

## PALESTINE EXPLORATION FUND.

PATRON.

HER MAJESTY THE QUEEN.

OFFICE-9, PALM MALL EAST, S.W., LONDON.

*Reports on Progress of Works at Jerusalem and elsewhere in the Holy Land, by Lieutenant Warren, R.E.*

XXXIX.

April 10th, 1869.

*The Sakhra.*—On Thursday, 8th inst., I visited the Dome of the Rock ("Mosque of Omar") and examined the Rock or Sakhra. On the north side there is a gutter cut out of the solid, leading from the western upper side to the northern lower plateau. The gutter is shown on the Ordnance Survey detail plan of Captain Wilson; extending in a northerly direction from the gutter for about 5ft. are two pieces of flagging lying horizontally on the rock, about 2½ft. in width. This flagging conceals an opening in the rock 5ft. long and 2ft. wide. Inside is a passage or cutting 2ft. wide and about 1½ft. long, leading nearly due north; it commences from the end of the gutter, and the rock is cut down perpendicularly on both sides and at the southern end. At the northern end it could not be ascertained whether it was the rock or masonry. The first 5ft. of this passage is covered by the flagging, then for 4ft. its roof is of rock only about 4in. thick; beyond this the pavement round the Sakhra covers the passage.

At present this passage or cell is about 3ft. deep, but it is filled up at the bottom with soft earth or rubbish, and the real depth cannot be ascertained. It is not easy to determine the object of this passage or cell. It is unlike the tombs and loculi seen about Jerusalem, and it can hardly have been for draining the rain-water off the surface into a tank, as the gutter commences from the higher portion of the rock.

Sir John Maundeville relates (apparently of this Dome of the Rock) A.D. 1322:—

"And in the middle of the temple are many high stages, 14 steps

high, with good pillars all about, and this place the Jews call the holy of holies. No man except the prelate of the Saracens, who makes their sacrifice, is allowed to come in there. And the people stand all about in divers stages, according to their dignity or rank, so that they may all see the sacrifice." From this it would appear that the present exposed rock was then concealed by a raised dais, with steps leading down all round, in which case the gutter may have been used for carrying away the water when the dais was washed after the Moslem sacrifice.

I may here offer a suggestion with regard to the Dome of the Rock, which I have not seen hinted at in any work, viz., that it may be the Sepulchre of David. Messrs. Fergusson, Thrupp, and Lewin object to the traditional site of the tomb of David (at the *Cœnaculum*), and the two former place it near to the temple area.

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## XL.

11th May, 1869.

*Golden Gate.*—The Golden Gate occupies a position in the east Haram Wall, where an examination below the surface would probably afford much valuable information. Unhappily, the greater portion of this east wall is lined with Mahometan tombs, and we are precluded from digging near them. It is true that a shaft could be sunk through the cemetery without in any way interfering with the graves, but it is very doubtful whether permission for this could be obtained.

It does not appear that there is any real feeling on the subject, as we find on all sides tombs, Jewish, Christian, and Mahometan, used as dwelling-places and stables by the people of the country, and sarcophagi used as watering troughs; but there is a certain amount of sentiment involved, and the same people who see no harm in the destruction of tombs while quarrying, in using them as stables, and in building the tombstones into their houses, think it desecration for a Frank in any way to examine these interesting relics.

It being desirable, then, to examine the wall at the Golden Gate, the only method was to sink a shaft at some distance off and drive a gallery up, so as to be altogether out of the way of the cemetery. (See plan 39.)

The nearest convenient point was found to be 143ft. from the south end of the gate, and in a line perpendicular to its front, in a piece of ground through which a shaft was sunk in 1867.

This point was found to be 55ft. 6in. below the level of the ground outside the gate. The shaft was commenced 25th January, 1869, and sunk down 25ft. 6in., giving a total difference of level between the ground outside the gate and the bottom of the shaft of 81ft. (See section. Also for nature of soil sunk through see Letter V., 12th September, 1867.)

A gallery was then driven in to west, and at 10ft. 3in. the rock was struck, rising about one in four to the west; the gallery then rose gently with the rock until at 18ft. 6in. a tank or rock-cut tomb was crossed. The examination of this was reserved, and the gallery continued, until at 27ft. the rock was found to present a cut scarp of 3ft. 9in. height, on the south side, running in a north-westerly direction, the natural surface of the rock inclining to the north. The scarped rock was followed for over 10ft., when it suddenly took a turn to north, and it was necessary to cross over it. On top of the scarp a rough masonry wall was found, which was broken through. At this point, 37ft. from the shaft, the total rise in the gallery was 8ft.

The rock is *mezze*, and on the scarp, about 2ft. 10in. from the bottom, was found a hole cut for passing a rope through, similar to those found in the cavern south of the Triple Gate (described January 30th, 1869). This ring or hole was apparently for tying up animals to.

