

meaningless way. I should be inclined to date the Damascus work to a period during the reign of Trajan, 98-118 A.D., probably the work of Apollodorus.

Could permission to search at will be obtained, I have no doubt that many more interesting fragments still exist, built into the houses which crowd around the locality. To lose a clue through the obduracy of a jealous householder, whose suspicions or cupidity demand either instant withdrawal or an exorbitant backsheesh, is a sore trial in pursuing archaeological research in and around the domiciles of a Mohammedan population. I had many disappointments in being unable to get admission where I hoped to find a clue, which seemed invaluable.

JERUSALEM, April 27th, 1897.

THE GREAT MOSQUE OF DAMASCUS.

By R. PHENÈ SPIERS, F.S.A.

THE plan and the detailed description of the Great Mosque of Damascus and its environs, given by the Rev. J. S. Porter in his work published in 1855, were so complete that scarcely anyone since seems to have thought it worth while to take up the subject afresh. Besides this, ever since the great massacre of 1860, visitors have been somewhat chary in their desire to sketch or measure, owing to the fanaticism of the inhabitants; in fact, with one or two rare exceptions, no one was allowed to draw inside the mosque. This may to some measure account for the almost entire neglect of the subject in the *Quarterly Statements* of the Palestine Exploration Fund.

In the spring of 1894, when first I heard of the disastrous fire which in October, 1893, had destroyed the mosque, I published in the "Builder" a reproduction of a water-colour drawing, which I had been permitted to make in 1866, of the interior of the great transept showing the great arches and the pendentives carrying the dome, and with it a short description of the building. Its publication led to a discussion which was carried on in the same paper for some weeks, as to which portions of the building were Christian and which Mohammedan. Various theories were put forward, and the only conclusion I was able to come to was, that without a carefully detailed plan and a minute examination of numerous drawings and photographs, and among the latter some valuable examples lent me by Dr. Wright, it would be impossible to arrive at any satisfactory result. Comparison of the drawings and photographs with Porter's plan showed me at once that the latter was not altogether reliable so far as the interior was concerned, and in my dilemma I applied to Sir Charles Wilson, who informed me that the plan he had lent Fergusson, and which was published in his "History of Architecture," was based on one measured and plotted by him in 1865.

It was true that the interior only was published, the inclement weather towards the end of the year having prevented Sir Charles Wilson from completing the task he had set himself. Here at all events were some definite dimensions to start upon, and resolving the perspective in the photographs to their geometrical dimensions I was able to work out elevations and sections of the whole building. Before this was completed my attention was directed by Professor Lewis to Mr. Guy le Strange's translation of the works of the mediæval Arab geographers published in 1890, which gave me a new interest in the work, as in the various quotations given I fancied I could read the whole history of the mosque from the time it was stated to have been entirely rebuilt by Al Walid in 705 : frequent references also were made to the pre-Christian structures round the mosque, so that with the assistance of Porter's map I was able to work out plans of the immediate enclosure walls not shown in Sir Charles Wilson's plan as published by Fergusson, and some of the archways and colonnades in the immediate vicinity.

The whole subject as worked out formed the subject of a paper which I read before the Royal Institute of British Architects in November of last year. Within three days of the delivery of the paper (read a month before it was really due) I received a long letter from Dr. Masterman of Damascus, answering a series of questions I had put to him, which showed me that in two cases my elevations were inaccurate, viz., the position of the great doorway in the south wall, and the number of pilasters at the south-west end not being correct. Beyond that, however, Dr. Masterman informed me that the fire of 1893 had destroyed the bazaars on the west side *exposing the west wall which was decorated with pilasters similar to those at the south-west angle hitherto thought to be only a tower*. This and other information was laid by Sir Charles Wilson before the Palestine Fund Committee, who decided to send Mr. Dickie, their architect at Jerusalem, on to Damascus to make fresh researches and to report on the same. The Committee also did me the honour to ask me to write an article giving the substance of my paper delivered at the Institute. I propose in my description to utilise the information given me by Dr. Masterman subsequent to the reading of my paper and also that contained in Mr. Dickie's report.

Damascus is one of the oldest cities in Syria ; it was already a noted place in the time of Abraham, and it is often mentioned in Scripture. In B.C. 333 it fell into the hands of Alexander the Great, and afterwards it was divided between the Seleucidæ and the Ptolemies. About a century before the Christian era, in 114, Antiochus Cyzicus took the half of the kingdom of the Seleucidæ and fixed his residence at Damascus. In B.C. 84, Aretas, King of Arabia, took possession of the city ; and in B.C. 64 it submitted to the Romans under Pompey, and the proconsul occasionally resided there. Aretas, the father-in-law of Herod Agrippa, seized Damascus about A.D. 37. During the reign of Trajan, A.D. 98-118, Damascus became a Roman provincial city : and Apollodorus of Damascus, the most celebrated architect of his time, who built the

bridge across the Lower Danube, may possibly have carried out some of the work there. To the peaceful reign of Antonius Pius who followed (138-61), and who was one of the greatest builders in Syria, we may ascribe the great arches at the east and west ends of the mosque. To this monarch and to his successor, Marcus Aurelius Antoninus (161-80), we owe the principal temples and monuments at Baalbec, Gerasa, Palmyra, and other great Syrian cities erected under Roman rule. Damascus remained in the possession of the Romans till A.D. 260, when it was taken by Sapor I, the Sassanian king.

Some years after the accession of Constantine, and when Christianity became, in A.D. 323, the established religion, Damascus was constituted an episcopal centre, with 15 dioceses. After this, for more than three centuries, the records are very scanty. The temple is said to have been converted into a church by Theodosius in 379, and, according to Mr. Porter, a stone was found near the Jeirûn gate stating:—"This church of the blessed John the Baptist was restored by Arcadius, the son of Theodosius."

