

NOTES ON COLONEL WILSON'S PAPER ON THE MASONRY OF THE HARAM WALL.

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COLONEL WILSON informs us that these "Notes on the Haram Wall" were written two or three years ago as part of a revised edition of the "Notes on the Ordnance Survey of Jerusalem," but that he was obliged, from press of work, to lay them on one side, and was unable to continue them.

In the perusal of notes thus prepared to accompany Ordnance Survey plates, we ought to have the advantage of his matured and well balanced opinions; but, unfortunately, apparently for want of time, the account is very much abridged, and some very important matters are either entirely omitted, or but slightly alluded to.

Lieutenant Conder has already, in his observations on these notes (published in the last Quarterly), shown that the identifications of Colonel Wilson are open to considerable qualification, and that many of his suggestions are wanting in any authorised support from local indications or historical or traditional evidence, and to this I may add the very important fact that he has in these notes expressed very decided views as to the dates of construction of the walls of the noble sanctuary and site of Solomon's Temple, though unfortunately they are obscured by many inconsistencies.

I submit that it is of very great moment that we should clearly understand exactly what are Colonel Wilson's views, as he has devoted so much study to the subject, and I will therefore endeavour, if practicable, to eliminate the apparent misconception into which he has fallen, and state, in a few words, the theory he advances. I may possibly fail to do this satisfactorily, but I can at least point out the discrepancies which occur, and the difficulties arising therefrom, in weighing his proposals.

Colonel Wilson follows Mr. Fergusson in supposing the original wall of Solomon's Temple to be east of Cistern XIX, at the south-west corner of the sanctuary, in attributing the building of the "great course" in the south wall to the time of Justinian, and in identifying Mount Moriah with Mount Zion.

Yet he materially differs from him in attributing the building of the whole sanctuary wall to King Herod, Mr. Fergusson allotting only part of the south and west wall to Herod. It is necessary to show that Colonel Wilson does actually attribute the whole sanctuary wall to Herod in many passages in his notes, because he also disagrees with himself in many other passages on this subject.

He states there were *five periods of construction* in the sanctuary wall which follow each other in the following order:—

1. The large stones with marginal drafts.
2. The large stones, plain dressed.
- 3, 4, 5. Medium-sized, and small stones.

Now the sanctuary wall, west, south, and east, is built of large stones with marginal drafts. Thus it is obvious that he attributes the whole of

the sanctuary wall to one epoch, and from the following it is clear that this epoch was the time of Herod.

P. 13. "On Herod's re-construction of the Temple the existing Haram Wall and Robinson's arch were built."

P. 14. "The Haram Wall was built by Herod."

Yet he differs from Mr. Fergusson and from himself in attributing the wall of the south-east angle to Nehemiah, and in stating that the wall of "wailing place" is a re-construction out of old materials, and again appears to be at variance with himself in affirming that the masonry from Wilson's arch to south-west angle is of exactly the same character, and again in stating that the masonry of the south wall is of two or three different kinds.

If there was but one epoch of large marginal drafted stones, and that epoch was the time of King Herod, how can there be three different periods (of marginal drafted stones) in the south wall? How can Nehemiah, Herod, and Justinian, over an interval of 1,000 years, have all built with the large marginal drafted stones?

Colonel Wilson affirms that the whole wall was built by Herod, and yet that only a part was built by him; that the large marginal drafted stones belong to but one epoch, and yet belong to three periods; that the sanctuary wall from the south-west angle to Wilson's arch is of one identical character throughout, and yet that the portion about the wailing place is a re-construction out of old material.

His views as at present expressed cannot be properly synchronised. In one case we have—

a. Large marginal drafted stones, cut at one epoch and used in building the whole of the Haram Wall by King Herod.

In another—

b. Large marginal drafted stones used—

1. In time of Nehemiah, south-east angle (p. 64)
2. " Herod, south-west angle (p. 64).
3. " Justinian, south wall (p. 65).
4. " Nehemiah, Herod's "Castle of Antonia" (p. 44).
5. " before Herod. Wailing place (p. 17).

