

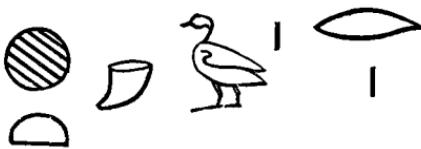
237. *Artha*, probably Aradus .... .... .... C. R. C.  
 252. *Sur* appears to be Tyre .... .... .... C. R. C.  
 254. *Nuzana* (also noticed with Tyre in the Mohar's journey) seems to be a stream or town by a river, probably the Kasimiyeh.  
 280. *Pederi* =Pethor, near Euphrates.  
 308. *Amak*, perhaps the present 'Umk plain preserves the name near Antioch .... .... .... C. R. C.  
 264. *Karshua*, perhaps Karis .... .... .... C. R. C.  
 311. *Khalbu*, =Aleppo .... .... ....

Among the Hittite allies at the battle of Kadesh were the Karkish or



Kalkish, whose names may survive at the later Calchis—a town of this name existed south of Baalbek, and another near to Aleppo. The Dapur conquered in this campaign may be *Dibl* east of Tripoli.

In this same connection it may be interesting to note the hieroglyphic characters which denote the famous city of Kadesh. Two at least of these emblems are identical with signs used on the supposed Hittite texts.



In the same connection the name of Kheta Sar, as written in hieroglyphic, is also of interest, including as it does the Egyptian emblems for the name of the Hittites.

C. R. C.

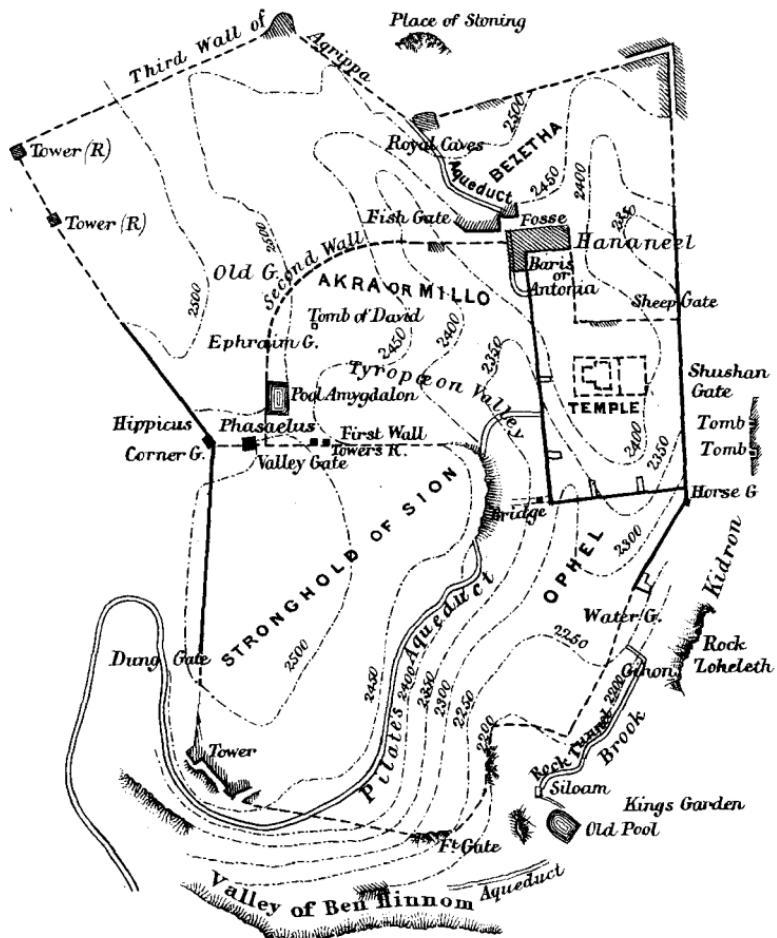
## JERUSALEM OF THE KINGS.

