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Publications of the Princeton University Archaeological
Expeditions to Syria in 1904—1905 and 1909

DIVISION II

ANCIENT ARCHITECTURE IN SYRIA

BY

HOWARD CROSBY BUTLER

SECTION A

SOUTHERN SYRIA

PART 3

UMM IDJ-DJIMÂL.

72. UMM IDJ-DJIMÂL (*THANTIA?*)

134125

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














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Abbreviations of Periodicals and Publications Frequently Mentioned.

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| A. A. E. S. <i>Publications of an American Archaeological Expedition to Syria in 1899—1900</i> , I, II, III, IV. | K. A. Strzygowski; <i>Klein-Asien, ein Neuland der Kunstgeschichte</i> . |
| A. J. A. <i>American Journal of Archaeology</i> . | M. N. D. P.-V. <i>Mittheilungen und Nachrichten des Deutschen Palästina-Vereins</i> . |
| Ann. Ep. <i>L'Année Épigraphique</i> . | M. S. M. Dussaud and Macler; <i>Mission dans les régions désertiques de la Syrie moyenne</i> . |
| B. C. H. <i>Bulletin de Correspondance Hellénique</i> . | P. A. Brünnow; <i>Provincia Arabia</i> . |
| C. I. G. <i>Corpus Inscriptionum Graecarum</i> . | P. E. F. <i>Quarterly Statement of the Palestine Exploration Fund</i> . |
| C. I. L. <i>Corpus Inscriptionum Latinarum</i> . | P. M. Guy le Strange; <i>Palestine under the Moslems</i> . |
| C. I. S. <i>Corpus Inscriptionum Semiticarum</i> . | P. R. G. S. <i>Proceedings of the Royal Geographical Society</i> . |
| S. C. Marquis de Vogüé; <i>La Syrie Centrale, Architecture Civile et Religieuse</i> . | R. A. <i>Revue Archéologique</i> . |
| G. G. A. <i>Göttingische Gelehrte Anzeigen</i> . | R. A. O. Clermont-Ganneau; <i>Recueil d'Archéologie Orientale</i> . |
| H. <i>Hermes</i> . | R. B. <i>Revue Biblique</i> . |
| I. G. R. <i>Inscriptiones Graecae ad Res Romanas pertinentes</i> . | S. E. P. Conder; <i>Survey of Eastern Palestine</i> . |
| I. S. O. G. Dittenberger; <i>Oriens Graeci Inscriptiones Selectae</i> . | V. A. S. Dussaud; <i>Voyage Archéologique au Şafâ</i> . |
| J. A. <i>Journal Asiatique</i> . | Z. G. E. <i>Zeitschrift der Gesellschaft für Erdkunde zu Berlin</i> . |
| J. K. D. A. I. <i>Jahrbuch des Kaiserlich Deutschen Archäologischen Instituts</i> . | Z. D. M. G. <i>Zeitschrift der Deutschen Morgenländischen Gesellschaft</i> . |
| J. K. P. K. <i>Jahrbuch der Königlich Preussischen Kunstsammlungen</i> . | Z. D. P.-V. <i>Zeitschrift des Deutschen Palästina-Vereins</i> . |

Explanation of Ground Plans.

SCALE: 0.0025 M. = 1 M. except when otherwise indicated on the plan.

	Walls standing to a height of 2 M. or more.		Arch in situ.
	Fallen walls, or foundations.		Arch fallen.
	" " material in situ.		Conjectured arch.
	Foundations only in situ, or top of low wall.		Opening high in standing wall.
	Conjectured walls.		" " " fallen "
	Column standing to height of 2 M. or more.		Pavement.
	" " " " " less than 2 M.		Tunnel-vault.
	Conjectured column.		Cross-vault.
	Columns and architrave in situ.		Cistern.
	Columns and arch in situ.		
	Bases in situ, arch fallen.		

Explanation of Elevations and Sections.

SCALE: 0.005 M. = 1 M. except when otherwise indicated in the drawings.

	Conjectured.		Limestone.
	Basalt.		Brick.

SCALE OF DETAILS: 5 cm. = 1 M. except when some other scale is given in drawing.

NOTE. It has not been possible to carry the above scheme into effect with absolute consistency; but it has been applied in a large majority of the drawings. Departures from the scheme are made clear by the text.

