

flagging of the upper galleries covered with Greek mason's marks, such as I have never seen except here and at Baalbek ; some of these marks were single letters, but others seemed worth attention for comparison with the marks which I have noticed on pillars at Ascalon and at 'Ammân. They are as given below.



The second, if turned upside down, is just like a ligatured Phœnician inscription.

But another observation of greater interest referred to the wooden beam which runs from pillar to pillar in the upper order of columns. I have had occasion to mention this as an Arab architectural feature, and at first supposed that the beams in this case also had been added by Moslem restorers of the church. The beam is not structural, but affords an additional brace to the pillars, and spans the round arches just as it does in the mosques at Jerusalem, Damascus, and Cairo. I found, however, finally, that one of these beams is ornamented with well cut Greek crosses, in relief, evidently the work of Byzantine masons. Mr. Fergusson will no doubt welcome this little fact (unless he has previously himself observed it) as confirming his views of the Christian origin of the Dome of the Rock. It would, however, be interesting to know whether Byzantines and Arabs alike may not have borrowed this kind of tie-bar from Sassanian architects.

I also observed a very peculiar cross, with various devices at the ends of its arms, occurring on some of the capitals. This cross is exactly like one which we have recently found in a Byzantine ruin in Moab.

The old walls of Stamboul are built of moderate square masonry, in courses alternating with one or more courses of flat bricks. The original work is Byzantine, and the structure has been adopted by the Venetians and later restorers of the walls. This structure we have never found in Palestine, but I found a fragment of wall so built at Kadesh, and the present observation seems to confirm the impression I then obtained that the ruin in question was part of the Roman town of Laodicea, which rose on the ruins of the older site of *Kedes*.

C. R. C.

NOTES ON MR. TRELAWNEY SAUNDERS'S INTRODUCTION.

THE Surveyors of Western Palestine owe their best thanks to Mr. T. Saunders for the appreciation and discriminating praise which he bestows on their work. Criticism from a geographer so well acquainted with the

preceding maps of Palestine, is the best test which could be applied to the work. I hope, therefore, it will not appear ungracious if I attempt a reply to one or two pieces of criticism in the "Introduction." I must also express my regret at the numerous printer's errors, which appear to have arisen from the indistinctness of the photo-lithographic reproduction of our MSS. maps. Several of these have also found their way into the corrected index of the Introduction, and should be revised in a future edition.

Aneroid heights (pp. 21, 176, 179). These were collected according to the names, as it was found impracticable to fix the exact points to which they should be written in cases where no name or special object of detail is shown. They were all calculated by Mr. Armstrong, under my direction, in 1877, but a certain proportion were judged to be below the standard, and not good enough to insert on the map. This is specially the case in Galilee. One of Lieut. Kitchener's aneroid barometers appears to have got out of order; unfortunately this was not discovered by his field party in 1877, and we were obliged to condemn the whole of the observations taken with this particular instrument (including his levels of the Hûleh Lake) after the observations had been calculated. We shall endeavour to fix the Hûleh level by vertical angle from the eastern shores.

The height, 136 feet at Shefa 'Amr (p. 200), applies to the spring, not to the village (as is clearly shown on the map). The village stands on a hill, as described in the Memoirs. This height is settled by numerous observations. I think the aneroid heights on the map may be relied on within 20 or 30 feet, and a comparison with some of Colonel Warren's observations confirms this calculation. The level marks are fixed within six inches. The heights of the trigonometrical stations within two feet or three feet.

Nahr Râbin (p. 46). It is true that this stream dries partly up, but a string of pools is left, as in the case of the Kishon, and it is therefore marked as perennial.

Kaukab el Hawa (p. 68). I have endeavoured to show in a previous *Quarterly*, that this name means "fortress of the gorge," which seems more probable than "star of the air."

Coabis (p. 70). I have tried to show in the Memoirs that this site is the present Mekhobby on the Roman road. *K'adin* has not a single letter in common with Coabis.

Maiumas Ascalon (p. 141). An explanation of this name, and the discovery of a second inland Ascalon, were noted in the *Quarterly Statement*, 1875. There is another Ascalon north of Jerusalem, and it seemed to me that the famous Philistine city was called Maiumas, "the watering place," in contra-distinction to the inland town.

Geology (p. 144). I have completed a small reconnaissance map of the geology of Western Palestine, accompanied by sections of great interest, and detailed observations. Many parts of the country, especially round Carmel, are incorrectly described by M. Lartet, but we found his observations round the Dead Sea very valuable. The view suggested by

Lieut. Kitchener, and mentioned by Mr. Saunders, seems hardly supported by the facts now collected.