WITH due deference to Professor Sayce, and to those who may agree with his views, I should like to be allowed to ask a few questions concerning the sketch and the two papers which he has contributed to the last *Quarterly Statement*. It is, no doubt, possible that the long list of authorities who agree in substance in regarding the Jerusalem of the Old Testament as approximately identical with the modern city may be wrong, and Professor Sayce, who confines its site to the Ophel spur, may be right. I do not, however, gather that any new fact unknown to Robinson, Williams, Lewin, Tobler, Thrupp, and Warren is brought forward by Professor Sayce in support of his views, and I think I may say with considerable confidence that there are facts represented on Sir C. Warren's plans and recorded in the reports of the exploring officers which militate very strongly against Professor Sayce's views. As regards these facts, in the first place, I would ask—

I. How is it shown that Dr. Guthe discovered a valley "which sepa-

# ANCIENT JERUSALEM.

*Showing the Rock Surface & Ruins.*

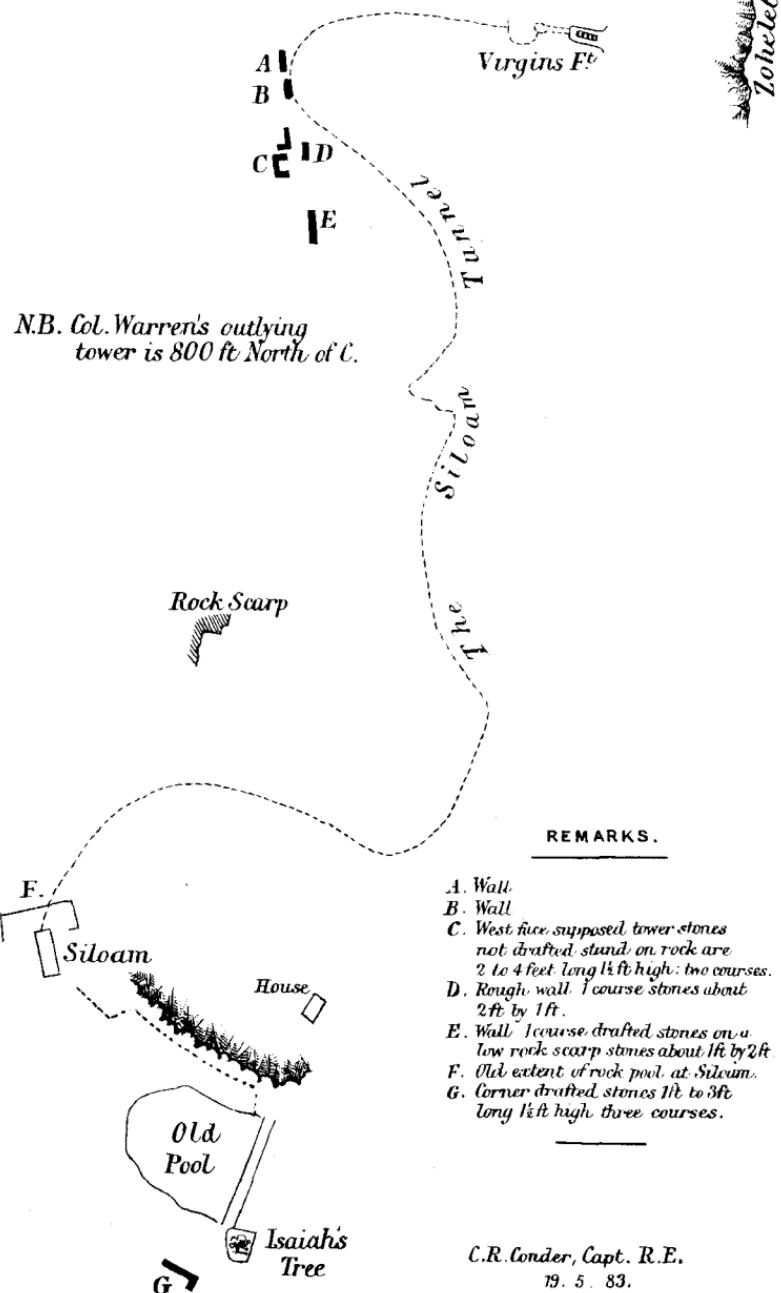


C.R. Conder R.E. del. 1879 A.D.

