

## TENTH REPORT ON THE EXCAVATIONS AT JERUSALEM.

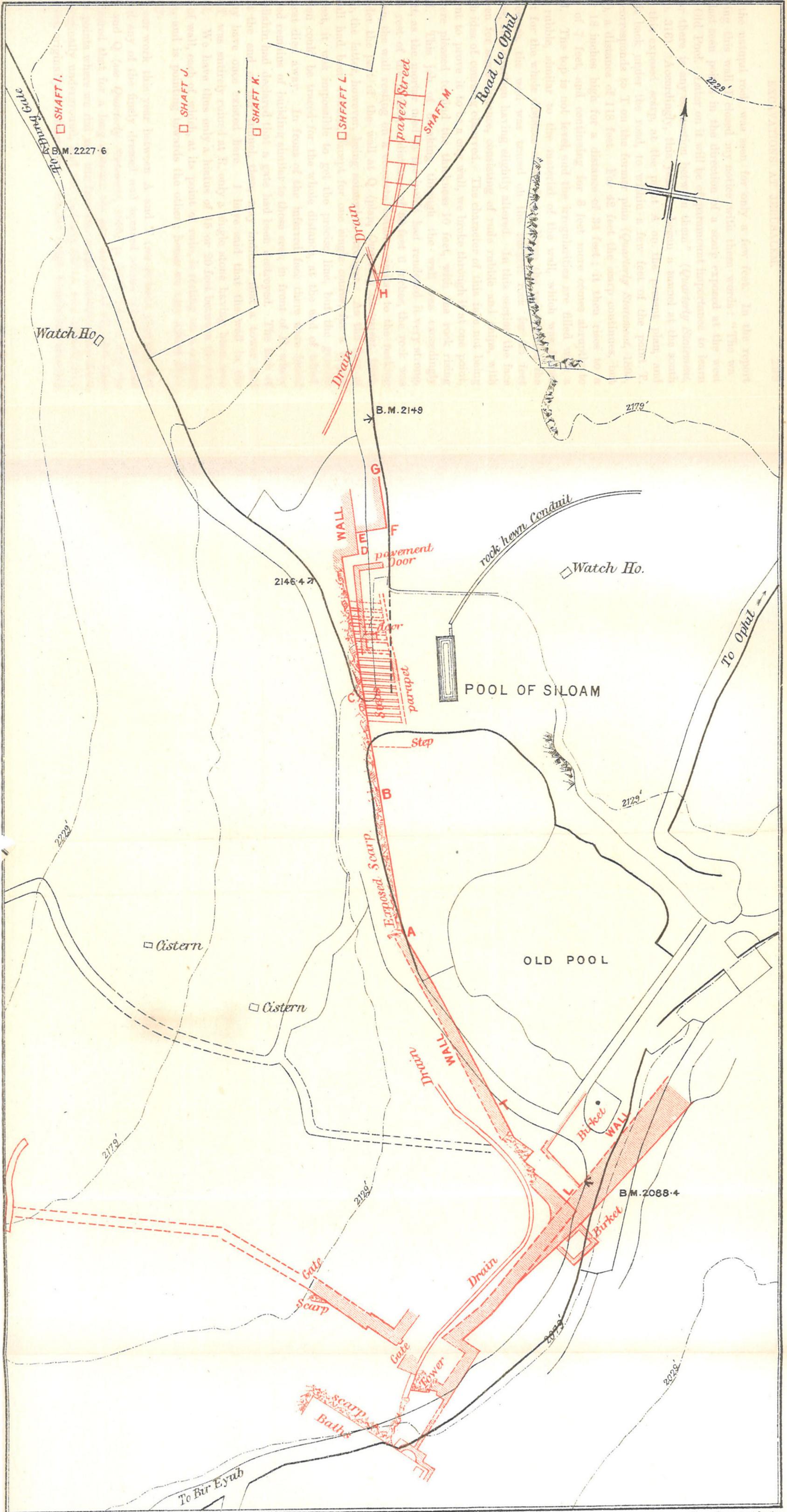
By F. J. BLISS, Ph.D.

