in depth, and often difficult to detect at all on account of the cement coating. I think, however, that I have been able to mark all the stones shewing this peculiarity.

A feature of the wall CD is the projection of several of the stones from one to five inches beyond the surface of the wall. This does not reappear in any of the other sides, except in one instance in the sixth course from the top in DA.

It is specially noteworthy that both these peculiarities—drafted stones and projecting "headers"—are confined with hardly an exception to the six lowest courses all round the chamber. The general appearance of the masonry, which I have endeavoured to reproduce in the elevations, and which to some extent is shewn in an unsuccessful magnesium light photograph of the middle of wall CD, leads to the conclusion that the lower part of the building is earlier than the upper, and that the chamber, as we now see it, is





a restoration of a building that for some time lay in ruins. It will be noticed that there are two "headers" in the sixth and seventh courses, respectively, from the bottom of wall CD, that are set skew in the wall. It almost appears as though these were at the top of the wall in its ruined state, slightly displaced, and that the restorers did not trouble to replace them exactly.

Two stones in the lowest course of CD, and one or two stones in BC, have holes cut in them. These are modern, intended for the reception of staples. (The chamber is used as a store room).

The seventh stone in the bottom course, and the second in the third course, of CD are dressed with hollowed faces, slightly recessed in the middle behind the surface of the wall. A stone at the top of the left jamb of the entrance in wall AB is dressed with diagonal strokes, much resembling the dressing of Crusader masons. This is the only stone that I found to be so treated; it is possibly a stone from some Crusader building, inserted at some repair.

The wall containing the doorway is 2 ft. 11 inches thick. Without tunnelling through, or excavating down, it would be impossible to tell the thickness of the other walls. Without knowing this the question of the identification of this wall with that of the City must remain indeterminate. I am bound to say that my own impression is that the masonry is of too insignificant a character to be considered as part of any very important structure.

Mr. Hanauer, who accompanied me to the vault, told me that there were other similar cellars under the same house, to the west of this chamber, which had long been filled up and blocked. They are now inaccessible.

Tradition fixes on this chamber as the scene of the imprisonment of St. Peter.

## NOTES ON THE GEOGRAPHY OF PALESTINE.

By the Rev. CALEB HAUSER.

- I. Notes on Some of Ptolemy's Renowned Cities of Arabia Petreva.—
  (1) Thana, probably Thenyeh, at the required distance, but southeast, instead of north-east, of Zoara, or Dra'ah.<sup>1</sup> Thona, named after Agalan and before Zoar by Josephus, Ant. xiv, 1, 4; likewise Thona, Ant. xiii, 15, 4.
- (2) Cletharo, the latitude of which should perhaps be corrected to  $30\frac{1}{3}$ , was at Kureithelah.
- (3) Necla may be identified with Nachal, of which Tristram heard at Kerak (Land of Moah, p. 120).

<sup>&</sup>lt;sup>1</sup> Unless Dra'ah be "Αδρου.

(4) Lydia, named between Meduna (Medaba) and Rabmathom (Rabbath-Moab), about equidistant from both, and east of the road leading from Rabbah to Medaba, seems to have been at  $Umm\ Rasas$ . Ptolemy locates Lydia  $\frac{1}{3}$  of a degree south of Ziza, as the only renowned city between Ziza and Mesada (*vide infra*).

• (5) Anitha. The latitude should be  $30\frac{1}{4}$  instead of  $31\frac{1}{4}$ . Anitha was thus, according to Ptolemy, situated  $\frac{1}{4}$  of a degree south, and  $\frac{1}{5}$  of a degree east, of Rabbath-Moab. At the required distance

south of that place we find the ruin el-Moteh.

(6) Surattha, named after Anitha is located 5' south, and 35' east of Anitha, and 20' north, and 30' east of Bostra. An important ruin, less than the required distance from both, but in correct relative position, is Zat Râs. In this name we recognize the name given by Ptolemy.

(7) Mesada, which Ptolemy locates almost due north of Surattha

at a distance of 20' (or 10', ed. Hudsonia), was at Meshed.

II. Chananea.—Reland (1714, p. 222 sqq.) gives excerpts from the Latin Notitia subjoined to the Geography of the Five Patriarchates, by Carolus a St. Paulo. The names of the first table seem to be set down in an unsatisfactory manner. The names should read: (1) Lidda, id est Sanctus Georgius, quae prius..... Gaza dicitur; (2) Joppe, id est Japhe; (3) Bethleem, id est Effrata; (4) Meivias; (5) Turris Stratonis, prius Dor dicta; (6) Affra; (7) Piodicianopolis; (8) Ebron, id est S. Abraham, prius Arbe dicta, vel Mambre; (9) Helis; (10) Pharan; (11) Petra, id est Cara;

Notes on the Table.— Improbable, whatever loss the lacuna may represent. Ascalon and Gaza, with Neapolis, are omitted. Bethleem, Turris Stratonis, Ebron, and Bersabee are added. Does this indicate a transfer of archiepiscopal seats?

b Minois is named Anthedon in the Greek Notitiae. The Jerusalem MS, has Anthedon, or Maïuma. This is Meimas of another Latin Notitia (Reland, p. 227), corrupted to Meivias in ours. Minois-Anthedon was probably at Mineh on the Mediterranean, near Gaza.

As other Notitiae have Gabalon, Gabalorum, Affra was probably at

Ufrah, near Petra.

d Piodicianopolis is a corrupt form of Diocletianopolis. In the Greek

Notitiae Diocletianopolis is named after Anthedon.

" Helispharan, as Reland has it, is evidently incorrect. Two names are thus joined together. Helis is the Ἐλάs or Αἰλία of the Greek Notitiae and the Aelis of another Latin Notitia. The Jerusalem MS, has Helas, Ailia, Aila, and Eila Helis is, of course, Elath. Where Pharan (or Faram) is named in the Notitiae, this name precedes it.