Colonel Wilson thus would propose that large marginal drafted stones were used in building for at least 1,000 years, viz. :—

From the time of Nehemiah to the time of Justinian.

I can quite comprehend the use of such stones from the time of Solomon to Herod, because, during that period, the feeling of the country was decidedly Eastern, and the ancient system of building would be kept up; but after the time of the Herods western influences prevailed and he adduces no authority for supposing that in the sixth century a Christian Emperor used large marginal drafted stones; indeed the account of Procopius appears clearly to prove that the stones were not large, comparatively speaking.

The ambiguity and obscurity of these and other affirmations will probably detract from the value of Colonel Wilson's notes, and being

thus so uncertain, it is very difficult to review his deductions as a whole.

Other weak points appear to be the hypercriticism accorded to many of the measurements taken by myself and others, from which there is an inference that the measurements are not sufficiently accurate (*vide* "The Temples of the Jews," pp. 11 and 172), the comparison of measurements on unrevised plans with those that have been revised, the collection of matter, sometimes partially from the "Recovery of Jerusalem," ignoring what was said in the original letters; sometimes from the original letters alone, ignoring the more complete account in other writings.

As an example, it is stated that I believe that the "Red Heifer Bridge" commenced at a point 600 feet north of the south-east angle. Now I may once have suggested this, but if so, it was a long time ago, for both in the "P.E.F. Quarterly," April 1875, and in "Underground Jerusalem," I have proposed the Red Heifer Bridge as commencing at the Golden Gate.

As another instance, Colonel Wilson is endeavouring to prove that there is a tower at the south-east angle, and considers it a *conclusive proof* that there is straight joint in east wall from top to bottom, because there was a gush of air into our mine below the cut joint above, from the joint of the stones during an east wind, and not during a west wind; and yet in another place where we find a pavement at several points within a few feet of each other, and nearly at the same level, he considers there is no proof that it was continuous. Having thus proved conclusively that there is a break in east wall from top to bottom, he proceeds to prove that there is also a break in the south wall at the "Great Passage," apparently (p. 56), because I do not mention there was not one. He states that I was unable to examine the wall either above or below the opening, but in this he is mistaken. If he had referred to my plan he would have seen that I show the stones of the sanctuary wall down to the rock, with the remark "detail mislaid"; it is very improbable that if there had been the slightest appearance of a cut joint here, I should have failed to have seen it, and I think it may be stated confidently that no such joint there exists. So far from my having closed this work up precipitately as inferred by Colonel Wilson, I kept it open "until further orders are received from England about it," from 26th October to 28th November, 1867; so that there would have been ample time for Colonel Wilson to have written out special inquiries about a cut joint. On 6th December I commenced another shaft to south-east of Single Gate, and again drove in to the sanctuary wall, reaching it on 16th December, 1867, and examined it for several feet with the object of seeing whether there was any passage under the next arch into the Sanctuary.

In another instance, Colonel Wilson pointedly calls attention to the apparent discrepancies between the measurements of Lieutenant Conder and Mr. Schick in their respective plans, and descriptions of the rock-cut passage leading from the Souterrains of the Sisters of Zion to the Noble Sanctuary, and in speaking of the height of this passage states, "Captain Warren gives the height as 30 feet "Recovery," p. 199, and as 36 feet

above the sewage, p. 201. Lieutenant Conder as 20 feet. *Quarterly Statement P.E. Fund*, 1873, p. 92." I have followed Mr. Schick's section, which gives 40 feet.

Now it is to be observed, that the roof of this passage falls about 28 feet in its length, that there is a difference of about 5 to 6 feet in the line of the rocky bottom (*vide* Mr. Schick's plan), and that there was (when I was there), a difference of level of 6 feet in the sewage west and east. Thus taking Mr. Schick's plan alone and with no fixed points for the measurements, all the various heights mentioned may be obtained, or indeed any height from 32 feet to 8 feet, so that thus far there need not necessarily be any discrepancy, as we have no record of the exact position where each measurement was made. Lieutenant Conder has already explained the matter so far as he is concerned, and with regard to my measurements they not only accord with themselves, but very closely with Mr. Schick, when read aright.

