



THE GREAT QUARRYING OF JERUSALEM

Illustration by J. M. W. Turner, 1840. See the Quarrying of Jerusalem, Turner.

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THE ROYAL CAVERNS OR QUARRIES, JERUSALEM.

BY WILLIAM SIMPSON, F.R.G.S.

THE existence of large excavations under such cities as Jerusalem, Rome, Paris, Constantinople, Kief, &c., has led to some curious theories. These ancient cities were not only capitals, but religious centres, and more or less regarded as sacred places. This identity of character naturally led to the conclusion that there must have been some similarity of purpose in these subterranean labyrinths. An extended knowledge of each of these places tends to destroy the supposition that there was any uniformity of idea in forming them. At Kief they are places of burial. The greater part of the Roman catacombs are the same. There are a few small chapels among these tombs, the chapels being tombs themselves. Some were undoubtedly Arenaria, from which the material for lime was taken. The pre-Christian date of any of them is a subject which is at present too fiercely debated to be assumed as a settled point. With the exception of the catacombs of St. Priscilla, where there is a choked-up line of an old aqueduct, evidently an accident among these underground ramifications, there is no appearance of any relation to a water-supply in the whole of the vast extent of these excavations. At Constantinople, on the contrary, "water-supply" is seemingly the only purpose. There is the *Bir-bin-derik*, or cistern of a thousand and one columns, and the *Yere-baton-sevai*, or "subterranean palace," both of these being very fine specimens of architecture. The latter is all in beautiful marble and elaborate Corinthian. In both cases they are built, and the columns support the ground above. There is another very large underground reservoir at Constantinople, which is said to extend from under the Seraglio Sta. Sophia, the Atmedan, and as far as the tottering column, and much farther, according to some accounts, for there is a story that two men ventured upon this unknown sea in a boat and never were again heard of. There were nineteen cisterns originally in Constantinople for supply of water. Eleven of these are said still to be in existence.

Most of the excavations of Jerusalem seem to resemble those of Constantinople in their purpose, "water supply" being evident in their construction, the great Bahr-el-Khebir, excavated under the Haram, being evidently connected with the ample supply required by the Temple services. The same may be suggested in regard to all the smaller cisterns under the Haram, and they are very numerous, as may be seen in the large map at the office of the Palestine Exploration Fund. These are all in the solid rock, the only yet discovered exception being the underground built cistern at the north-east corner, and how far the others are natural, and how far excavated, it is now difficult to determine. These may have been caves originally, and they may have been extended as the wants for water increased, and passages of communication from the one to the other would be added,

the whole as it remains at present forming a most wonderful labyrinth of cisterns, grottoes, tunnels, stairs, &c., &c. The Sacred Cave under the Dome of the Rock is an exception: it has never been a well, no doubt, but it has been a natural cave, and it has been also increased, and its original form altered by excavations. The second cave underneath, called the Bir-Aruah, or "Well of Souls," has a long passage running north and south, connecting it with the cisterns of the Haram. The two tunnels under the Convent of the Sisters of Zion are partly cut in the rock and partly built, and their object has also apparently been the supply of water. The long rock-cut tunnel at En-Rogel, which Captain Warren has cleared out, at least to one of its extremities, must, although not yet clearly understood, have been designed for a part of the water system of ancient Jerusalem. There are also subterranean passages leading to the Fountain of the Virgin.

These are the principal subterranean places as yet discovered in Jerusalem, with the exception of the Royal Caverns or Quarries. And as the supply of water is evident in the one case, the supply of stone for building will be as clearly seen in the other.

The Damascus Gate is in the north wall, where it dips down into the upper portion of the Tyropœon Valley. Upon passing out, a part of the city wall is seen on the right hand, standing very high upon a mass of stratified and rugged rock, and it is only when you come close under this point that a very low entrance is discovered, so low that one has to stoop in passing in. Gradually the height increases, and before you have proceeded far the ground slopes downwards, and you find yourself in a very magnificent cave. At this point there is nothing to indicate that the place is other than a natural cave. The roof is formed by the stratification of the limestone rock, and fragments are scattered about on the ground. This portion may have been an original cave formed by nature, and it may have become a quarry when the building of the Temple, the palaces, or the walls of the city would require a large supply of stone, and its nearness would be a strong recommendation. After entering a little farther, the evidences of its having been a quarry soon begin to appear. This is seen in the straight-cut walls, the absence of stratification in the roof, in rude masses, more or less square, being left to give support as they quarried beyond. But above all, the character of a quarry is seen in the stones, more or less cut out, left as the work was going on. The process by which a block of stone was separated seems to have been by cutting a perpendicular line into the rock as far in as the breadth of the block was required. These cuttings, which are yet to be seen in many parts of the quarry, are about four or five inches wide, and would allow the use of a pick or instrument with a long handle, by which the incision could be carried on to the necessary depth. A similar cutting is necessary behind, and the same at the top and bottom, before the stone could be removed. This process, although it must have been slow, has the advantage of producing stone already squared. There is very satisfactory evidence left as to how they

