

or of himself; nevertheless I beg to call attention to the circumstance that a ruined village named Kessijeh is marked on Van de Velde's map, near Betogabra, and somewhat to the south-west of it; but whether one can find a trace of Elkesei (by the omission of the Arabian article) in this name appears very questionable to me. But however that, may be, the object of this paper is attained if it prevents the tradition attributed to Epiphanius being rejected without further inquiry. The statement is so decided, and is not contradicted by anything in the book of Nahum, that it must have rested on some old foundation. Even if it is of no real historical value, it is yet of much consequence to the history of Biblical tradition, and beyond tradition we cannot in many cases advance.

Let me be allowed, in conclusion, to add a double reason for taking this into consideration. If the Arabians now call the old Betogabra indiscriminately Bêt-Jibrîn and Jebeil, and give "House of Gabriel" as the signification of the latter, this is only a case of popular etymology; the original meaning of the name is not merely "perhaps," as Robinson supposes ii., p. 620, note 2, but it undoubtedly is "House of Men;" this is proved by the Syrian form of the name. The small link in the chain of historical proof which Robinson missed in 1838, was discovered a few years later by Rödiger in a Syrian author. I can now produce a much more ancient and decisive piece of evidence in favour of the identity of Betogabra and Eleutheropolis from another Syrian book, namely, the "Doctriue of Addai," which was published by Philips in 1876, and which dates from the third century of the Christian era. In the first page of this book the town is mentioned "that is called Eleutheropolis, and Bêt-Gubrin in the Aramaic tongue."

MODERN RESEARCHES IN PALESTINE.

By Rev. SELAH MERRILL, D.D. (Abridged from the Bulletin of the American Geographical Society.)

BRIDGES OVER THE JORDAN.

BETWEEN Lake Tiberias and the Dead Sea there is at present but one bridge over the Jordan, and that is *Jisr Mejamiéh*, about six miles south of the Sea of Galilee. Just below this lake are the ruins of a once fine Roman bridge of ten arches, which was, no doubt, on the main route from Tiberias and Tarichæa to Gadara and the eastern cities and plains. On the Menadhireh, or ancient Hieromax, or Yarmuk (for the stream is known by all these names), which is the first tributary of the Jordan on the east below the Lake of Tiberias, there is a bridge of five arches, situated only a few miles from the point where the two rivers unite. The next and only other bridge of which there is at present any trace is one, now in ruins, at the Damieh ford, which was on the high road from Nablûs or ancient Shechem to Gilead and the East. This bridge

was originally Roman work, but there are evidences of extensive repairs by the Moslems or Crusaders. On the east side the bank is quite low, and the wide flat at that point is often overflowed; hence it was necessary to build a causeway across the low ground, which was done at great expense. I traced 450 feet of this causeway or eastern approach to the bridge, which was supported on arches, nine of which remain. The original length of this causeway was probably one hundred or more feet greater than that indicated by the figures which I have just given. The foundations of the abutments at the eastern end are still perfect. The bridge itself over the river must have been not far from one hundred feet in length. Formerly there were ruined piers in the stream, and my Arab guides said they used to swim to them; but they have been washed down by floods and are no longer visible. The foundations on the western side have likewise disappeared.

Roman civilisation demanded the convenience and luxury of substantial roads and bridges; and when some civilised power again gets control of Syria and the Holy Land, we may expect that these conveniences for travel and commerce will be restored.

At the present time, at Damieh, and also at Jericho, there are ferry-boats, run by strong ropes, which are stretched across the river. Once in the Bible, when David returned from Mahanaim, a ferry-boat is mentioned for carrying across the household and goods of the king (2 Sam. xix. 19).

WATER SUPPLY AND IRRIGATION.

The exploration which I conducted was the first that has ever been made of the entire valley on the east side of the river between the Lake of Tiberias and the Dead Sea. The general width of this half of the valley is from three to four miles, while in the Succoth region and on the Shittim plain it is from six to eight miles. The northern part of this valley, including all the portion between the Lake of Tiberias and the Jabbok, is not a desert, as has been supposed; for no less than a dozen streams, besides two respectable rivers—the Jabbok and the Hieromax or Manadhireh—flow down upon it from the hills, and most of them are living, *i.e.*, they flow all summer. The Hieromax is nearly as large as the Jordan itself where this leaves the lake. In February and March this portion of the valley resembles New England in the month of June. The soil is then burdened with its own productions. By the last of May the weeds, thistles, and wild mustard have become so rank that they are as high as a man's shoulders on horseback, and it is almost impossible to drive a horse through them. This portion of the valley is, perhaps, thirty-five miles in length.

South of the Jabbok or Zerka, for about twenty miles, or as far down as Wady Nimrin, the soil is quite barren, except during the winter months, because there are no fountains or streams among the hills to send down water upon the plain. It may be necessary to state that the barrenness of the soil in this portion of the valley is only apparent,

since it is naturally fertile, and, if it could be irrigated, would become as fruitful as a garden.