(12) Adroga<sup>†</sup>; (13) Helenopolis; (14) Legionensis, id est Ligum <sup>g</sup>; (15) Mauronensis <sup>h</sup>; (16) Patracensis <sup>i</sup>; (17) Beigeberin; (18) Capitolina <sup>j</sup>; (19) Jericho; (20) Bersabee; (21) Gedam <sup>k</sup>; (22) Tiberiadis; (23) Sebastia, id est Samaria; (24) Carrata <sup>1</sup>; (25) Thabor, ubi transfiguratus est Christus; (26) Diocaesarea.

III. Jazer.—Prof. Cheyne (Ency. Bib., col. 2341) contends that the identification of Jazer with Kh. Sâr "is to be rejected, (1) because the sibilants of Sâr and Jazer do not correspond, and, above all, (2) because there is no large stream, such as the statement of Eusebius requires." We reply, that, if perfect correspondence of sibilants be required, we may find such correspondence in the later name of the place  $\alpha \eta \rho^2$  (Eusebius) and Sâr. To the second argument we may safely reply, that, as compared with the stream at Yajûz, Wâdy Sîr is sufficiently large to meet the requirements of the language of Eusebius. See P.E.F. map.

The following comparison may set forth more clearly the value of the respective claims. Eusebius (ad rocem 'Aσώρ) states that Jazer was 8 or (ad rocem 'Iaσήρ) 10 R. miles west of Philadelphia. Kh. Sâr is so situated; whereas Yajûz is such a distance north of 'Ammân. Eusebius states that the large stream coming down from Jazer is received up into Jordan. Of Wâdy Sîr, uniting in its continuation as Wâdy Kefrein with Wâdy Hesbân, this is true. Wâdy Zorbi, or Wâdy el-Hammâm flows into the Zerka or Jabbok. Eusebius states that Jazer was 15 R. miles north of Heshbon. Kh. Sâr is nearly, if not quite, this distance; but Yajûz is, by the nearest practicable road, at least 25 R. miles from Hesbân.

- $^{\rm f}$  Adroga, named here between Kerak and Helenopolis and elsewhere (Reland, p. 228) between Kerak and Afra (which is  $Ufr\hat{u}h$ ), was situated at ed-Derajeh.
- g Legionensis, or Ligum, is the Legionum of another Latin Notitia, Maximinianopolis of the Greek lists.
  - h The Latin Mauronensis is the Greek Myru, Meru, or Meron.
- <sup>i</sup> Patracensis, possibly, of the Monastery of St. Nicholas of Petra, assigned by the Jerusalem MS. to the archbishopric of Diocaesarea.
  - <sup>j</sup> Capitolina of the Greek Notitiae.
  - k Gedam is Gedara or Gadara, written also Gedera.
  - <sup>1</sup> Other Notitiae seem to have Nazareth in place of Carrata.

Errors in other Notitiae might be corrected, as Oluna, Galanis (Reland, p. 226) = Clima-Gaulanis; but they are quite evident.

According to Num. xxi, 32, the Amorites dwelt in Jazer, and furthermore, Jazer was not in the tract known as "half the Land of the Children of Ammon" (Josh. xiii, 25). As a city commanding the great highways between Moab and Bashan, and Ammon and Canaan, it had strategic value (Num. xxi, 32, and compare 1 Macc. v, 8). These notices serve to establish a better claim for Kh. Sâr than for Yajûz. Kh. Sâr is situated farther west and nearer Heshbon and other Amorite cities, near the crossing of the important roads of the country. In this vicinity a general taking a census of the southern part of Eastern Palestine in David's time, would naturally encamp (2 Sam. xxiv, 5). An encampment anywhere between Rabbath-Ammon and Yajûz would have been very unsuitable. Taking everything into consideration, Yajûz seems to be an almost impossible site. With Seetzen, Merrill, and others, we therefore hold that Jazer was at Kh. Sâr.

IV Ramoth-Gilead.—The enumeration of the Levitical cities of Gad in the following order: Ramoth-Gilead, Mahanaim, Heshbon, Jazer (Josh, xxi, 38, 39), indicates for Ramoth-Gilead a position in the northern part of Gad's territory. Indeed, Ramoth-Gilead, here named before Mahanaim, seems to be Ramoth-Mizpeh, likewise named before Betonim and Mahanaim in the description of the northern boundary of this tribe (Josh, xiii, 26). Another consideration will strengthen this view. Ramoth-Gilead was evidently a city of refuge for all Gilead, of easy access from the northern as well as from the southern part of Gilead. Machir's Gilead (Num. xxxii, 40) and the Havvoth-Jair in Gilead were evidently in the region north of Mahanaim, or Mahneh. And so we find it very reasonable, that the administrative centre of a prefecture, embracing on the one side the Havvoth-Jair in Gilead, on the other Argob in Bashan, should have been situated between both, on the northern border of Gad's territory (1 Kings iv, 13); and such a site between Samaria and the Aramaean border seems to be required by the narrative of 1 Kings xxii, 3 sqq. A conspicuous elevation, as also the name implies, is required for this city of refuge; the site of this great fortress-city of Gilead must be naturally a strong one; but an approach for chariots, a plain of some dimensions, surrounding the site, is necessary (1 Kings xxii, 34). Prof. G. A. Smith, who seems first to have contended for some site in northern Gilead, remarks that Irbid and Ramteh are both of them fairly strong sites. Er Remtheh has been favoured by Smend also (Zeitschrift für die

Alttestamentliche Wissenschaft, 1902, p. 153). Er-Remtheh, however, seems to be situated farther east than the requirements of a city of refuge allow, and Irbid cannot be anything else than the eastern Arbela of Eusebius. Beit Râs answers all the requirements, the P.E.F. map shows it to command northern Gilead. Here we have the heights of northern Gilead. Ramoth, Capitolias, and Beit Râs are in the respective languages idiomatic equivalents. Finally, it is improbable that a large city like Capitolias should have superseded anything but a very important city of earlier times.

