Some Problems of Herod's Temple.

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II. THE AREA OF HEROD'S TEMPLE.

THE next problem, or rather series of problems, calling for examination concerns the great court which surrounded the sanctuary on all sides, termed by Josephus 'the outer sanctuary,' by the Mishna 'the mountain of the house' (cf. I Mac 16²⁰), and by Christian writers 'the court of the Gentiles.'¹ Here there are three minor questions to which a definite answer is still required, viz. (a) the dimensions of the court, (δ) the identification of the gates giving access to it, and (c) the arrangement of the portico known as the Royal Porch.

(a) The first of these need not detain us long, for most students of the topography of the ancient city are now agreed that in Herod's day the Haram area did not extend so far north as at present. Now Sir Charles Warren has described for us (Recovery of Jerusalem, 218 ff.) a line of scarped rock running east and west immediately to the north of the present inner platform of the Haram.² and was the first to suggest that we have here the scarp on which stood the northern boundary wall of Herod's temple. That this view is correct is rendered almost certain by the change of masonry in the present east wall just at the point where the line of scarp, if prolonged, would meet the wall, and, to my mind, absolutely certain from this further fact that the scarp is 365-367 feet or 250 cubits distant from the centre of the sacred rock. This is also the distance, to within a foot or two,-even with large scale maps one must allow a certain margin,---of the west wall of the Haram from the same point. A final confirmation of the contention that Warren's scarp marks the northern limit of Herod's temple-and of the second temple as well-is the striking and noteworthy fact that, when prolonged west and

¹ I have not been able to ascertain by whom this designation was first used. It is evidently formed on the analogy of the Mishnic 'court of the women,' to emphasize the fact that non-Jews were not admitted further into the temple precincts.

² Coloured blue in G. A. Smith's 'general plan of Jerusalem' at the end of vol. i. of his recent work.

east as nearly as possible 1000 feet in all, the line of scarp meets the west wall at a point 800 cubits from the south-west angle of the Haram, and the east wall at the same distance (c. 1170-73 feet) from the south-east angle, a little to the north of the Golden Gate. Since the south wall of the Haram measures 922-925 feet 3-the published measurements vary within a certain range-we get a total perimeter for 'the mountain of the house' of about 1420 yards, enclosing an area of approximately 26 acres, as compared with the 35 acres or thereby of the present Haram area. Herod's court must have served as the model for that of the second century temple at Damascus, now partly occupied by the 'great mosque,' which is said to have measured 1100 feet by 1000, and was likewise adorned with a double portico (Anderson and Spiers, The Architecture of Greece and Rome [1902], 168).

III. THE GATES OF THE GREAT COURT.

(b) Of the various gates mentioned by Josephus (J.A. xv. xi. 5) and the Mishna, the two so-called Huldah gates of M.M. i. 3 are those most readily identified. They are represented by the present Double and Triple Gates in the south wall, the former, as has been shown, placed 225 cubits fromthe western end of the wall, the latter 400 cubits from the same point, and 200 from the eastern end. The explanation of these positions is not far to seek. The Double Gate is fairly in a line with the sacred rock, otherwise with the altar of burnt-offering, but yet not so that the centreof the one is precisely in line with the centre of the other. Is this due to a lack of accuracy on the part of Herod's builders? Probably not, for it can scarcely be an accident that the centre of the rock is actually in line with the centre of the right hand passage of the Double Gate. Now the Mishna tells us that 'all who entered the mountainof the house entered on the right hand, and wentround and out on the left hand,' with certain exceptions (M.M. ii. 2). This gate, then, was so placed that the worshipper entering the temple ³ 630 cubits or 924 feet was doubtless the intended length.

court from the Lower City would see directly before him the smoke of the altar as it rose above the lofty wall of the sanctuary. The Triple Gate, further, is in a line with the former site of the Beautiful Gate, the principal entrance to the sanctuary proper, as will be shown in due course. Both gates were placed low down in the retaining wall, at or near the surface of the ground outside. Access was in both cases by means of a double ramp, divided by pillars, which passed under the Royal Porch—hence the name Huldah or 'mole' gates—and opened into the court at a distance of 190 feet from the wall, as shown on the plan.