The gallery was now continued on a gradual rise through a loose and dangerous accumulation of stones. At 47ft. the rock was found to rise suddenly to a height of 4ft., and at 53ft. another rough masonry wall was encountered and broken through. At 68ft. a portion of the shaft of a column (3ft. in diameter) was met with, placed erect in the *débris*, and about 3ft. above the rock. (See sketch in "Illustrated London News," page 425, April 24th, 1869.) On the bottom of this shaft of column are what appear to be masons' marks, of which I have taken a cast.

From this point forward the work became very dangerous, the gallery being driven through a mass of loose boulders alternating with layers of shingle, which on being set in motion runs like water.

At 85ft. from the shaft, the gallery had ascended 25ft. 6in. The *débris* now began to run into the gallery, forming a cavity above; and to prevent further falls fifty old baskets were stuffed in, and a quantity of old timber. After a considerable amount of labour the gallery was continued, and at 97ft. (*i.e.*, 46ft. from the Haram Wall) a massive masonry wall was reached, running north and south.

An attempt was made to break through this wall, but after getting in 5ft. it was abandoned: the stones being of large size it was also found not practicable to get over the wall, as it appears to continue up to a considerable height. A gallery was then driven south along the wall for 14ft., but there was no appearance of any break. The *débris* pierced through was of the loosest description, and the gallery had become in a highly dangerous state. I therefore had it tamped up, leaving in all the frames for about 30ft.

The tamping up was continued as far as the hanging column, and at the same time a branch gallery was driven to north from a point immediately east of the column. At 14ft. it was turned-in to the west (see plan 347). It was found that there was here about 3ft. of solid earth between the *débris* and the rock, and by very careful management the gallery was driven on for 34ft. from the turn. At this point the massive

wall was again met with, running in a north-westerly direction; the gallery followed along it, but the layer of solid earth gradually diminished in thickness, until on 28th April, when 55ft. from the turn, the shingle suddenly came in with a rush, quickly filling up 6ft. of the gallery, and burying some of the tools. An attempt to remove this shingle was of no avail; when touched it only ran further into the gallery, and I have, very reluctantly, been obliged to abandon the work.

Although we have not succeeded in our object at this point, we have at least obtained some interesting results.

1. It is now nearly certain that at the Golden Gate the Haram Wall extends below the present surface outside, to a depth of from 30ft. to 40ft. (See section  $\frac{1}{17}\pi$ .)

2. It appears that the rock has an inclination to the north near the Golden Gate.

3. The massive wall where first encountered is about 50ft. in front of the Golden Gate. It appears from thence to run to north and gradually turns in to west, apparently following the contour of the ground.

This wall is composed of large quarry-dressed blocks of *mezzeh*, so far similar to the lower course seen in the Haram Wall near the Golden Gate, that the roughly dressed faces of the stones project about 6 inches beyond the marginal drafts, which are very rough. The stones appear to be in courses 2ft. 6in. in height, and over 5ft. in length. On trying to break through the wall a hole was made 5ft. 6in., without any signs of the stone terminating. The horizontal joints are not close, but appear to be about 12in. apart and filled in with stones 6in. cube, packed in a very curious cement, which now looks like an argillaceous stone and has a conchoidal fracture. The fellahin pronounce it to be formed of lime, oil, and the virgin red earth, and state that such is used at the present day in the formation of cisterns. Specimens of this cement have been sent home.

It is disagreeable to have failed in reaching the Golden Gate, but to pierce through the *debris* of the nature encountered, some special machinery would have to be used; and it is dangerous to put anything but the simplest instruments into the hands of the fellahin.

We also cannot work more than a certain number of days at a time at a difficult place, as the constant danger causes the nerves to become unstrung after a time, and then a few days at safer work is required; only those who have experienced the peculiar effect of the rattling of the *debris* upon the frames, with the prospect at any moment of the boards being crushed in by a large stone, can appreciate the deterring influence it has upon the workmen. The non-commissioned officers have to keep continually to the front, or the men will not venture up.

It appears probable that the massive wall met with may continue up to the surface, as immediately above it, in the road, are some large roughly bevelled stones lying in the same line.

I send by this mail a section ( $\frac{1}{17}\pi$ ) of the rock in the Golden Gate, and

to follow is an approximate elevation of the East Haram Wall (עֶזְרָא) and a section through the Haram Area.

## XII.

May 17th, 1869.

*Bab el-Mathara.*—Having failed to find any entrance similar to Barclay's Gate in the West Haram Wall, south of Wilson's Arch, I have been making a search to north of that arch. Any examination here is difficult, as the present surface outside is generally about the same level as, or higher than, that of the Haram Area.