UMM IDJ-DJIMÂL AND SURROUNDINGS

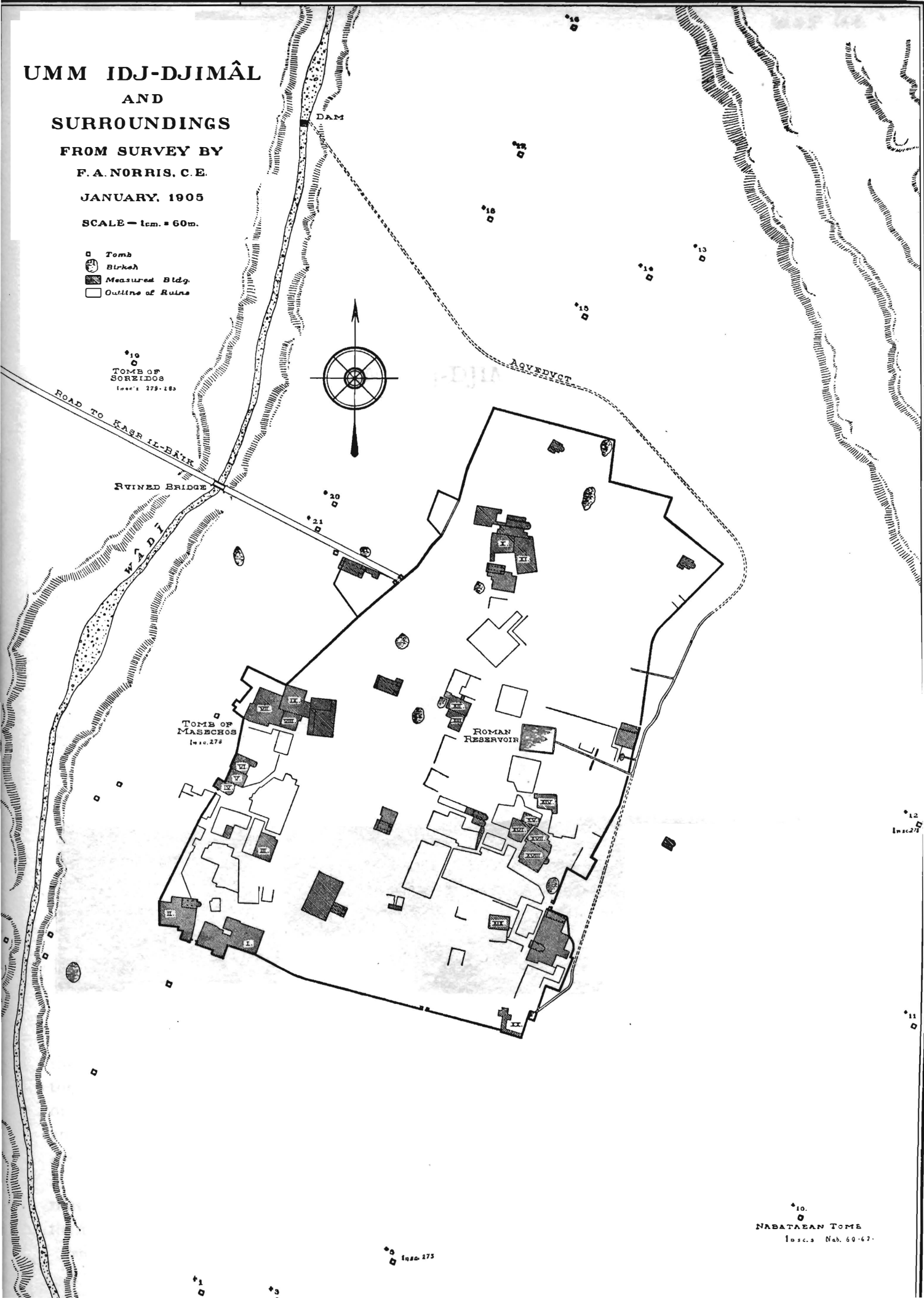
FROM SURVEY BY

F. A. NORRIS, C. E.

JANUARY, 1905

SCALE - 1 cm. = 60 m.