Arcadius is said not only to have restored the church but to have enlarged it, and Mr. Dickie's report suggests, at all events, the extent of the south wall. On the taking of Damascus by the Saracens in 634 the church was sufficiently large to be divided into two parts, the Moslems taking the eastern half, and the Christians retaining only the western half, both entering, however, by the same great doorway, which still exists, of the Roman temple.¹

On the accession of Walid, the sixth Khalif of the Omeiyades, the whole edifice was appropriated by the Moslems, and, according to all the Arab authors, pulled down prior to the building of the existing mosque. It was evident that this did not apply to portions of the external wall on the west side and portions of the south wall, viz., the west angle and the central doorway. Mr. Dickie's report shows that the whole of the south wall, including the return at the south-east angle (under the minaret Isa), and the whole of the west wall, including the return at the north-east angle, were retained. So that in fact the pulling down refers to all the covered portions only of the Christian church and the clearance possibly of buildings on the north side; and the rebuilding of the whole of the mosque proper, viz., the transepts, the triple naves on east and west sides, and the great court at the back with its arcade rounded. Mr. Dickie calls attention to the fact that in the north wall of this arcade "the masonry is patchy, badly coursed, and built of old reused stones, many of the same character as those in the early wall," and that "it has not the character of the south Mohammedan wall, which is

¹ The discovery of the triple gateway measured and drawn by Mr. Dickie is a new one. Porter stated that on each side was a smaller one of similar workmanship, but as he went on to state that they had circular heads, I felt convinced they were niches and not doorways; Mr. Dickie has discovered doorways under these niches and two other niches lower down between the doorways.

mostly of one style of masonry, finely picked, dressed, and well squared and set."

It is difficult, however, to see how the arcade on north side of the court (which is of the same character and style as that on the north and west sides and the arcades inside dividing the triple naves) could have been built without a back wall, and it is possible that Al Walid employed his Byzantine masons only to build the more conspicuous portions of the mosque.

My best course will probably be to describe, first, briefly the actual buildings and adjuncts commencing with the mosque itself as it existed prior to the fire in 1893.

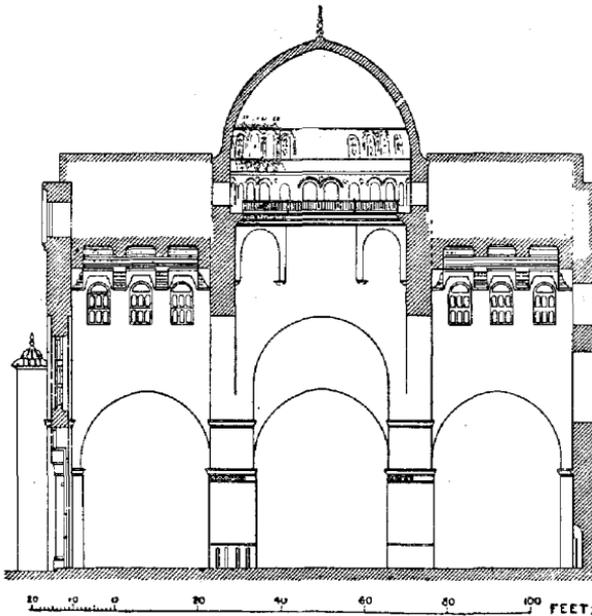


FIG. 1.—NORTH AND SOUTH TRANSEPTS AND CROSSING.

The main building (*see* plan accompanying Mr. Dickie's report) runs east and west, and is built in between two towers at the south-east and south-west corners respectively. It measures internally 446 feet by 123 feet. Exactly in the centre is an immense transept, running north and south, with a dome over the crossing; and on each side, *viz.*, to the east and west respectively, a nave and aisles, or, more correctly speaking, three naves (for the three divisions are of equal dimensions), each nave being 180 feet long. On the north side is a court of the same length as the mosque, and 160 feet from the north transept wall to the rear wall of the arcade which surrounds the court on three sides. The north wall and arcade are not parallel to the mosque, the east wall

and arcade being 10 feet longer than those on the west. The two principal entrances to the court are on the east and west sides, by triple gateways with bronze doors. There is a third entrance on the north side. There are three minarets to the mosque, one on the north side, supposed to be the oldest, and erected by the Khalif al Walid, the builder of the mosque; and two others at the south-east and south-west corners respectively, built on the two towers before referred to. The great piers of the transept measure, exclusive of the casing, 13 feet by 10 feet. They are not, however, equidistant, being 32 feet apart from north to south, and 39 feet 6 inches from east to west. The transverse arches on

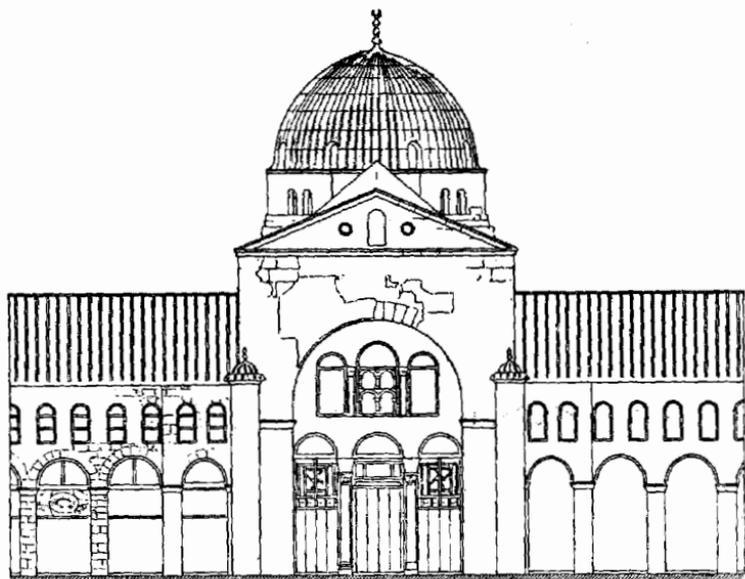


FIG. 2.—NORTH FRONT OF MOSQUE, FACING COURT.

the north and south sides of crossing are set back 3 feet 9 inches, so as to obtain above a perfect square of 39 feet 6 inches. The angles of this square are vaulted over with squinch pendentives (Fig. 1), above which runs a gallery, a portion of which is corbelled out. Above this rises the dome with two ranges of windows, one in the drum, the other in the dome. The dome is, I think, of stone, and covered with lead.