Twenty feet to the south of Bab el-Mathara is a large cistern (numbered xxx. on the Ordnance Map), which was discovered and surveyed by Captain Wilson: it runs east and west, and is shown as piercing the Haram Wall. On plan it is singularly like the vaulted passage leading from Barclay's Gate; it is of the same width, and runs the distance into the Haram Area, but it does not appear to turn round at the inner extremity, as the other passage does.

It would be very interesting to ascertain whether over this cistern (xxx.) there is a lintel similar to that at Barclay's Gate.

Yesterday, when examining the Haram Wall on the outside, in an Effendi's house, I found a cistern which, on examination, proved to be in direct prolongation of cistern xxx., but not so wide. It was nearly empty, and I was able to go down and measure it. It is 34ft. 6in. from surface of ground to bottom; width from north to south, nearly 12ft.; and length from east to west, 14ft. 9in. On the south there is a recess, so that the Haram Wall is exposed over a surface 23ft. in height and 12ft. in length, but it is for the most part covered with plaster. At 22ft. from the bottom can be seen the springing of a modern masonry arch, which is apparently the western extremity of the vault of cistern xxx. There are no signs of any lintel or large stones, but the surface here is over 6ft. above the general level of the Haram Area, and the wall, free of plaster, could only be seen to a depth of 12ft. below the surface, that is to say, it could not be seen so low down as the level of the upper bevelled course at the Jews' Wailing Place. It is very necessary that the plaster covering the wall should be removed, as by so doing the wall would be bared to a level lower than the bottom of the lintel at Barclay's Gate.

It is desirable that Captain Wilson's description of this passage or cistern xxx. should be published. What I have here written is in continuation of his remarks.

No. 1.—Return showing the height, &c., of Courses of Stone at Barclay's Gateway, exposed by an excavation commenced 17th March, 1868, and completed. The stones 1 to 8 are above ground, and were observed about 40ft. from Barclay's Gate to north; the remainder, from B to V, are beneath the surface of the ground.

	Height of Course.		Top Bevel.		Bottom Bevel.		North Bevel.		South Bevel.		Set-out.		Depth of Bevel.		Remarks.				
	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.					
Squared stones ...	8	3	5								0	0							
	7	2	5								0	1							
	6	3	10								0	1							
	5	3	6								0	1							
	4	3	4	0	6½	0	6½	0	2½	0	2½	0	1	0	0½	Worn.			
	3	3	6	0	4½	0	3¾	0	2	0	1½	0	2½	0	0¾	Worn.			
	2	3	8	0	4½			0	2½			6	10	high	0	0¾	Worn.		
				Lintel course.															
	1	3	2	0	3½			0	1½					0	0½	Worn.			
	A	3	5								0	1	0	0	0	Very much worn.			
	B	3	8	0	3			0	3½	0	3	0	3	0	1	0	In good preservation.		
	C	3	7	0	3½						0	1	0	0½	0	0½	Worn at bottom.		
	D	3	3	0	3½						0	0½	0	0½	0	0½	Broken at bottom.		
	E	3	8	0	3½	0	2	0	2½					0	0½	0	In good preservation.		
	F	3	8½	0	2½			0	2½					0	0½	0	Stone worn.		
	G	3	8	0	2½			0	2½					0	0½	0	Well preserved.		
Bevelled stones .....	H	3	9½	0	4½									0	0½	0	0½	Top in good pres., bottom worn.	
	I	3	4½	0	4	0	2½	0	2½					0	0½	0	0½	Broken sill, course of gate.	
	J	7	8½	0	5½													Not seen.	
	K	3	10½	0	5½			0	4½					0	0½	0	0½	Well preserved.	
	L	3	9½	0	4½			0	3			0	2½	0	1½	0	0¾	Ditto.	
	M	3	11½	0	3½	0	3	0	3	0	2½	0	2½	0	0½	0	0¾	Ditto.	
	N	3	6½	0	5	0	1½	0	3½	0	2½	0	2	0	0½	0	0¾	Ditto.	
	O	3	6½	0	4½	0	4½	0	4½	0	2½	0	2	0	0½	0	0¾	Ditto.	
	P	3	5	0	4½			0	2½						0	1½	0	0½	Top well pres., bottom broken.
	Q	3	6½	0	4½	0	3½	0	3	0	3	0	2½	0	1	0	0½	Ditto ditto.	
	R	3	6	0	4			0	3						0	1½	0	0½	Ditto ditto.
	S	3	5½	0	3½	0	3½	0	2½	0	2½	0	2½	0	0½	0	0½	0	Ditto ditto.
T	3	7½	0	3			0	3½						0	0½	0	0½	Ditto ditto.	
U	2	5½												0	0			Not bevelled, stone embed. in rock.	
Total distance from Rock to Lintel		...	78	6½															
											Total set out	0	12½						

20th May, 1869.