- Tomb
- Birkeh
- Measured Bldg.
- Outline of Ruins

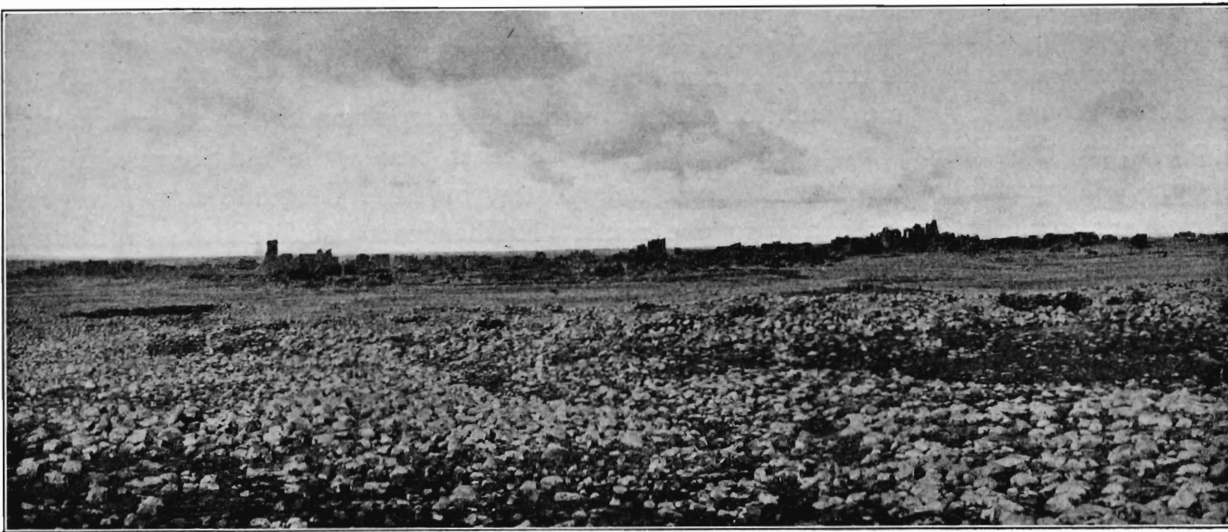


*10.
 NABATAEAN TOMB
 Insc. Nab. 69-67

UMM IDJ-DJIMÂL.

72. UMM IDJ-DJIMÂL (*THANTIA?*)

Far out in the desert, in the midst of a rolling plain, beside the dry bed of an ancient stream, there is a deserted city. The plain about it is not a waste of sand, its surface is composed of dry and exhausted soil, overgrown with grey lichen, thinly sprinkled with parched desert plants, and strewn with rounded bits of black basalt, from the size of an egg to the size of a man's head, which are no longer black, as they were when the peasant's plough-share turned them over from time to time; for



Ill. 130. Ruins of Umm idj-Djimâl. View from the Southeast.

the desert mosses have covered them with a lace-work of white and grey, so disguising their real nature as to have led one traveller, at least, to mistake the plain for a bed of limestone. The walls of the ancient deserted city, its half-ruined gates, the towers and arches of its churches, the two and three-storey walls of its mansions, all of basalt, rise black and forbidding from the grey of the plain. Many of the buildings have fallen in ruins, but many others preserve their ancient form in such wonderful completeness, that, to the traveller approaching them from across the plain (Ill. 130), or viewing them with the aid of a field glass from the nearer crests of the Djebel Haurân, the

deserted ruin appears like a living city, all of black, rising from a grey-white sea. This ancient ruined city has long been called by the Arabs Umm idj-Djimâl, which, being translated, is "Mother of Camels". Certain Bible scholars have tried to identify the place with *Beth Gamul* of the Old Testament.¹ It is not definitely known what the city was called in Roman and early Christian times; but "Mother of Camels" it is now, and no name could fit it better, especially in the springtime when the Bedawin, with hundreds of breeding camels, pitch their tents around the walls of the city, and the new-born camels are sheltered within the ruins against the winds that blow from Hermon's snow-capped peak.