The north and south transepts have flat ceilings carried on beams (Fig. 1) supported on corbels, all richly carved, painted in brilliant colours, and gilded. The transept is lighted; by the windows in the dome, by a range of windows in the north and south walls (in the former (Fig. 2) running above the triple arcade which forms the principal entrance to the mosque), and by windows in the east and west walls,

partially, however, blocked up by high-pitched roofs over the nave and aisles (Fig. 3). The nave and aisles, or the triple naves, on the east and west sides of the great transept, are divided by an arcade of 11 bays, with columns taken from some more ancient edifice, raised on pedestals, and surmounted by ancient capitals and by dossierets. The dossieret is of Byzantine origin, and consists of a cubical block placed above the capital to carry a wall of greater thickness than the diameter of the columns. Above the arcades the walls are pierced with semicircular arched openings (Fig. 4). These open out into the side aisles, which are of the same height as the central aisle, the whole device being rendered

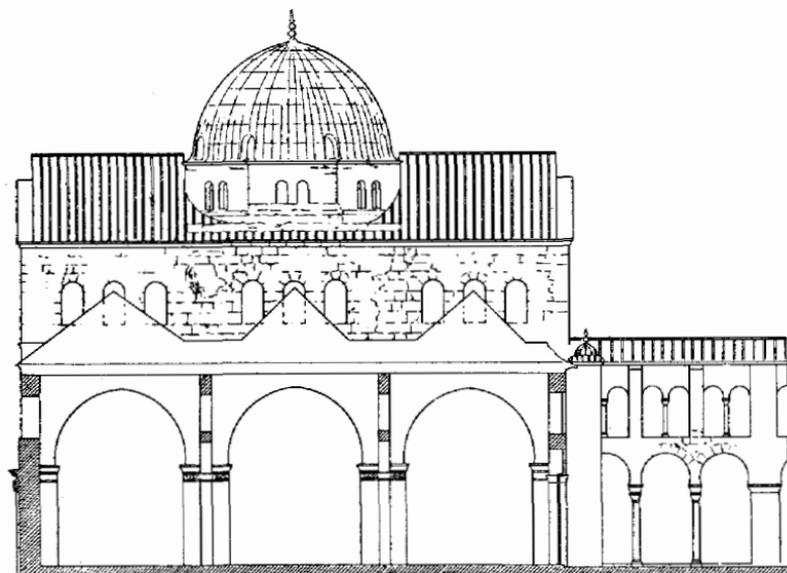


FIG. 3.—SECTION ACROSS THE EAST AISLES, SHOWING EAST WALL OF TRANSEPT.

necessary by the desire to give greater height to the structure than the columns afforded.

The three naves of the eastern and western wings were (probably in the fifteenth century) raised and roofed with high-pitched open timber roofs covered with lead, masking the original windows in the east and west walls of the transept. The destruction by fire of these roofs has revealed the fact that not only were there windows on each side in the north and south transepts, but also in the crossing; and as these windows rise above, and are internally masked by the great arches which carry the central dome, it proves conclusively that the dome and the arches which carry it were afterthoughts, and not at first contemplated. This circumstance, perhaps, also explains the peculiar arrangement of the arches. The transept as built was wider than the central aisle, but as it was deemed necessary to

have a square centre, across the angles of which the squinches were to be thrown, this could only be obtained by setting back the north and south arches. The thickness of the north and south arches carrying the squinch pendentive is 7 feet, whereas that of the east and west is 9 feet, and to this latter dimension must be added the thickness of the original wall, 5 feet, making 14 feet. Mukaddasi, writing in 985 A.D., mentions the dome as if it formed part of the original structure; and, no other Khalif being cited as having added it, we must assume that it was Al Walid's work, but conceived and built by some of the workmen brought over from Byzantium. On the completion of the main building,

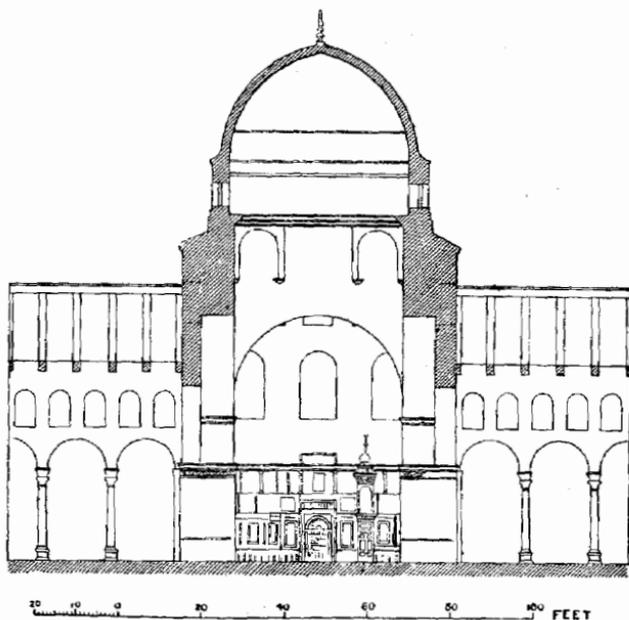


FIG. 4.—SECTION THROUGH NAVE AND CROSSING.

skilled workmen from Persia, Byzantium, and India were employed by Al Walid on the mosaics, which occupied them seven years, and some of the Byzantine workmen might have suggested the erection of a dome for the mosaics, it being a well-known traditional form.

The trusses of the high-pitched open timber roofs above mentioned were placed closer than usual in such roofs, viz., 8 feet 3 inches centre to centre; and as the tie beams measured about 26 inches by 20 inches, not much of the open roof was visible. The four great piers of the transept and the south wall were encased with marbles enriched with arabesque inlays and borders of mosaic up to a height of 20 feet. In the centre of the south wall was the principal mihrâb (Fig. 5), or Mecca niche, and

this was enriched with tier above tier of small arcades of marble with inlays of mother-of-pearl and mosaic, the semidome of the niche being decorated with diagonal cofferings similar to that found in Roman buildings. The inner wall of the north transept still preserves portions of the mosaic decoration of the eighth century, with which all the upper part of the walls and the dome were once covered.