My visit to this duct was when it was full (up to a certain height), of liquid sewage, and I had to balance myself on a floating door; on entering, I mention that I found myself in a rock-cut passage "30 feet high." I then describe the roof sloping downwards, and state that I came across a dam and descended on to a lower line of sewage 6 feet, and thence traversed the passage to a distance of 200 feet, and then in general language state that the roof of the passage is full 36 feet above the sewage, referring to the lower line, (30 feet plus 6 feet fall). These observations I made merely with the eye, as we had no means of reaching up such a height.

I now examine Mr. Schick's plan, and I find that the height he gives at the entrance (which he notes as "supposed height" (!) and also only appears to have estimated with the eye), where I measured it, from the upper sewage to the roof is 32 feet, and that in no place is it more, so that I cannot account for Colonel Wilson's mistake about 40 feet, unless he measured from some point after the ditch was cleared out; in which case he should not compare my estimate of 30 feet with that of 40 feet of Mr. Schick, taken from a lower line. I expressly state in my section that the line of upper sewage was 2,422 feet. Our measurements are as follows:—

	Warren.	Schick.	Wilson's revised plan.
Top of passage, highest point	2,452	2,454	2,456
Level of upper sewage ..	2,422	2,422	2,422
Level of lower sewage ..	2,416	2,417	?
Presumed lie of rock ..	?	2,410	2,416

The above analysis will show how Colonel Wilson has fallen into this error; he has altered both the height of passage and level of rock as given in Schick's plan, and making it 40 feet, he has compared it with a totally different measurement of mine. If I am wrong, in supposing that Colonel Wilson has taken the very highest point in the roof, and he has taken any other point, then he must be still further in error than I have shown.

While on the subject of discrepancies, I note that Colonel Wilson has forgotten that there was a very considerable discrepancy between his measurement of the Souterrain of the Sisters of Zion and my own, so much so, that I found it necessary to alter the eastern end about 5 feet farther to the north, making the prolongation fall upon the Sakhrah instead of on the edge of the dome of the rock.

This alteration appears to have been adopted by Colonel Wilson, as it is shown in the altered direction on the Revised Ordnance Survey Plates, but I see no mention of it in these notes.

P. 10. Colonel Wilson proposes that the set-off of 1 foot 3 inches from the face of the wall under Robinson's Arch was probably formed by allowing the course to run up perpendicularly from the rock, and suggests that this has escaped my notice. This, however, is a misconception, and I scarcely concur in Colonel Wilson's suggestion, which I note he has embodied in my section of the wall. I think this set-off affected only the one course under the spring of the arch, just as there is a similar set-off under the balcony arch, at the south-east angle, and that the alteration of my section may not be correct: however, this is a matter which could be settled in half-an-hour at Jerusalem.

P. 11. It appears to me that Colonel Wilson is aiming at very close coincidences which may not exist on the ground, in suggesting that the width of Robinson's Arch was exactly the same (viz. 42 feet) as that of Wilson's Arch. The pier of Wilson's Arch is different in every respect from that of Robinson's Arch, and there is no reason for supposing them to be of one age, merely from their appearance. I gave the space as a "trifle" over 41 feet 6 inches, because I could not get a thorough measurement and did not wish to give inches if I was not sure of them, but it is to be noted that a measurement of Colonel Wilson's supports my view: he gives 54 feet from the sanctuary wall to west side of pier. I found the pier 12 feet 2 inches, which would leave 41 feet 10 inches, agreeing with my 41 feet 6 inches and a trifle.

I do not think, however, that Colonel Wilson's measurement at that depth is likely to be correct to an inch, and he does not say whether he measured from the actual Haram wall or from the set-off of 1 foot 3 inches under the arch; in the former case there would be a discrepancy between our two measurements of over a foot.

P. 11. Colonel Wilson argues that as the pavement under Robinson's Arch was only seen in a few places, there is no proof positive that this pavement was connected between these points, and in this I must agree. On the other hand, however, at page 51, he states that because during an east wind a gush of air was felt through a joint of the stones at south-east angle it is *conclusive evidence* that there is a cut joint all the way up, so as to form the tower he proposes. While I will allow that there is a probability of the existence of a cut joint, yet I submit that if there must be a judgment of "not proven" with regard to the first case there must be a similar judgment regarding the second.