Umm idj-Djimâl was the central city, and the metropolis, of the once thickly settled region that lies south of the Djebel Haurân, and which is styled in these publications, the Southern Haurân. It was certainly one of the largest, if not by all means the largest, of the cities of the Roman province of Arabia, south of *Bostra* and east of *Philadelphia*. The line betwixt Syria and Arabia today is not very definitely drawn in this locality; but, if Syria is taken to be part of the Turkish Empire, and Arabia to be the independent country inhabited solely by the Bedawin, and free from garrisons, soldiers, taxes and other features of Imperial government, then this is Arabia still, as it was in the days when it was ruled from Rome and Byzantium. As it stands today, with all its monuments of the past still recognizable, it is the pre-Islamic Christian Arabic city *par excellence*, practically untouched by Roman or Greek influence, and unchanged by the stream of Islam that swept by it.

This ancient site is not difficult of access for those prepared for desert travel and willing to entrust their safety to the Bedawin; but the lack of water places restrictions upon camping among its ruins. A number of explorers have reached Umm idj-Djimâl for a few hours at a time; but no Europeans had encamped on the spot until January 1905 when the Princeton Expedition pitched its tents beside the old fortress for two weeks, and were followed, later in the same winter, by Miss Gertrude Lowthian Bell² who spent a night in camp among the ruins. Neither party suffered the slightest inconvenience from the Bedawin, although travelling without the usual Turkish guard. The Arabs who were encamped there when the Princeton Expedition arrived, pointed out to our muleteers a small pool of water about two miles west of the ruins, and left the place quietly next day, saying there was not sufficient water for them and for us too. Indeed I may add that unusually heavy falls of snow upon the mountains of the Haurân, and unwonted showers in the plain, made the winter of 1904-1905 a singularly opportune season for exploration in this region. I was told by Bedawin shepherds that the supply of water was more plentiful there than it had been within their memory, and I could well believe it when I returned to this locality in 1909. During two weeks of uninterrupted work, we were able thoroughly to explore the ruins. A survey of the ancient city was made by Mr. Norris, in which the lines of the walls and all the more important buildings within them, and a church and many tombs outside the walls, were located. As a result, two maps are presented herewith, Map No. 1, which shows the city and its immediate surroundings, and Map No. 2 which gives the city itself on a much larger scale, and many of its buildings drawn to scale. The ground plans of a large number of buildings were carefully measured, and these have

¹ Jer. XLVIII, 23.

² *The Desert and the Sown*, p. 73-77.

been inserted in the larger map. A large collection of photographs was taken, and measurements were secured for the publication, and presentation in detail, of over thirty buildings. Including the 29 inscriptions in Greek and Latin, and the 3 inscriptions in Nabataean that had been copied and published by former explorers, the Princeton Expedition gathered 5 Latin, 276 Greek, 31 Nabataean, 1 pre-Islamic Arabic and 13 Safaitic inscriptions, which appear in Div. III, A, 3 and Div. IV, Sects. A and C, respectively.

Umm idj-Djimâl was probably the great city of the desert described by the Arabs to some of the earliest travellers in the Ḥaurân. It was first reached in 1857 by Cyril Graham¹ who published a brief description of the ruins in the following year. In 1861-62 W. H. Waddington² copied several inscriptions here, and, over a decade later, in 1875-76, Charles M. Doughty³ passed through the ruined city. At about the same time Selah Merrill⁴, then American Consul at Jerusalem, visited the site, and, the year after, in 1877, William M. Thomson⁵ reached it. It was not until thirteen years later, in 1890, that Heinrich Frauberger⁶ came to Umm idj-Djimâl; he was followed in 1893 by G. Robinson Lees⁷ who has recently published anew the account of his journey in Southern Bashan. The first plans to be published of buildings in the ancient city were those of one church and of one of the city gates made by G. Schumacher⁸ in 1894, and published with descriptive notes the following year. In 1901 René Dussaud⁹ and Frédéric Macler made a hasty excursion to the place, and copied several inscriptions; the Princeton Expedition followed in 1905, and Miss Bell completed the list of visitors in the same year.