I HAVE never before begun to write a report with the reluctance felt at the present time. And yet the work has never before been pushed as vigorously, nor has been in so encouraging a condition. This paradox is explained by the exigencies of excavation, when the work covers a large area, when interesting clues have been struck, but not as yet followed completely, when connection between bits of walling or pavement can only be suggested by guesses, the correctness of which may be proved or disproved by the pick of the digger, the day after the post has left. The proper moment for rendering a logical account of a given excavation does not always coincide with the date of the appearance of the *Quarterly Statement*. To attempt fully to describe to-day the work done since July 16th, when our excavations were resumed, would be a task as thankless as that of a Chinaman, restricted to the use of his own language, who should visit the grounds of a great exposition in Europe a month before its opening, and should be obliged to rely entirely on his own observation in attempting to describe the grounds and buildings. Incomplete halls still covered with scaffolding, half-finished roads, gardens only partly laid out—these would suggest to him some idea of the order of the exposition, but he would prefer to postpone his description till after the inauguration. So I greatly regret that a report must be written when our work in the Tyropecon Valley is, as yet, so incomplete. Details of a building should be left till the main outlines are traced. Hence the indulgence of the reader is begged for this short report, which must confine itself to showing that we have worked hard, that we have found many important clues, and that these clues give every hope of establishing a coherent topography of this part of the valley, and of its buildings. The next report will cover the same ground, hence the details which it will be necessary to incorporate here had best be minimised. Most of the work done is laid down on the adjoining map, but detailed sections and plans are reserved for another report.

It is over a year since we left the work near the Pool of Siloam to resume our excavations on the Western Hill. At that time we had proved that beyond the gate the wall took a north-easterly direction, including the "Old Pool," as well as the Pool of the Siloam, in the city. Branching off from this, however, was found another wall running in a north-westerly direction up the west bank of the Tyropecon (*see* plan in *Quarterly Statement* for October, 1895). This wall was called LT, and was traced for some 100 feet to the point R, where it was quite ruined. Beyond this the tunnel was pushed for 15 feet to the point T, but only one single stone was found *in situ*, midway between T and R. The scarp on which this wall rests from its beginning at L ceases at Q, beyond

PLAN TO ILLUSTRATE DR. BLISS'S TENTH REPORT.  
 The Detail in Black from the Enlarged Ordnance Survey Plan, the Excavations in red.

PALESTINE EXPLORATION FUND.



which the natural rock was seen for only a few feet. In the report describing this wall I closed my notice with these words: "The wall where last seen points in the direction of a scarp exposed at the west of the Old Pool. Later on it will be of paramount importance to learn whether there is any connection between them" (*Quarterly Statement*, 1895, p. 316). Accordingly, this year we began a tunnel at the south end of this exposed scarp, at the point A on the present plan, and drove it back under the road, to within a few feet of the point T, which corresponds to T on the former plan (*Quarterly Statement*, 1895, p. 305), a distance of 118 feet. For 42 feet the scarp continues, but is only 18 inches high for a distance of 34 feet; it then rises to a height of 7 feet, and continuing for 8 feet more comes abruptly to an end. The top is not level, and the irregularities are filled with a rough rubble, similar to the material of the wall, which was traced upon it for the whole distance of 42 feet. From the point where the scarp ceases, the wall was traced on the natural rock for 25 feet 6 inches, the direction having slightly altered. In this section the face was seen for some distance, consisting of rude rubble and chips, with a rough idea of coursing observed. The character of this face not being sufficient to prove it to be a city wall, we broke through it at one point, and were pleased to find the thickness 10 feet, with the rock rising behind. This job of breaking through the wall was exceedingly difficult, as the mortar used in the inside had rendered it very strong. In the rest of the tunnel, a distance of 50 feet 6 inches, the rock was not seen, the wall resting on a concrete bottom, similar to the making up under the part of the wall at Q (plan, *Quarterly Statement*, 1895, p. 305), the latter, however, being somewhat stronger. As the face of the wall had been robbed, except for one single course, for a length of 5 feet, it was impossible to get the precise line, but the general direction could be traced for the whole distance, at the end of which it almost died away. In front of the inferred face there were found confused remains of building similar to those seen in front of R, where the Fellahin had declared that a gate had been destroyed. The lack of face at the end of our tunnel, then, may indicate that a tower and gateway have once existed here. I have said that the wall in the line LT was entirely ruined at R, only a single stone having been seen beyond. We have thus only a hiatus of 15 or 20 feet between the two pieces of wall, each of which, at its point of ruin, is resting on a cement bottom, and is pointing towards the other; hence we may affirm their identity.

