THE WALLS OF JERUSALEM.


1. General Remarks.—Before attempting to investigate the questions connected with the ancient walls of Jerusalem, some consideration of the general principles that governed the construction of fortifications in early times is not only desirable, but necessary. Jerusalem was strongly fortified at all periods of its history, but there is no reason to suppose that there was anything unusual in the trace and construction of its walls. The defences of Jebus could not have differed greatly from those of other Canaanite cities; the walls of David and his successors, which Nehemiah restored, were constructed probably in accordance with Phoenician systems of fortification; and the citadels and walls built by Herod the Great and Herod Agrippa were almost certainly Greek or Greco-Roman in character.

Philo of Byzantium,¹ who embodies the experience of his day, lays down that the trace of a wall, and the form, size and position of its towers, must depend upon the natural features of the ground. The salient angles should not be too advanced, for such salients are more useful to the besiegers than to the besieged; and the towers should be so situated as to give each other mutual support. In the construction of fortifications every effort was made to guard against the blows of the battering ram and the insidious attacks of the miner, for these were considered far more dangerous than the projectiles of an enemy. Thus on steep rocky slopes the foot of the wall was rendered inaccessible or difficult of approach by scarping the rock beneath it; whilst on level or undulating ground it was protected by a deep ditch. The range of ancient projectiles was small, and a wall of sufficient height and medium thickness,² even when the ground rose upwards at a moderate slope from its foot, was ample protection against them. On the other hand, the


² Tacitus, Hist. v. 11, gives the height of the towers at Jerusalem as 60 feet when built above a scarp, and 120 feet when standing on the lower ground.
blows of the ram and the pick of the miner could only be resisted by solid, well-built masonry. The walls exposed to their attack were consequently of great strength and thickness. Their lower portions and those of their flanking towers were frequently solid masses of masonry, and their bases were sometimes protected by masonry revetments built at the angle of slope best calculated to resist the ram and projectiles, and to render escalade difficult.

Where the walls and towers were exposed to the attack of an enemy, the masonry was faced wholly or partially with large stones having projecting bosses, to counteract as far as possible the shattering effects of concussion; where they were not exposed to attack, as on the sides facing the town, the masonry was of plain-dressed stones having no bosses. On weak fronts, especially in advance of gateways, there were frequently entrenchments composed of ditches and palisades, and there is some evidence in Josephus that there were such entrenchments at Jerusalem.

The description which Josephus gives of the siege in A.D. 70, and existing remains, show that the fortifications of Jerusalem were at that time of exceptional strength, and that they had been planned and constructed with great skill. The Jebusite walls had no doubt disappeared, but the first and second walls, though frequently damaged and repaired, must have retained much of their original character. The ancient scarps above which the first wall stood and fragments of the masonry are still visible on the west and south fronts; but on the north it is uncertain whether the wall ran above a scarp or behind a ditch. The second wall, built on undulating ground to the north of the first wall, must have been of great thickness, and must have been protected by a rock-hewn ditch. The third wall was, probably, not unlike the walls of some of the Greek towns in Asia Minor, and its northern front at least must have been protected by a rock-hewn ditch. In those portions of the modern defences that undoubtedly belong to the Herodian period, Greek influence is very apparent. The "Tower of David" is in all its features a tower such as Philo describes, and the beautifully-dressed and jointed stones of its sloping revetment are essentially Greek in character.

1 Josephus, B.J., v, 4, §§ 2, 3.  
2 Ib., v, 4, § 4; 5, § 8.  
3 Cf. Tacitus, Hist. v, 11. Two hills, of considerable height, were enclosed by walls scientifically constructed with re-entering angles, and curves to take an assailant in flank.
It was believed at one time that any fragment of masonry at Jerusalem could be dated, approximately, by the manner in which the stones were dressed. But Mr. Dickie, a trained architect, who was associated with Dr. Bliss in the excavations at Jerusalem in 1894–97, came, after a study of all the masonry exposed, to a different conclusion. After pointing out that the modern stone dresser uses the same tools that his predecessor did when the ancient walls were built, he remarks that his investigation "tends to encourage scepticism as to the possibility of fixing periods by any hard and fast rules of masonry alone."