It will be noted at the head of this chapter, that *Thantia*, with an interrogation mark, appears as the ancient name of Umm idj-Djimâl. My reasons for this tentative identification are given in an appendix¹⁰, devoted to a description of the section of Trajan's great road between *Bostra* and *Philadelphia*, which I prepared for Div. III, Sect. A., Part 2. They need not be repeated here further than to say that the identification is based upon a new interpretation of the reading of the number of miles given from point to point in Roman numerals on the *Tabula Peutingeriana*, which are not easily reconciled with the actual figures which appear upon the milestones that are still in place on Trajan's road; further evidence being deduced from the order in which the name *Thainatha*, i.e. *Thantia* of Peutinger's map, appears in the *Notitia Dignitatum*. A suggestion is perhaps to be found in an inscription discovered at Umm idj-Djimâl by the Expedition of 1909, which mentions the βασιλεὺς Θανουηνῶν; it is the Greek half of a Nabataean-Greek bilingual¹¹. Considering the two variants of the form of the name which appear on the ancient map and in the *Notitia*, it is not surprising that both should differ slightly from the Nabataean original and its Greek transliteration.

¹ *Journal of the Royal Geographical Society*, '58 (xx-viii) pp. 226-263.

² *Wadd. inscs.* 2057a-2068, and de Vogüé, *La Syrie Centrale, Inscriptions Sémitiques*, Paris, 1868-77, pp. 120-123.

³ *Travels in Arabia Deserta*, Cambridge Univ. Press, 1883, Vol. 1, p. 11.

⁴ *Q.S.* '76, pp. 51-55, *East of Jordan*, New-York, Scribner, 1883, (new ed.) p. 86.

⁵ *The Land and the Book* (3 vols.), London, Nelson, 1881-1886, p. 509.

⁶ *Globus*, '93 (LXIII) pp. 10-13 and 167-172.

⁷ *Geog. Journ.* '95, pp. 1-26, *Life and Adventures beyond Jordan*, New-York, Appletons, 1909, pp. 263-267.

⁸ *M.N.D.P.-V.* '95 (i) pp. 33-35. *Z.D.P.-V.* '97 (xx) pp. 65-227.

⁹ *M.S.M.* pp. (608; 682), 438.

¹⁰ III, A, 2, p. xiv.

¹¹ Published by Dr. Littmann in *Florilegium Melchior de Vogüé*, p. 76. III, A, 3 insc. 238¹.

EXTENT AND CONDITION OF THE RUINS. The ruins of the city itself cover an irregular space over 800 m. long, and from 300 to 500 m. wide (see Map No. 1) all enclosed by a wall built at different periods and now in varying states of dilapidation. On all sides of the city, to a distance of 500 m. from the walls, are the ruins of large built tombs. All along the west side of the ruins, about 200 m. distant, is the dry and nameless wadi in which the ruins of a bridge lie about opposite the middle of the west wall, and where the ruins of a masonry dam are to be seen about 400 meters to the northwest of the city. From this dam the remains of an aqueduct can be traced to the northwest angle of the city wall, along its north wall, and by the whole length of the east wall. The main aqueduct, which lies just below the surface throughout the greater part of its length, was tapped at several points by branch aqueducts that carried the water into reservoirs in different parts of the city. From the west gate the remains of a built road are traceable, leading north of west, in the direction of *Ḳaṣṣ il-Bā'ik*, as is shown on Map No. 1.

Within the walls there is a broad open space, like an irregularly shaped common, which extends from the main west gate southward, a little to the west of the main axis of the city, as far as the south wall. This open space is interrupted only by three or four single buildings, of public character; but it is surrounded by close set ranks of buildings of all kinds, between which open the narrow streets, leading east and west to the outer walls of the city. All the space between the open common and the walls is filled with confused masses of ruins. Many buildings are in a remarkable state of preservation, others are more or less destroyed, but the great mass of buildings, consisting naturally of private houses, have been completely destroyed. It was possible to measure the ground plans of all of the public buildings, the churches, the barracks, the government house, etc., and a large number of the private residences of different classes, and to secure data for making elevations, sections, and restorations of buildings of almost every one of these varieties. In Map No. 1 the buildings that were measured are shaded grey, and the groups of private houses, are numbered by Roman numerals, the groups of which only the outlines were measured are left white; and it will be seen that there still remain large areas within the walls that have been left blank in the map. These are strewn with ruins most of which are too completely destroyed for the making of satisfactory ground plans, yet I have no doubt that later explorers could add much to the detail of the map by tracing the walls of ruined houses among the masses of debris. Map No. 2 gives the plan of the greater part of the city on a larger scale, with all the buildings that were measured by the Princeton Expedition, drawn to scale. Many of these buildings will appear separately on still larger scale, with sections and restorations; but a large number of the private houses shown here are hardly of sufficient importance to require individual presentation, and only such as represent a particular class, or have some feature of special interest, will receive separate attention in this Part.