In our work this year between A and T (*see* present plan) we did not find any of the finely dressed and squared stones which occurred at M and Q (*see Quarterly Statement*, 1895, p. 314), but it may be remembered that for a long distance we saw no face at all, and that at the points where we did see the face the rough masonry may have been originally underground, and the masonry above, now ruined, may have been originally of a finer type. Similar rough foundation masonry

also occurs under the dressed work in the line LT, as may be seen in the section LN, facing p. 313 of the *Quarterly* for 1895.

I now return to the point A on the accompanying plan, where the scarp is exposed on the west side of the "Old Pool," in order to describe the work to the north-west. For 115 feet little work was needed, as we had only to scrape along the exposed rock, at some points, to prove that it really was scarped. As at B the rock ran underground again, a shaft was sunk and the scarp was found to be 17 feet high, quite perpendicular, and finely worked. Between A and B there is no wall directly on the top of the scarp, and a tunnel driven in at right angles for several feet at one point failed to reveal any wall set back from the scarp. From B we ran a tunnel north-west for 65 feet, not at the base of the scarp but along its top, in order to see whether any wall occurred, but no wall was found. Running almost the whole length of this tunnel there was observed a small channel of concrete, 9 inches square, interrupted by a *birket*, a yard in diameter, into which a second similar channel flowed. We also broke through the walls of a chamber built against the scarp, 15 feet broad, and paved with white tesserae.

Fifteen feet beyond the end of this tunnel we sank another shaft at C, and picked up the scarp again, which we followed in precisely the same direction (N.W. by N) for 91 feet. At first we kept along the top of the scarp, but soon we were obliged to tunnel under the hard concrete bottom of a channel, a proceeding which we had reason to be glad of later on. A few feet before the scarp ends the top was seen again (the channel having altered its course), and a wall was observed on it. This wall continues in about the same direction on the natural rock for 12 feet, when it breaks out for 14 feet, forming at D a strong corner, consisting of large stones, fairly squared. Between D and E, a distance of 17 feet, the wall consists of small rubble set in mud. Turning at E it runs for 25 feet to F, preserving the same rude character, until reaching F, where we have a strong corner similar to D. Eleven courses, averaging 17 inches in height, are preserved. The masonry is set in good lime. The fall of the rock between E and F is 11 feet. This rapid fall led us to suppose that it was to cross the Tyropeon, and as we pushed north from F we hourly expected a turn to the east, but the corner G, which has just been found, gives a turn towards the west. Part of the wall midway between F and G rests not on the rock but on solid loam. Whether G is on the rock or not is still to be determined.

At E we broke through the wall EF to find its thickness. It is bonded into the wall DE at the corner E for 3 or 4 feet, but beyond this a distinct face, evidently a continuation of DE, was found. The exact thickness of EF was not determined, as the inner face was ruined, but it is at least 13 feet. Curiously enough the interior stones are more massive than the facing stones, and are set in good lime. The wall running back of EF has been traced for some distance, but whether it is older than EF, or due to some internal construction, is yet to be determined.

We thus have followed a continuous line between L and G. This line consists of wall on scarp, wall without scarp, and scarp without wall. We have seen points where the wall on the scarp ceases and the scarp runs on; we have seen points where the scarp under the wall ceases and the wall runs on. Though we have along the scarp a distance of almost 300 feet from A north on which no city wall has been proved to exist (though the search has not yet been exhausted), yet on either end of this scarp masonry has been found to exist which runs on for a long distance beyond. We may thus affirm, with at least archaeological certainty, that the continuous line from L to G represents a line of wall, bearing off to the north-west from the wall crossing the Tyropœon Valley below the "Old Pool."