"Each succeeding style has mingled with its predecessor from the time of its production. Boss and margin work may have been used in early Jewish times, but was undoubtedly used in later Jewish-Roman times, and afterwards. Comb-pick margin with pick-centered dressing was certainly used contemporarily with the boss and margin, and may have been used before. Quarry-pick dressing is universal. The delicate pick-centre and comb-pick margined dressing of the Haram Area is certainly characteristic of one great building period such as the reign of Herod the Great might signify." 2

Boss and margin work is simply a natural development in stone dressing. 3 It is found in the Hittite walls at Boghaz Keui, in the walls of Phoenician cities in Syria and Palestine, of the eighth century city at Lachish, and of Greek cities in Asia Minor; it is seen also in Roman and Byzantine buildings, and in castles erected during the period of the Crusades. The highly-finished masonry of the Wailing Place, and of the revetment of "David's Tower" might be a copy of that of the podium of the temple of Diana at Ephesus, 4 or of that of the temple of Jupiter at Athens, so close is the resemblance.

1 There was a general impression that most of the stones with a marginal draft were Jewish. This view has long been recognised as an error due to insufficient archaeological knowledge, and it appears to have owed its wide dissemination to Porter, who wrote, in Murray's Handbook to Syria and Palestine, of the "Jewish bevelling."

2 Excavations at Jerusalem, 1894-97, p. 282.

3 As soon as walls were built with closely bedded and jointed stones some dressing of the margins became necessary. The faces of the stones were left rough or finely dressed according to taste, and the character of the wall.

4 In the British Museum there is the face of a stone from the Temple burned B.C. 356, which is almost identical with the best work in the Wailing Place.
2. The City Walls A.D. 70.—At the time of the capture of Jerusalem by Titus, the city was protected on the north side by three walls, and for the trace of these fortifications the only authority is Josephus. In his general description of the defences the Jewish historian follows the historical order of the walls: The first is the old, or inner wall, the second, the intermediate one, and the third the new or outer wall built by Agrippa. But, in recording the incidents of the siege, he refers to the walls occasionally in terms that would naturally be used by a Roman officer outside the city. From this point of view the outer line of defence becomes the first wall, the intermediate line the second, and the earliest or inner line of defence becomes the third wall. In the following remarks the walls are referred to in their historical order:

SECOND WALL.

"The second wall started from a gate called Genath (or 'Genanath'), which belonged to the first wall, and, enclosing only the northern quarter, went up to the Antonia." The wall was defended by 14 towers, and was not connected, at any point, with the third wall. It was intended to protect the quarter to the north of the old city. Immediately north of Herod's fortified palace few houses had been built, and here the space between the second and third walls was occupied, for the most part, by terraced gardens in which probably there were rock-hewn tombs.

It is now generally agreed that the Antonia, the acropolis of the Eastern Hill, was situated at the north-west corner of the Harîm esh-Sherif, and portions of the ditch running, approximately, east and west, that separated it from Bezetha have been discovered. The expression "went up to the Antonia" shows that the wall ran straight up from the Tyropoön Valley along the south side of the ditch, and that it did not, as some writers have supposed, either take a wide sweep to the north, or follow, in part, the course of the

2 B.J., v, 6, § 2; 7, § 2; 8, § 1.  
3 B.J., v, 6, § 2; 8, § 2.  
4 The description of the first wall is omitted.  
5 Lit. "encompassing the quarter to the north alone." This quarter appears to be the suburb (προαρτιόν) of B.J., i, 13, § 3, where some texts read προάρτιον, and of Ant. xiv, 13, § 4; xv, 11, § 6.  
6 B.J., v, 4, § 2.  
8 B.J., v, 4, § 2; 5, § 8.  
9 Robinson, Tobler, &c.
present wall, and then come down over the ridge of Bezetha to the acropolis.