## DR GUTHES WORK

Site Plan of the principal remains.

Feet 0 100 200 300 400 500



rated Zion from Moriah?" Laying down the valley shown by Professor Sayce on the Ordnance Survey map, I find that there are a number of known levels along its supposed course. The mines which Sir C. Warren sank to the rock on Ophel in this vicinity (Nos. 8, 9, 14, 25, 38, &c.) give us far more detailed knowledge of the rock in this position than can be gathered from anything published by Dr. Guthe. The mines which Dr. Guthe drove I was courteously allowed to examine, and to me it appears perfectly certain that the work done was not sufficient to allow of any conclusions being drawn which in any way might be placed on a footing with the work of the English Society. It is greatly to be regretted that Dr. Guthe has never published any site plan of his works, but this deficiency I have endeavoured roughly to supply. It is also to be regretted that no levels appear to have been taken in his mines which might definitely fix the height of the rock where he uncovered it; but, on the other hand, we already possess so many observations as to render it impossible to suppose that any valley such as that shown on Professor Sayce's sketch can ever have existed. The rock was found by Dr. Guthe at the points *D* and *E* (see attached site plan), so near the present surface that, although no levels were obtained, his results only served to confirm those already reached by Sir C. Warren. It may therefore, I think, be considered proven that no valley dividing the Ophel spur in twain exists, and that any theory founded on this supposition is unsound. The geological evidence might be found to agree with the preceding arguments, but the rock as found by Dr. Guthe alone is sufficient to condemn the theory.

II. How is it shown that Dr. Guthe recovered the walls of David and Solomon? I was allowed to examine the masonry he uncovered at various points, and, judging by that which I have examined in other ruins in all parts of Palestine and Syria, I should feel no hesitation in saying (without intending any disrespect to Dr. Guthe) that he had recovered the remains of houses and other buildings not older, in all probability, than the fourth century A.D. It was not a mighty rampart, such as that planned by Sir C. Warren on Ophel, that Dr. Guthe found, but much thinner walls of comparatively small ashlar—the foundations, in fact, of those monastic and other buildings which we know historically to have occupied this spur in the early Christian centuries.

It appears, in short, to be assumed that the Ophel spur has, as yet, been but little explored. The fact is, however, that the northern part was very thoroughly examined by Sir C. Warren, and that there is but very little *débris* on the southern part, which has been again and again visited and examined by various explorers, including M. Clermont-Ganneau. In 1872 I reported on the remains of rock-cut aqueducts visible on the surface, and since destroyed by quarrying, and on Sir C. Wilson's survey the rock will be found showing on the surface in many parts of the southern portion of the Ophel spur. It appears to me that theories which take no account of these varied observations can hardly be regarded as of great value.

III. Proceeding next to the considerations which are more purely theoretical, I would draw attention to the legitimate outcome of Professor Sayce's sketch when compared with the Survey of Sir C. Wilson. If the supposed valley be traced on the Survey, it will be found that the area within the walls south of this line, according to Professor Sayce's sketch, is not larger than 8 English acres. This is a good deal smaller than Lincoln's-In-Fields, and considerably smaller than the base of the Great Pyramid. The courts of Herod's Temple occupied about four times this area, and an ordinary English field is generally larger than Professor Sayce's Jerusalem. This was the City of David according to the new theory, the northern part of the spur being Ophel. The capital of Syria, in David's time, occupied consequently only 8 acres, and in the time of Manasseh, when Ophel was included, it still only occupied about 15 acres. The Jebusite village which Professor Sayce proposes (for the first time) to place on the Temple-hill was, he informs us, cleared away by Solomon.