While pushing our tunnel from C north, at a distance of 68 feet from C we came across a slab of stone set against the scarp, 6 feet broad, with a step down from it at the north. Later on we examined the south edge of the slab and found steps of masonry descending from it, butting up against the scarp, somewhat off the right angle. We were thus obliged to work back again towards C, deepening our tunnel as the stairway descended until, at a point 19 feet from C, the scarp towers up for 12 feet, forming the west wall of the tunnel. We were thankful that the top consisted of the concrete bed of the channel referred to before. Up to this point we had no idea of the width of the steps, having seen them only for the width of the tunnel, or about 4 feet. At this point the rock was reached, and we found it stepped down, but irregularly, for a few feet towards C. Accordingly we followed eastward along the last masonry step seen to a point 24 feet from the scarp, where it terminates in a wall 3 feet thick, and running at right angles. This wall is set back 2 feet from a scarp, the depth of which has not yet been ascertained. The width of the stairway at this point is thus seen to be 24 feet. About midway in this tunnel we started a tunnel south in order to see whether the masonry steps still continued there. This they were found to do, and we followed them for 40 feet, where the pavement continues level for 20 feet, at which point another step occurs. We had evidently struck the stairway at its top, hence it continues without break for over 90 feet. Whether after the break of 20 feet it continues south or not remains to be seen.

The work along the last-mentioned tunnel was exceedingly ticklish, as the steps were choked with large well-squared stones which may have fallen from the great scarp to the west. The boxing was managed cleanly by the digger in charge, who had to fill up the spaces between the boxes and the roof of the tunnel with the fragments of the huge stones he had broken up. Moreover, a tunnel that runs down hill is much more difficult to manage than one that keeps on the level.

The number of the steps is 34. They vary in height from 7 to  $7\frac{1}{2}$  inches, and are arranged in a system of wide and narrow treads alternately, the wide treads varying from 4 feet 4 inches to 4 feet 10 inches in breadth, and the narrow ones from 1 foot 3 inches to 1 foot

4 inches. They are built of hard well-jointed stones, finely polished by foot-wear.

As it seemed best to find the breadth of the stairway at another point, we selected the top step, and pushing along it struck a wall only 7 feet from the scarp. This wall is 4 feet 4 inches wide, and turns out to belong to a building running not quite parallel to the scarp, so that the distance between them diminishes as one goes south. This building has a paved flooring, and two doorways have been found in it, but it is not as yet sufficiently excavated to describe. It appears probable that when it was erected part of the stairway was destroyed, as the steps are broken off irregularly near its west wall, leaving only 4 feet of breadth for the stairway between the building and the scarp. The relation between the two will be clearer when more thorough excavation permits of proper levelling.

The Committee has requested me to make a rock section of the eastern face of the western hill, continuing the line across the Tyropœon Valley and partly up Ophel. As this section is incomplete no drawing can yet be made, and details must be left till later. I may say here that rock has been reached in shafts I, J, K, L, and M. The true bed of the valley was struck at L, where the rock is 65 feet below the surface. From L tunnels have been driven towards M and K, but the connection could not be made as the tunnels had to ascend with the rapidly-rising rock, and at last the candles refused to burn.

In shaft J was found a ruined archway, resting on an old wall, set on the rock. The opening is 8 feet 4 inches, the arch is circular, and the distance from the key of the arch to the floor is 10 feet. Excavation here is rendered difficult by a later *birket* on one side, by evidently later buildings on the other, and by the extremely loose nature of the *débris*. It has been thought best to leave the matter until other clues may point to a solution.

At K a building has been found resting on the rock and standing to a height of 20 feet, the walls being only 3 feet thick, but stepping out as they descend, giving a foundation breadth of 7 feet. This also must be left for future consideration.