arranged the means of light for this work. On the left-hand side of each cutting there is a very slight hollow formed at the corner, into which a small wick may have been placed and a little oil; the small cup-like hollow makes the theory of a wick and oil more probable than that it was for a candle, and the smoke has blackened the white limestone above, which still remains over each as a record of the past. The side of the cutting is also blackened, as well as the outer face, telling that when the workman advanced with his work and required the light to shine inwards that he must have turned the wick so that he might see to the back of the narrow incision. One cannot but admire the simplicity and ingenuity of such primitive means, for the space is so narrow, that there is no room beyond what is required for the movement of the pick, and a lamp would have been in the way. The illustration given with this article will assist in conveying a clearer idea of what is here described.

At one place our guide placed one of the candles on the ground at the edge of what seemed a precipice, and in a few minutes after we had gone on we found that we were in a lower level, for through an arch of solid rock we could look up and see the candle throwing a dim glimmer on the darkness around. This was what a theatrical manager would call in his bill "startling effects," and our guide seemed to pride himself upon it quite as much as if he belonged to the stage. Upon inquiring of him as to the real extent of these caverns, he spoke with a mysterious vagueness on the subject. "No one could tell," but it was believed "that they extended all under Jerusalem; he would take us as far as he knew, and he was the only guide in Jerusalem with whom it was safe to enter these places." Such was his account. And some caution is necessary in the selection of a guide to this labyrinth, for one friend has reported that his party went in with a person who pretended to be acquainted with the place, but had not a sufficient amount of candle, and they were left in the dark: the guide sat down and cried, and the party had to grope their way in the darkness, but they were lucky enough to scramble out. Upon inquiring of Captain Warren about the real extent of these caverns, his account was much less imaginative than that of our guide. The limits of the place were understood to have been all explored, but there might be other caverns of the same kind under Jerusalem. In fact, the existence of others is highly probable. The Royal Quarries are in some places as much as 100 yards wide, and may be said to extend from the entrance to about 200 yards or more in a south-easterly direction. They are on the eastern side of the Tyropœon valley, and under the high ground upon which stands that portion of Jerusalem known as Bezetha. They are supposed to extend south as far as the Austrian Consulate, and it will be noticed that they thus approach very near to the excavations under the Convent of the Sisters of Sion, the double tunnel at this last place extending to under the Haram Area; so that it may be said that the ground is nearly hollow all the way from the Temple enclosure to the Damascus

Gate. The popular idea is that a passage exists from these caverns to the Haram, and leading to the cave under the Dome of the Rock, but none of the authorities who have examined the place give any countenance to it. The following from a Mohammedan author will indicate what has been believed about these curious quarries. Mejr-ed-Din says: "Opposite to and to the south of the Zahara, and below the northern gate of the city [Damascus Gate], is a great oblong excavation, called the Cotton Grotto; some say that it extends even below the Sakarah." The place was called by the Arabs, "Maghara el Cotton," or the "Cotton Grotto," and its existence seems not to have been altogether unknown, but it was only about fifteen years ago that it was explored, and described by Dr. Barclay. The following is a notice of it which appeared at the time:—"Those portions of the cut-away rock which lie exposed to the action of water, were coated over with a thick incrustation of stalactites, which showed the remoteness of the age of excavation; yet the marks of the chisel on the dry portions of the rock looked as new and fresh as if the workmen had only just retired. We proceeded onwards, encountering on our way only such objects as tended to heighten our curiosity and to excite inquiry, such as, Why and wherefore were deep niches cut here [these niches have been explained in this paper] and a flight of steps there? Or to what class do those animals belong over whose burrows we were stumbling? Or how or when had the human skeletons that lie on yonder ledge of rock been brought hither? All these gave way to an object of much greater interest, almost affecting. Within a retired solitary place, hidden from the gaze, stood a grey-looking circular basin of about three feet in diameter, scooped out of the solid rock, receiving in its bosom the water that was filtering through the sides and the ceiling above. Close to it lie scattered broken pieces of pottery, remains of vessels used for drinking, and which appeared as if they had only just dropped out of the hands of the buried workmen when coming hither to quench their thirst."