With regard to these facts, two questions may be asked, which are as follows :—

Is there any good reason to suppose that the capital of David's kingdom was a village only about a third the size of any ordinary Fellah hamlet of modern Palestine ? Can any ancient city be pointed out by Professor Sayce whose walls only included an area of either 8 or even of 15 acres ? Certainly in Palestine we never found an ancient town of such minute size, and unless authentic plans can be produced of famous cities occupying such an extent, we are justified, I think, in considering this a very important objection. For purposes of comparison I here give the areas of various cities of which good plans exist, and the differences will, I think, at once strike the reader :—

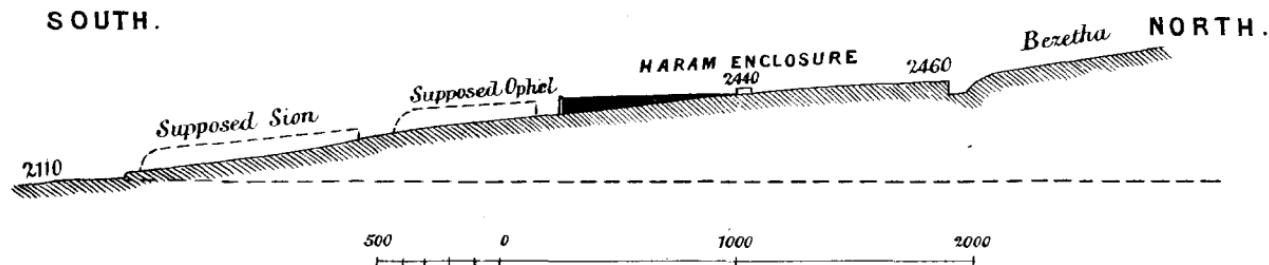
	Acres.
Cæsarea (within the Roman walls) ....	.... 300
The Hill of Samaria (within the colonnade)	.... 160
Rabbath Ammon { upper city 29 acres } lower city 31 , , }	.... 60
Gerasa (Roman walls) ....	.... 200
Tyre (the island town only) ....	.... 100
Gezer (the hill site only) ....	.... 40
Jerusalem, in 30 A.D.	.... 200
" in 70 A.D. ....	.... 300

No comparison is, of course, possible with such huge cities as Thebes, Memphis, Nineveh, or Babylon. Nineveh (see Smith's "Assyrian Discoveries," p. 87) had, according to modern plans, an area of 2,500 acres. Babylon (see Professor Oppert's plan) was 12 miles square (72,160 acres). Modern London, we may note, occupies 700 square miles, with 4½ million souls of population. The usual size of a modern Fellah village is from 20 to 40 acres, but Jerusalem was a capital, and a place at least as important as Tyre on its island. David's conquest extended over at least 15,000

## SECTION OF OPHEL & TEMPLE HILL.

*Natural Vertical Scale.*

SOUTH.



Scale of Feet.

C.R. Conder, Capt R.E.  
12. 10. 83.

square miles of country. Solomon was married to the daughter of the Pharaoh, and was allied as an equal with Hiram the Phœnician. The city was so strong that even the great King of Assyria was unable to take it, and Nebuchadnezzar laid long siege to it before he conquered it. In later times (probably in Hezekiah's reign) the civilisation of Jerusalem was so advanced that a fine inscription was carefully cut on rock to record the making of the Great Siloam Tunnel.<sup>1</sup> Surely all that we know of Egypt and of Assyria directly contradicts the supposition that a capital like Jerusalem can only have occupied an area of 8 acres.

The second question connected with the matter of the area regards the history of the city. Professor Sayce speaks, it is true, of *præ-exilic* Jerusalem, but his sketch applies to the Jerusalem of Nehemiah, and his quotations are taken from the Books of Ezra and Nehemiah quite as often as from earlier writings. It follows, then, that down to about 300 B.C. the city still did not occupy more than 15 acres in area, yet in the time of Christ, as Professor Sayce will, I think, agree, the hills west and north of the Tyropœon Valley had become covered with buildings, and were included within walls. When did this great increase of area take place? Jerusalem in 30 A.D. occupied 200 acres, but as between 200 B.C. and 140 B.C. the whole country was undergoing great troubles, and the capital was often in ruins for some considerable time, we cannot well suppose it to have begun to grow in size until the time, at earliest, of the Hasmonean kings. Is it possible, I would ask, that in 200 years an Oriental city increased from 15 to 200 acres, and if so astonishing a growth occurred, how is it that we have no record of it, and no notice of the real builders of the new walls which Josephus ascribes to David, Solomon, and succeeding kings?