On the other hand, there is much confusion in the current literature as regards the four gates which Josephus assigns to the west side of the court (J.A. xv. xi. 5, § 410). The language of this passage is unusually precise, and there would probably have been no dubiety as to the relative positions of the gates specified but for the almost universal, but undoubtedly mistaken, view that Robinson's Arch marks the site of a former approach to Herod's temple. Josephus does not enumerate the four gates in their topographical sequence, but places first the principal entrance to the temple enclosure, and the only one on this side mentioned by the Mishna. The name given to it in M.M. i. 3 is 'the gate of Kiponos,' probably Coponius, the first procurator of Judæa. This was the only entrance on a level with the great court, all the rest being apparently like the Huldah gates above described. It opened upon a bridge or viaduct which spanned the Tyropœon at the spot now occupied by Wilson's Arch, itself a product of the Byzantine age. The fallen voussoirs of an earlier arch doubtless belong to the bridge frequently mentioned by Josephusfirst in connexion with the siege of Pompey in 63 B.C.—as in close proximity to the Xystus or Gymnasium, and as connecting the street from Herod's palace, near the modern Jaffa Gate, with the western cloister of the temple (J.A. XIV. iv. 2, xv. xi. 5; J. W. 1. vii. 2, 11. xvi. 3, v1. vi. 2, viii. 1 compared with iii. 2). At this spot we may also locate the gate Shallecheth of the second temple, which opened on to 'the causeway (or raised way mesillah) that goeth up' (1 Ch 2616 R.V.).1

¹ It is time to have done with the traditional identification of 'the Parbar' of v.¹⁸ with 'the suburb' of Josephus. The *parbar* or *parvar*, a word of Persian origin, clearly denotes some part of the temple enclosure, either a

Tosephus then proceeds to mention the smaller gates in the order from north to south. First come two gates leading to the suburb ($\pi \rho o a \sigma \tau \epsilon i \sigma \nu$). the part of the city beyond the old or first wall which joined the Haram at Wilson's Arch. The gates in question must therefore be looked for to the north of the latter. Now about 50 yards to the north, Sir Charles Wilson discovered an entrance, which he named Warren's Gate, leading to the cistern numbered 30 on the Survey maps. The cistern represents an old temple entrance, 18 feet wide, running for 84 feet under the Haram (Recovery of Jer. 116 f.; P.E.F.St. 1880, 30). Here undoubtedly stood one of Josephus' suburban gates. The second has not yet been discovered, and must be looked for further north.

There remains the fourth of Josephus' gates described by him as leading to the 'other,' i.e. the lower, city. A passage under the level of the court led down by a large number of steps to the bottom of the valley of the Tyropœon. This exactly describes the ancient passage entered from Barclay's Gate, at the south end of the Jews' wailing-place, with its enormous Herodian lintel, 6 feet 10 inches or 4 cubits and 4 handbreadths exactly, in height (Recovery, etc., 111 ff.; S. W.P. Jer. 191 f.). The passage, which has been traced a long way under the Haram, is of the same width as the passage at Warren's Gate, and as each of the double ramps at the Double and Triple Gates, viz. 12 cubits (171-18 feet). That Barclay's gate cannot be one of Josephus' suburban gates, as is suggested by almost all recent writers, is clear from the single fact that Josephus' suburb, as has been said, must necessarily be placed beyond the old wall of the city, generally known as the 'first wall.'

IV. ROBINSON'S ARCH.

This unfortunate confusion is due, as indicated above, to the persistent identification of Robinson's. Arch as marking the position of an older bridge at the same spot, which led directly into the Royal Porch. Thus G. A. Smith still speaks of 'the fragment known as Robinson's Arch' as 'probably indicating the position' of one of Josephus' gates (*Jerusalem*,

colonnade—the second temple already had more than one $(J.A. XIV. XVI. 2, \S476)$ —or less probably a row of kiosks, along the western wall (cf. 2 K 23^{11}).