The well is still visible, and looks like a natural fissure in the rock. The water is brackish, but there are no skeletons visible nowadays, and there is no appearance of the usual ledges or cells cut in the rock to indicate that the place was intended for tombs. Bodies may have been placed in it at later times, or it is not impossible that people may have got in and lost themselves in such a large place.

It has been supposed that the entrance to the Royal Quarries was blocked up about 1542 A.D., when the present walls of Jerusalem were built by the Sultan Suleiman. Thrupp quotes the account of a Jewish traveller from Leghorn, who visited Jerusalem in 1523, and he says: "Not far from the Báb el' Amud [or Damascus Gate] is the Cave of Zedekiah, which extends underground to the mountains of Jericho. Several persons told me that they themselves walked a mile in the same. It is so spacious that a man on horseback with a lance in his hand can walk through it quite comfortably." If this is not a sensa-

tional account by the guides of that period there is evidently a great field for discovery in the caverns at this locality. The entrance has been blocked up by a large accumulation of earth, which has, from its appearance, been perhaps blown in by the wind, and extends in the form of a bank for some distance into the interior. If this earth was removed down to the original surface of the rock, instead of having to duck down on entering, a man on horseback with a spear could easily pass. The rock has been cut deep down on the outside of the walls of the city at this point, and to the casual observer it looks like a portion of the fosse which is more or less cut out of the rock all the way round to nearly St. Stephen's Gate, but a closer inspection will show that the deep cutting between the Damascus Gate and the entrance to the cave is exceptional. There is a large square basin, with perfectly perpendicular sides, which at first one would suppose had been cut out as a tank for water; although partially filled up, it is yet more than twenty feet from the surface. This is only a part of the passage by which the road out of the caves to the Damascus Gate went along. The cutting through the rock from this square basin has been to some extent built up, suggesting that the mouth of the cave had been intentionally closed, which may have become necessary for various reasons, such as people losing themselves, or its being a haunt for robbers and such characters as Abu Gosh, who regularly levied black mail upon the pilgrims to the Holy City. There is the statement in 1 Kings vi. 7, that the stones for the temple were all squared and made ready, "so that there was neither hammer nor ax nor any tool of iron heard in the house, while it was in building," and the notion is associated with these caverns that they are the underground means by which these stones were moved in silence to their places. If such were the case, the communicating passage has yet to be discovered, and in such a city of caverns it may exist, but the deep fosse between the entrance to the quarries and the Damascus Gate is satisfactory evidence that the stones were moved by that route into the city to where they were required for building on ordinary occasions.

There is over the entrance to these quarries a high mass of rock upon which the city wall at this point is built; this rock is now rough and rugged, but the fact that it was cut so as to form a strong defence at this place is evident. As soon as the mind realises this aspect of the case the inquiry naturally occurs, Where is the other side of the cutting? The eye looks over the ground, and the counterscarp of the fosse becomes manifest in the cliff at the Grotto of Jeremiah, which is distant about 400ft. This grotto, although it now contains some tombs, is an old quarry, and may consequently be looked upon as almost a part of the Royal Quarries. But the excavated space between, was it all excavated for defence, or may it not owe its great width to its being also a quarry? This question is important as bearing on the defences of Jerusalem and the line of its ancient walls. If these quarries are of antique date—and the curious rock-cut passage for removing the blocks of stone

does give an air of antiquity to the spot—we have a valuable item in the consideration of one of the most difficult questions of Jerusalem topography. The high rocky point over the entrance to the Royal Caverns must always have been one of the keys, at least, of the defence of Jerusalem, the Temple being always the object of attack, and it was probably the position of one of the three towers described by Josephus. Antonia would be safe till the fortifications on this height fell. The likelihood is, that the stratagetic value of this strong spot may have caused the deep fosse to be cut into the solid rock; and afterwards, the proximity of the place to the town, and perhaps the quality of the rock, may have led to its becoming a quarry. The first object of the cuttings, that of defence, may have again directed the quarrying so as to give a still greater width to the fosse, and hence its extension to what is now called the Grotto of Jeremiah.