V. Camon.—As the Havvoth-Jair in Gilead were on the northwestern slope of Mount Gilead, from Mahanaim (Mahneh), Ramoth-Gilead (Beit Râs), and Betonim (el-Butein) towards, and perhaps beyond the Yarmûk also, we readily assent to the identification of Camon, the place where Jair was buried (Judges x, 5), with Kumeim, west of Irbid. Polybius relates the capture of Camon with other cities of Perea, by Antiochus; and the order, in which these cities are enumerated, shows that Camon must have been at Kumeim: παρέλαβε Πέλλαν καὶ Καμῶν καὶ Γεφροῦν καὶ κατασχὼν εἰς τὴν Γαλάτιν κύριος γίνεται ᾿Αβίλων (Hist. lib. V, 70, 12). Josephus also mentions Camon as a city of Gileaditis (Ant. V, 8). In the Ecclesiastical Notitiae (Latin) it is called Comanas (Reland, p. 223) and Komanas (Ibid. 226) respectively, being once named between Clima-Gaulanis and Tiberias, and once, last in the list, after Clima-Gaulanis (Oluna-Galanis).

VI. Zaphon, one of the towns assigned to Gad, was in the valley of Jordan. It is named after Beth Haran, Nimrah, and Succoth. "The Jerusalem Talmud (Sheb. 9, 2 fol. 38 d) identifies it with עבותו, the later Amathō, Amathus" (Eney. Bib., col. 5379). Josephus, who often mentions it (Ant. XIII, 33; XIV, 5, 4; B.J. I, 8, 5), places it on the Jordan (Eney. Bib.), Eusebius, 21 R. miles from Pella. Tell Amateh, exactly the same distance south of Pella, answers all the requirements; whereas el-Hammeh is outside of the territory of Gad, and not in the Jordan valley.

VII. Gath.—The MS. in the library of the Patriarchate of Jerusalem (Palmer, Desert of the Exodus, pp. 550-4), supplies evidence for the identity of the Tell es-Safieh and ancient Gath. To the archbishopric of Eleutheropolis belonged, according to this MS., Catharocastrum which was situated "on the mountain (! and) called Telesaphion or Telesaphy." This is clearly Tell es-Safieh, and Catharocastrum is Roman Gath, just as certainly as Cyriacopolis (MS., and Nili Doxopatrii Notitia Patriarchatuum) is Kir of Moab.

# THE TEMPLE SPOILS REPRESENTED ON THE ARCH OF TITUS.

By the REV. W. SHAW CALDECOTT, M.R.A.S.

JERUSALEM fell A.D. 70. On the army's return to Rome a triumph was voted by the Senate to Vespasian and Titus. In the procession which followed, 700 Jewish captives walked, among whom was Simon, son of Gioras, the Jewish leader—then to die. In his Jewish War (Book vii, Chap. v), Josephus gives a graphic account of the sights and figures of that memorable day, so fateful to the Hebrew race. In honour of the event which it commemorated, the



Panel from the Arch of Titus in Rome.

Emperor built the Temple of Peace, in which were deposited the golden vessels of the Temple brought from Jerusalem, and correctly recapitulated by Josephus.

Afterwards was built the most beautiful of the triumphal arches, that of Titus, at the head of the Sacred Way, which led from the southern gate of Rome to the Capitol and the Temple of Jupiter. Within this arch, known to almost every visitor to Rome, are two

interior panels, whose protected position has preserved them to our times in better condition than would otherwise have been possible. It is with one of these panels alone that we are now concerned. It is that in which are seen the low-reliefs of the Temple Spoils. Some twenty figures of Magistrates and Soldiers are seen carrying and accompanying the golden furniture of Herod's Temple, as they appeared on the day of the procession.\(^1\) This panel has been a source of wonder and delight to myriads of spectators, none of whom have been of the Hebrew faith, as no Jew ever walks beneath the arch, or glances at the sad memorial of his nation's fall.

The panel is a large one, filling the whole length of the arch, and is some six or seven feet in height. The bas-reliefs are somewhat mutilated, as thousands of photographs have shewn, but they are said to be shewn in their perfect state in a drawing of Giuliano di Sangallo.

In a little volume published in 1904 the following footnote is printed:—

"Edersheim has remarked that the representation of the Shewbread table on the arch of Titus is less in size than we should expect from its description. His cubit was one of 18 inches. It is to be hoped that some future visitor to Rome will test its dimensions by a cubit of 10.8 inches, and make public the result.<sup>2</sup>

Reading this note, the Rev. Dr. Walsh, of St. Clement's Church, in Rome, used his influence with Commendatore Boni to have exact measurements taken of the sculptures. This was found to be impossible to effect while the grime and dirt of eighteen centuries and a quarter obscured the real proportions and outlines of the figures. Signor Boni, Director of the excavations now being made in the Roman Forum, accordingly had the encrusted dust removed—a service for which many tourists to Rome will thank him. When this was done, exact measures were possible. These the Professor himself took. Their correctness is therefore indisputable, as no one stands higher in the modern archaeology of Rome than does Boni.

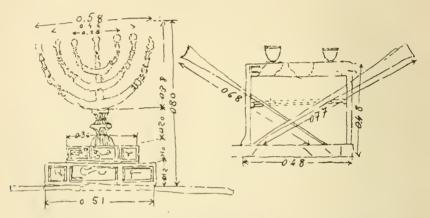
The measures are given in millimetres, each being nearly the

<sup>2</sup> The Tabernacle. Its History and Structure, by the Rev. W. Shaw Caldecott (R.T.S.), p. 224.