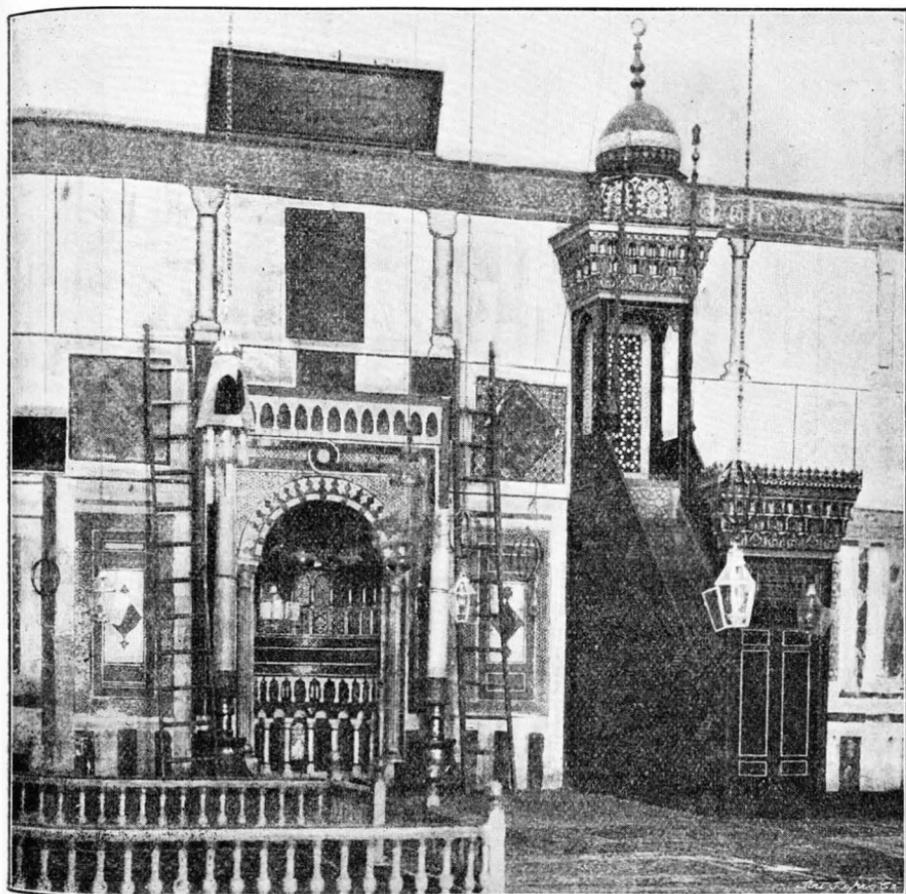


FIG. 5.—THE MIHRAB AND MIMBAR AT SOUTH END OF TRANSEPT.

The two wings of the mosque are lighted by ranges of windows in the north and south walls, of the same size, and occupying almost the same position, as the openings already referred to as over the arcades dividing the three aisles. They, as well as the tympana of the arcades below on the north side, are fitted with pierced arabesque designs in stucco filled

with coloured glass. These windows are known in the East as "kamariyas," or "shemsiyas." There are on the north front on each side of the transept eleven arcades corresponding with those of the aisles ; they are, however, carried on square piers, and the openings are fitted with framework and doors. It is said that originally these arcades were carried on columns, so that virtually the mosque was open to the court ; in other words, that the columns have been encased with masonry.

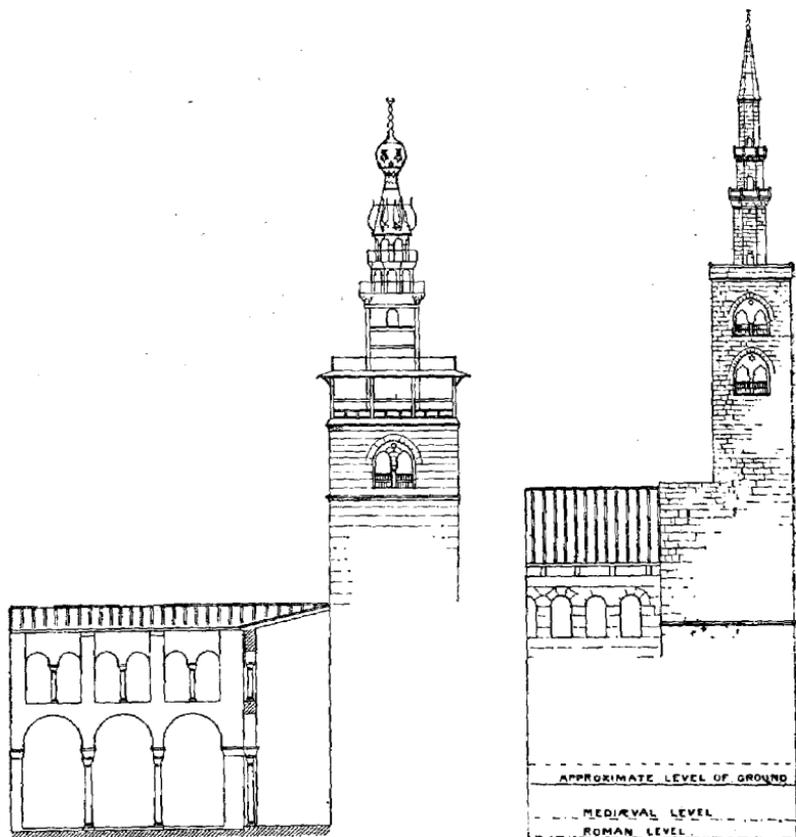


FIG. 6.—ARCADE OF COURT AND MINARET OF THE BRIDE.

FIG. 7.—THE MINARET OF JESUS.

The great court on the north side is surrounded by a lofty arcade the design of which is similar to the arcades and superstructure within the church, except that the columns are alternated with piers irregularly, there being sometimes three, sometimes two columns between the piers ; and in three cases, opposite doorways in rear wall, the piers come together. Instead of the two openings above the arcade (Fig. 2) they



FIG. 8.—VIEW OF THE MOSQUE FROM THE WEST, SHOWING THE NORTH FRONT AND DOME.

are coupled together with a shaft in the centre (Fig. 6); but they open into the great portico the roof of which is constructed of beams exposed to view, and painted and decorated. Of the 47 free-standing pillars cited by Ibn-Jubair, 11 have been encased, some, as Mr. Porter states, within the last century. These are all covered with stucco, stamped with arabesque patterns.