The ruins preserve ample remains for the study and restoration of the city walls and gates, the reservoirs and aqueduct, a temple and details of the Nabataean period, churches of three different centuries, houses that probably represent every century from the first to the seventh, and tombs of every period from the time of the Nabataean settlement to the fall of the Christian city. Thus, we have a sufficient variety of buildings, and a long enough period of building activity, to render possible not only a recon-

struction of the historical development of architecture in this ancient city, but a restoration of an important Christian Arabic centre of civilization at the end of the sixth century.

THE BUILDINGS. The architectural forms illustrated in the ruins of Umm idj-Djimâl, i.e. the ground plans, the construction of the superstructures of the buildings, and their ornament, present something more than the common types that are familiar to us in the numerous towns of the Ḥaurân, and that are described in a general way in the introduction to II, A, 2. It has been said by more than one of the earlier visitors to this ruined city that the style of the architecture is typically Ḥaurânian, and this is true of the general principles of construction employed in its buildings. The girder-arch, the corbel courses, and roofing slabs, all the principal details and constructive principles that were developed in the purely lithic architecture in basalt throughout Southern Syria, are exemplified in an hundred different buildings here; but there are to be observed, at the same time, a number of features, important in construction and significant in ornament, which are not common in the architecture of the Ḥaurân, when viewed as a whole, and which add interest to the style as it was expressed in this Arabic metropolis. Taken up in chronological order these peculiarities appear first in the architecture of the Nabataean period of which the remains are scanty at best, but sufficient for comparative purposes. Nothing new or unexpected is found in the matter of plan, and the actual stonework shows the same beauty and skillful workmanship that are to be seen in other centres of Nabataean influence; but the ornamental details are plain in the extreme, severe indeed in comparison with those rich decorations which are most characteristic of Nabataean architecture in other parts of the Ḥaurân. The mouldings are flat and simple in profile, and always without carved enrichments. The four-pointed capital with its exaggerated abacus and depressed echinus, seen at Petra, Boşra and Sî, is here; but the foliate capital is entirely wanting.

The few buildings of the Roman period that remain show none of the elaborate ornamental features that are most expressive of the Imperial architecture in the northern parts of the Province, and the scattered details of Roman buildings that perished during the early Christian period show only delicate and complex moulded surfaces, but no carving of any kind.

The churches present a far greater variety of ground plans and superstructures than can be found in any other part of the Ḥaurân. The most typical of all the church forms in the Ḥaurân, i.e. the three-aisled basilica with transverse arches, does not appear at all; the long, single, hall-church, with broad transverse arches, which is perhaps the oldest church plan in the region, is found in several different edifices; the three-aisled basilica, with longitudinal arches, high side walls and a flat roof of stone over all, — the commonest form of church plan in the southern Ḥaurân —, occurs in several examples; but there are other forms which are either rare or wholly wanting among the churches of the neighborhood. These are, first, a plan like the churches of the fifth century in Northern Syria, having three aisles with longitudinal arches carried on piers, and a semi-circular apse between side chambers, and a superstructure in which the side aisles were roofed with stone slabs and the main aisle was covered with a double pitched roof of timber raised upon a clearstorey, — the plan and superstructure in fact of the well known church at Kalb Lauzeh in the region east of Antioch; secondly, a plan like the above, but with columns substituted for piers, and with high

side-walls, flat roof of stone, and no clearstorey; and third, the same general arrangement, with a double pitched roof of timber over the main aisle, set on the level of the stone roofs of the side aisles. Columnar narthexes, rare in the other parts of the Ḥaurân, are found in a number of churches here, and the rectangular presbyterium exists as well as the semi-circular. The ornament does not differ from that of other churches in the basalt region of Southern Syria.

The type of domestic architecture is the one common in all the towns of the locality; but the proportion of large and tall houses is much larger. The use of columns, in some porticos and loggias, adds interest to the general appearance of the houses. Houses with two large arched storeys in front and four storeys of narrow chambers, without arches, behind, are common throughout the ruins.