Megiddo (p. 159). Mr. Saunders does not seem to have known, when writing this passage, of the identifications proposed in support of my suggestion as to Megiddo, namely, *Beit Jenn* for Beth-haggan, *Yebla* for Ibleam, *Kâra* for Gur; and he remarks that these sites should occur in the vicinity of *Mujédda'* if my view were correct. This is just what I have tried to show is the case.

The high mountain (p. 166). The tradition placing this at Quarantania seems quite modern. In the middle ages the latter was shown, not as the scene of the Temptation, but of the Fast of Forty Days, as the name also intimates. The mediæval scene of the Temptation was first recovered by the Survey party at the Osh el Ghurâb.

Dead Sea Shores (p. 170). The Survey outline is controlled by tangential lines from the trigonometrical stations; before these stations were fixed, it must have been almost impossible accurately to map the shores, and we found the indentations much exaggerated on the maps, which is the natural tendency in sketching, as the distances are foreshortened to the eye. We have found the same to be the case last year on the eastern shores.

Identifications. Mr. Saunders only alludes to a small percentage of the known sites mentioned in the Memoirs. I cannot help regretting that he should support what may I think be called the exploded theories as to Lachish, Kirjath Jearim, and Shihor Libnath. The site of Abu Gheith, which he proposes for Gath, cannot have been that of an important town. He also speaks of Lejjûn as if it were almost certainly the ancient Megiddo, although there is hardly an argument in favour of this view beyond the proximity to Taanach. An identification is merely a vague conjecture unless the ancient name can be proved still to exist. It was for this reason that I attributed to Mr. Selah Merrill the recovery of Succoth, as no previous writer seems to have recognised the value of the existing name. In the same way the name Haiyân was unknown to Robinson, though by a lucky conjecture he pitched on the site in question as representing Ai. I may, perhaps, be allowed to express the opinion that it is entirely a false supposition that the names of Hebrew towns have been translated into Arabic names having the same meaning though a different word. The tendency of the Fellahin is towards the preservation of the *sound* not of the *sense*, as can be proved by an overwhelming number of examples. With the exception of Tell-el-Kady I know of no well established instance of the converse being true, and even in this exceptional case the old name Dan appears to survive in the immediate vicinity. The identifications of Tubania, District, Geba of Horsemen, and Janum, I was, so far as I can find, the first to propose; it is not quite clear whether these have been independently fixed at the same spots by Mr. Saunders, but if this is the case the coincidence is very satisfactory. I am very glad to see that many of the proposed identifications which I have felt most confident in publishing have been adopted by Mr. Saunders.

Many others will be found in the pamphlet on "Biblical Gains," amounting to some 130 in all; but there are a great many Byzantine and Crusading identifications due to the Survey, which I have as yet only noticed in the Memoirs, where the authorities are given in full.

Valley Names (p. 163). Mr. Saunders notices a group of small valleys in the Ghor, some of which have names not marked on our map. It should be noted, however, that in many cases the name does occur, applied to a ruin, spring, or other object, in or near the valley as shown on the Survey. The surveyors who have worked with me (including Mr. Tyrwhitt Drake) have always been of the same opinion, that it was only the main water-courses of the country which have really distinct names of their own. Even these constantly change their names, along their courses, as may be seen on the map, and are called after the villages and ruins they pass. The small valleys have no real names at all. We have remarked, in the Bedawin districts especially, that there are *local titles*, generally taken from a ruin or remarkable feature, and applied to all the natural objects near it. Thus if a ruin is named Mushukker, we have 'Ain do., Jebel do., Wâdy do., Sahel do., etc., all round it: and each traveller has perhaps collected one out of this group of half-a-dozen names, the only one of value being probably found at the ruin. Springs have often valuable names with traditions attached, but the names of hills and valleys, as a rule, are either purely descriptive, or else taken from the village, ruin, or spring. I have already written at length as to the fleeting "secondary nomenclature," as distinguished from the ancient and unchanging nomenclature of the ancient sites. These views are confirmed by our late experience, and although names of interest may have escaped the Survey party, or have been rejected as not resting on reliable evidence, the experience of our various revisions has been, that, unless a ruin had escaped notice, the additional names collected yielded nothing of any value.

I have, however, in the case of the names mentioned by Mr. Saunders examined the Map (Sheet XII), and subjoin the results of my investigation. It appears that our work agrees with that of Colonel Warren, but the nomenclature of M. Guerin cannot fairly be placed, I think, on an equal footing with that of the Survey, because it has evidently not been written down by an Arab scribe; while the hasty character of his journey would of course prevent his verifying the names which he has given. The names in question are as follows:—

NAMES COLLECTED BY COLONEL WARREN.

Sheet XII of Survey.

1. Wâdy Umm Karuby. This is probably Wâdy Umm Kharrûbeh, "valley mother of the locust tree," marked on the map, but not noticed by Mr. T. Saunders.
2. Wâdy Umm Dahideh. "Valley mother of the flock of camels," a name not on the map; apparently not important.