<sup>&</sup>lt;sup>1</sup> On the heads of all these figures may still be seen the "crowns of laurel" which Josephus says all the victors were on the day of the triumph.

25th part of an English inch. In addition to giving a transcript of these fourteen measurements, I annex a photographic representation of Signor Boni's drawing, with the distances which he has marked upon it.

This reproduced representation will, in every way, be satisfactory to the student, and will so far commend itself to him as to preclude serious discussion upon the basal facts which it contains, though further research and remeasurements may shew that slight amendments are necessary or permissible. It is obvious, as the Hebrew cubit, in all its parts, is exactly commensurate with the English inch and its decimals, that better and more certain results



Spoils of the Temple of Herod, as depicted in panel. (Drawn to scale by Signor Boni).

in the measuring of these *ontiques* may be obtained by using them, than by the use of the modern millimetre. Some saving in the labour of translation would also be effected.

Coming now to the present writer's interpretation of these metrological data, we enter upon a stage of the enquiry of which it is hopeless to expect that the results will be unquestionably received—the more so as the ravages of time have defaced the sharp edges of all the sculptures and, in many cases, left but an indistinct representation of what has been.

The measurements shown in the photograph are, in the following table, arranged in order of size, and are, for convenience of comparison, described and translated into English inches.

#### SCALE.

40 inches to 100 C.M. or 1 metre (true value being  $39'' \cdot 37 = 100$  C.M.).

### (1.) Candlestick.

	Metre.	Inches.	Approximate error (in excess).		
Height of 2nd base Height of 1st base Height of stem, to 1st branch Width of inner branches Width of 2nd base Height of branches, from top of stem Width of middle branches Width of lower base Width of outer branches Height of candelabra	0·10 0·12 0·20 0·28 0·36 0·38 0·44 0·51 0·58 0·80	4·0 4·8 8·0 11·2 14·4 15·2 17·6 20·4 23·2 32·0	- 0.063 of an inch. - 0.0756 ,, - 0.126 ,, - 0.1764 ,, - 0.2268 ,, - 0.2494 ,, - 0.2772 ,, - 0.3654 ,, - 0.504 ,,		

# (2.) Shew-Bread Table.

				Metre. Inches.		Approximate error (in excess).		
Height Width	••	••	••			0 ·48 0 ·48	19 ·2 19 ·2	- 0:3024 of an inch. - 0:3024 ,,

# (3.) SILVER TRUMPETS.

			Metre.	Inches.	Approximate error (in excess).		
Length (shorter) Length (longer)	••	••		0 ·68 0 ·77	27 ·2 30 ·8	-0:4274 of an inch. -0:4851 ,,	

In the P.E.F. Quarterly Statement for January, 1902, pp. 79–82, is a brief account of an interview with the Executive Committee of the Society, the late Sir Charles Wilson being in the chair. In that account occurs the following sentence:—"There were three cubits of the respective lengths of  $\frac{9}{10}$ ,  $\frac{12}{10}$ , and  $\frac{15}{10}$  of an English foot, the first of which was used exclusively for gold and gold-tapestry work,

the second for building purposes, and the third for measuring areas only."

It will be apparent from this conclusion, expressed over four years ago, that the cubit by which the golden vessels of the Temple were thought to be constructed, and by which their representations are to be measured, is that of the small cubit of 10.8 inches, equal to nine-tenths of a foot.

This cubit, according to an article published in the Journal of the Royal Asiatic Society, April 1903, pp. 257–283, on the "Linear Measures of Babylonia," consisted of three palms or hand-breadths, each being of the conventionalized size of 3.6 inches. Among the peoples of the East this palm was divided into three sections, but among the Hebrews the palm was divided into quarters and made to correspond with the breadth of the four fingers² (Ezek. xl, 43, Exodus xxv, 25, I Kings vii, 26, Jeremiah lii, 21), the width of the palm being, in each case, the same. We thus arrive at a "fundamental" of nine-tenths of an inch, as being that which any Hebrew artist would use in making the sacred vessels of the sanctuary. In this way—Boni's figures being before us—we construct the following list of proportional measures as those by which the Temple gold- and silver-smiths worked.

1. 3-Cubit Lengths.—The sacred cubit being one of 10·8 inches, three such cubits give us a length of 32·4 inches. To this length, I am of opinion, the height of the Candelabra was made to conform. It was also the length of the two silver trumpets (Numb. x, 1). No measures of any of these objects are given in the Bible, and it will be noticed that each of them is, by Boni, given as a fraction less than is requisite in order to substantiate the measure of 32·4 inches. In explanation, it may be pointed out that the candelabra is imperfect at its upper ends, and may well have consisted of the other four-fifths of an inch which is requisite to the equation of 32" - 504, and 32·4 inches. Boni gives the present height of the candlestick as 80 centimetres, whereas 82 are requisite in order to effect its harmonization with the 3-cubit theory.<sup>3</sup> This slight

<sup>&</sup>lt;sup>1</sup> This sentence (p. 82) needs correction so far as to include silver work as well as gold, in the fabrics measured by the short cubit. Brass work was measured by the medium cubit.

<sup>&</sup>lt;sup>2</sup> Cp. The Tabernacle, pp. 148, 220.

<sup>&</sup>quot;According to Josephus, each of the seven branches "had a lamp of brass on its top." This is in accordance with Ex. xxv, 37, and may have been included in the artist's measure of height.

deficiency is such as might have been anticipated in relics on which time and wear have done their work for so many centuries.

We come now to the consideration of the silver trumpets, in which, taken alone, a difference of nearly three inches is observable in their given lengths.