Externally, the mosque is of the simplest design: the walls are all built in ashlar masonry, with stone courses 2 feet 9 inches in height;¹ the windows are all circular-headed, with from five to seven voussoirs, according to the size. The transept rises 30 feet above the walls of the two wings, and has a low-pitched gable at the north and south ends, with a single bold ogee moulded cornice. There is a vertical straight joint at each end of the south front, where the mosque was built up against the earlier towers.

In the centre of the transept, and rising above the roof, are two or three courses of stone, which probably carried the original dome built by Al Walid. The existing drum and dome were built probably after the fire of 1400.

The minaret on the north side of the mosque, known as the *Mâdinet al 'Arūs* (the Minaret of the Bride, Fig. 6), is the most ancient, and is ascribed to Al Walid (705-12), though it has probably been restored since. It is square, with a gallery round the central minaret. The *Mâdinet 'Isâ* (the Minaret of Jesus, Fig. 7), 250 feet high, stands at the south-eastern angle. This and the *Mâdinet el Ghurbiyeh* (the Western Minaret) are built on towers of more ancient date, which are said by Ya'kûbî (writing in 891) to have been "originally watch-towers in the Greek days, and belonged to the Church of St. John." The substructure of the western tower, however, is much earlier than this, and is probably the earliest work in Damascus. To this I shall refer again. The minaret which surmounts it is octagonal, and is set back on the north-west angle of the tower.

The principal entrances to the mosque are the triple gateways with bronze doors, on the east and west sides, which lead into the great court. The east gate, known as the *Bâb-el-Jeirun*, leads to a vestibule with two columns, and was preceded by a lofty arcade with six columns: these are shown in Porter's plan, but they fell down in 1858. The west gate, *Bâb-el-Berid*, leads into a vestibule with four columns, and in both cases into the arcade of the great court. There is a north entrance of less importance by the side of the Minaret of the Bride (Fig. 6), and an entrance known as the "Gate of the Addition" at the south-west end of the mosque.

On the south side of the mosque in a line about 10 feet west of the east wall of transept is the axial line of one of those magnificent doorways

¹ The courses of the transept walls are higher than this, but there is no vertical straight joint between transept and naves, and the courses bond in proving that both were erected at the same time.

such as are found in the Roman temples at Baalbec, Palmyra, and other places in Syria. It is on the centre fascia of the architrave of this doorway that the well-known Greek inscription has been carved and which exists to this day notwithstanding the Mohammedan use of the building for twelve centuries, the translation of which is: "Thy kingdom, O Christ, is an everlasting kingdom and Thy dominion endureth throughout all generations."

The existence of niches (thought to be doorways by Porter) was known, but Mr. Dickie's researches have resulted in the discovery of two doorways under these niches (*see* his drawing and description).

At the south-west angle of the south wall is the most ancient building in Damascus. I had thought it to be only a tower, but Dr. Masterman's statement that the pilasters on south side were continued along the west wall (having been exposed since the fire), and Mr. Dickie's discovery of the return of the same on the north front suggests a "porticus" of much greater importance. Mr. Dickie's statement that "the last cap of the third pilaster from the north-west angle returns back through the wall," isolates the porticus and renders it difficult to understand its original destination.

At the south-east angle of the south front, and now, according to Mr. Dickie, along the whole front (except for about 121 feet west to the porticus which has apparently been rebuilt) are the remains of an ancient wall which he considers to be Christian work up to a height of 23 feet above the mosque floor.

In front of the east and west gates there existed a double colonnade, the remains of the latter could still be traced in 1866, built in the shops by the side. The east colonnade was 312 feet long, the west 184 feet. At the west end of the latter there exist the remains of a magnificent portico of four columns, and two responds and angle piers. The columns are, according to Mr. Dickie, 4 feet 9 inches in diameter, and the width is 83 feet 9 inches. The two centre columns are wider apart than the others, and are spanned by an arch round which the entablature is carried, similar to the well-known example of the Palace of Diocletian at Spalato. Half of the pediment above the arch and the springing of the latter still exist.

At the east extremity of the eastern colonnade there existed, according to Arab authors, a similar portico. This was pulled down in 1223, and the materials used to pave the court of the mosque. Mr. Porter found three of the lower portions of the columns; their diameter being 5 feet, would give a length of about 90 feet to this portico.

The principal portion of the paper I read at the Institute of Architects was devoted to proving that the whole of the prayer chamber of the mosque, viz., the transept and the triple nave east and west, and the courtyard on the north side were set out and built by Al Walid in 705. It included extracts from the writings of the mediæval Arab geographers too long to be reproduced here. I propose therefore now only to give a history of the mosque and its restorations.

Of ancient walls Al Walid appears to have utilised the whole of the western porticus with the substructure of the west minaret built probably by the Christians on the south-west angle of the porticus—the whole range of the south wall (including the triple entrance wall of the Roman temple) and the tower at the south-east angle, built, according to Mr. Dickie's discoveries, by the Christians. The two towers are referred to by Yakubi, writing in 891, as having been "originally watch towers in the Greek days, and belonging to the Church of St. John."

The great transept comes exactly in the centre between these two towers, and as the east wall of same blocks up a portion of the great doorway, this was probably walled-up at the same time, and no longer served as an entrance. This transept, really the principal prayer chamber, measured 68 feet wide to outside of walls, and 125 feet north and south, not including the Roman wall. On the east and west Al Walid built the triple naves to a height of 52 feet 6 inches to the wall-plate, and 23 feet above the old Christian wall; as there are no openings in the latter it is not clear how the church was lighted, probably by the clerestory windows of a central nave. As the style and design of the lofty arcade round the court on the north side are similar to the arcades of the naves, Al Walid may be assumed to have built that, as also the lower portion at least of the minaret el Arus on the north side. For the erection of the mosque and court, Christian workmen from Byzantium were employed, and the building and the decoration with marble and mosaic took seven years. Enormous sums of money were spent on it. Twelve hundred artisans were brought over from Byzantium; marble and porphyry were imported from Alexandria and from various towns in Syria, and as Porter says, "in this warlike monarch's days Damascus was the great reservoir for the plunder of nations" (as Rome had already been) "and much of it was devoted to the ornamentation of the mosque, as if the consecration of the booty would atone for the sin of robbery."