The following considerations will ii. 517). suffice to show the untenableness of this view. (1) Josephus knows of only one bridge connecting the temple with the western hill. This bridge stood on the same spot in 63 B.C., long before the temple area was extended to the neighbourhood of Robinson's Arch, and the passages cited above prove beyond a shadow of doubt that this spot coincides with the site of Wilson's Arch. (2) Notwithstanding the numerous shafts sunk by Sir Charles Warren across the valley to the west of Robinson's Arch, only a single pier was found which could be brought into connexion with the arch; in other words, there is no monumental evidence of an enormous viaduct having stood in the line required. (3) If the existing stones, which formed the springing of the arch, had been placed there by Herod's masons, they would have been of the same material as the rest of Herod's wall, that is, of hard mezzeh. But instead of this they are of the soft melekeh, a fact which, in Wilson's words. may well form 'a matter for speculation' (S. W.P. Jer. 175). (4) Had a bridge been placed here by Herod, he would undoubtedly have built it in a line with the central aisle of the Royal Porch. That this was the case is one of the most frequently recurring fallacies regarding Herod's temple. Conder alone has made several attempts (the last in P.E.F.St. 1902) to show that the centre of the bridge and the centre of the porch were in line, all vitiated by forgetfulness of the fact that Josephus gives the dimensions of the porch in Greek, not in English, feet! The medial line of the central aisle was about 511 feet from the inside, and some 60 feet from the outside of the south wall, while the centre of the springing of the arch is from $63\frac{1}{2}-63\frac{3}{4}$ feet from the latter point.

On these grounds, therefore, it seems clear that the bridge to which these weathered stones belong must be later than the time of Josephus, and *a fortiori* of Herod. They may belong to the abortive restoration of the temple which the Jews began in the reign of Hadrian. The massive pier, which is of the harder stone, may have originally belonged to the older arch of which some stones were found at a great depth, and this older arch, I would suggest, may have been part of a 'raised way,' at a much lower level than Robinson's Arch, connecting the western hill with the buildings of Solomon, or with the later Acra fortress on the eastern hill.

V. THE ROYAL PORCH.

(c) There remain for consideration certain difficulties in connexion with the porticoes by which the Court of the Gentiles was surrounded. According to J. W. v. v. 2, 'all the cloisters were double,' but the fuller account in J.A. xv. xi. 3, 5-understood to be taken from the contemporary work of Nicolaus of Damascus (see Büchler, Jewish Quart. Rev. x. [1898] 678 ff.)shows that the south side of the court was occupied by a triple portico of imposing size and magnificence, known as 'the Royal Porch.' The very precise description of Josephus or his authority may be thus summarized. The Royal Porch had three walks or aisles, formed by four rows of Corinthian columns, the first row engaged in the south wall of the court. The two side aisles were 30 Greek feet, and the central aisle 45 feet, i.e. 20 and 30 cubits, in width, the total width being 70 cubits or 103 English feet. The height of the two former is given as 50 feet, that of the latter as twice that figure, 'for it was much higher than those on each side'-a remark which suggests that the double number is not to be taken as mathematically This triple colonnade ran practically exact. along the whole length of the wall, which helped to carry its roof, or as Josephus puts it, 'it reached in length from the east valley unto the west.' This does not seem to exclude the provision, at the east and west corners, of guardhouses or towers, which are required on architectural grounds to connect the royal portico with the double colonnades on the east and west sides of the court. Their size would at least equal the width of the porticoes, viz. 70 cubits by 30, or 103 feet by 44 feet, as on the plan. The columns of the Royal Porch numbered 162 in all, with capitals of the Corinthian order and a double moulding or torus for base. Each column was doubtless cut from a single block, like the monoliths of the side porticoes (J.W. v. v. 2, § 190), and was of such dimensions that three men could scarcely 'fathom it round.' We are all the more surprised to be told that the height of the monoliths was only 27 feet, or circa $4\frac{1}{2}$ diameters. The roofs of all the porticoes

may be assumed to have been flat, and were formed of deeply coffered cedar beams. The roof of the centre aisle was supported on pillars partly engaged in an ornamental stone balustrade; the upper portions of the intercolumnar spaces must have been left open for lighting the portico. Grand, amazing, incredible are some of the epithets applied by the historian, with good reason, to this portico which formed the climax of Herod's architectural achievements, and was indeed worthy to be distinguished as 'royal.'