The position of the Gate Genath, which may have derived its name from the gardens that were enclosed between the second and third walls, is unknown. The interval between the Tower Hippicus and the gate must have been considerable. Before commencing the siege Titus made a reconnaissance, and decided to take the Temple by way of the Antonia, and to make his attack upon the "Upper City" by the monument or tomb of the high priest John. The latter point was selected because, in that quarter, the third wall was lower than elsewhere, and the absence of any line of defence between the second and third walls exposed the first wall to direct attack as soon as the outer wall had fallen. An additional reason was that the space between the second and third walls was unencumbered by houses, and the approach to the first wall through the gardens was easy.

It would appear from the above that the monument of John was situated between the second and third walls. And, since the citadel is not mentioned, there must have been an appreciable distance between the monument and the almost impregnable towers, Phasaelus, Hippicus, and Mariamne. Titus would not have attacked these towers and the fortified palace. Evidently his intention was to isolate them by breaking into the "Upper City" through the weaker wall to the east. The tomb of John was certainly post-Exilic, and consequently must have been outside the second wall. It was in close proximity to the first wall, and 45 feet from the mound thrown up by the 10th Legion at the Pool Amygdalon, which is usually identified with "Hezekiah’s Pool." This pool, like the monument of John, was outside the second wall. It is certainly an ancient pool, and there must have been some reason, such as the prior existence of a massive wall, for its con-

1 B.J., v, 6, § 2.
2 Josephus seems to hint (B.J., l.c.) that it was originally intended to build a wall which would connect the second and third walls, and protect this weak point, but the intention was never carried out.
3 This he eventually did, but at another spot (B.J., vi, 8, §§ 1-4).
4 B.J., v, 9, § 2; 11, § 4.
5 The monument was either the sculptured face of the rock-hewn tomb, or a pyramid or stele above it.
6 The south portion of the wall was standing and its towers occupied by the Romans when the two mounds were thrown up (B.J., v, 8, § 2), and these mounds would not have been erected on opposite sides of the wall.
struction on the side of a hill. In two instances—the Birket Israil and the Lower Pool of Siloam—the dams of the pools formed part of the defences of the city at certain periods of its history; and it is natural to suppose that the eastern wall of Hezekiah's Pool was similarly connected with the fortifications of Jerusalem. It is true that the pool would have been, in this case, outside the wall, but, as the water could easily be run off to reservoirs at a lower level, this was of no importance. The surface of Christian Street is here many feet above the rock, and the houses on the west side of the street are built on solid masonry,1 which, originally, may have formed part of a city wall. Taking into consideration the space required for the mounds thrown up against the first wall and the distance necessary to secure the besiegers from missiles and hostile attacks from the citadel, it is hardly possible to place the second wall nearer the "Tower of David" than the east side of "Hezekiah's Pool,"2 a distance of about 250 feet. On the other hand, if it were placed still farther east it would be in too close proximity to the main thoroughfare of the ancient city.

The quarters of Titus, on ground known as "the Camp of the Assyrians," was beyond the range of missiles from the second wall.3 The exact position of "the Camp of the Assyrians" is not known, but the tent of Titus would naturally be pitched on the back of the western spur of the plateau in close proximity to the tower Psephinus which had fallen into his hands, and whence the whole field of operations could be overlooked. The first camp of Titus was 400 yards from Psephinus, and the camp of one of the legions was the same distance from Hippicus.4 These camps would be well out of range of any engines likely to be available inside Jerusalem, and it may reasonably be supposed that the second camp of Titus, on the high ground, would be out of effective range of missiles from the second wall at about 250 or 300 yards.

The second wall must have been protected by a rock-hewn ditch, and its lower half must have been a solid mass of masonry from 15 to 20 feet thick. The stones were probably of great size, and those on the outer face of the wall would have marginal drafts, and rough projecting bosses.