If, however, Boni's drawing be carefully examined, it will be seen that the trumpets are not carved at the same angle, and do not hold the same position with regard to their surroundings. The mouthpiece of each rests on a lower table or shelf, which is protected on all its sides by a wooden curtain or side. Within this curtain lie portions (hidden) of each trumpet, and of one a greater length is hidden than of the other. It is this more-deeply-hidden trumpet to which the shorter length of 68 centimetres is given, the other having a length of 77 centimetres. There is no reason why each of the tube here represented should not have been 82 c. long.

- 2. The 1,  $1\frac{1}{2}$ , and 2 Cubit Lengths.—These three measures are found in the candelabra, and in such a relation to each other as that their close connection cannot be doubted. These measures are used to determine the width at which the three pairs of branches were placed. The inner branches are placed at a single short cubit apart, the middle at a cubit and a half apart, the outer at two cubits apart, the requisite number of centimetres being  $27\frac{1}{3}$ , 41 and  $52\frac{2}{3}$ . These are given by Boni as 28, 44, and 58. In each case there is a slight excess in Boni's figures. This may be accounted for by the fact, shewn in his drawing, that Boni measured from the outer circumference or, at least, from centre-to-centre, whereas it would be in harmony with Hebrew methods to give the spaces free of the structure. They would thus be interior measures, and to this variation in the mode of calculation may be attributed the slight differences which appear.
- 3. Size of the Shew-Bread Table.—The table on which was placed "the bread of the Presence" in the Mosaie economy, is described in Exodus xxv, 23–30, and xxxvii, 10–16, a description which receives illumination from the sculptured representation, as we see that it had two levels, on the upper one of which were placed the twelve loaves of shew-bread, and on the lower one the dishes and spoons and bowls and flagons which were ordered to be placed upon it<sup>1</sup> (Ex. xxxvii, 16). The table itself was of diminutive size, as was

<sup>&</sup>lt;sup>1</sup> Two golden cups are shewn in Boni's drawing. Ordinarily, and when in use, these cups stood upon the lower level.

imperative, when it was ordered to be overlaid with plates of gold. Two cubits was its length (Exodus xxv, 23), one cubit its breadth, and a cubit and a half its height.<sup>1</sup>

Professor Boni's measures for the height and width of the Table are the same, being 48 centimetres, or nearly 19 inches. The attempt to co-ordinate this measure with those already given, produces a length of a cubit and two-thirds, which yield eighteen inches. This does not agree either with Moses or with the scale of cubits herein adopted. Yet the figures are irrefragable, supporting one another as they do. Further light is requisite upon this point.

4. Bases and Stem of Candlestick.—Reverting to the golden Candelabra, there are several measures still unnoticed that call for attention. These are those of the bases and the stem or pedestal of the candelabra. It will be observed that the candlestick stood upon two bases, each of which had six sides. The Roman artist, in order to express this fact, shading being impossible, represented two of the three sides visible, in perspective, and as foreshortened. This is why the three panels in the foreground are not of the same size.

A six-sided figure, when viewed from opposite any one of its sides, will always have the same breadth. The width of the lower base is given by Boni as 51 centimetres. Now  $52\frac{2}{3}$  c. are two cubits, and there is little doubt but that this was the original figure. Similarly, the width of the upper base is given at 36 centimetres, and the height of the branches, measured from the top of the stem, at 38 centimetres. I have little doubt but that each of these measures, before dilapidations set in, was 41 c., or a cubit and a half (= 16.2 inches).

Three smaller measures remain for examination. These are the heights of the bases and the distance between the bases and the first out-branchings.

It was artistically imperative that the thickness of the larger and lower base, or platform, should be something more than that of its smaller fellow above. A palm breadth was, therefore, given to the upper base—as was given to the castings of the brasen sea in

<sup>&</sup>lt;sup>1</sup> It will not escape the reader's notice that these are the lateral measures of the branches of the golden candlestick. See above, p. 311.

<sup>&</sup>lt;sup>2</sup> Of the three centimetres required here to make up the 41, two are those which, *supra*, are required to give the candlestick its height of three small cubits. The other one is to be deducted from the combined heights of the bases and the pedestal, which now total 42 c.

Solomon's Temple (1 Kings vii, 26), and to the eastings of the pillars Jachin and Boaz (Jeremiah lii, 21). This was equivalent to four fingers, or 3.6 inches. An additional finger-breadth, of nine-tenths of an inch, was given to the height of the lower base. Nineteen centimetres, given by Boni as twenty, remain, as the space between the bases and the first outbranching, these being one-half the total elevation. This half-total is thus arrived at:—

		Inches.
Thickness of lower base, 12 c.	 	4.5
Thickness of upper base, 10 c.	 	3.6
Height of single pedestal, 19 c.	 	8.1
		$16.2^{1}$

The remark of Josephus that "the construction of the candlestick was somewhat different from that in use amongst us," can refer only to its representation in stone, as the original was carried in the procession. His caveat is met by Gregorovius, who remarks that the fantastic figures carved upon it prove that it was not an exact likeness of that which came from Jerusalem. The Roman eagles referred to by him have now flaked away and are quite indistinguishable.