CHARLES WARREN, Lieut. R. F.

PALESTINE EXPLORATION FUND.

No. II.

Return showing the height of Courses of Stones in the Haram Wall immediately south of Wilson's Arch, exposed by an excavation commenced in November, 1867.

The second column shows the height of each course at Barclay's Gateway.

		Height of Course, Barclay's Gate.		Height at Wilson's Arch.		Top Bevel.	Bottom Bevel.	Side.	Bevels.	Set-out.	Depth of Bevel.	Remarks.
		ft.	in.	ft.	in.	in.	in.	in.	in.	in.	in.	
Squared stones.	8	3	5									
	7	2	5									
	6	3	10									
	5	3	6									
	4	3	4	3	4½							
	3	3	6									
	2	3	8	3	6							
	1	3	2	3	3							
	A	3	5	3	6							
	B	3	8	3	6							
	C	3	7	3	6							
	D	3	3	3	4							
	E	3	8	3	9½	4	3	4	2½	1½		Broken away.
F	3	8½	3	8½	2½	4	2½	2½	1			
G	3	8	3	8	2½	4	2	2½	1½			
H	3	9½	3	9	2½		3	2½	1			
Bevelled stones.	I	3	4½	3	3					1		
	J	7	8½	4	1				0½			Very rough.
	K	3	10½	3	11	5	2½			1		to
	L	3	10½	3	11½	5	2½			1		
	M	3	9½	3	10	5	3			1	4	Very nicely worked and preserved.
	N	3	11½	3	9	5	2½			1½		Very nicely worked and preserved.
	O	3	6½	3	9		3			2½	½	Much worn.
	P	3	6½	3	6	6				1½		
Q	3	5	2	10½	No draft.				6			

May 21st, 1869.

CHARLES WARREN, Lieut. R.E.

The fifth course is bevelled under the Mahkameh, but not so at the Wailing Place.

May 21st, 1869.

*West Wall of the Haram Area.*—That portion of the Haram Wall to be seen above ground is described in Captain Wilson's notes; I will now describe those portions of the wall which we have exposed below the surface to west.

Excavations have been made along the Haram Wall to west in three places, viz., in front of Robinson's Arch, Barclay's Gateway, and under Wilson's Arch.

At Robinson's Arch we were not permitted to excavate near the wall: we therefore commenced a shaft at a distance of 72ft., sunk down to rock, and then drove in towards the wall, passing the pier and getting among the voussoirs of a fallen arch. Not being able to make our way through these voussoirs, we sunk through the pavement on which they rest, and 20ft. lower down came upon a rock-cut aqueduct, with two circular pools cut out of the rock to the north and south of the bridge. The Haram Wall was then reached and examined, but only at its foundations, where it rests upon the rock. The stones here are bevelled, but rather carelessly worked.

At Barclay's Gateway we exposed the whole of the courses in the Haram Wall, from the lintel of the gate down to the rock, a depth of 78ft. 6in.

At Wilson's Arch we also bared all the courses, from the springing of the arch to the rock, a depth of 54ft. 8in.; and also in a chamber of the Mahkameh, to the south of Wilson's Arch, we bared the wall for 17ft. in search of the second suburban gate. A return of the stones met with in the wall is given (see pp. 108 and 109), showing the heights and width of drafts. From this it may be seen that the courses of stone at Wilson's Arch and Barclay's Gateway differ in height sometimes to as much as 2in. There can be no doubt, however, that they are the same courses throughout.

We find that from stone C to E, at Wilson's Arch, it measures just 25ft., and at Barclay's Gateway the same; and in the same way, taking any number of the courses together, and comparing them, we find that they agree in height. We therefore presume that from the northern end of Wilson's Arch to Barclay's Gateway it is one wall from course 4 to the rock, and that in this space there is no other existing gate similar to that of Barclay.

We have, then, in the western portion of the Haram Wall, two bridges and one gate, and the two bridges so far correspond to each other that they have the same span to 6in., and the spring of Wilson's is only 7ft. above that of Robinson; in other respects, however, they differ. The pier of Robinson's Arch is of bevelled stone, and appears in every way similar to the wall of the Haram. The pier of Wilson's Arch, on the contrary, is for the first 19ft. built up of rough blocks, and after that height of large squared unbevelled stones, similar to those above the bevelled stones at the Wailing Place: also the voussoirs of Wilson's Arch are of a style which, I understand, is not met with until

late in the days of the Roman Empire. This, together with the fact of our having met with a great heap of masonry (apparently voussoirs) in the place where a former arch would have fallen, may lead us to suppose that the existing arch of Wilson cannot date so far back as the building of the Haram Wall; the stones at the springing and for the first two courses are, however, apparently of the same age as the Haram Wall.

May 20th, 1869.