From Wady Nimrin to the Dead Sea, a distance of about fifteen miles, lies the great Shittim plain, watered by three copious streams, which make it a rich and beautiful oasis. The Bible, in speaking of the eastern half of the Jordan plain, divides it according to the natural oases, which doubtless existed then as they do at present, namely, Beth-haran, Beth-Nimrah, Succoth, and Zaphon. The Talmud, in its physical divisions of that portion of Perea, follows the same order as the Bible (Josh. xiii. 27). Beth-haran was the south and middle portion of the Shittim plain; Beth-Nimrah was the northern portion; Succoth was the region just north of the Jabbok; while Zaphon, meaning the north, ran up to the Sea of Galilee. (The Talmud, however, appears to identify Zaphon with the oasis about Wady Rajib, where the city Amathus stood, which is now represented by Tel Ammata).

I have made a careful examination of the Jordan valley on the east side of the river, throughout its whole extent, with special reference to its being irrigated from the Jordan itself, and I am convinced that the project is a very feasible one. Every square mile not now irrigated could be watered from the Jordan, and the expense for dams and canals would be small compared with the large amount of valuable land that would thus be made productive. If we reckon the valley at seventy miles in length, and three miles in average width, we should have one hundred and ten square miles of land as fertile as any prairie, and which, at twenty-five bushels per acre, would produce between three millions and four millions of bushels of wheat. In this calculation it will be observed that I make no estimate for the valley on the west side of the river.

Here is a vast valley, and the means for making it one of the most fertile and productive on the globe, lying side by side, waiting for the skill of man to bring them into conjunction.

It is an interesting fact that while in the valley itself there are almost no ruins, there are a good many in the foot-hills; and these are situated in every case on the watercourses which I have mentioned, in such a way that while they had a good head of water in the fountain or stream behind them, they had spread out before them the fertile plain with its marvellously winding river, beyond which the hills of Western Palestine rose in grandeur. I have visited thirteen such ruins, and some of them I judge to have been places of wealth and importance.

If it should be objected that this valley, on account of the malaria and terrible heat, could not be inhabited, these ruins can be pointed to as evidence of its former condition of populousness and prosperity. Besides these ruins in the foot-hills, there are others on some of the tels or mounds in the Jordan valley, particularly those on the Shittim plain.

It should also be mentioned that certain tribes of Arabs live in the valley nearly or quite all the year round. People born there can live there well enough.

HOT SULPHUR SPRINGS.

One of the interesting facts connected with the Jordan valley is that of the *Hot Sulphur Springs*, which exist at various points. Those at Tiberias are best known, perhaps, because they were very famous as a healthful resort in antiquity, and are still frequented by multitudes from all parts in search of health or pleasure. South of the Lake of Tiberias, and about one hour above the point where the Hieromax leaves the hills, are the hot springs of Gadara. Between this and the Jabbok I succeeded in bringing to light two groups of hot springs not previously known—at least they are not mentioned by Ritter or Robinson, or even in the recent scientific work of Lartet. One of these is just north of the site of ancient Pella, on Wady Hammat Abu Dhableh, and the other is at the mouth of Wady Zerka. At Tel el Hammam, on the Shittim plain, there is another, and east of the Dead Sea, on the Zerka Main, is the famous group to which the Greeks gave the name of *Callirrhoe*.

There is good reason for supposing that the springs at Tel el Hammam, on the Shittim plain, are those which Herod the Great visited during his last illness.

The springs at Tiberias and Callirrhoe are the hottest, while those at Callirrhoe and Gadara send forth the greatest volume of water. I was most interested in those at Gadara. There are four of them in one group, and a few miles up the valley is another, almost equal in size to the four just mentioned combined. The temperature of these springs is respectively, 115°, 103°, 92°, 83°, and 112°. That one which has 103° temperature is the largest of the group of four, being sixty or more yards in length by thirty in width, and the average depth of the water is six feet. In it is a small floating island, covered with canes and reeds. I swam in this spring as many as fifty strokes in a straight line, and a more delightful bathing-place I never saw. That one which has 115° temperature I found was a little hotter than I could endure, although the Arabs who frequent the place prefer it.

As these springs are considered healthful, some suitable for one and others for other complaints, the ground about them is by common consent regarded as neutral, and friends and foes meet here in peace. If the water flowing from the three hottest of the four springs forming the group just referred to were united, I estimate it would form a stream twenty feet in width and eighteen inches in depth, with a rapid current.

There are extensive ruins about these springs, including a beautiful theatre. After the destruction of Jerusalem the Jews had a flourishing school at Gadara, and the rabbis used to visit these springs and walk for recreation along the bank of the river. If El Hamma, as this place is now called, could be rebuilt, it would become not only one of the most attractive resorts in Syria, but one of the most interesting in the whole world. At present it seems a pity that these delightful and

healing waters should flow on for ever without being enjoyed by those who would both appreciate and be benefited by them.

In connection with the hot spring which I discovered near Pella, at Wady Hammat Abu Dhaleb I found also a fine natural bridge spanning the deep ravine just above the spring. It is from twenty to thirty feet wide, eighty to one hundred feet high, about two hundred feet long, and its single great arch is twenty-five or thirty feet in height at the highest point. The Wady runs from east to west, the banks are very steep, and the bridge forms a striking object when looked at from below.