P. 12. The remark "no search appears to have been made for other

voussoirs" is scarcely correct, and I do not know on what authority it is made ; it would, I think, lead a general reader to suppose that the work was performed in a somewhat perfunctory manner.

P. 12. Note †. Colonel Wilson states that I have made no mention of man-holes leading up to pavement in the text, though I have shown them on the plan. It is to be regretted that he should have written this note, as in Letter XXXVI he will find it stated, with regard to this aqueduct, "every few feet we meet with shafts for lowering buckets." He has quoted these letters on several occasions to point out apparent discrepancies, but on this occasion he appears to have omitted to look at the text before he wrote this foot-note.

P. 13. *Deductions from Discoveries.* He considers that the source from which water was brought to aqueduct is unknown. I have little doubt myself that it was the Hamamesh Shefa, which I believe in former days was either the Dragon well or fountain of Zion (Akra) to the west of the Temple Mount.

Colonel Wilson in suggesting that this aqueduct is the conduit of Hezekiah, makes Zion identical with Moriah, a proposal which appears to be untenable.

He affirms that the existing Haram wall was built by Herod ; this is not consistent with his other proposals, pages 14 and 17, in which he gives different dates for the construction of various portions of the wall.

P. 15. He alludes to certain discrepancies between the rock levels in the "Recovery of Jerusalem" and the lithographs ; the latter were published without being examined by me, and may possibly be wrong in some respects in consequence. I am now examining these points.*

P. 16. He appears to find fault with the excavations, for throwing no light upon his proposed roadway and broad flight of steps ; but it is difficult for an excavator to throw light upon what does not appear to exist.

P. 17. *Wailing place.* He proposes that the stones are not *in situ*, and that it is a reconstruction out of old materials. As he considers the wall of Sanctuary to be Herodian, then these stones must be pre-Herodian, perhaps of the time of the Jewish kings. At page 65 he attributes similar stones at south-east angle to the time of Justinian.

Pp. 19, 20. He suggests that the original wall of Solomon's Temple is in rear of the Prophets' Gate, and enters into a discussion as to the flights of steps that lead up to it. In order to facilitate this proposal he shows the rock (in plate 6), running up precipitously to east, but there are no

* I find, for example, that in letter XVII: (22nd November, 1867), I stated that Lieutenant Anderson and I differed only a quarter of a minute (15 seconds of arc) in latitude of Ain Shems, while in printed report the numerator is left out of the fraction, and I am made to say that we differ 4 minutes. [The lithographs were issued as they arrived from Jerusalem to illustrate Colonel Warren's letters. Many of them were only diagrams showing progress which naturally differed from week to week.—Ed.]

apparent grounds for this disposition of the rock, and I think that a jury of 12 surveyors would, with our present knowledge, decide that the rock lies more nearly at the angle I have given it.

P. 22. *Wilson's Arch.* He appears to have fallen into a very singular error regarding the voussoirs of Wilson's Arch. He states that the stones are of *equal thickness*, causing an almost painful appearance of regularity, and then proceeds to prove that they must be ascribed to same date as Haram wall, which he pronounces to be Herodian.

Now both Lieutenant Conder and I, independently, believe that these stones are not of equal thickness. My elevation of the arch certainly shows them of various thicknesses, and we both, on the spot, considered the arch as Byzantine on account of the form and graduated thickness of the voussoirs. It is singular that Colonel Wilson omits to notice this discrepancy, for he refers to my mention of the different forms of the voussoirs.

P. 26. *Vaults west of Wilson's Arch.* I think Colonel Wilson goes rather too far in suggesting inaccuracy in my plans merely because they do not coincide with his plan of the street above. In the first place the plan of the street may be in error; in the second place, there is no absolute reason why the street should be exactly over the secret passage. I have written to Jerusalem to endeavour to have the street examined. Mr. Schick, writing on 28 April, 1880, sends a revised plan of this street and states "it is at once clear that my drawing differs greatly from that of Colonel Wilson."