Chance favoured us in our shaft at M, for at a depth of 20 feet we came down directly in the street kerb. From the shaft we pushed tunnels both north and south, thus following the street for a distance of 115 feet. From the shaft south the pavement falls  $1\frac{1}{4}$  inches in 1 foot; from the shaft north it rises  $1\frac{1}{2}$  inches to the foot. Besides this the street drops with a 6-inch step at intervals varying from 18 feet 8 inches to 16 feet. From our shaft south we followed along the kerb till we came to a step, and then followed along the line of the step to get the width of the street, which is 24 feet. We then pushed south along the western kerb. From the shaft north we drove our tunnel along the eastern kerb. The paving stones vary in size, the largest being 6 feet by 4, and 18 inches thick. They are laid on a concrete bed strongly made up of chips and lime, averaging 13 inches deep. The kerb is  $5\frac{1}{2}$  inches high, and drops

with the steps. The street is wonderfully well preserved, very few slabs and only occasionally the kerb being missing. Work here was very slow and difficult, as the street is completely buried by stones evidently fallen from houses on either side, for at the shaft the wall of a house was found standing a little back from the kerb, built in finely-dressed courses 18 inches high, set in lime. These stones, *in situ* as well as the fallen stones, have beautifully-dressed comb-pick margins, with centres picked with a very fine tool. On pulling up the pavement to find the rock below, we found that this wall continues under the street level in rough rubble courses, 8 to 15 inches high, set in lime, resting on the rock, which is about 10 feet below. On the other side of the street, directly on the kerb, stands a single course of stones which may represent the wall of another house.

We hope to trace this street further north. Sixty-five feet to the south of the point last seen in the tunnel from M we sunk a shaft at H, coming upon a concrete bed similar to that found under the street. Below this we found a large drain silted up to within about 2 feet of its covers. It is 9 feet high and 2 feet 8 inches broad. The construction is very fine, the walls being built in courses 23 inches high; the stones are well squared and set in lime with  $\frac{1}{2}$ -inch joint. The covers are well squared and dressed on soffit; they average 19 inches broad by 21 inches deep. As seen on plan, it was followed for a distance of over 200 feet, at either end of which it was blocked by fallen covers. It has many small inlets and one large branch, 2 feet wide, traced 50 feet to the west. Nineteen feet to the south of H there is a square manhole with bevelled ventilating openings through covers, which probably are the paving stones of the street traced to the north. Beyond this there is a circular manhole; 18 and 36 feet north of H respectively there are two other manholes, the further one circular. Though finer in construction, in many ways this drain resembles the one running under the gate at the south-east corner. From the plan it may be seen that they incline towards each other, and they may be one. As to the street, it is pointing to the steps excavated west of the Pool of Siloam, and between the two we have found a pavement at D. It will be interesting to know whether these three belong to the same long street. In favour of this view is the fact that the level pavement succeeding the steps at the south is, at a distance of some 20 feet from these, itself stepped down, in the same manner as the street at M.

These discoveries have excited much interest among our archaeological visitors, who, in regard to the position of Zion, are divided into two parties, one favouring Ophel, or the Eastern hill, the other holding to the traditional site on the Western hill. Both would see in our stairway "the stairs that go down from the City of David" of Nehemiah iii, 16. The traditionalists point to the fact that it runs at the base of the Western hill. The "Ophelites" insist on the connection between the steps and the paved road, traced in almost the same line to the north, this road being on the west slope of Ophel. As for us, who have the spade

still in our hands, we need not trouble about theories till this implement has shown us all it can.