IV. Hitherto we have considered this question from a purely practical point of view, comparing Professor Sayce's sketch with the Survey, and with the results of exploration, and indicating the inevitable consequences of the new theory. No reference has been made to the accounts given by ancient writers, or to the words of the Bible narratives. It is well known that Professor Sayce values Josephus and Herodotus also at a very low estimate, and that he also values the Book of Chronicles in the same way, accusing the author of "loose wording," and "confusion" (*Quarterly Statement*, pp. 212, 221).

What is here said will, therefore, have weight only with those who

<sup>1</sup> It will be best not to complicate this inquiry by entering into the question of the date of the Siloam Inscription. Dr. Isaac Taylor has published the views which result from his special study of the alphabet (cf. *Alphabet*, Vol. I, p. 238), and his opinion must carry very great weight in the matter. He concludes that the text may possibly be as old as Hezekiah's time, but he is himself inclined (p. 237) to regard it as not earlier than Manasseh. The arguments as to the forms of certain letters which he adduces appear to me entirely to preclude the possibility that the text is, as Professor Sayce now suggests, as old as Solomon's time.

believe that writers who described what was before their own eyes are more likely to have been right than students who eighteen centuries later endeavour to reconstruct ancient cities by the aid of certain selected expressions or passages in the writings of the authors in question.

As, however, Professor Sayce makes use of the Bible narratives, he may, perhaps, attach some value to certain passages which are not mentioned in his papers, and although he does not accept the evidence of Josephus as having any accurate value, it seems impossible to suppose that he is prepared entirely to reject the general statements of that author. I propose, then, to consider the Biblical statements as to the population of Jerusalem, and the account given by Josephus as to the walls.

As regards *population*, it is stated (2 Kings xxiv, 14) that Nebuchadnezzar took captive "all Jerusalem . . . ten thousand captives . . . none remained save the poorest." Either this statement must be explained away, or we must suppose a density of 1,000 souls per acre, giving only  $2\frac{1}{2}$  yards by 2 yards per soul. Modern Jerusalem has a population of 20,000 souls within the walls in 200 acres. Modern Jerusalem is a very crowded city, but Professor Sayce's Jerusalem, if the Book of Kings is correct, had ten souls in the same area now occupied by one.

Ezra brought to Jerusalem 1,496 males (or 3,000 souls) in addition to the population which previously existed, which might be deduced to have been about 9,500 souls (Ezra ii, 64, and viii, 3-14) out of 42,360 exiles who came back to Judea. We have thus a population of at least 3,000, and probably of 12,000 in Ezra's time, yet in the Book of Nehemiah we read : "The work is great and large, and we are separated upon the wall one far from another" (Neh. iv, 19); and again, "Now the city was large and great, but the people were few therein" (vii, 3). Again, rather later, a tenth of the village population (that is, 3,000 to 5,000 souls) is brought into the town (Neh. xi, 1 ; cf. vii, 66), giving a population of at least 10,000 souls as before the siege—a total which, as before shown, could not be the population of a town of 15 acres.

Taking an average from many towns and villages, we may state 100 souls per acre as the normal population of any Syrian city ; ancient Jerusalem possessed open spaces (**בָּנָה**) and a royal palace and a governor's house (Ezra x, 9 ; Neh. iii, 7 ; viii, 1 and 16 ; xii, 37). The maximum of population, according to Professor Sayce's view, would thus be 800 souls in David's time, and 1,500 souls in the later days of Manasseh or of Ezra. Not only does this disagree with the Bible, but the result seems clearly impossible, considering the extent of Solomon's dominions and the size of ancient Asiatic capitals.

If, on the other hand, we accept the views of Sir C. Warren and Mr. J. Fergusson as to the extent of the ancient city, we shall obtain results in perfect accord with the Bible statements of population.

The areas are as below :—

	Acres.
Upper city ....	140
Lower city ....	45
Ophel ....	15
Total....	<u>200</u>

The normal population would be 20,000 souls, and when the city contained only some 5,000 souls it might consequently well be considered very empty. The Biblical statements as to population are consequently in favour of the general opinion, and not of the new theory.