The transept as originally built was of low pitch, and ran through level from north to south; the advent probably of the Greek mosaicists suggested the necessity for having a dome, and accordingly, as already detailed, this was contrived in the centre of the great transept. The only remains of this dome, burnt in 1069, may be the three lower courses of stone standing outside the existing dome.

No description is given of this fire, but a comparison of the writings of Mukaddasi in 985 and of Ibn-Jubair in 1184 suggests that a great portion of the marble and mosaic decoration was destroyed, and it is probable that the eastern nave suffered the most, as in their restoration, according to Sir Charles Wilson's notes, "several columns of smaller size have been used, and in some cases they stand on fragments of the original columns." "Many of the Corinthian capitals which have been taken from other buildings are too small for the column on which they stand." The fire also calcined the face of the masonry of the transept on the east and west sides, necessitating in the restoration the coating of the

whole surface with stucco, which was decorated with frescoes, possibly copied from the mosaic inside representing the sacred towns of Mecca and Medina, and of other places. The greatest change made, however, was in the dome; the original dome, having been built by Byzantine workmen, was probably in stone. The domes described by Ibn-Jubair (1194) were double, and consisted of an inner and outer dome, both constructed in wood, each built with "forty-eight ribs, which converge above and unite in a centre piece of wood," the upper dome covered with planks of wood and sheets of lead, the lower dome, seen from the interior of the mosque, "inlaid with wooden panels, gilt in the most beautiful manner, and ornamented with colour and carving." The great double dome rested "on a circular base built of mighty blocks, above which rise short and thick pilasters built up of large stones of a very hard kind, and between every two pilasters is pierced a window; thus the windows extend round the circle under the dome." In addition to this double dome others are described as existing in the north and south transept; these were probably flat cupolas of a decorative character, formed in the timber ceiling, as there is only a height of 9 or 10 feet between the top of the windows and the soffit of the tie beams of the roof.

The roofs over the east and west triple nave are described by Ibn-Jubair as being flat roofs covered with large sheets of lead, as a matter of fact they were low-pitched roofs, the traces of which Mr. Dickie found in the existing gable ends.

All these roofs and those covering the transept, including the double dome, would appear to have been destroyed in the great fire of 1400. The nave arcades do not seem to have suffered much, with the exception of that part which comes over the tomb of St. John. It is probable that there had always been a decorative structure of some kind over this tomb, which stood between the third and fourth columns of the south side of the eastern naves; and the capitals of the column here referred to were Saracenic, of fifteenth century work. In the restoration after the fire of 1400 high pitched roofs in three rows took the place of the low-pitched roofs, and these blocked up the central clerestory windows on each side of north and south transept. A single shell stone dome raised on an octagonal drum (externally) took the place of the original double dome standing within the stone base of three courses, which may be those of the original or the second dome. At the same time, or probably at a later date, a high-pitched roof was built over the north and west transepts.

Of the internal decoration of Al Walid's Mosque, Mukaddasi, in 985, gives the clearest description. Ibn-Jubair, writing in 1184, speaks of the mosaic decoration in the past tense, as if the fire of 1069 had destroyed much of it. He says nothing about the marble lining of the walls up to twice the height of a man, described by Mukaddasi, and only describes the four great piers under the dome, which he says, referring to the covering of course, "are made of the most exquisite marble set with coloured stones in mosaic." This description was written in 1184, and the question arises whether any of the marble decoration destroyed in the last fire of

1893 escaped the fires of 1069 and 1400. The lower portion of the mihrab has a Byzantine character about it which would justify its being ascribed to Al Walid's time. The upper portion resembles that of the mihrab of Sultan Kalaoun's Mosque, Cairo (1287), and the columns flanking it on either side are similar to those in the Mosque of Sultan Hasan, Cairo (1361). The decorative marbles on the great piers would seem to belong to the same date,¹ but the panelling on the south wall is probably that of the restoration after the fire of 1400. And this and the magnificent interior might have been carried out by Sultan Kaitbey, of Cairo, 1488, who, according to Mr. Kay, built the south-west minaret of the mosque. Of the mosaic work of Al Walid's time, there existed prior to the fire of 1893 only that found on the inner wall of north transept, and according to Mr. Dickie, there still remains a small portion on the outside of north transept and on the spandrels of the arcades by the west entrance.

The destruction caused by the fire of 1893 was far greater than either in 1069 and 1400, owing, probably, to the immense amount of timber used in the high-pitched roofs. The whole building has been gutted from one end to the other, and only the south-west arcade of the west nave maintained its position and, according to Mr. Dickie, is now standing in a more or less shaky condition. The lower portion of the south wall of the transept and the mihrab still retained the major part of its marble panelling, the shafts and side of the niche being partially calcined. Apparently this has been taken away and stored for future restoration. Judging from the photographs the plaster coating of all the internal walls and the cement or stucco on the east and west walls of transept have preserved the masonry throughout. The work of restoration is proceeding very slowly, probably in some measure owing to the difficulty of obtaining marble shafts for the nave arcades. These are being specially quarried for the mosque, and take much longer to provide than when they could be taken from other buildings. The old columns were too much broken up to be of any service, and these materials, now broken up, are being used to macadamise the roads in and about Damascus, as I am informed by Dr. Masterman.

It now remains to say a few words about the classic remains round the mosque to which Mr. Dickie has devoted his chief interest. The plan which I prepared originally for my Institute paper, and the description which followed being chiefly derived from Porter's work, I have but little to add, except that the accounts given by the Arab geographers throw some light on the avenues of columns which existed at Damascus, and which at Palmyra, Gerasa, Samaria, and other Syrian towns, constitute now the principal ruins of these once populous cities. Apparently

¹ Mr. Kay informs me that the inscription on one of the great piers of the transept states that the restoration and decoration of the Mankurah (the prayer chamber) was effected in the days of the Khalifah al-Muktadi (who reigned 1075-1094).