ARTIFICIAL TELS OR MOUNDS.

I wish also to call attention to the *tels* or mounds which exist in the Jordan valley, because, as some of them are wholly or in part artificial, they carry us back to the Canaanite, or to the pre-Canaanite period, and may help us in solving the problem of the site of the "cities of the plain" that were destroyed.

These mounds appear in groups. There are some interesting ones around Lake Merom, on the Upper Jordan. Again, in the Succoth region, just north of the Jabbok, there is a second group. And, finally, on the Shittim plain there is a third cluster, which deserves our careful study.

Independent of any historical evidence on this point, I think my researches have established the fact that, with regard to the Jordan valley, the flat land was never occupied by cities and towns of importance, but that these were situated either in the foot-hills or upon natural or artificial mounds in the plain. In connection with the lowlands, cities are several times mentioned in the Bible as occupying *tels*; while in the valleys of the Tigris and the Euphrates, a city presupposed a mound on which it was built. There is a statement in Numbers xiii. 29, which shows that the Canaanites lay along the Jordan Valley, and their occupation of it may have extended back into the remotest times. A decisive proof that these *tels* were the sites of cities or towns is the fact that several of those in the Lake Merom and the Jabbok groups have ancient ruins upon them; and further, all the mounds, without exception, on the Shittim plain, are covered with ruins, and at least three of these we are able to identify with places which existed in the time of Joshua. Hence it follows, that if we are to look for the site of ancient cities, no matter how ancient, in the Jordan valley, we must first of all examine the *tels*.

One of these *tels* in the Succoth group bears the name of Der-'Alla; and Neubauer, in his "Geography of the Talmud," states that Succoth was called Ter'allah. These words are identical, with the exception of the two initial letters, *t* and *d*, which often interchange. My opinion is, that we have here a clue to the identification of the Succoth which is connected with the history of Jacob. From certain indications, I suspect that cuttings into this mound would reveal ancient remains, which, even

if they did not consist of numerous objects of gold and silver, such as have rewarded Dr. Schliemann's excavations, might, nevertheless, be extremely important in elucidating the history and antiquities of this valley. Somewhere in this immediate region were the brass founderies of King Solomon, where the metal work for the temple was cast; and as the same physical conditions exist now that existed in Solomon's time, it is not improbable that future researches and excavations may enable us to point out the exact locality where that work was done.

It may be well to notice the fact that, at certain points along the valley, there are slight elevations, which may be called *littoral mounds*. They are, however, not remarkable in any way, and have no importance to deserve our notice. This fact is referred to because a certain critic of my work, who withholds his name, has stated that all the mounds in the valley were "*mere littoral mounds*." With all due respect, I must say that this critic writes without any adequate knowledge of the facts, and that the mounds of which I am speaking are beyond dispute wholly or in part artificial. My chief reasons for this opinion are—1st. That in a few cases, where they have been cut into, ruins, walls, pottery, and bricks have been found. 2nd. Columns, capitals, and fine squared stones project from the ground, suggesting the existence of buildings there in ancient times. 3rd. Supporting walls exist in a few cases, formed of several tiers of great boulders or blocks of unhewn stone, which are four or five feet thick, eight and ten, and even twelve feet long, and six feet wide; and in two or more cases, where the walls formed angles, there were foundations apparently for towers.

THE SHITTIM PLAIN.

But I wish to direct especial attention to the Shittim plain, which is about fifteen miles in extreme length by seven or eight in width. With it I include now the oasis of Nimrin, which is at the north end of this plain. Here is situated Tel Nimrin, covered with ruins, which corresponds to the Bethennabris of Josephus (*War.*, 4, 7, 4), and likewise to the Beth Nimrah of the time of Joshua.

For the sake of convenience, I will consider the section south of the Nimrin oasis as the Shittim plain proper. It is watered by two fine streams, which pour down from the mountains in Wady Kefrein and Wady Hasban.

In some respects this plain, as thus defined, is one of the most interesting portions of the Holy Land. Among the memorable historical events connected with it may be noticed the sin of the Hebrews with the Midianites, and the terrible retribution visited upon those idolaters; also the completion of the law, and the farewell of Moses; the sending forth of the spies to Jericho, and the final preparations before crossing the Jordan.