As regards the testimony of Josephus, I have only to ask, Why is the following statement unworthy of credence ?

"Now of these three walls the old one was hard to be taken, both by reason of the valleys, and of that hill on which it was built, and which was above them. But besides that great advantage as to the place where they were situated it was also built very strong ; because David and Solomon and the succeeding kings were very zealous about this work. Now that wall began on the north at the tower called Hippicus, &c., &c." (5 "Wars," iv, 2).

Has Professor Sayce considered this passage ? Is he prepared to prove that this "old wall" is his wall, and that Hippicus was on the Ophel hill ? or does he reject the whole account of Jerusalem given by Josephus ? I do not think he will find it possible to reconcile Josephus with his theory. The attempt has been made long since to do this, and to place Akra on Ophel, and it has always been found to lead to helpless confusion of the topography, and to final denial of some or other statements of the ancient accounts. We must then glance for a moment at the question of the Akra.

V. Sir C. Warren and Professor Sayce agree in identifying Zion and Akra and the City of David as all three one and the same. We may assume, then, that this view rests on good grounds, which it is unnecessary here to detail. Sir C. Warren, however, writes these names west of the Temple, Professor Sayce at the end of the Ophel spur. I think no student can read Josephus without seeing that the former view is correct. A "broad valley" separated Akra from the Temple (5 "Wars," iv, 1), and such a valley exists between the two as identified by Warren, Robinson, Conder, &c. ; but we have seen that it is proved that no such broad valley ever cut in two the Ophel spur. Of the levels we will say nothing, for Akra was cut down by the Hasmoneans ; but the "broad valley" noticed by Josephus has no existence, according to the view of Professor Sayce.

VI. We must now say a few words on the facts which really lie at the root of the new controversy. It has come to be generally allowed that the view which I have advocated as to the position of Gihon is correct, and Professor Sayce adopts my identification with the so-called Virgin's Fountain. But does it therefore follow that the great aqueduct to Siloam is intended in the passage where Hezekiah is said to have brought the

water down "on the west side of the City of David?" To me it appears that the Siloam Pools are on the south rather than on the west of the spur, where Professor Sayce places the City of David. Until the year 1881 I was always unable to explain the passage in question to my own satisfaction, but during that year I reported on the aqueduct found by the Fellahin leading away westwards from the Siloam Pools on the slope of the western hill now called Zion. We ascertained the levels of the channel, and its antiquity is shown by the great accumulation of *débris* above it. As it was found after Professor Sayce's visit, it may have escaped his notice, for it is not mentioned in his paper. If the term "City of David" (*i.e.*, the capital of David's time) were applied, as I believe it should be applied, to the two western hills (the Upper City and Akra of Josephus), the discovery of this aqueduct would, I think, be found to explain the difficult passage (2 Chron. xxxii, 30) more completely than it can ever be explained on Professor Sayce's theory.

The question of the position of the Tombs of the Kings is intimately connected also with the new theory. To me it appears quite clear that two royal cemeteries existed. The first was in the City of David, and the more famous Kings of Judah were buried in it. It seems to me most probably to be the ancient Jewish tomb still existing immediately west of the traditional Holy Sepulchre. This theory I have often explained in detail, and it has met with acceptance by many. But of Ahaz we read, "They brought him not into the sepulchres of the Kings of Israel" (*i.e.* David, Solomon, and Rehoboam), 2 Chronicles xxviii, 27. Uzziah was buried in his own garden (probably the "garden of Uzzah"), and Manasseh and Amon appear also to have been excluded from the original cemetery. If we suppose the garden of Uzzah to have belonged to the royal palace on Ophel, we obtain a second royal cemetery, to which allusion appears to be made in the Book of Nehemiah, and I believe it will be found that every passage in the Bible is satisfied by this view, without its being necessary to place the City of David in a practically impossible position.

These two explanations as to the aqueduct and the tombs will be found to dispose of all the real arguments as yet brought forward in favour of the new theory, and I may perhaps be allowed to say that I endeavoured, before publishing my views as to ancient Jerusalem, to weigh these arguments impartially while coming to a conclusion.