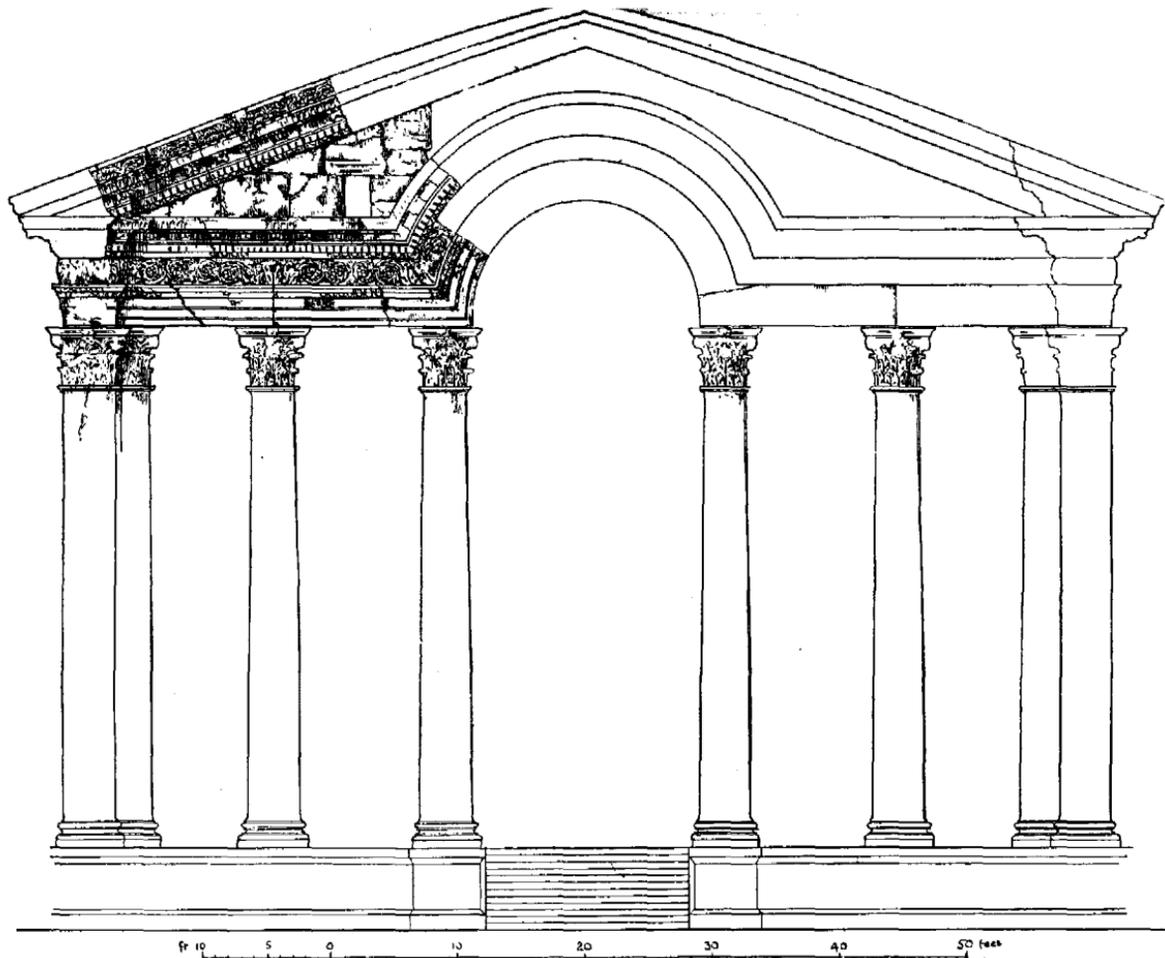


FIG. .—THE GREAT ARCHWAY. A PORTAL OF THE PALACE OF BERID.

nothing now remains of the colonnades on the west side between the Bâb-el-Berîd and the great archway. This great archway, calculated as measuring 84 feet wide, is now, according to Mr. Dickie's measurement, 83 feet 9 inches, but the intercolumniation, as shown in my drawing, is not quite correct, and I had omitted a portion of the pier which was not visible in the photograph from which I made my calculation. Otherwise the design is fairly represented in my drawing, Fig. 9, and as it is the only representation ever made I have thought it worth while reproducing, but its plan must be differentiated with that set out by Mr. Dickie. Mr. Dickie's discovery of the triple gateway on the east side of Porter's eastern archway suggests that a similar gateway existed on the west side of the western archway. The idea which I entertained originally that these archways were the triumphal entrances to palaces lying beyond them is therefore no longer a valid one. Mr. Dickie calls these features propylæa, a term applied generally to the principal entrances of ancient Greek towns, and consisting of a central wide passage for chariots and horses and side passages for foot passengers. At Damascus they appear to have been the central features of the great peristyles on each side of the great court or temenos of the temple. At Palmyra one only of these is found; on the west side, nearest to the town. The existence of a great portico of columns outside the Palmyra example suggests that similar features existed here. Mr. Dickie could find no trace of any, but the columns being isolated might disappear quicker than the solid walls of a triple gateway, and nothing remained above the capitals of the semi-detached columns flanking the triple gateway to show whether a portico existed or not. Similarly in front of the triple gateway in the south wall of the mosque I think it is probable that a portico existed, such as is found in almost all Syrian and Roman temples.

The most interesting discovery made by Mr. Dickie, however, is the connection of these triple gateways to the east and west of the mosque with an enclosure wall, the temenos of the temple, and which here in Damascus reaches a dimension far beyond that of Palmyra. The continuity of the range of columns enables us to trace out the outer wall, with tolerable certainty on all four sides, so that a dimension of 1,000 feet by 1,300, a site equal to about one-fourteenth of the whole area of the city of Damascus, constituted the temenos of the temple of that city. The temenos of Palmyra measures, according to Wood, 730 feet by 710 feet. On the other hand, the principal street at Palmyra, with its double colonnade, is a little more than twice the length of the straight street of Damascus, which ran from gate to gate of the outer walls of the town.

The orientation of the Roman temple at Damascus is still a doubtful point, for although at first it might be assumed that it ran north and south, especially if a portico existed in front of the triple doorway, that is not the usual disposition (except in crowded cities like Rome, where the portico generally faced the Forum). The Temple of the Sun

at Palmyra ran north and south, but the great doorway faced the west, and, moreover, was not in the axis of the western front. The triple doorway, also, is an exceptional feature, so that there is evidently plenty of room for archaeological speculations, and the problem is by no means so easy of solution as Mr. Dickie seems to suggest. The pendant to what I have called the "porticus" on the western side—the destination of the piers discovered outside the Bâb-el-Jeirun, and the covering over of the peristyle round the great court, nearly 70 feet wide, to support which not a single column has been discovered, renders still more complex the true solution of the problem.