We find here five remarkable tels, namely: 1. Tel Kefrein, which corresponds to the Abila of Josephus, and to Abel Shittim of Joshua's time. 2. South of this is situated Tel er Rama, which corresponds to

the Beth Ramtha of Josephus, and to the Beth Haram (or Haran) of Joshua. Herod Antipas rebuilt or fortified this place, as it belonged to Perea, which was a part of his territory, and, in honour of Julia, the wife of Augustus, gave it the new name of Julias, or Livias, for it bears in history both these names. There is sufficient ground, I think, for supposing that here the notorious feast was held when John the Baptist was beheaded. This point is one of the localities where I am particularly anxious to make excavations. 3. Following still south an irregular line from Tel Kefrein, and Tel er Rama, we have a place called Suweimeh, which, from its position near the Dead Sea, also from its distance from the other places as indicated in the Talmud, Eusebius, or Josephus, and from the signification of the name, I think should be identified with the Bezimoth of Josephus, and with the Beth Jeshimoth of Joshua. When the Hebrews came down from the mountains of Moab, they pitched from Beth Jeshimoth on the south, to Abel Shittim on the north, and their tents must have covered the whole plain. At the time of Josephus, Abila and Livias, and perhaps also Bezimoth, enjoyed the rank of cities. Between this irregular line already referred to as running north and south, and the Jordan, I crossed the plain in several directions, but found no ruins of any kind, nor any mounds of any importance. But between Tel Kefrein and Tel er Rama on the west, and the mountains on the east, there are two important tels which remain to be noticed. These are Tel el Hammam in the north, where there are extensive ruins and a hot spring; and Tel Ektanu in the south, about two miles from the other, on which are some of the oldest ruins that I have yet seen in the country. As to Tel el Hammam, I have been unable thus far to find any clue to its ancient name.

Of Tel Ektanu I shall speak further, when considering the site of Zoar.

Let me ask you to bear in mind the fact that what I have called, for convenience, the Shittim plain proper, *i.e.*, the southern and main portion of the whole plain, has upon it a group of five tels or mounds, situated only a few miles from each other, all of which have ruins upon them, and three of which we can identify with cities which existed in the time of Joshua. I think we have a right to suppose—indeed, the historical notices are conclusive on this point—that these cities did not spring up in Joshua's time, but that they existed upon these sites from the earliest occupation of the valley.

In making any suggestions in regard to

THE SITE OF ZOAR,

about which there have been various theories, it will be necessary to notice the account of the view which Lot had when he stood with Abraham on a hill near Bethel and looked down the Jordan valley towards the Dead Sea (Gen. xiii. 10). As the tenth verse of the thirteenth chapter of Genesis is rendered in our English Bible, the sense is not

very clear; but it will become so when we read, as we should, all the middle portion of the verse as a parenthesis, as follows:—

“And Lot lifted up his eyes and beheld all the plain of Jordan (that it was well watered everywhere, before the Lord destroyed Sodom and Gomorrah, even as the garden of the Lord like the land of Egypt), until thou comest to Zoar.”

The last clause qualifies the first. Lot saw all the plain of Jordan as far as Zoar, or until you come to Zoar. Zoar was both the limit of the plain and the limit of his vision in that direction, as far as the land was concerned. How much of the Dead Sea he saw is not stated; but no human vision, unless miraculously aided, could reach to the southern end and distinguish anything; while from the point where he stood the greenness and beauty of the great Shittim plain are distinctly seen. I make this remark because it has been advocated by some writers that the Zoar of Moses and Lot's time was at the south end of the Dead Sea. Such persons suppose it to be implied in the passage just quoted, that Zoar, *thus situated*, could be seen from the point where Abraham and Lot stood. But I think it is to do violence to the language and to the facts of the case to attempt to make the phrase “all the plain of the Jordan” include the salt marsh at the southern end of the Dead Sea, which is fifty miles from that river, and has nothing to do with it. Indeed, the region there belongs to another water system altogether—entirely distinct from that at the northern end of the sea, with which the Jordan is connected (compare the significant phrase found in Josh. xv. 5, “unto the end of Jordan”).

The plain which Lot saw as being “well watered everywhere” would continue so unless such great geological changes followed or accompanied the destruction of Sodom and Gomorrah as to cut off the water supply from the neighbouring mountains, which is nowhere stated or even hinted at, nor are there in the region itself any geological evidences of such a change or convulsion.

If Lot saw the plain of Jordan as far as Zoar, and observed that it was well watered everywhere, the inevitable conclusion is that the place must have been at the north end of the Dead Sea. This is an important point gained. It is a fact which cannot be ignored, and which must be considered in any discussion of the question of the site of ancient Zoar.

The same fact is brought out in the account given in the thirty-fourth chapter of Deuteronomy of the view which Moses had of the promised land, including the Jordan plain. The statements in this passage are clear and the order of events is systematic. Moses, we will suppose, was standing on the summit called “Siaghah,” near to Mount Nebo, or one of the Nebo group of hills. He first looked north and saw Gilead and Naphtali; then, turning to the west, he saw Ephraim, Manasseh, and all the land of Judah; he next turned to the south; and he finishes by looking down upon “the plain of the valley of Jericho unto Zoar;” and this plain and valley, at whatever point Zoar was situated, were at his very feet.

One, standing where he stood, cannot fail to realise the force of the Hebrew words of the third verse of the chapter just referred to, namely, *ciccar*, which includes the plain on both sides of the river; and *bikath* (valley), which signifies a great cleft between mountains. The mountains appear here as if they had been spread apart, and the plain been sunk far down between them.