*Haram Wall, at Wilson's Arch.*—The ground about Wilson's Arch, below the surface, was examined in the latter end of 1867. (See letters XX.—XXII.)

On 20th November, 1867, a shaft was commenced alongside the Haram Wall, immediately under the southern end of Wilson's Arch (see elevation), in the Pool el-Burak. The bottom of this pool is composed to a depth of 3ft. 6in. of a very hard concrete, formed of stones about 3in. cube, set in a hard cement. The first course below the surface is cut back about 18in., apparently for the skewback of an arch. Below this the stones are very similar in appearance to those at the Wailing Place, but in better preservation. After passing through the concrete we came upon black soil, and at 21ft. we came in contact with a mass of very large stones, apparently the voussoirs and bevelled stones of a fallen wall and arch. We were here delayed some days, as the stones, being of *mezzeh*, could not be broken up with the hammer. Eventually a hole about 2ft. square was cut through, and we were able to continue our shaft. The stones passed through appear to be similar to those in the Haram Wall, and the mass of them together is about 8ft. deep. Continuing down, we arrived at water at 44ft. from the surface, which, on being observed for several days, was found to bubble in at the northern end of the shaft and run out at the southern end; but after a night of heavy rain the water disappeared (see letter of December 21st, 1867), and we were able to continue down the Haram Wall until at 51ft. 2in. from the surface, or 54ft. 8in. below the springing of Wilson's Arch, we came upon the rock. The last stone (Q) of the Haram Wall is let into the rock, and we sunk down about 18in., until we could see the bottom of the stone. There has been water on the rock since we opened the shaft until the present time, and it appears to have a very gentle motion towards the south; at certain times it rises 2ft. or 3ft. The last 8ft. or 10ft. we passed through before coming to the rock is full of limestone crystals.

We now made a landing at 21ft. from the top of the shaft above the large stones we had met with and drove a gallery in to south along the Haram Wall, in search of any appearance of the second suburban gate. At 23ft. we came upon a wall of well-dressed stones, 2ft. by 2ft., butting on to the Haram Wall. We were close to the top of it, and, passing over, found a pavement extending 11ft., when we came upon a wall

immediately below the southern wall of the Pool el Burak. Having found no signs of any gateway in the Haram Wall, this gallery was abandoned.

We now sunk a shaft about 18ft. south of the southern end of the Pool el Burak, along the Haram Wall, to a depth of 17ft., in search of the gateway, with no result.

The width of Barclay's Gate is nearly 19ft., and it can be seen on looking at the elevation ( $\frac{1}{125}$ ) that if a second suburban gate existed to south of Wilson's Arch similar to Barclay's Gate, it would have been visible in the shafts or gallery, or in some part of the Haram Wall which is to be seen in the chambers under the Mahkameh.

We now commenced a shaft on the east side of the pier of Wilson's Arch, about 7ft. from the southern end, and found it to be built of large, well-cut, squared stones, rather larger than those in the Haram Wall, but without any bevel. At 11ft. 6in. we came upon a recess in the pier, covered over with a great lintel, and similar to the recesses found in the pier at Robinson's Arch, except that it extends through three courses instead of two. It is 9ft. 5in. in height, and about 6ft. wide, and reaches 5ft. into the pier. Apparently it has once been used as a gateway, as there are grooves cut in the stone as though for an iron gate. Below this recess the pier is formed of great roughly-hewn stones, to a depth of 19ft., when rock was struck. A gallery was now driven along the rock across the valley to the east, from the bottom of this shaft, until we reached the other side, close to where our first shaft is. In this gallery we found the rock to have a general inclination towards the east. There was a good deal of water in this gallery, and at last we were nearly swamped out of it.

It is apparent that the lower part of the pier, below the recess, was built after the *débris* had filled up the Tyropæon Valley to that height, and that the portion above and including the recess has the same appearance as the portion of the wall (four courses) of squared stones *above* the bevelled stones at the Wailing Place.

It is also to be remarked that at 21ft. down the eastern side of this pier we met with the same kind of fallen masonry as in the shaft along the west wall, from which we may infer that an arch existed previous to the present one, and that it fell after the *débris* had filled up over the rock to a height of from 20ft. to 30ft.

*Barclay's Gate.*—In the west wall of the Haram Area, about 270ft. from the south-west angle, immediately under the Bab el-Magharibe, is an enormous lintel, which, it appears, was first prominently brought to notice in this century by Dr. Barclay, of the United States, in his "City of the Great King."

As there does not appear to have been any generally received name for the gateway over which this lintel rests, we have called it after Dr. Barclay.

In 1866 Captain Wilson excavated to a depth of about 25ft. in front of the north jamb of the gate without reaching the sill. He also explored a cistern in the Haram Area, which proved to be the continuation of the Mosque el Burak, the two together forming the passage leading from Barclay's Gate to the Haram Area above.