Conclusion.—At the time of the building of the Arch of Titus the golden vessels of the Sanctuary were in the Temple of Peace, and at the observation of the architect and the sculptor. The panels of the Arch were so designed as to afford full-sized reproductions of these objects. This involved that, if practicable, the human figures, crowded together in the bas-relief under discussion, should be of average-sized Romans. The work was, however, conditioned by the size of the panel, especially the height which could be given to it. Mr. Cecil Smith, Keeper of the Greek and Roman antiquities in the British Museum, has kindly hunted up the authorities on the subject, and writes that the total height of the panels is 2.04 metres, or  $78\frac{3}{4}$  inches. The delineation therein, on the one side, is of that part of the procession in which the victors were carrying on poles, shoulder-high and resting on moveable platforms, the golden spoils

<sup>1</sup> It is not unnoticed that the same number of inches is here given to the bases as to the pedestal, while Boni gives to the former 22 c., and to the latter 20 c. It will, however, be found, 1 anticipate, that the bases are 4 and 5 fingers in thickness, and that the height of the clear pedestal is 9 fingers.

of the Temple. It was necessary that the upper portion of the panel should be reserved for the representation of the principal figures intended to be commemorated. These were the articles of furniture measured by Boni. Projecting far above the heads of the bearers, these golden embodiments of victory, themselves possibly gilded, did not allow of the full size being given to the human figures below them. No east from this unique record of other days exists in our National Museum or in any other place, known to me as accessible to the student, so as to allow of fresh measurements being taken. The figures are, of course, not all of the same height. Some are in a stooping position, but the result of Mr. Smith's reading is that he "estimates the figures as nearly 1:50 metres high." This is within a small fraction of 5 feet, and leaves some 18 inches above them as the clear space for the carving of the principal objects of the commemoration. Roman soldiers were not unfamiliar objects in the streets of Rome in the first century A.D., and it was not, therefore, necessary to do more than indicate their presence, though, had the general plan of the arch allowed of it, they would doubtless have been shown life-size. That they are not done so, is not, in the circumstances of the case, in my opinion any valid reason for rejecting the idea that the candlestick and the table, with its belongings, were exactly copied, as to their size and shape, from the originals then in the Temple specially built to receive them.

With one exception, all Boni's measures are thus seen to bear a resemblance to those which would be used were the objects of the representation given in natural size, and were the artificer's cubit one of 10.8 inches. As to that single exception I should like to make a hypothetical suggestion. It is this: As we have seen, the sacred table was ordered to have a length of 2 cubits, and a height of 11 cubits. It was very narrow, a dimension with which the sculptor could not deal. If the Jewish priests, for some reason of convenience in placing the bread upon the table, decided increase its height, this could only be done by retaining its old dimensions and harmonising them so as to make the height and the length the same. By adding the old dimensions (21.6 + 16.2), and then by halving the total, 37:8, they would arrive at the exact figures, 18:9 inches (19:2 - :3204), which is reported by Boni as being the height and width of the present representation. This, I believe, is what was done: thus accounting for the alteration in

two of its dimensions as given in Exodus, and bringing the measures of the Shewbread table into line with Boni's other measurements—the key to all of which is the new sacred cubit of 10.8 inches.

### NOTE ON MR. CALDECOTT'S PAPER.

However interesting as a detailed examination of the representation of the holy vessels from Jerusalem, borne in the triumph of Titus, few will be disposed to accept the dimensions of the sculpture as the exact equivalents of those of the objects themselves.

It would certainly be a most exceptional incident in the history of decorative sculpture to find minute care taken to preserve such dimensions exactly. That the forms are approximately correct is most probable; that the scale is larger for the objects borne than for the bearers is likely enough, the figures being considerably under life size, and the sculptor desiring to give prominence to the objects. But Mr. Caldecott should have mentioned that Josephus expressly says that the candlestick carried in the triumphal procession of Titus was quite different from that formerly used in the Temple (B.J., VII, 5, § 5). I quote Whiston's translation: "The candlestick "also, that was made of gold, though its construction were now changed "from that which we made use of: for its middle shaft was fixed upon "a basis, and the small branches were produced out of it to a great "length, having the likeness of a trident in their position, and had "every one a socket made of brass for a lamp at the tops of them. . . . . and the last of all the spoils was carried the Law of the "Jews."

See Whiston's note also, which remarks that "the Law of the "Pentateuch does not appear on that arch at all, though Josephus, "an eye-witness, assures us that it was carried in this procession." Josephus seems to infer that the original candlestick was not of the "trident" form at all.

It would be very rash to assume more than approximate likeness to the originals, and perhaps approximate proportion between the several objects.

J. D. C.

### RAINFALL AT JAFFA.

Our correspondent Mr. J. Jamal forwards the following report of his meteorological observations at Jaffa:—

The amount of rain which fell in Jaffa during the winter season, commencing on October 20th, 1905, and ending May 15th, 1906, was as follows:—

5 d	ays i	n October, 1905	 2·10 inches.
2	,,	November, 1905	 ·35 ,,
14	,,	December, 1905	 9.90 ,,
12	,,,	January, 1906	 4.00 ,,
14	2.2	February, 1906	 5.72 ,,
+	,,	March, 1906	 1.10 ,,
5	,,	April, 1906	 1.10 ,,
-2	,,	May, 1906	 .35 ,,
	lavs		 24.62 inches

Table showing the directions of wind, taken at 9 A.M., on the above-mentioned 58 days:—

			Winds.									
Dates.		N.	N.E.	E.	S.E.	S.	s.w.	w.	N.W.	Tota Day		
5 d	lays i	n Oct., 1905	1	0	0	0	3	0	0	1	=	5
2	,,	Nov., ,,	()	0	0	1	1	0	0	0	_	2
1.4	22	Dec., ,,	1	1	0	3	5	2	0	2	= 1	1.1
12	11	Jan., 1906	()	1	1	-1	1	2	3	0	= 1	12
14	7.7	Feb., ,,	U	0	0	0	5	4	5	0	= 1	14
4	2.1	Mar., ,,	()	0	()	0	1	2	1	0	! =	-1-
5	17	April, "	()	0	Ō	0	2	2	l	0	-	5
2	*1	May, ,,	0	0	()	0	0	1	0	1	=	2
58 d	lays.		2	2	1	8	18	13	10	4	= 8	58

It will be noticed from the above table that on 27 rainy days the wind has been blowing from the E., S.E., and S., thus showing that the rain clouds coming up from those directions have evacuated the greater part of their contents on the mountains of Judea and Jerusalem before arriving at Jaffa. Clouds of rain coming direct from the Mediterranean, from the west or south-west, as a rule pour down their rain in torrents on the maritime plains, taking in Jaffa and leaving small showers for Jerusalem and its district. This explains why Jerusalem has received a greater portion of rain this season than Jaffa, the difference being about 14 inches between the latter and the former which is very unusual.