If Zoar is to be located at the southern end of the Dead Sea, this passage in Deuteronomy becomes confused, and the words "the plain of the valley of Jericho unto Zoar" have no intelligible meaning. Hence the view of Moses, like the view of Lot, appears to bear directly upon the question of the site of Zoar. And it is so evident that it hardly needs to be stated, that any hints bearing on the true site of this city help us also in attempting to locate the sites of what are called the "cities of the plain."

I will now give a summary of the main facts bearing upon this question:

1. A tradition has existed in past ages that the cities of the plain were submerged. Indeed, I have seen, in ancient maps, Sodom, Gomorrah, Admah, and Zeboim represented, at convenient distances from each other, at the very bottom of the Dead Sea. For instance, Thomas Fuller's quaint book, "A Pisgah Sight of Palestine," A.D. 1650, has a map which places them in this manner; and represents them as enveloped in flames, notwithstanding the fact that they are 1,300 feet deep in water. But for this tradition there is no warrant in the Bible; and, besides, it is established beyond dispute by geological researches that the surface of the Dead Sea was never *less in extent* than it is at present. During past geological periods it has gradually contracted to its present limits. I have myself traced an old shore-line distant about two miles from the present one. It is evident, beyond question, that the sites of these cities are not to be looked for at the bottom of the sea.

2. The supposition that the shallow water south of the peninsula, or el Lisan, covers these sites has, for the same reasons, no foundation, and is to be abandoned in like manner. Dr. Robinson advocated this theory; but I am sure he would have been the first to reject it had the geological facts been known to him which modern researches have brought to light.
3. There is no warrant in the Bible for supposing that the *sites* of these cities were destroyed when the cities themselves were, or that they were obliterated, or that the region about them became desolate in consequence of their destruction. Indeed there is a passage in Deuteronomy (xxxii. 32) where "the vine of Sodom and the fields of Gomorrah" are spoken of in such a way as to indicate that this was far from being a barren region.

4. If the region where these stood was once fertile, it must always have remained so, unless, as I have before stated, some great geological change cut off the water supply from the neighbouring hills.

5. The region at the southern end of the Dead Sea is a salt marsh and desert, with only a narrow belt of inhabitable land skirting its

eastern border at the foot of the mountains. It is not now and never has been a suitable place for cities.

6. On the other hand, at the north end of the Dead Sea, there is a large and fertile plain, which has been occupied by flourishing cities ever since the days of Moses and Joshua at least, if not from a period much more remote.

7. In speaking of the *tel* system of the Jordan valley, I have shown that the ancient inhabitants built their cities upon natural or artificial mounds, and not down upon the flat lands of the plain itself; and I have stated the fact that such *tels* or mounds, covered with ruins, exist at the north end of the Dead Sea, while there are none at the southern end.

8. As we can identify some of these *tels* with places which existed in Josephus' time, and still farther back with cities which existed in the time of Joshua, it is not unreasonable to suppose that these *tels* were occupied by cities in the time of Lot and Chedorlaomer. If we have historical evidence that these mounds were eligible sites for cities for a period of fifteen centuries before the time of Christ, and during that period were occupied for that purpose, we may be justified in supposing that they were thus occupied from the earliest advent of man in that part of the country.

9. With regard to the account of the view of the Jordan valley which Lot had or of that which Moses had, in both of which Zoar is mentioned, any justifiable rules of interpretation compel us to look for the site of Zoar, which was one of the doomed cities, at the north end of the Dead Sea.

10. Only five sites are required, namely—Sodom, Gomorrah, Admah, Zeboim, and Zoar; and on the Shittim plain we have exactly five sites—Tel Kefrein or Abel Shittim, Tel er Rama or Beth Haram, Suweimeh or Beth Jeshimoth, Tel el Hammam and Tel Ektanu.

11. What are termed the "cities of the plain" appear to have formed a group in rather close proximity to each other, because cities that are many miles apart cannot be said to be destroyed by one and the same conflagration. Hence, if we find their sites at all, we should expect them to be quite close together; and this is precisely the case with the five sites to which I have just referred.

12. It is important to remember that Zoar formed one of the group that were to be destroyed. It was near the others and in the same plain with them, but nearer the mountain than any of the rest. As Lot, who had no time to flee to the mountains, wished to make this city his temporary refuge, it was spared on his account.

13. In the account of the catastrophe, all the time allowed to Lot to flee from Sodom to the "little city," which was his temporary refuge, was from dawn to sunrise. The fatal objection to all the hitherto proposed sites of the "little city" is that they are several times too far from the scene of the disaster, whether the cities that were destroyed are placed at the south or at the north end of the Dead Sea. Zoar, consequently,

must form one of a group of cities, as I have said, and this fact must be borne prominently in mind in any attempted identification of its site.

These thirteen facts, now stated, seem to be fair and reasonable. They are forced upon us by an examination of the Hebrew record of the event, in connection with careful researches upon the ground itself; and they all appear to have a legitimate and important bearing upon the question which we are trying to solve.

But is it possible for us to come to any more definite conclusion as to the site of ancient Zoar? I think we are able to decide with strong probability, if not with absolute certainty.