3. Wâdy Shiyeh. Apparently for Wâdy Sh'aïb. There were, unfortunately, some errors in the Arabic of Colonel Warren's list, as pointed out in former papers by M. Ganneau and by myself.
4. Wâdy Swaideh. Apparently named from Khûrbet Suweideh ; shown on the Survey.
5. Wâdy S'aidiyeh. Proper name ; the ford of S'aidiyeh, is marked on the map.
6. Wâdy Abu Jerad. "Valley father of locusts" (or perhaps "barren valley"), not named on the map.
7. Wâdy Belgod. The name Sidd el Belkawy occurs on the map near, applied to a cliff. This is probably the same ; and Belgod cannot well be an Arabic word.
8. Wâdy Abu Hashîsh. "Valley father of grass." The cliff of Abu Hashîsh is marked on the map.
9. Wâdy Ghor. This seems improbable, especially as it has no article. It is probably not a real name. The Ghor is the whole basin.
10. Wâdy Abu Sidra. The form Wâdy Abu Sidreh, "Valley father of the lotus-tree," occurs on the map, and is more correct than Sidra.

Thus out of ten names only two are really omitted on the map, though the rest are written to the objects whence the valleys are named. The two omitted do not seem to have any particular value.

NAMES COLLECTED BY M. GUERIN.

(Sheet XV).

1. Wâdy Rhazal. This is the French spelling of Ghazal. A spring "Ain el Ghazal" (of the Gazelle) is marked on this part of the Survey map.
2. Wâdy es Seder. Wâdy Abu Sidreh occurs on the map, but not apparently in the same order. There are many lotus-trees in this district, whence probably the name.
3. Sath el Rhoula. Probably Sâdet el Ghuleh ("Ghoul's Cliff"), not on the Survey.
4. Khurbet el Bridje. Apparently "Ruin of the little tower." Two are marked on the Survey.
5. Wâdy es Sekaah. Apparently for Zôkah-Râs ; Umm Zôkah here occurs on the Survey.
6. Hosh ez Zakkum. "The courtyard of the balsam-tree," apparently at Khûrbet Suweideh, whence the valley called Umm ed Deraj ez Zakkûm is shown descending on the map.
7. Wâdy en Nekeb. "Valley of the hollow," a name so common that it can hardly be called a local title.
8. Tell es Saidieh. Apparently out of place. The name occurs at a ford of Jordan near a tell a little further north.

9. Wâdy Asberra. This can hardly be an Arabic word. Probably some error has crept in. The name Sâdet et Ta'leb occurs here on the Survey, "cliff of the fox."
10. Wâdy Abu Sehban. This word also does not seem to be Arabic. The valley is called on the Survey Jûrat el Kutufi, "hollow of the St. John's wort"—a plant growing abundantly here.
11. Wâdy Kefr Anja. Unknown.
12. Wâdy ez Zarha. Apparently "broken valley." It is called Abu Hashîsh on the map; both names are of little value archaeologically.
13. Wâdy el Eurkan. "Valley of cliffs." This like the preceding would apply to any of the little valleys hereabouts, as they all have low cliffs. It is called Abu Lôz on the map.
14. Siret el Maazeb. "Fold of the summer grazing place." These folds are marked (there are several). The peasantry from the villages use them in spring. This formidable looking name is consequently nothing beyond a description given by the guide of what the enclosure was used for.
15. Khurbet es Sîreh. "Ruin of the fold." See preceding.
16. Wâdy Abu Sedra. Sidreh on the map, which is a more correct way of spelling the word, as the final Aleph is very rare.

Out of these 16 names, therefore, only Nos. 3, 7, 9, 11, can be fairly considered to be omissions, and of these one seems to be a mistake, and the others unimportant; unless it be Kefr Anja—a name not noticed by any other traveller.

The above comparison seems to show how necessary it is, both for the explorer and the critic, to be acquainted with Arabic, and especially with the local Syrian dialect, which presents many peculiarities in the use of topographical terms, which may be studied in the Name Indexes now published. It also serves to illustrate the contention that the names of the smaller valleys, especially in Bedawin districts, have very little importance for the antiquarian. Several misprints occur on this page of Mr. Saunders's work, *e.g.*, Katurj for Katwy, and Taleh for T'aleb.

C. R. C.

NEW IDENTIFICATIONS.

Mount Baalah (Josh. xv, 11). A relic of this lost name may perhaps be recognised in the *Wâdy el Baghl* (the *gh* representing one of the two Arabic equivalents for the Hebrew 'Ain), which runs into the Valley of Sorek from the north, on the west of Zoreah. The name appears to have applied to the Ekron ridge (see "Handbook to the Bible").

Bethsaida. Without entering into the controversy whether there were