1 Quarterly Statement, 1891, pp. 277, 278; 1899, p. 44 and plate.  
2 Ibid., 1899, p. 44; see section of wall and pool.  
3 B.J., v, 7, § 8.  
4 B.J., v, 3, § 5.
All the principal authorities are now agreed that at its eastern extremity the wall ran along the south side of the ditch of the Antonia; but there is no such agreement with regard to the position of the Gate Genath at its western end. On this point three different views have been put forward, and each of these has been supported by arguments drawn from the existence of isolated masses of masonry. The first theory is based upon a fragment of an old city wall (A, see Plan), which extends for a distance of 120 feet from the front of the Grand New Hotel, north of the citadel, to the corner of the street Haret el-Mawāzin. Several writers consider this fragment to be a portion of the second wall; and place the Gate Genath either in the “Tower of David,” or in the curtain wall connecting it with the tower by the Jaffa Gate. The wall is well situated for defence, but the descriptions given by Josephus of the project of attack framed by Titus, and of the operations of the siege (see p. 235), render its identification with the second wall of the city impossible. The position assigned to the Gate Genath is also an improbable one. The fragment, which has no ditch in front of it, and apparently no towers, is probably a portion of the wall which Hadrian built round the civil town or colony of Ælia. The number of relics of the 10th Legion, Fretensis, found near the rock during the excavations, combined with the absence of pre-Roman objects, seems to indicate that the ground was not occupied prior to the siege by Titus. It may also be observed that the Roman engineers, when constructing the legionary fortress after the siege would, almost certainly, have demolished completely all walls within 300 feet of their fortifications. The fragment, apparently, is referred to Hadrian by Saewulf (see p. 241), who saw Jerusalem before its reconstruction during the period of the Latin Kingdom.

Writers who reject the authenticity of Golgotha maintain that from the north end of fragment A, the second wall either ran in a north-westerly direction to the ruins of walls in the garden of the Latin Patriarch (B), and at Kasr el-Jalūd (C); or that it continued northward towards the Franciscan Convent (see Plan); and that then,

1 These included stamped pottery and an inscribed column (Quarterly Statement, 1886, pp. 21-24, 72, 73).
2 The masonry of the fragments A, B, C, so far as it is known, differs so much in character that it is not easy to maintain the view that A, B and C are parts of a continuous wall.
in either case, it followed the present city wall to the Damascus Gate. This line seems to take too wide a sweep, and it is open to the objection that, unless the wall ran southward along the west
side of the Tyropeon Valley, there would have been a descent and not an ascent to the Antonia. On the other hand, if the wall continued eastward beyond the Damascus Gate, it would have enclosed parts of Bezetha which were outside the second wall.

It may be added that no remains of important walls have been found to the north of a line drawn west from the Porta Judiciaria (J on Plan); that the accumulation of rubbish is far greater and more general to the south of that line than it is to the north of it where the rock is often visible; and that whilst rock-hewn chambers, cisterns, and caves are common to the south of the same line, they are almost unknown to the north of it.¹

Advocates of the authenticity of Golgotha accept the theory of the late Dr. Schick² that the wall turned abruptly to the east at the end of fragment A, and then followed the zigzag course of the Haret el-Mawazine³ to some massive masonry (E') at the corner of Christian Street. The ruins at a sharp bend in the former street (D), now known to be mediæval, were supposed by Dr. Schick to be the remains of an old corner tower. From E' the wall is carried across Christian Street, to a block of masonry (F) beneath the minaret of the Mosque of Omar, and thence eastward to a fragment of a wall (G) which runs east and west under the centre of the German Church of the Redeemer, and stands upon débris of some depth. A little further east the wall is assumed to turn at a right angle and join the ruins in the Russian Convent (H). These remains are supposed to extend northward to the traditional Porta Judiciaria (J), and to have formed part of the eastern side of a large castle at right angles to the wall. They have not, however, the characteristics of ancient fortifications, and neither the historical records nor the natural features of the ground lend support to the view that the re-entering angle at this point was occupied by an important fort. The masonry faced with large stones is probably