In the group of mounds which exist on the Shittim plain I have referred to one called "Tel Ektanu." This is in some respects the most remarkable one of all this cluster of ancient sites. In the first place, the ruins upon it appear to be of a very great age. Again, its position deserves notice, since it is nearer the mountains of Moab than any of the others; and although it cannot be reckoned as one of the foot-hills, it is so situated as to command an extensive view of the whole plain around and below it. I learned the name from some of the most intelligent of the Arabs who belong in that region—questioning different persons on different occasions, that there might be no mistake about it. They could, however, give no account of the origin and meaning of the name, except to say that it was very old. They said, also, that the ruins upon this *tel* were the most ancient of any that were known to them.

The name itself has no meaning in Arabic, and we are compelled to look elsewhere for its origin and signification. It appears to be the Hebrew word "Katan," which means *little* or *the little one*. Zoar has the same meaning, and the two words are synonymous. This signification is appropriate for this *tel*, as compared with the others. It is a well-known fact that the Phœnicians had, in ancient times, one or more cities named "Katana" or "Katane."

If the cities that were destroyed were at the north end of the Dead Sea, this Tel Ektanu would be exactly in the direction which Lot would take, if his intention was to hasten to the neighbouring hills, or towards them, for safety; and its distance from the rest of the mounds corresponds well with the time allowed the fugitive—namely, from dawn to sunrise.

The fact that one Hebrew word has been substituted for another identical with it in meaning, *i.e.*—*Katan* for *Zoar*, ought not to be urged as an objection to identifying Tel Ektanu with the site of the "little city" to which Lot fled, provided all the other circumstances of the case point to it as the real one. Besides, it is much easier to understand how this substitution could have taken place than it is to understand how the name "Bela," by which this place was known in Chedorlaomer's time, could have given way to Zoar.

The anonymous critic already referred to thinks he has overthrown this whole attempt to identify *Ektanu* with the Hebrew word *Katan* by

asserting that "these words resemble each other only in their English transcription—the *t* of Katan being the Hebrew *teth*, and the *t* of Ektanu being the Arabic *ta*—two letters," he continues, "*which never interchange.*" To which I reply that we have the Hebrew word *Katal* written with a *teth*; while the same or a corresponding word in Arabic, *Katala*, is written with a *ta*—precisely the change which this critic says can never occur. If this person had examined any standard Hebrew grammar or lexicon, he would have seen that the change which he asserts is impossible is recognised by the authorities as existing and occurring in certain cases (see Gesenius, Fürst, Böttcher, Ewald, and others).

To sum up, I would say that, in my judgment, they are not merely accidental circumstances: 1. That this *tel* should be one of a group of five, the exact number required by the Scripture narrative, and all of them ancient sites. 2. That it should be in the same plain, but nearer the mountains of Moab. 3. That the direction and distance should correspond minutely with the requirements of the Biblical account. 4. That the ruins upon it should be some of the oldest in the country. 5. And that the name it bears should have no meaning in Arabic, but be apparently the Hebrew word signifying "the little one," which is the precise meaning of the name of the place to which Lot fled.

After a thorough examination of the region itself, and a careful consideration of all the facts bearing upon the question, I think there are unanswerable arguments in favour of the opinion that the "cities of the plain" were situated at the north end of the Dead Sea, and upon the mounds whose names I have given, and that Tel Ektanu is identical with the site of ancient Zoar.

It is a matter of great interest to know that some of the apparent difficulties connected with the Bible have been solved or dissipated by the researches that have been made in the Holy Land. One of these is with regard to the vast number of inhabitants which the country is said to have possessed, and the great fertility which it is alleged the country formerly enjoyed. And in the time that remains to us this evening, I propose to invite your attention to a *general summary of the evidence for the fertility and populousness of this region east of the Jordan in ancient times.*

I. Let us glance first at the *people* who have occupied this region. 1. For some centuries previous to the Moslem conquest, in A.D. 635, the population was largely Christian, industrious and peaceful, with churches and schools, enjoying the benefits of education and religion. 2. Before them were the Romans, who filled the land with temples and public works, which they adorned with the highest art. 3. Before the Romans were the Nabatheans, who are described as united and peaceable, enterprising, and considerably advanced in culture and wealth. When a Greek army was sent by Antigonous, the successor of Alexander, three centuries before the birth of Christ, against Petra, their capital, they were routed and slaughtered by these little-

known people of the desert. This was the first introduction the Greeks had to these inhabitants of the desert; and the Assyrian records which have recently been brought to light show that six or seven centuries before Christ, the Nabatheans were a powerful kingdom, and able to offer a formidable resistance to the disciplined armies from the Euphrates. 4. As we cannot give accurate details of the period intervening between the Nabatheans and the Hebrews, it will be sufficient for our present purpose to mention the Israelitish occupation, when the desert bounded their country on the south and east, the Jordan on the west, and Mount Hermon on the north. The children of Israel—*i.e.*, the two and a half tribes that occupied that region—were possessed of wealth, and could at one time command over forty thousand valiant men of war. 5. Before the Hebrew invasion under Moses and Joshua the land was occupied by the Amorites, under the leadership of the famous Kings Sihon and Og. 6. And history reaches yet further back, even to a race of giants who had flourished and grown old upon this soil, and whom the Elamite King Chedorlaomer once subdued, at least six centuries before the time of Moses. I have found in at least half a dozen places east of the Jordan some remarkable Cyclopean remains, which I have good reason for supposing date from the people called "the giants," or the people that had flourished and grown old here before the advent of the Hebrews. If we except the twelve centuries that have elapsed since the Moslem conquest, this region has always been inhabited by people who were distinguished by enterprise and strength, or by intelligence and wealth.

