

being an objection to their having been designed for millstones, it is sufficient to say that stones larger than the largest of these two are still in use in the country as millstones.

An American who visited this region some years since appears to have seen and described these identical stones. He asserts that on account of their size, and because they have no hole in the centre, they could never have been designed for millstones, and his antiquarian zeal leads him to see in them mysterious "solar disks," connected with the worship of Baal. But this same gentleman is famous in Palestine for having "discovered" a lot of "rude stone monuments of a high antiquity," "connected with early Phœnician worship." He even points out what part was "employed for the fire of wood or coals" and "where the victim was laid across." It turned out, however, that these were nothing but old oil presses, which even his elaborate description could not change into ancient altars.

SELAH MERRILL.

THE NEWLY-DISCOVERED CHURCH.

THE work of excavation at the newly-discovered church north of the Damascus-Gate, has been carried so far since Captain Conder and Lieutenant Mantell made their brief reports in the *Quarterly Statement* for April, 1882, pp. 116-120, that it needs to be described again. The ruin has proved to be one of great extent, and of special interest.

The way in which it was brought to light is worth recording. In an uneven field, which rose considerably above the land about it, parts of which appearing, indeed, like little hillocks, the owner of the soil tried to maintain a vegetable garden, but the ground was so dry that neither grain nor vegetables would flourish, and even irrigation did little or no good; besides, here and there large holes appeared in the ground which could not be accounted for. At last the owner determined to dig and see what there was below the surface of his field, and to his surprise he very soon came upon fine walls and a pavement. The excavations being followed up have laid bare a church with some of the surrounding buildings.

The amount of *débris* which had accumulated above the floor of these buildings was 10 to 20 feet in depth. To remove this mass of earth has required much time and labour, and the work is not yet completed.

The piece of ground in question has about 60 yards frontage on the main road (see the plan of this section in *Quarterly Statement*, April 1882, p. 119), and extends, so far as the excavations go, about the same distance back from the road, that is, to the east.

The church itself is situated on the south side of this plot, and is very near the street. The ground in front of the church is paved with fine slabs of stone, on one of which is the inscription given by Lieutenant Mantell on page 120. The steps by which the church was entered were 5 feet wide, but the doorway itself was somewhat wider. From the

entrance to the altar-step, or platform, the distance is 55 feet, and from that point to the back of the apse 15 feet 6 inches; the width of the apse is 16 feet 6 inches. The width of the church is 24 feet 6 inches. 9 feet in front of the altar-step a wall has been thrown across the church, in a manner similar to that in the Church of the Nativity at Bethlehem. This wall, also those of the church, of which several courses remain, and the interior of the apse, show that the building was originally painted, and some of the figures and designs can still be traced.

At the south-east corner of the church, leading from the apse, there is a narrow but well-built passage-way to the buildings in the rear. The character of these buildings is not very evident; certainly they did not stand on a line with the church, but at an angle of 25° with that line. Between the church and what appears now to have been the main building in the rear, there was a passage not over 3 feet wide; this passage and the one at the south end of the apse had been reached when Lieutenant Mantell made his report. The main building in the rear of the church is 47 feet 6 inches long, but to this must be added 20 feet more of a special room which seems to have belonged to it, and which had a beautiful mosaic pavement.

Thus the extreme length from the entrance of the church to the (present) east side of this mosaic floor is 140 feet.

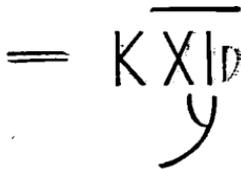
On the west side of this mosaic floor, where it joins the wall of the main building, there is a threshold of a single stone 9 feet 6 inches long, with a step 6 feet 9 inches in the clear. This is considerably wider, it will be seen, than the steps, and even the entrance of the church. Several patches of mosaic pavement have been found, but in one place two or three square yards have been preserved, enough to show that the work was extremely beautiful. The coloured tracings resemble those in the church on the Mount of Olives, and on one side are the large Greek letters

ⲀⲚⲔⲟⲩⲩ.

North of this mosaic floor, and of the main building which joins it, and running alongside of both, there is a watercourse or channel cut in the solid rock, which has been levelled to accommodate the buildings above. This can be traced in an east and west line for a distance of 37 feet; it is 2 feet 3 inches deep, 20 inches wide at the top, and 12 at the bottom. From about the middle of the mosaic floor this channel turns a right angle and runs 20 feet or more (so far as I could trace it) to the north; it is possible that it led from the north, and at the point indicated turned a right angle and ran to the west. Piles of stones and *débris* prevent us at present from deciding as to the length of the channel or where it came from.

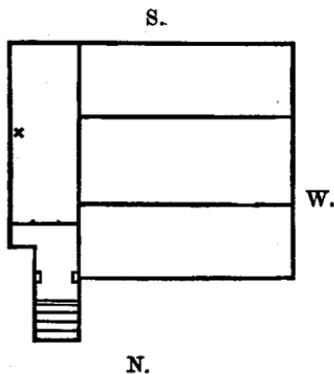
In the bank of *débris*, which rises on the east side of the mosaic floor to a height of 20 feet, there is, about 6 feet above the floor, a watercourse formed of cement, running north and south at right angles to the line of the church and the other buildings, which must have belonged to a much later period. In fact—and this is an interesting circumstance—the mosaic pavement appears to extend under and beyond this canal and the mass of *débris* which is yet to be removed.