A brief description of the lie of the ground at this point may be necessary. The general level of the Haram Area is 2,420ft. above the Mediterranean, but near the Bab el-Magharibe it is 2,416ft. Immediately outside this gate the general surface is about 2,395ft., and a ramp leads up to the Bab from the ground below. This ramp, near the wall, is formed by two vaulted chambers, one over the other; in the lower one the lintel can be seen. The height of the lintel is 6ft. 10in., the total length visible is 20ft. 1in.; the bottom is at a level of 2,398ft. 5in., being 5ft. 5in. above the surface of the ground at that point. The northern jamb of the gate can be seen; it is flush with the northern side of the older portion of the passage inside, which is here 18ft. 8in. wide, and we may reasonably suppose the gateway to be the same width. The lintel would then be 24ft. 5in. in length.

The space below the lintel, forming the gateway, between the two jambs, is built up in rough rubble, with here and there a few cut stones. Immediately above the lintel there are no courses of bevelled stones; the masonry is modern, and the stones are small. At the Jews' Wailing Place there are two courses of bevelled stones and four of squared stones above the level of the top of the lintel, but these all terminate abruptly at about 12ft. from the gate.

An excavation was commenced here on 17th March, 1869. It was desirable to sink the shaft at some distance from that of Captain Wilson, as where the soil is very loose it is dangerous to work again in an old excavation. We commenced about 7ft. north of the jamb of the gate alongside the Haram Wall. A description of each stone met with in the Haram Wall is annexed. About 5ft. below the surface we came upon a lamp and a good deal of broken pottery, of a different description to what we had hitherto met with, and bearing beautiful impressions of scrolls and other devices. At 14ft. a gallery was driven in to south, until we reached the north jamb of the gateway, the soil being black and very loose. We here came upon the shaft of Captain Wilson, and a rush of earth came into our gallery. On looking up into the void space a stone corbel was seen to be built into the rubble masonry under the lintel. It must, of course, have been placed there when the gate was blocked up, and was probably for the foundations of a house to rest on. I imagine that the foundations of the vaulted chambers on which the ramp leading to Bab el-Magharibe is laid rest upon similar corbels on the side near the Haram Wall. A plan and section of the corbel is given.

Having made secure the gallery where the rush had taken place, a shaft was sunk down along the northern jamb, through hard earth mixed with large stones, some of them 2ft. long. At about 23ft. from the surface the sill course was met with. This course, however, is

broken, so that it cannot be said whether the top or bottom of it is the true sill of the gate. The top is 28ft. 9jin. below the lintel, and the bottom is 32ft. 1jin. below it.

We now continued our shaft, and 9in. below the bottom of the sill course came upon stone flagging forming the flat roof to a drain running along the Haram Wall towards the south-west angle. This drain is 2ft. 4in. wide, and 5ft. 6in. high. It is the same drain which we found *above* the pavement at Robinson's Arch, and which we followed up to Barclay's Gateway. (See letter xxvii., 22nd August, 1868.) Men were sent to knock at the extremity of this drain from Robinson's Arch, and they could be heard quite plainly, but we could not communicate through to our shaft at Barclay's Gate, as rubbish had fallen in and stopped up the passage.

Sinking through this drain, we came upon the top of a wall, perpendicular to, and abutting on, the Haram Wall, at 31ft. below the surface. We first sunk to south of wall, and found ourselves in heavy masonry; then sinking to north of it, and finding the face to be of well-dressed squared stones, in courses, we continued our shaft alongside of it until at 66ft. 7in. from the surface we passed its foundations. We then continued along the Haram Wall, and at 73ft. 7in. struck the rock, which is cut horizontally, and the bottom stone of the Haram Wall is let into it.

For the last 30ft. we had passed through *débris* composed of hard earth and broken cut stones, many of them 3in. by 2in. by 1ft. 6in. On tamping up, a gallery was driven to south, through the wall butting on to the Haram, to a distance of 8ft., where it was found that it had been a retaining wall, about 6ft. thick, there being no southern face to it. From this it appears that the road to Barclay's Gate from the Tyropœon Valley may have been by means of a causeway, raised 46ft. above the rock. Whether it may have been solid or supported on arches is not apparent.

The shaft at Barclay's Gateway has now been tamped up.

The Haram Wall has thus been bared to a depth of 78ft. 6in. from the bottom of the lintel of Barclay's Gate to the rock, and the stones are of one appearance throughout, and are probably *in situ*. There are twenty-six courses of bevelled stones in all, twenty-two below the lintel, two on a level with the lintel, and two above it. These two latter courses do not now exist immediately above the lintel, but can be seen a little further to the north at the Wailing Place. Above these, again, are four courses of squared stones, without bevels, except in portion of the fourth and lower course, at the farther end, near the Mahkameh, where bevels are to be seen.