II. Again, we learn from the cuneiform records that the provinces east of the Jordan and the Dead Sea were invaded by the Assyrian armies as many as six or more times previous to the year 600 B.C.—a fact which shows that these lands, with their cities and people, were regarded by those Romans of Asia as enviable objects of conquest. It is noticeable that these stone pages of history mention that the conquerors took back with them from this region immense spoil—silver and gold and camels and costly articles, that had been captured or paid as tribute or ransom to the victorious king.

III. One of the most striking and convincing proofs of the populousness and the prosperity of this region in ancient times are the ruins which literally dot its surface from the Jordan and the Gilead hills east and south to the very border of the desert. Whoever has passed through this East-Jordan land is surprised at the number and magnificence of these ruined towns. Amman and Gerash, Kunawat and Bozrah, vie with Palmyra and Baalbek in the splendour and beauty of their ruins. At Gerash two streets ran through the city, crossing each other at right angles—one of them over a mile in length, and both of them were lined on either side with columns. Three hundred columns still stand upright amid these ruins—a mere remnant of the forest of columns that once adorned this city, which does not now boast of a single inhabitant! We speak of the "multitude of ruins;" of the surface of

the country being "dotted with ruined towns;" let us look closely at the evidence and see for ourselves that these general statements are not exaggerations. The accurate Wetzstein, a former Prussian consul at Damascus, whose book is a standard work upon the Hauran, counted, from the castle at Bozrah, on the plain about that city, as many as thirty ruined towns. Dr. J. L. Porter, who by his researches and writings has rendered very important service to Biblical geography, stood once upon the castle at Salchad—the Salcha of the Old Testament—and counted not less than thirty ruined towns and villages from that commanding spot. From the ruins of Melah es Sarra, some hours east of Salchad, the Rev. W. Wright, formerly a missionary in Damascus, counted as many as fourteen ruined towns within sight from where he stood—i.e., in the south-east direction toward the desert. At 'Are an intelligent Druse, from whose house-top I overlooked the surrounding country, pointed out to me upwards of forty ruined cities and towns, most of which he called by name. Clustering about Kunawat, the Kenath of the Old Testament, there are the ruins of a dozen or more important places, some or all of which, in ancient times, were doubtless dependant upon the chief or central city; so that the group strikingly illustrates the Hebrew phrase, "Kenath with her daughter towns." The places already referred to are either south or in the most southern part of the Lejah, the Argob of the Old Testament; while the northern part of the Lejah, and the eastern and the surrounding plain, is likewise covered with ruins. Consul Wetzstein is authority for the statement that this eastern section of the Lejah and the slopes of the Hauran mountains contain at least 300 ruined cities and towns. It should be mentioned that a town of ordinary size contains 600, 800, or 1,000 houses. In the ancient Gaulanitis, lying between the Lejah and the Lake of Tiberias, Dr. Porter has stated that he had a list of 127 towns and villages, all of which were deserted with the exception of eleven. Among these random data no reference has been made to the cities, towns, and villages in the Gilead hills, in the Jaazer region, directly north of Heshbon, or in Moab, where they are numbered by scores and hundreds. I think that, taking the country from north to south and from east to west—go where you will and in whatever direction—you will come upon an important ruin in every half-hour of travel. I do not know where else on the face of the earth there is anything to equal or even to compare with the ruin-dotted surface of this East-Jordan land. Among these ruins I have myself visited and examined upwards of *sixty ruined churches*. I have examined and measured eleven of the *thirteen theatres* which there exist, including one vast *Naumachia*, or place where mock sea fights were held. The smallest of these would seat 3,000 people; and the largest, at Amman—the *Rabbath Ammon* of the Bible—which I measured a few months ago, would actually seat 10,000 people. Of these theatres the one at Kunawat, the two at Gerash, the one at Bozrah, one of those at Amman, and one of

those at Gadara, could easily be repaired and made ready for use again, at an expense of only a few thousand dollars. Three theatres at Gadara, two and a naumachia at Gerash, and two at Amman—how could the citizens of these places have needed so many costly structures of this kind? At the warm springs of Gadara, three miles from the city, there was a beautiful theatre, for the accommodation of those who frequented this famous pleasure-resort of antiquity. It is possible that the smallest of these theatres may have been roofed over, but generally they were open to the sky, unless covered by awnings. In some cases they were so built as to command a fine view of the surrounding country. That one in the western part of the city of Gadara, is especially worthy of notice on this account. The view is not only extensive but beautiful and magnificent. The spectators from their seats, while enjoying the play, could overlook the finest portion of Palestine. Five great fortresses were in sight; the whole country, from white-capped Hermon in the north far down towards Jericho in the south, filled with flourishing cities and towns, was before them in the distance; and sunk below them to a vast depth was the Jordan valley, with the river winding through it; while almost at their very feet was spread out the charming Sea of Galilee, covered at that time with vessels, and surrounded with cultivation and life. And as this is but a specimen of the marvellous views which may be obtained from many of the mountain summits of the Holy Land, I sometimes feel that I can forgive its ancient inhabitants for choosing these hill-tops as sacred places. Yet it should be remembered that the grooves, the attractive scenery—all that was beautiful and enchanting in such localities as these, could not save the people from the grossest idolatry and the most lascivious rites.