VII. Professor Sayce's views as to the history of the various pools agree in great measure with those which I published in 1879, in the "Handbook to the Bible." There is, however, a good deal that must remain conjectural. We do not really know where the Fuller's Field was, although Professor Sayce's view as to the upper and lower pools is identical with that which I have published.

The argument as to the date of the Siloam aqueduct seems to me, however, to fail entirely. In the first place, is it necessary to conclude that "the waters of Shiloah that go softly" (Isa. viii, 6) were running in an aqueduct? May they not have run in an open stream down the valley?

In the second place, when we reflect on cases like those of Adullam, Keilah, Shiloh, &c., it becomes quite clear that it is not necessary to suppose that ancient fortresses were always fixed close to springs. The strongest position was chosen, and if water did not occur within the walls cisterns were hewn. It is hardly necessary to prove this in detail, but the amount of available evidence is quite conclusive in the matter.

I have failed to find any passage in the Bible which can be considered to contradict the direct statement of the chronicler, according to which the Siloam Tunnel was hewn by Hezekiah, and I therefore offer the following proposed history of the Jerusalem pools, which appears to reconcile all the Biblical passages without the necessity of supposing "that the chronicler has confused" distinct localities. According to my view we should suppose—

1st. In the time of Ahaz, a spring (Gihon) with a stream down the Kedron, and two pools for rain-water (upper and lower), with a rock conduit (still existing, as do the pools) joining the upper to the lower.

2nd. In the time of Hezekiah, the construction of a new pool *at the spring*. The cave pool of the Virgin's Fountain is evidently artificial, and was probably cut at the same time as the aqueduct. This is the "pool" that was made by Hezekiah, where only a natural spring before existed. At the same time Warren's shaft was cut in order to "bring water into the city" by its means, and the Siloam aqueduct was excavated and *was continued beyond the pool westwards on the slope of the hill of the upper city, which was the stronghold of Sion, and part of the City of David.* Even these alterations did not bring the spring of Jerusalem within the walls, although the Siloam Pools were close to the ramparts. Jerusalem always largely depended, even in its best days, on the great reservoirs described by Josephus and Tacitus. It follows from this view that the Siloam Inscription cannot be older than Hezekiah, and this agrees with the strong epigraphic arguments of Dr. Isaac Taylor respecting the date of the text.

VIII. In conclusion, a few details ought to be separately noticed. The valley-gate and the dung-gate were 1,000 cubits apart. On Professor Sayce's plan, when applied to the Survey, they will be found to be 300 cubits apart, and I think he will find it very difficult to give the required distance, without hopelessly crowding the other points on the wall. The circumference which he supposes is, in fact, too small to agree with these measurements. Professor Sayce's plan also requires us to suppose two gates both called "the corner gate." According to my plan all the references can be applied to one gate. The corner gate was 400 cubits from the gate of Ephraim, along the wall (2 Kings xiv, 13). Professor Sayce's plan makes it only 200 cubits distant, and the reason is clearly, as before, that his wall is too short to allow space for the gates.

Professor Sayce follows the Crusaders in placing En-rogel at the Bir Eyüb. The discovery of Zoheleth induced Sir C. Warren to place En-rogel at the Virgin's Fountain—the only true *En*, or spring, at Jerusalem (*cf.* 1 Kings i, 9). As to Zoheleth, I am prepared to show the radical identity of the Arabic and Hebrew words which M. Clermont-Ganneau

has compared, and to account, on dialectic grounds, for the presence of the *Wau* in the Arabic form of the name *Zahweileh*, which has the same meaning as the Hebrew *Zoheleth*, and the same tri-literal root.

Professor Sayce says that the sheep-gate is mentioned in John v, 2. This is true of the English version, but Professor Sayce is no doubt aware that all ancient authorities regarded the *Probatike* as being not a gate at all, but a pool.