In wandering through and around the outskirts of Jerusalem it must have struck many that there is scarcely a foot of the rock that remains in its original formation on the surface. From the Tombs of the Kings, all the way down the valley of the Kedron, along the valley of Hinnom, in truth, all over the ground, everywhere, there is scarce a bit of rock that has not been touched by a tool; many places are so old and worn that it is difficult to say what they were originally; tombs, or excavated caves, have crumbled, and a perpendicular wall is all that is left to tell of the hand of man. Some of these indications may only be the marks of where quarrying had been carried on; tombs were no doubt the most common purpose of those excavations; some may have been temples; steps are very common, but at the present day they lead to nowhere, showing that their original purpose is lost. In one of Capt. Warren's late reports there is some very valuable and curious information which bears on this subject; last year he sunk a series of shafts at the north-east angle of the Haram Area, that is, on the outside of St. Stephen's Gate. These shafts were carried down through the soil to the rock, and he makes the following important statement: "Wherever we have excavated we have found the rock at bottom of our shafts to be cut away in steps, or levelled, or otherwise showing that the hand of man had been applied to it."—*Quarterly Statement V.*, March, 1870.

These shafts were at depths varying from 6ft. to 30, 40, and even to 80ft. The question naturally arises, For what purpose were these cuttings made? Were they quarries, or defences, or were they merely the levelling of the rock for the houses of the Jebusites, or of those who first built the city? This may have been the spot where the people prepared the "great stones, costly stones, and hewed stones, to lay the foundation of the house." According to Josephus, the hill on which Antonia stood was higher than that of Bezetha. It is not so now, hence we must suppose that it was quarried down. In the north-west corner of the Haram Area the surface of the ground is a level rock that was cut down, its former level being visible in the perpendicular scarp in the corner where the Governor's house now stands. Antonia was separated

from Bezetha, "the new city," by a "deep valley which was dug on purpose." This fosse is supposed now to be discovered in a perpendicular cutting in the rock, which may be seen in the church of the Sisters of Sion, where it forms a part of the interior wall near the entrance. Even the surface of the Sacred Rock, under the dome of the rock, has not escaped, and evidences are visible almost all over it that a tool has been used. Some of the cuttings on this stone are so old that they are now almost crumbled away again; it was only while making a careful sketch of it that I became conscious of lines which must have been cut, and which were only to be made out by the continuity of a few detached points. There are a few illustrations of important changes produced by quarrying or cutting away of the original rock upon which Jerusalem stands. Everyone has been interested in learning, through the Explorations of the Fund, of the accumulation of *débris* over almost every part of the surface, but it is equally important to know the changes which have taken place in the form of the rock upon which the whole rests.

NOTES ON OUR LORD'S TOMB.

1. *Nature of the tomb.* All accounts concur in describing it as an excavated sepulchre, a new and recently finished work, and not as yet used for purposes of burial.

The general idea concerning the tomb is that it was single-celled. When constructing it, Joseph could never have had any idea of the sacred use to which it would be applied, and must have had in view a multi-, not uni-locular *family* sepulchre. The narratives uphold the idea of a multi-locular tomb; had it been otherwise, the angel's invitation, "Come, see the place where the Lord lay" (Matt. xxviii. 6), would have been unnecessary, for a glance would have revealed the interior to the two Marys. St. Mark's narrative is more clear; he describes evidently an antechamber, from which the loculi branch off, and in this case there were apparently only two rows, right and left. On entering this chamber, the Marys find the angel "sitting on the right side" (lit. : ἐν τοῖς δεξιῶν; right what, if not row of loculi?), probably at the entrance of the lately tenanted loculus, which he points out to the affrighted women, "Behold the place where they laid him" (xvi. 6).

According to St. Luke it was only on entering the chamber that the women found not the Lord's body (xxiv. 3); if it had been a one-celled tomb a glance from the entrance would have revealed its emptiness; again, the presence of a loculus branching off from the chamber would necessitate the stooping of Peter to see the grave-clothes laid by themselves (xxiv. 12).

So with St. John—the chamber of the sepulchre admits both Peter