¹ Schick in Quarterly Statement, 1893, pp. 192, 193; Pierotti, Jerm. Expd., i, 33.
³ The zigzag course is supposed to indicate the existence beneath the surface of a wall with towers.
⁴ A large castle in a re-entering angle as suggested by Dr. Schick would be contrary to the rules of fortification, and is unknown in the defences of any ancient city.
part of the eastern wall in front of the entrance to Constantine's Basilica. It undoubtedly contains stones taken from earlier buildings, possibly from the second wall, but it could not have belonged to the defences of the city. Dr. Schick places a gate tower at J, and then carries the wall eastward along a high rock-scarp to a block of masonry at the “House of Veronica” (K). From this point the wall, after crossing the Tyropoeon, is carried up, along the south side of the ditch (see p. 234), to the Antonia. According to Dr. Schick the assumed wall was protected by a wide ditch which extended from the Jaffa Gate to the St. Stephen's Gate. This ditch is entirely imaginary. No certain evidence of its existence has been found anywhere excepting at the place where it separated the Antonia from Bezetha. At several points, even where the ditch is said to have been traceable—on the west side of the supposed castle—there is now known to be solid rock, as on the north and south sides of the Chapel of St. Helena. Unfortunately Dr. Schick, whose accuracy as regards measurement is well known, rarely made any distinction either in his writings or in his drawings between existing and assumed remains. He considered it necessary to identify everything that he found, and his enthusiasm frequently led him astray in his efforts to complete or support preconceived theories. This tendency is most marked in his attempt to define the course of the second wall and its ditch; and it is to be regretted that his views have been so widely adopted. There is no evidence that the isolated fragments of masonry, some of which differ widely in character and construction, ever formed part of a continuous wall; and there is no certainty that either of them belonged to the second wall.

1 Quarterly Statement, 1890, p. 20. It is doubtful whether this scarp is continuous; but, if the wall ran this way, it may mark the position of a strong tower at the salient.


3 Guthe holds the same view (Z.D.P.V., viii, p. 278).

4 Schick writes “merely to say that this and this was found, would have been to show that I did not understand things of antiquity” (Quarterly Statement, 1893, p. 122). This explains his wish to identify every isolated fragment of masonry.

5 Schick's mind was always open, and he never neglected to publish new facts even when they disproved his theories. Thus, in his paper on “The Site of the Church of the Holy Sepulchre” (Quarterly Statement, 1898, p. 145 ff), he acknowledges that the view of the lie of the rock upon which he based his theory of the ditch of the second wall was wrong.
The second theory is that the fragments of an old wall (E, E') on the west side of Christian Street are portions both of the "broad wall" and of the second wall ¹; and that the Gate Genath was near the point P, where a southerly prolongation of the east side of Hezekiah's Pool would strike the first wall. From the Gate Genath, which may have been in the west side of a tower like that in one of the towers at S, the wall is supposed to run northward to E¹; and then, either to turn eastward to F and G and follow the line proposed by Schick to the Antonia or to continue northward to the fragment of a wall at E². From this last point the wall would follow the north side of the street Khôt el-Khânegh ² to the Porta Judiciaria (J), and thence an undetermined line to the Antonia. It would appear, from what Saewulf says, that, at the commencement of the twelfth century, there was a conspicuous wall in the position indicated by the fragments E and E¹.

"The church is situated on the declivity of Mount Sion, as was the city itself, ³ after that the Roman princes, Titus and Vespasian, had, by the vengeance of the Lord, destroyed from the foundations the whole city of Jerusalem . . . . We know that our Lord suffered without the gate. But the Emperor Adrian, who was called Helias, rebuilt the city of Jerusalem, and the Temple of the Lord, and extended the city as far as the Tower of David, ⁴ which formerly had been some distance from the city; as anyone can see from the Mount of Olives, where the extreme west walls of the city formerly were, ⁵ and how much the city was afterwards extended" (Saewulf, Pilgrimage, pp. 9, 10; P.P.T.S., vol. iv).