Note.—The rainfall in Jerusalem this season, as noted in the *Home Words*, has been about 39 inches. The rainfall at Jaffa in the preceding season was 23:50 inches in 63 days; see *Q.S.* p. 70.

# NOTICES OF NEW BOOKS AND FOREIGN PUBLICATIONS.

Recueil d'Archéologie Orientale, Vol. VII, January-March, 1906. This number contains a number of short notes, principally on inscriptions, on Chusader documents, and on Makrizi's History of Egypt, to the latter of which some ingenious emendations are suggested. There is also an interesting paper on the word sirr, used in Muslim grave-formulae; a review of Brünnow's work on Arabia; notes on an enigmatical Byzantine inscription from Eshdud; a summary of the work of the American expedition to central Syria; and a large series of interesting epigraphic notes on inscriptions of Syria and Mesopotamia.

Revue Biblique, July, 1906. Beside some articles of theological importance, but not directly touching upon Palestine Exploration, this number contains an account by Prof. Clermont-Ganneau of another fragment of the great Beersheba rescript, which has recently come to light: the paper is accompanied by a facsimile. There is also an account of an Arabic description of Palestine in the Vatican Library, accompanied by a Latin translation: the first instalment of an account of the adventurous journey made by the Dominicans of St. Étienne, Jerusalem, from Nakhel in Wady el-'Arish to Petra: and an investigation of Saladin's journey from Cairo to Kerak and Damascus.

Notes de Mythologie Syrienne. By René Dussaud. The second

instalment of this important publication contains eight articles of various lengths and all of considerable value. One of the most interesting is that on the god-name Bel in Syria, shewing evidence of the fusion of Bel with Heracles—a fact which has its interest in connexion with the perplexing Altar of Eunelos found at Gezer. The other articles in the brochure are—a lost figure of the Jupiter of Heliopolis—symbols and representations of the consort goddess (a specially interesting article)—a votive hand of the type of the Heliopolitan Jupiter—the Phænician pantheon—Milk, Moloch, and Melkart—Brathy, Brochoi, and Baruk—the cult of Dusares according to the coins of Adraa and Bostra.

Dr. Petrie's Researches in Sinai. "The work of this last season in "Sinai has served to put in order the Egyptian inscriptions previously "known there, and to fix their places and connexions which were "uncertain before. It has also uncovered many new inscriptions, and the "whole of these two or three hundred inscriptions have been drawn full-"size in facsimile, and many of them photographed. The publication of "these will form the largest body of texts from any year's work. The "plan of the temple of Serâbît was but vaguely known before. Many "more walls have been found, and also the Shrine of the Kings; and "the whole is now fully planned and modelled, and the architectural "details restored as far as possible. The district of Serâbît has been "planned for the first time, and the positions and character of the mines "recorded. The considerable mass of offerings found in the Temple "includes the finest portrait known of Queen Thyi. The fuller records "now obtained have enabled us to reconstruct the old Egyptian "organization of the expeditions. And the views that result from these "studies regarding the early Semitic ritual restore what has hitherto "been only a matter of conjecture."

In these words Prof. Petrie sums up the results of his recent expedition to the Sinaitic peninsula, and certainly he can fairly claim that it is an excellent record of work for a few months. In the interesting volume before us, perhaps the most attractive that Prof. Petrie has produced, he gives a lucid account, illustrated with admirable photographs, of the various stages and branches of his investigations.

The first three chapters of the book contain an account of the journey through the desert to the Wady Magharah, the valley of the turquoise mines, and a description of the valley itself and its series of sculptures. The numerons photographs in this part of the work give an admirably clear idea of the desert and wild mountain scenery of the peninsula. If m the letterpress one is tempted to complain that there is too much about the personal idiosyncrasies of the camels and their drivers employed by Prof. Petrie's party, it is because there is in these chapters so much geographical detail of permanent value that one grudges any space expended on these more trivial matters.

The fourth chapter commences with the miserable record of the fate of many of the sculptures which for five to seven thousand years (according to our anthor's scheme of chronology) had resisted the depredations of the Bedawin savages of Sinai. Prof. Petrie tells how in a short season they suffered irreparable injury, in many eases total destruction, at the bands of savages from the land which produces the worst kind of savages—namely, England. "The Khufu sculptures were "smashed up. The half-dozen Assa inscriptions were all destroyed or "buried. The Pepy inscriptions were annihilated. The whole of the "Amen-em-hat inscriptions at the mines have likewise disappeared. The "Sneferu scene has been brutally bashed about with a hammer, and the "only portrait of Sneferu has been destroyed. The Sahura scene and the "Men-kau-hor tablet have both been partly blasted away. The Ra-n-"user tablet has had pieces knocked off it"-by English turquoisehunting speculators. To guard the few that remained from further injury Prof. Petrie had them cut out and transported to the Museum at Cairo, where they are now to be seen. Of course, this proceeding destroys a large part of the interest both of the sculptures and of the valley; but under the circumstances, obviously no other course was open to the explorer.