It is interesting to compare the stones above ground at the Wailing Place with those we have bared beneath the ground at Barclay's Gate, and for this purpose I annex a tabular form (see p. 109), showing the height of each course in the wall at this point, and the width of bevel or marginal draft, and also the set-out of each stone.

The first course below the lintel is very much worn, and is shown on

plate 12 Ordnance Survey, as being 3ft. 2in. in height. By taking it in conjunction with the courses above and below I find it to be 3ft. 5in. in height.

The stones we have laid bare are in a much higher state of preservation than those at the Wailing Place. It is curious that many of them are in good order at the top and damaged at bottom.

With one exception we have found the top level to be a little broader than that at the bottom, and this we observed, also, to be the case in the stones uncovered on the south and east faces of the Haram Wall.

### N.II.

May 31st, 1869.

*Haram Wall to West, continued.*—I have levelled round from the Wailing Place, and find the line of springing of Robinson's Arch to be on a level with the bottom of Stone C, Barclay's Gate, and the first courses above and below are similar at both places; so that, though we are not yet in a position positively to assert that the same courses run through from Wilson's Arch to the south-west angle, yet it does seem likely that this is the case. We must now, if possible, sink a shaft down along the Haram Wall under Robinson's Arch, and another at the south-west angle, to bring the matter to a satisfactory conclusion.

We may now, with the accompanying elevation of the Haram Wall to west, examine into the ancient lie of the ground in the Tyropœon Valley.

We find a drain running under the level of the sill of Barclay's Gateway and over the ruins of the upper arch of Robinson; and we may therefore suppose that Barclay's Gateway was in use after the fall of Robinson's Arch. Now the *débris* of what appears to be the first arch of Wilson is on a level nearly with the sill of Barclay's Gate, and also within two or three feet of a polished marble (*mezzeh*) pavement, which we found round the south-west angle. Are we, then, to suppose that at one time there was a nearly level pavement round the west and south walls of the Haram Area, and that at that time the first Arch of Wilson and the Gate of Barclay were in use, but that the Arch of Robinson was in ruins? And because we find that below this level the pier of Wilson's Arch is roughly built, are we to come to the very awkward conclusion that Robinson's Arch was in use and in ruins before the present causeway going over Wilson's Arch was constructed?

I call it a very awkward conclusion, because I cannot at present see how it can be avoided; and yet it does not appear to accord with the account of Josephus; and it is the more difficult to comprehend because the secret passage which we have discovered running under the cause-

way must be identified with that described by Mejr-ed-din in the sixteenth century. As this is a question of some moment, I will quote from the translation of Mejr-ed-din given in Williams's "Holy City" (i. 157):—"The Street of David.—This is the great street which commences at the Gate of the Chain (Salsala) of the Mosque el-Aksa, and leads to the city gate, once called of the Mihrab, now of Hebron (Kahlil). . . so named from a subterranean gallery which David caused to be made from the gate of the Chain to the citadel, called the Mihrab of David. It still exists, and parts of it are occasionally discovered. It is solidly vaulted."

I suggested some time ago that originally Wilson's Arch was only 20ft. wide; and if this is so, we might find that the northern portion of the pier is more ancient than the southern. Objections are made to our digging any more under the Mahkameh, or this point might be settled.

It is to be observed that the aqueduct running under Robinson's Arch is vaulted as far north as Barclay's Gateway, and beyond that its roof is formed of flat slabs. Under the street leading to the Jews' Wailing Place the aqueduct is cut through by the foundations of a building, and we could not examine it further; but I am under the impression that it is in connection with the aqueducts we found under the causeway leading over Wilson's Arch.

*Sculptured Slab.*—A short time ago a fellah, when digging on the south-east side of Mount Sion, found in a hewn cave a slab of sculptured marble, in size and appearance very similar to those found built into the walls of the mosques in the Haram esh-Sherif (see Plates 13 and 14, Ordnance Survey Plans).

This slab has a cross upon it; and also the ornament inside the wreath appears to be a cross coupled with a fleur-de-lis, similar to one of the ornamented sides of the great red marble font which is now to be seen at Tekoa.

*Doric Capital.*—This was found in a shaft south of the Haram Area, at Ophel, about 14ft. below the surface. It is the only specimen of the order we have found under ground. The other Doric capital, of which you have a profile, was picked up by Professor Donaldson on the surface of the ground near Siloam.

*Ionic Capital.*—This capital was found in the Birket Israil, about 20ft. below the surface of the rubbish. It is roughly cut, but has an elegant appearance from a distance, and is only the second specimen of the order found in the excavations.