IV. I have mentioned that I visited as many as *sixty ruined churches*. But I visited only a portion of those that still exist; and how many existed in former times it is now impossible to tell. Among these were cathedrals; and several of the larger edifices must have been erected at great expense, since they are spacious, splendid structures, and adorned with the highest art. And to give a hint of the extent of Christian influence in this region during the early centuries following the birth of Christ, I will mention that at one time Bozrah had seventeen bishops subject to its archbishop, and Damascus, Scythopolis or Betshean, and Petra, had respectively twelve, seventeen, and twenty-three bishops subject to their archbishops. The ecclesiastical provinces of Damascus and Scythopolis included some territory not embraced in the East-Jordan district which we are especially considering; but with this small reduction the bishoprics that remain are numerous, and the churches were no doubt reckoned not by scores but by hundreds.

V. A fifth fact illustrative of the condition of this country in former times is that of the Roman roads. According to my own estimate, which I have made with considerable care, there were east of the Jordan, between Petra on the south and Damascus on the north, not less than 500 miles of road, touching all the important cities in that region and

leading to the seaboard. These roads were built upon honour. The engineers were skillful, and the workmanship was substantial and enduring. Some of their bridges still remain, together with perfect sections of their roads here and there—surprising monuments of the character of the Roman people. Hills were cut down, streams were bridged, a solid road-bed made of gravel, sand, and cement; on this bed a pavement of squared stones was laid; the line of the road, wherever the country would admit of it, was as straight as an arrow; the width of the roadway was pretty uniformly twelve feet; each side was lined with curbing-stone; and at proper intervals there were stations for watchmen and overseers, and others for relays of horses. On these roads they travelled one hundred, and sometimes two hundred miles in twenty-four hours; and at certain points I have found the ruts which were worn in the pavement by the chariot wheels. Whenever in "the wilderness beyond Jordan," I find a section of a Roman road that is well preserved, I always stop to admire the substantial workmanship which it displays, and especially to reflect upon the character of that government and people—that state of civilisation which demanded such convenient but costly means of intercourse. What a contrast in this respect between the Romans and the Turks! *Those* a people who made the land a paradise; *these* a people who turned the paradise into a desert.

VI. A sixth fact which must be considered in judging of this country in former times is that of the *inscriptions*. Perhaps 2,000 Latin, Greek, Nabathean, and Palmyrene inscriptions have been collected here, which furnish a multitude of details with regard to the government, religion, arts, and social life of the different races and peoples that once flourished on these now deserted and desolate plains.

VII. A seventh fact bearing on this subject is the evidence which the existing remains afford of the complete system of *irrigation* which the ancient inhabitants perfected and employed. Details with regard to the numerous wells, cisterns, aqueducts, and vast reservoirs which were provided, cannot now be given; but we will simply refer to the valley of the Jabbok as an illustration. This valley is perhaps seventy miles long, and half a mile to two miles in width; and in ancient times every acre of it was reached by irrigating canals. Only the best portions of it are now under cultivation. The present owners of the soil never dig any canals; but whenever they wish to plant a certain piece of ground, they clear out and repair an old one. The Arabs say they did not make these canals, and that their fathers did not make them; but they have existed here from the oldest time. Some of these I have traced for five or six miles along the side of the hills or mountains, and the skill displayed in their construction—leading them under ledges and around bold, rocky headlands—shows that their builders had more means and intelligence than any people that have been settled here since the Moslem conquest. These could have been built by the Romans; but as this valley was settled

and cultivated in the Hebrew times, it is more probable that they date originally from that remote period.

With regard to the populousness of the country east of the Jordan in ancient times, I think the evidence is cumulative and overwhelming. In every age previous to the Moslem conquest in A.D. 635—running clear back to the time of the giants—this land has been thickly inhabited, generally by intelligent and wealthy people. Churches, theatres, palaces, temples, castles, baths, porticos, splendid roads, a multitude of inscriptions, remains of a perfect system of irrigation, historical notices of cathedrals, bishops, and a wide-spread Christian influence, notices of conquests and vast spoils falling into the hands of the victors, authentic notices of many successive and powerful races that have flourished here, and the surface of the whole country dotted with ruined towns, cities, and villages, are convincing proofs that the statements found in the Old Testament respecting the numbers of their armies and people may be accepted, so far as the capacities of the soil for supporting such a population are concerned, as the literal truth.