Now all this reads smoothly enough, but as soon as one begins to examine the data more closely, one difficulty emerges after another. How, for example, were the 162 columns distributed among the four rows? The explanation is to be found in the fact that the south-east angle of the Haram is an obtuse angle; accordingly the length of the two outer rows of columns will have been a few feet longer than that of the first row. The two inner rows, I believe, had 40 pillars each, the two outer 41, as shown on plan.

Let us next test Josephus' statements regarding the dimensions of the columns. These, he tells us, had a circumference equal to three men's stretch, yet their height was only 27 Greek feet, notwithstanding which the height of the side aisles of the porch was 50 feet. Now the length of the south wall is known to be about 924 feet (see above). Deducting the thickness of the walls and the spaces occupied by the corner towers, we have a length of 820 feet in which to place 40 columns The latter give with 41 intercolumnar spaces. 20 feet as the distance of the columns from centre to centre. 'Taking this as 4 diameters, on the recognized principle that 'the sturdier the columns the greater the intercolumniation,' we get 5 feet as the diameter and *circa* 16 feet as the circumference of the columns, which shows that Josephus' reckoning does not require so much of the proverbial pinch of salt as might have been expected. The height of the monolithic shaft may be reckoned at 8 diameters or 40 feet, in Jewish measure 27 cubits. Adding the remaining elements of the order according to the usual proportions, we get a total minimum height for the order, to the ceiling of the aisle, of 60 feet.

It now becomes clear from the evidence of the

space to be covered and the laws of the Corinthian order, that only one of Josephus' three irreconcilable data can be accepted as accurate, while his 27 feet is a slip for 27 cubits, as Clermont-Ganneau has indeed suggested, and the height of 50 feet is an underestimate. The height of 100 Greek feet = 97 English feet, may be retained for the central aisle, as giving an appropriate ratio to the side aisles of 5:3.

An interesting archæological fact remains to be chronicled in this connexion, since it affords an unexpected confirmation of the conclusion we have reached as to the true dimensions of the Royal Porch. Some years ago M. Clermont-Ganneau discovered a gigantic monolith in a disused quarry measuring a little over 40 feet in length (Archaelogical Researches in Palestine, i. 135 ff.; cf. photo in the Jewish Encycl. xii. 89). This column the eminent savant suggested must have been intended for one of Herod's porticoes, but, misled by a false cubit-length, he assigned it to one of the double porticoes. In reality it was intended for the Royal Porch. The same authority is responsible for another equally tempting identification. The antique pillar which now stands within the entrance at the Double Gate, with its capital of acanthus leaves (see De Vogüé, Le Temple, and elsewhere), he considers to be the top of a column that once stood in the colonnades of the Royal Porch. The height of the remaining portion is 23 feet, and the diameter 5 feet. The shafts of Herod's columns, we found, were probably 40, or, with the capital, $45\frac{1}{2}$ feet in length, and 5 feet in diameter. These dimensions may be compared with those of the columns of the porch of Agrippa's Pantheon at Rome, which were set up a few years only before those we have been studying. Their shafts are 38 feet, equal to nearly 8 diameters, and the total height of the order about 58 feet. In any future delineation of Herod's colonnades the Pantheon columns may safely be taken as models. Or, if preferred, those of the temple of the sun at Jerash, east of the Jordan (c. 150 A.D.). With shafts of 35 feet $(7\frac{1}{2}$ diameters) they reach a height of $45\frac{1}{2}$ feet, without the entablature; allowing for this we get a height of 56-57 feet (see the elaborate measurements with plans and photos, Z.D.P.V. xxv. [1902] 133 ff.).