*Shaft of Column.*—The shaft was found standing upright in the gallery running up towards the Golden Gate. The marks cut in with the chisel are about one-eighth of an inch deep, and appear to be masons' marks. A sketch of this shaft is given in the *Illustrated London News* of April 24, 1869.

*North-east Angle of Haram Area.*—The excavations at this point are still in progress, but so much has been done, and so much important information obtained already, that I think it better to summarise what we know, however imperfect it may be, rather than let it run on for another three months.

Twelve shafts have been sunk to east of St. Stephen's Gate, and north-east of the Haram Area. Three of these are yet in progress, and if only we can successfully drive galleries from them, I am sanguine of very important results; results not only great of themselves, but which are likely to increase in a great measure the value of what we know at the south-east and south-west angles.

Though it would not be right at present to form a permanent theory on any of the disputed points, yet it is impossible not, and in fact most necessary, to look ahead and conjecture what we are likely to come across, for without so doing the excavating must degenerate into a wild probing of the ground, instead of a systematic investigation. And though in the following brief account I find it necessary to couple conjecture with fact, in order to give any idea of what our results are, and to what they tend, yet I do so with the knowledge that each day my views must be modified by the accumulation of fresh results, and they must go on changing until by constant probing we can speak with certainty of the ruins of ancient Jerusalem. I may quote in illustration of this, my letters of 1st and 2nd February, 1869, in which I came to the conclusion that there is rock only on the western side of the Birket Israil (so-called pool of Bethesda). I was fully impressed with the idea that on the eastern side, the valley running south from the Harat Bab Hytta, ran out into the Kedron, after having been joined by the valley, which I conjecture to run east from Bab en-Nazir, north of the platform of the Dome of the Porch. Also in my letter of 28th December, I put the question, "Are we to suppose this gate (Bab Sitti Miriam) elevated 100ft. above the bottom of the wall, or does the rock break down suddenly from the gate towards the south, so as to form a deep gorge in which the pool is built?"

In order to settle this question, I sunk shafts on either side of the Gate of St. Stephen (Bab Sitti Miriam), and also in the road leading down to the Church of the Tomb of the Virgin, and find that the roadway at the gate is about 20ft. above the rock, and that going down the hill the accumulation of *débris* decreases from 25ft. in height to 2ft. or 3ft. This threw considerable light upon the subject, showing that there has been no great destruction of extensive building so far north as this gate, and that the spur of the hill running from the Burj Laklah to the Birket Sitti Miriam still continues to the south. Shafts were then sunk to east of the Birket Israil, and rock was found at a depth of 50ft. from the surface, being higher than the bottom of the Birket Israil by 40ft. As we find the natural rock in the Birket to the west at a little below this level, we are forced to the conclusion that the valley running south does not turn sharp round to the east in this

pool, but runs on through the Haram Area, and issues into the Kedron somewhat north of the Golden Gate.

I have placed on the accompanying tracing, the conjectural lie of this valley. That it is an important matter there can be no doubt, for on the proving of it may hang the destinies of most of the theories concerning the site of the ancient temple.

It is very mortifying just at this juncture to hear that the sum for excavations is to be curtailed still further. When I left England last June, I was told that my limit would be £300 per month; it has since then been reduced to £200, and now I hear you are compelled still further to reduce it, and even propose closing the works during the three summer months, just when the fellahs do most work, and Jerusalem is most quiet.

It is very desirable just now that we should proceed with the work with unabated vigour, and bring the question of the Haram Enclosure to a proper conclusion. A few more months' work here, and we may go forward confidently, and find the old walls of the city, having fixed the site of the temple.

We expend a great deal of wood in the shafts and galleries on the east side of the Haram Area. The shingle we pass through is often of such a nature that the frames cannot be taken out again. If it is possible to get up to the north-east angle, I propose examining it very minutely. We find the wall joining it to St. Stephen's Gate to rest several feet above the rock, the intervening space being partially filled up with concrete, and in one place at least the wall rests on the red earth. It is apparent that this wall is of no very ancient date.

Of the city wall to the east, this north-east angle of the Haram Area is the first sign from the northern end of anything ancient in appearance, and it will now be very necessary to ascertain whether the whole wall of the Haram Area to the east is built from the rock with bevelled stones; if it is, we can hardly doubt that the theory of De Vogüé is correct, and that the Haram Area is one vast platform of ancient date: if, on the other hand, we find the bevelled stones in the north-east angle only extend under ground as far south as they do on the surface, then we have the interesting problem whether this has been a tower, whether of Hananeel, as Dr. Barclay supposes, or of Meah, or the House of the Mighty (Nehem. iii. 1, 16; xii. 39). For if it should be decided that the Haram Wall at the south-east angle is of the time of the Jewish kings, we can scarcely give a more recent date to this wall at the north-east angle, provided we find it to be built up of bevelled stones from the rock.