We have also this season done considerable work on the Western hill, but as this consisted mainly in following out clues (some of which were followed in vain), mentioned in the last report, I shall refer the reader to the plan accompanying the July *Quarterly* of this year. Perhaps the most interesting discovery reported in that number was the pavement which we guessed to belong to an old street. This conjecture has now been verified. Sinking a shaft at a point midway between L and M, we came directly upon the same pavement, finding some 18 feet of breadth, though the kerb, seen at L and P, was gone on either side. The portion of the street at P was found by the Père Germer, and he pointed out to me that at this point it could not run on directly north, as it butts up against the rock, which rises abruptly for 6 feet. Our further excavation proved that it turns to the east to avoid a platform of rock, about 17 feet east and west, by 30 feet north and south, after which it returns to its original direction, thus going around three sides of the platform. Beyond the platform we traced it for a few feet. A shaft sunk 80 feet beyond to the north, revealed in the same line a single paving stone, which may safely be assumed to belong to the street, which at almost every point where it had been struck had been more or less robbed of its paving stones. From this point, in almost a straight line to the point M, a distance of 500 feet, we have thus found, at seven places, similar pieces of pavement. This line points almost directly to the eastern one of the two streets running parallel in the Jewish Quarter, and connected by the Bazaars (in which traces of an ancient street still remain), with the street from the Damascus Gate. As the main thoroughfares of a city are the features that are most apt to remain the same from age to age, it may be safely conjectured that we have here the continuation of a street originally coming from the Damascus Gate. In its width, in its kerb on either side, in the size and appearance of its slabs, and in its inclination, this street resembles the one found in the Tyropæon Valley.

In my last report I spoke of the scarp FP (see plan in July *Quarterly Statement*), which is about 10 feet high. As the upper city is supposed by some to have had a wall of its own, further examination has been given to this scarp. At P a tunnel was driven southwards along the scarp, which beyond F was found to have an insignificant height, and after some irregular turnings to die away. After the expected turn to the east at P it turns north again, growing less and less in height, until after a few slight turnings it also dies away. The conclusion is that, like many similar scarps on this Western hill, it was due to quarrying, and was not hewn as a base for a wall. From contour 2469 we drove in a tunnel west to a point not far from the road.

The depth of soil was slight, and no traces of a wall were found, but we were glad to discover a fine cistern, apparently in excellent preservation, at a point just by the place where our kind hosts, the Augustinians, pitch their mammoth tent at Whitsuntide, when the French pilgrimage visits Jerusalem. The excavations made by the

Augustinians between contour 2469 and the aqueduct have relieved us from searching for the city wall there. Such a wall may have once existed, but the chances are against its recovery, as the line it may have occupied has been built upon over and over again.

As to the late wall, NAI, shown in the July plan of this year, all attempts to trace it beyond I have been vain. I gave reasons to suppose it had turned north at O or J. Accordingly a shaft was sunk a little to the north of J, and from its bottom much tunnelling was done. Several times bits of walling gave us supposed clues, but the walls always turned out to be of slight thickness. A wall was also examined near K, with similar results. As the work in the Tyropœon Valley has become so important we have left the Western hill for the present.

Such, then, are the main outlines and some of the details of the work done this last season. The daily average of workmen employed has been higher than ever before, being about 35. It has been trying to work in that open sewer, the Tyropœon Valley, during a summer whose heat the oldest inhabitant does not find paralleled in his memory. Our health has been, on the whole, good. Mr. Dickie's arm has now quite recovered, and he was able to relieve me entirely for over a fortnight, when I was ordered to rest. Hardly was I fit for work again when a sore throat laid by Mr. Dickie for a time. One day work was suspended, when we attended the Turkish Criminal Court as prosecutors of the men who attacked us. Judgment was in our favour, and they are now in prison. Our Imperial Commissioner, Showkat Effendi, has followed his late father's excellent traditions in every way, and the readers of the *Statement* will know this to be high praise. His valuable assistance to our work is rendered cordially. The diggers have done their work well, and have been ably superintended by their young foreman, Yusif, whose aim is to be worthy of his predecessor, Abu Selim. He is full of enthusiasm for the work, and his fidelity has already been proved during his five years in our general service.

JERUSALEM, *September 14th*, 1896.

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## REPORT ON TOMB DISCOVERED NEAR "TOMBS OF THE KINGS."

By ARCHIBALD C. DICKIE, A.R.I.B.A.

A FORTNIGHT ago Bishop Blyth kindly asked me to visit a tomb which had been discovered on his property to the north of the city. I did so, and was delighted to find the rather faded remains of a most charming piece of frescoping on the walls of a tiny rock-cut cell, this being the only part excavated at that time. It lies immediately to the west of the "Tombs of the Kings," and is adjacent to the Anglican