Extracts from Diary of CAPTAIN (now MAJOR-GENERAL SIR CHARLES) WILSON, in 1865.

December 20th and 21st, 1865.—Making plan and taking photographs of the Mosque at Damascus.

The mosque is on the south side of a large open court, and is divided into three aisles by two rows of columns. In the centre is a transept, having in its middle a small dome supported by four massive piers. The south wall of the mosque is of solid masonry; the northern is formed by a row of arches carried on square pillars, with the intervening spaces, which were once open to the court, roughly closed. In the eastern part of the mosque is the shrine of St. John, standing, it is said, above a cave in which is the saint's head. In the shrine is a cenotaph covered, in the usual manner, with richly embroidered cloths or shawls. Within the mosque are two fountains and a well. Most of the pedestals of the old columns remain, but in a sadly mutilated state; and a large number of the original columns are apparently still *in situ*. This is specially the case in the *western half* of the mosque, which is by far the best preserved. In the *eastern half* several columns of smaller size have been used, and in some cases they stand on fragments of the original columns (a shaft 6 feet in circumference stands on the old shaft, which is 7 feet 1½ inches in circumference, and broken off about 2 feet above its base). In the *western half* most of the original capitals remain, but many are so injured that they would appear to have been thrown down and replaced. All these capitals are Corinthian, similar to those of the Kubbet el-Kitab. In the eastern half there is a variety of capitals; two at the south-east corner are Ionic; the two enclosed in the shrine of St. John are of late date; and many of the Corinthian capitals, which have been taken from other buildings, are too small for the columns on which they stand. Above the capitals are architrave blocks of a single stone each, and over these are stones which take the springing of the arches, and are cut to their curve; thus the arches, which are circular, are carried a little beyond the semi-circle. The western half being under repair, and the plaster and whitewash being scraped off, the character of the masonry could be seen. The principal entrance to the mosque leads from the court to the transept, and is very fine.

Round three sides of the court runs a cloister, the arches of which are semi-circular, and carried on square pillars and columns. The columns have Corinthian capitals and architrave blocks, and above them is a range of smaller arches as in the mosque. In the north-west corner are four capitals, which appear to be Saracenic. There are three main entrances from the city to the court. One in the *east wall* has a porch and three doorways, of which the central door is covered with delicately-worked brass. The Arabic inscriptions are in brass, and in the modern (not Kufic) character. On one of the columns is a mutilated Greek inscription. On the *north side* is a large single doorway, of which the door is similarly ornamented with brass. In the *west wall* is the third entrance, with a large central and two smaller side doorways; the porch is rather deeper than that of the entrance in the east wall. From this doorway a colonnade extends to the remains of the great arch and pediment; the capitals of the colonnade are plastered over, but enough can be seen to show that they are Corinthian. Opening directly into the western half of the mosque, through the south wall, is a fourth large gateway, in front of which a similar colonnade can be traced for some distance. Several capitals and fragments of shafts were lying about in the court; and some of these shafts, as well as some of those in the cloisters, are of granite.

At the eastern end of the court is a small octagonal building, in which clocks are kept, but they had all run down; in the centre of the court is a fountain with four columns on which are Corinthian capitals, and the shafts of two columns used for the illuminations at Bairam. In the north-west corner of the court is the Kubbet el-Kitab, a small domed structure, supported on eight columns with Corinthian capitals; in the dome were said to be fragments of MSS. in Kufic.

On several portions of the mosque, the Kubbet el-Kitab, and the cloisters are large fragments of mosaic work (houses and arabesques), but not nearly equal, either in design or execution, to those in the "Dome of the Rock" at Jerusalem. In some places are patches of faience work; the designs on the tiles are for the most part identical with those of the tiles in the "Dome of the Rock," but not with those of the best tiles in that building. The marble decoration inside the mosque is similar to that in the Mosque el-Aksa at Jerusalem.

At the north-west corner of the court are two small chambers, in the inner one of which is a Greek inscription. The inscription is on the lintel, and there are nine lines on the inner and five shorter ones on the outer face.

Outside the mosque and near the centre of the south wall there is an old entrance. It consists of a large central gateway and two side ones; the top of the eastern doorway is just visible, and the western one can be seen by looking down a hole in the roof of a chamber. To this chamber there appears to be an entrance from the mosque, but we were not allowed to visit it. The top of the central gateway rises a little above the rubbish; the ornamentation reminded us very much of that of

Baalbek. On the architrave is the Greek inscription, cut on it at a later date; the last word is on a lower line. No trace of this gateway could be seen inside the mosque, but it lies at the east side of the transept, as well as could be ascertained, in the position shown in the plan. At the south-west corner, and along the western end, are traces of older masonry and more classic decoration, of which a photograph was taken (No. 13, Pal. Exp. Fund Series).

A short distance from the mosque, and opposite to the west entrance to the court, are the remains of a large arch and pediment; on the east face the ornament is in tolerably good preservation, but on the west face it is quite obliterated. The style is the same as Baalbek. This also appears to have been a triple gateway.

At the east and west ends of the mosque are several chambers. At the west end one of these opens into a small mosque; at the east end one gives access to the minaret at the south-east angle. There are other minarets at the south-west angle, and in the centre of the north wall of the enclosure.

It is difficult to determine to which buildings the existing remains belong. The gateway in the south wall of the mosque, and the arch and pediment in the bazaar on the west side, apparently belonged to a temple of the age of Baalbek, and not to the church; whilst portions of the southern and western walls of the enclosure seem to be of much older date. A good deal of the church possibly still exists in the mosque, which, from its orientation, appears to have followed the form of the church. The small *mihirabs* are cut out of the solid masonry of the south wall.

Writing to Mr. Spiers Sir Charles Wilson says:—"I find from my diary that on December 23rd I took the plan into the mosque after it had been plotted, and compared it on the ground, correcting a few inaccuracies. The same afternoon a heavy storm of sleet and snow commenced, which lasted, almost without intermission, till the 28th, when we left Damascus. This, probably, accounts for our not completing the plan with the outside wall, minarets, &c.; but I think we were particularly asked to make a plan of the interior, which was then little known."