The position of this wall, and its distance from the citadel, satisfies the requirements of the narrative of Josephus (see p. 235). But there is no evidence that the wall extended north of E¹, or south of the pool; and none of the existence of a ditch, unless, as is probable, the "Pool of Hezekiah" formed part of one. ⁶ The character of the

¹ The view is that Nehemiah rebuilt a wall of the time of the monarchy and that the second wall of Josephus was, in all essential particulars, the wall of Nehemiah.
² Excavations have shown that there could have been no ditch or city wall between the north side of the street and the church.
³ This would be the region of the bazârs which was occupied by squatters after the siege.
⁴ The wall A occupies the position referred to.
⁵ The wall E, E¹ on the east side of the pool.
⁶ This view is held by M. Clermont-Ganneau (Quarterly Statement, 1901, p. 293).
masonry at E² is also different from that at E and E¹. The P. Judiciaria occupies the right position for the north gate in the wall, but here again there is no evidence, and the tradition may be nothing more than a reminiscence of the fact that at the point where the second wall crossed the main street there was an important gateway.

Assuming that the tower Psephinus was at the north-west angle of the modern city, where it is placed by most commentators, the tent of Titus would have been quite 300 yards from any point of the suggested wall, E, E¹, E², but not so far from that represented by A, D, E.

Conder maintains ¹ that "the nature of the ground admits of no other line" but one which "started near the Tower of David." But at the period when the wall was first built command was a secondary consideration, and the occupation of the higher ground was not necessary for defence (see p. 231).

The third view is that the second wall commenced at the traditional Gate Genath (L), and ran northwards, past some fragments of masonry (M, M¹) mentioned by Pierotti,² to the remains in the Russian Convent (H) and the P. Judiciaria (J). Thence it followed the line proposed by Schick to the Antonia.³ The traditional Gate Genath stands on an accumulation of rubbish no less than 25½ feet deep,⁴ and it is probably not earlier than the fifth or sixth century. So little is known of the masonry seen by Pierotti that no opinion can be formed as to its date. It may have belonged to a wall separating the bazars from the quarter of the town to the west. The principal objections to the third view are the small area the wall would enclose; the close proximity, for a considerable distance, of the wall to the principal street of the city; the apparent absence of any important ruins between the points L and H; and the existence of no visible trace of a ditch.

The only safe conclusion seems to be that no certain trace of the second wall has yet been found. Possibly one or other of the

¹ Quarterly Statement, 1883, p. 73.
² Jer. Expd. i, 33.
⁴ Recovery of Jerusalem, p. 276.
isolated masses of masonry noticed above may be a fragment of that wall, or mark its position at a particular point; but none of them, singly or collectively, supply definite evidence with regard to the course of the wall, or throw light upon the question whether it included or excluded the site of the Church of the Holy Sepulchre. The massive masonry west of Christian Street appears to me to have formed part of the second wall, but extensive excavation alone can show whether this is the case, and, if so, where the wall turned east, and where it crossed the street Khān ez-Zeit and the Tyropoeon Valley.

THE CRAFTSMEN’S GUILD OF THE TRIBE OF JUDAH.

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I.

In the excavations conducted by Sir Charles (then Captain) Warren at Jerusalem,\(^1\) in those of Dr. Bliss in the Shephelah,\(^2\) and, again, though to a less extent, at Gezer, certain stamped jar-handles have been discovered which have given rise to a good deal of controversy. The device impressed upon these handles consists of a winged creature, recognised by Professor Clermont-Ganneau\(^3\) as a flying scarabaeus; above, in Old Hebrew letters, the inscription למלך, “to the king,” and below one of four words, which we may conventionally transliterate Hebron, Shocoḥ, Zeph, and Memshath.

The first specimens discovered were incomplete; they consisted of a Ziph handle without its central yodh, and a Memshath example without its initial mins. It was, therefore, natural to take these imperfect words as unknown proper names, and to translate “Belonging to King Zepha” or “Belonging to King Shat.”

The hope was at the time expressed that some further information might later come to light regarding these newly-found royal

\(^1\) *Recovery of Jerusalem*, pp. 474–5.
\(^2\) *Quarterly Statement*, 1899, pp. 104, 184; *Excavations in Palestine*, pp. 106–118.
\(^3\) *Ibid.*, 1899, p. 204.