P. 29. *Possible nature of Causeway.* The deductions of Colonel Wilson appear to hinge upon a hypothetical wooden bridge, for which he produces no authority. I shall shortly be able to publish some account of these vaults, which will throw much light upon the matter.

P. 30. *Gate.* Colonel Wilson proposes to call this gate by my name, because he discovered it, on the same principle that Tobler's discovery was called Wilson's Arch. I would deprecate the naming of the ancient buildings in this manner.

P. 31. *Hamam esh Shefa.* He states that the lie of the rock is here very puzzling, but has omitted to mention a discrepancy between his measurement and mine of 30 feet. I state (December 12, 1867) that the rock is 50 feet below the level of Haram Area, while Major Wilson makes it 80, and I make the bottom of the conduit 2,359 feet, while Colonel Wilson makes it 2,339-feet. I went down this well for an examination of the bottom and merely calculated the height from some observation I happened to have taken when engaged in these operations, so that I may possibly be wrong; but if I am right then the difficulties vanish. It would not take half-an-hour for an agent at Jerusalem to settle this point so far as the level of the bottom of the conduit is concerned.

P. 44. Colonel Wilson informs us that the Haram Wall from the "Castle of Antonia," to the Golden Gate has certain characteristics not found in any other section of the wall, but omits to suggest any epoch to which this very imposing piece of masonry may be referred. This is much

to be regretted, as it appears to introduce a still further complication in his proposals.

P. 58. *Triple Gate.* It is mentioned that the openings of the Triple Gate are only 13 feet wide, while those of the Double Gate, Barclay's Gate, are from 18 to 19 feet, but no notice is taken of the fact that the Triple Gate leads to a double tunnel very similar to that to which the Double Gate leads, and that the one is about 41 feet wide while the other is about 39 feet wide, and that the old wall in each double tunnel terminates at a distance of about 190 feet from the south wall, and that in each case there is a ramp up towards the surface of the Haram Area; and further, no notice is taken of the west wall of the double tunnel of the Triple Gate which Mr. Fergusson asserts was the east wall of the Temple Court. It is to be regretted that so important an omission should have taken place, p. 52. It is to be remarked that no notice is taken of the abutment of the Ophil wall on the south-east angle, beyond the mere mention of the fact; it seems a pity that no reference should have been made to this wall in the deductions.

P. 60. *Shaft near south-west Angle. No. 13.* Colonel Wilson states that in my early letters this shaft is *always* said to be 40 feet from the south-west angle, and the same distance is given on a drawing dated October 2nd, 1867, but that in subsequent drawings and in the "Recovery of Jerusalem" this distance is given as 90 feet.

It is difficult to comprehend the precise object in calling attention to an error made in October, 1867, which has been corrected in every subsequent drawing and description.

A similar effect would be gained were I in describing the revised plans of the Ordnance Survey of Jerusalem to call attention to all the errors that have been corrected in the new edition.

In this particular instance Colonel Wilson has overstated the case.

This shaft was commenced 16th September, 1867, under cover of the cactus bushes which conceal the south-west angle, and, on account of the animosity or greed of the Abu-Saud family, we were unable to cut through the cactus bushes and measure the distance until the work was completed: therefore a blank was left in the account of the number of feet the shaft was distant from the angle. Colonel Wilson says that I *always* called this shaft 40 feet from south-west angle, but I cannot find that I have done so in a single instance. On 22nd September and 2nd October I say it is *about* 40 feet from south-west angle. On 11th October, 1867, I say *near* south-west angle. On 22nd October *at* south-west angle. It was closed on the 26th October. As soon as the measurement was taken, the correct distance was laid down and the plans drawn. The drawing referred to by Colonel Wilson was merely a section through some of the courses of stones and had nothing to do with the site of the shaft.

Space has not allowed me to analyse these notes very fully, neither is it necessary to do so, as I am now engaged on a description of the whole of the excavations for the P.E. Fund, the publication of which, owing to want of funds, could not be previously undertaken.