In the north-west corner of the room where the mosaic floor is found, very near the angle (already mentioned) of the rock-cut channel, there is a tomb about 6 feet below the surface or level of the floor. The tomb is 10 feet long and 9 feet wide, and is entered by a doorway 26 inches wide, which is well built, and in the sides of which are grooves for a door to slide up and down. On the wall of the tomb at the east end there is a raised Greek cross, 22 inches long and 13 inches wide. At the left of the horizontal bar of the cross are the following letters or characters :—



Each letter is 5 inches in length. They are deeply cut, and the bar above them extends from the cross to the small character at the end. There appears to be something where I have made the dotted line, but it is not so deeply cut as the rest, and being very near the end of the cross-bar of the cross it may never have been designed as a part of a letter. The short verticle bar of the last character is cut as deep as the rest.

The following is the ground plan of the tomb :—



× Cross at this point.

One cannot stand erect in its highest part, but it is to be considered that the loculi are two-thirds full of *débris*, composed chiefly of decayed bones and bits of glass. Those in charge of the excavations have not, up to the present time, allowed the tombs to be cleared out. The loculi are 2 feet in depth.

What Captain Conder (p. 116) speaks of as “vaults north of the church,” turn out to be the tops of houses. They are four in number, each 75 feet long by 28 feet wide, and faced the street. They were divided (one or two of them at least) into apartments by means of arches. The

lower courses of the walls, to the height of several feet, are of squared stones, while the upper portions and the roofs are of rubble work, which was covered with a heavy coating of plaster. The threshold of one has been exposed, which is 6 feet in the clear, and the sides of the doorway show excellent work.

Among the ruins there are two sections of marble columns, each 33 inches in diameter; but where they belonged in the original structure, or whether they belonged to it at all, I cannot say.

Three large cisterns have been found, two of which were nearly full of water; the mouths of these, which were closed, were many feet below the surface of the ground before the excavations began, hence no one knows how old the water in them may be.

Some of the slabs with which the church was paved were 6 feet long by $2\frac{1}{2}$ wide.

In the church two pieces of cornice were found, each 8 feet in length. One is entire and quite plain, while the other is broken in the middle. It is upon this that the figures of Christ and His twelve Apostles were painted. They can still be traced, although exposure has nearly obliterated the colours.

Pottery and a considerable quantity of broken glass have been found, and some small articles in marble of no great value. The top of a certain block of marble has been formed into a basin, and a hole drilled the entire length of the block for the water to run off.

South of the mosaic floor and of the east end of the main building there is a large underground chamber with seven openings (each the size of a man's body) to the surface. The chamber is 12 feet wide and nearly 20 feet long, but the depth is not yet ascertained, owing to the accumulation of *débris* on the bottom. On the west and north sides a wall of solid rock appears to a depth of 6 feet, showing that the chamber was excavated in part at least in the solid rock. The use of this chamber does not appear evident, unless it may have been a store-room. The place within the city shown as "Peter's Prison" consists of a similar chamber (not dug in the solid rock however), with similar openings in the ceiling, or roof.

I have already hinted that the ruins extend under ground some distance to the east of the mosaic floor, and efforts are being made to purchase the land in that direction, in order to allow of the excavations being extended there. It is almost equally certain that the buildings extended to the south and south-east of the present plot of ground. But the owners of the land are jealous and everybody is superstitious; consequently excavations must be abandoned, or move with aggravating slowness.

With regard to the inscription on the slab in the pavement in front of the church, given by Lieutenant Mantell, page 120, I have little new to add to what he has said. I have submitted copies to different scholars, but do not know that it has yet been satisfactorily read. In the copy given by Mantell, the first two letters in the fourth line need correction. Of the first, only about one-third of the upper right-hand portion of the letter is

perfect on the stone ; the second shows an O quite perfectly. As the left-hand edge of this stone is true, and perfect with the exception of some chippings at the lower corner, this slab can easily have joined another at the left, and thus have formed the right-hand end of a long inscription.

NOTE.

Since writing the above I have visited the church again, as I have done many times during the year past. The west wall of what I have called the "main building," towards the apse of the church, has been removed and the floor cleared, exposing a fine pavement. This pavement, the threshold before mentioned, and the mosaic floor all belong to one period, and to a structure very much older than the date of the "main building." It puzzled me because the threshold west of the mosaic floor was not square with the east wall of the "main buildings," but the reason is now clear. Captain Conder (p. 116) says of this church, with such of the ruins about it as were exposed when he was here, that "the whole is evidently of the Crusading period." As regards the church itself this to me is not so clear, and the mosaic floor especially I would carry back many centuries previous to that era.

At the south side of the floor of the "main building" a new mouth to the largest cistern has been discovered ; over the mouth there is a thick stone 5 feet in diameter. This was eight-sided, and was built against the wall, so that five sides are exposed. The stone was cut in such a way as leave on two of its sides small brackets shaped like the two halves of the utensil called a "tunnel."

It may be of interest to state that this piece of land was offered for sale a few years since, and for a long time went a-begging for a purchaser ; at last it was sold for 40 napoleons. During the present year it has passed into the hands of the French for 2,000 napoleons.

SELAH MERRILL.

THE BITUMEN OF JUDEA.

AN investigation of the nature of this natural product of Judea and the Dead Sea has been made by M. B. Delachanal, who has communicated his results to the French Academy of Sciences. It is employed in Palestine as an insecticide on the vines, and hence the recent attention it has attracted in France, where *savants* are still engrossed with the problem of fighting the phylloxera. Some kilogrammes of the bitumen were procured from the French Consul at Jerusalem by M. de Lesseps, and on this M. Delachanal has operated. He finds the presence of a considerable quantity of sulphur in its composition. It is a deep brown colour, nearly black, and of a friable nature. It contains 27 per cent. of oil, which is nearly colourless, and of the nature of petroleum. A solid paraffin can also be extracted from it. The rest of these experiments is that the bitumen of Judea, if it