The Wady Magharah inscriptions consist of a series of steles, left behind by the kings who here quarried turquoise, or by their lieutenants and overseers. They begin as far back as the 1st dynasty, with king Semerkhet, whom Prof. Petrie dates about 5300 B.C., and come down through practically the whole of the Early Empire. They are triumphal monuments for the greater part, celebrating the royal victories over the Bedawin of the peninsula. But mining was carried out industriously during the middle empire as well, and not the least valuable part of Prof. Petrie's work has been the exploration of the mines of this period and the determination of the methods followed by the miners—as well as the unearthing of the workmen's settlements and the discovery of their tools and household utensils.

The central part of the book is occupied by the investigation of the great temple of Serâbît el-Khadem; a shrine which, dedicated to Hathor at latest in the IHrd dynasty, was increased by the addition of steles and chambers, till it acquired a plan perfectly unique and singularly complex. Though the temple had long been known to exist, it would appear that Prof. Petrie's is the first exhaustive investigation.

As Prof. Petrie's description of the temple and its contents occupies over a hundred quarto pages, and is illustrated by nearly a hundred photographs, it is clearly impossible to abstract it here. Let it suffice to say that the temple consists of a rock-cut shrine and six chambers, including lavatories (perhaps it might have been better to have used some such English word for these ablution-chambers, in preference to the

native word hanafiych; which is self-explanatory only to a reader who understands the ritual arrangement of Muhammadan mosques): outside the court round which these chambers are grouped there is a further series of fourteen chambers, added one by one, by successive kings (as inscriptions found within them indicate). The whole is enclosed within surrounding walls, with which other chambers, less well defined, are associated. Judging from the remains found within the temple, and the evidences of non-Egyptian worship which it contained, no doubt Prof. Petrie is correct in considering this as a temple essentially for some variety of Semitic religious rites. The temple of Şerâbît, therefore, is of especial value at the present moment, when the excavations of Tell es-Safi and of Gezer, as well as Taanach and Megiddo, have been revealing to us the shrines and furniture of Palestinian cults. The investigation of the Şerâbît temple is a solid contribution to the complicated subject of the religion of the Semites.

Among the many discoveries made within the temple precincts, of which we cannot here speak, the most remarkable—apart, perhaps, from the striking Thyi head—is a series of stones bearing inscriptions in an alphabetic character different from the hieroglyphic. Until the more official report of Prof. Petrie's inscriptions, with facsimiles of the inscriptions, makes its appearance, it would be premature to make any detailed criticism on the one specimen of this script illustrated by Prof. Petrie—a rude figure of a sphinx bearing some random characters, and an evidently formal inscription of six letters. But these letters certainly convey the impression of being part of a form of the Phenician alphabet. If so, this discovery is of immense importance as carrying the history of that alphabet about 500 years behind the farthest point previously known. The inscription given by Prof. Petrie reads straight off previously known. The inscription given by Prof. Petrie reads straight off previously known in the possible meaning of this vocable (or vocables).

The latter part of the work is occupied by a number of chapters dealing with miscellaneous points. The first of them is devoted to an exposition of Prof. Petric's well-known views on Egyptian Chronology, which he here re-states and for which he makes, it must be admitted, a persuasive case. It is curious, however, that the conclusions at which the Cretan excavators and those of Palestine have arrived on this difficult problem are diametrically opposed. Dr. Evans finds so great a depth of debris between the XIIth dynasty and XVIIIth dynasty strata that the short chronology does not give sufficient time for its accumulation; on the other hand at Gezer, for example, there is surprisingly little interjected between the strata corresponding to these periods if the long chronology is to be accepted. Time and further work will settle this and many other problems still in suspense.

This is followed by a short but important chapter on Semitic worship,

with special reference to the indications which the Serâbît temple affords of its nature; and then comes a fascinatingly interesting chapter on "the Conditions of the Exodus," in which an attempt is made to reconcile the high numbers of the census-lists of the Israelite wanderings with the possibilities of desert life. Some parts of this chapter are not very convincing, perhaps. Thus the analogies drawn between the divine names in the Pentateuch documents and those in a modern hymn-book, and the deductions founded thereon, fail because the hymn-book terminology is directly founded on the Biblical, in its final form, and quite irrespective of the origin of the Biblical nomenclature. Discussion of the central thesis maintained in this chapter—the revision of the numbers based on the ambiguity of the meaning of the Hebrew word alâph—must be left to professed exegetes. The layman can but wonder at its simplicity and its ingenuity.

The book ends with four chapters from the pen of Mr. C. T. Currelly, Prof. Petrie's assistant, narrating his own experiences. These chapters are frankly travel notes, and contain a large number of interesting observations on Sinaitic life, manners, customs, folklore, as well as an account of his important examination of the Nawamis and the removal of the Wady Magharah sculptures, which delicate work was entrusted to Mr. Currelly. We should like to have heard more of the Nawamîs, but no doubt the official publication will satisfy this desire. The suggestion that the manna story is a recollection of the first sight of snow is ingenious, but it would be difficult to explain how so singularly accurate a recollection of the appearance of the snow-fall-more accurate, one may venture to say, than the best-attested examples of folk-memory should have received the enormous modification implied by the one additional element that the manua was used for food. More interesting and more convincing is the chapter on the identification of Mount Sinai; a very persuasive case for Serbal is made out by Mr. Currelly.

It is, perhaps, hypercritical to complain about a point of spelling, but we confess to disliking "Gaa"; because no Arabic word can commence with two consonants. Mr. Currelly sins in good company in this respect, for one often sees monstrosities like "Mkaur" and "Naneh." These words, as written, are absolutely unpronounceable to Arabs, and therefore cannot represent any form of local pronunciation.

In closing this notice of an important and very interesting book, a word of praise must be given to the typography and the reproduction of the photographs. They are, perhaps, as near perfection as it is possible for them to be.

R. A. S. M.



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