As regards the chronicler's account of the Ophel wall, Professor Sayce considers that his wording is "somewhat loose" (p. 221). The chronicler says that Manasseh built a wall "without the City of David" (לְעִיר הַצִּנָּה), on the west side of Gihon, in the valley. Professor Sayce appears to think that he meant to say "round the City of David." This may be necessary to the new theory, but the old theory fits exactly with the distinct meaning of the Hebrew words, and the chronicler had at least this advantage over the modern student, that the walls were then standing before his eyes.

The Hebrew particle לְנִ is rendered "on" by Professor Sayce in two passages (2 Chron. xxxii, 30; xxxiii, 14); why, then, is it rendered "from" in another passage (Josh. xv, 9), where the Authorised Version reads "unto?" I think that if Professor Sayce will consider the whole question of the boundary of Judah (Josh. xv and xviii) he will agree in running the line further south than he at present proposes to do, and that the generally accepted reading of the Hebrew will be found satisfactory. It certainly agrees with established views as to Jerusalem topography, though not perhaps with the new theory.

Finally, I would ask if Solomon cleared away a city of Jebusites in order to build his Temple, as Professor Sayce supposes, is it not remarkable that no hint of this arbitrary act is found in the Old Testament?

We read of David and Solomon as rebuilding the Jebusite town, and as buying an open threshing-floor as the site of the Altar; we hear nothing of destruction or of the two towns, upper and lower, divided by a district only afterwards occupied and called Ophel. On Ophel Solomon built his palace, and this, as we learn distinctly, was outside the City of David (1 Kings ix, 24).

With Professor Sayce's topography on the east I for one must in the main concur. His plan will be found to coincide with that which I published in 1879 ("Handbook to the Bible"), in almost all the details on this side, and some of those details I think I may claim to have been the first theorist to assign to the positions which Professor Sayce adopts. As regards the topography on the west side, I think that after considering the explanations now offered on the points which really induced Professor Sayce to adopt his present views, I may rely on him to reconsider his position. The impartiality of Professor Sayce and his constant effort to keep his mind open on doubtful questions are very well known. I hope he will weigh the suggestions I have ventured to offer concerning area and population, concerning the history of the pools and of the aqueducts, concerning the information which we possess as to the levels on the Ophel

spur, and concerning the two royal cemeteries mentioned in the Bible. He may, perhaps, even do me the honour of reading the account which I have endeavoured to give in the "Handbook to the Bible" concerning our present knowledge of ancient Jerusalem, and I know that if, on reading these remarks, he should become convinced that the generally accepted theories are really the simplest (and they have been very carefully thought out by many experienced and able writers), we can rely upon his expressing his adhesion to the views of the majority, including such names as Robinson, Fergusson, Williams, Lewin, and Warren.<sup>1</sup>

C. R. CONDER, *Captain, R.E.*

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### DISC STONES.

I MUST thank Dr. Selah Merrill for correcting our measurement of the Mensef Abu Zeid by 10 inches. I have no doubt he is right. The stone in question weighs, probably, some twenty tons, and for this reason I do not agree with Mr. Merrill in regarding it as a millstone.

There are two kinds of millstones commonly used in Syria. Those for grinding corn, which are large and made of basalt, and those belonging to olive-presses, which are small and made of limestone. A limestone block would not, I think, be hard enough to grind corn, and for this reason the basalt stones imported from the Hauran are much prized. There is no doubt a danger of mistaking a modern utensil for an ancient emblem. Even Dr. Schliemann did not escape this danger. On the other hand, the surveyors had seen very many millstones which they could compare with the Mensef, but never, I think, did they find a horse or donkey who could have turned this great disc stone in a mill. I have lately found an instance of disc stones which are clearly solar emblems, namely, the twin disc stones of Killiney, co. Dublin. The 'Amrit disc stone is just about the size of the Mensef, and the disc stone with a central obelisk is a well-known emblem to Oriental archaeologists. Such antiquities are not, however, I believe, found in America.

C. R. C.

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<sup>1</sup> Sir C. Wilson's name will no doubt in time be added to that of other authorities when he has time to publish his views. At present, however, we can only appeal to his Survey and Memoir, as he has not expressed an opinion on the questions now under consideration.