Ornament of all kinds is meagre in the buildings of the Christian period as it was in the Roman and Nabataean periods. A few Roman mouldings of intricate profile were employed as second-hand decoration in Christian buildings; but the mouldings of the Christian period are usually of simple right-lined profile. They are used as string courses and impost mouldings, and, in a few cases, as door frames. The use of the column introduced other ornamental features. The Doric column, with plain shaft, and with or without a base, is the most common form used; but the typical Doric entablature does not appear, being replaced by a perfectly plain architrave and a simply moulded cornice. The Ionic order appears in the columns of the "Praetorium" and in the pilaster caps of the Church of Numerianos. No Corinthian types were found in the ruins, though very plain campaniform capitals appear in a number of places. The remains of mosaic pavements are to be seen in several of the churches; these were in simple geometrical patterns of four colors. The subjects of moulded ornament in plaster, and of painted decoration, in Umm idj-Djimâl are discussed on page 69 of Part 2, describing the architecture of the Southern Ḥaurân.

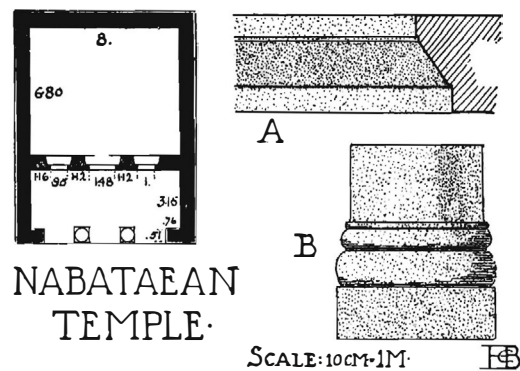
HISTORY OF THE MONUMENTS: Certain deductions with regard to the history of the city are to be drawn from the monuments of architecture, with the aid of a few inscriptions that have to do with the buildings. The remains of no less than two Nabataean temples, and one monumental tomb, besides a large number of Nabataean stelae that belonged to other tombs now destroyed, indicate that the site was an important centre of Nabataean civilization as early as the first century B.C.-A.D. A gateway bearing an inscription of the Emperors Marcus Aurelius and Commodus, and parts of an early wall, prove that the city was defended certainly before the end of the second century; the great reservoir near the centre of the town probably belonged to the same epoch. There are no monuments that can be assigned definitely to the third century; but the fourth century is represented by the "Praetorium", and by a church dated in the year 345. In the next century the barracks were built; for though the inscription referring to the building of the *castellum* is not in situ, there is very little doubt that the *Dux* Pelagios Antipatros, whose name is mentioned in it, and who built the fortress at ẖaṣr il-Bâ'ik in 411-12, was also the builder of the barracks here. A large portion of the city as it stands today was erected in the sixth century; and there is only slight evidence to show that any building operations were carried on here afterwards. The first settlers were Arabs of the nation we have called Nabataean, and the absorption of that nation into the Roman Empire seems to have had little effect upon the racial characteristics of the city; for, though Latin and Greek be-

came the languages of a majority of the inscriptions, the art that flourished under Roman rule in other parts of Syria, and even in other parts of the Province of Arabia, did not reach this distant frontier city. In the following centuries, under Roman political, and Christian religious, influence, we find that the inhabitants in many instances adopted Roman and Greek names; but no corresponding influence is perceptible in the art of the city which undoubtedly remained purely Arabic in blood until the end. Monumental inscriptions in Safaitic script¹, and an example of a pre-Islamic Arabic inscription, show how strong the Arabic national life was throughout the city's history.

Nabataean Architecture.

As has been remarked above, the architecture of the Nabataean period at Umm idj-Djimâl has none of the rich or elaborate character of the same style as we find it at Si^c, and other centres of Nabataean art. The building which I believe to have been a temple of this period is situated in the southwestern quarter of the town within the west gate (see Map No. 2), in the midst of a group of houses of a later time. It is very evident that the walls were utilized in the Christian period without alteration, being wrought into a complex of domestic buildings. The beautiful quality of the stonework, and its high finish, stand out in strong contrast to the walls that surround, and almost hide, it. The temple faces the north. Its plan (Ill. 131) is prostyle, distyle-in-antis, the cella is 8 m. wide inside, and 6.80 m.

deep; there are three portals in the front wall, — a wide doorway between two narrow ones. The anta-walls are returned 76 cm. toward the two columns. The columns are no longer in situ; but their two bases lie in the courtyard not 10 m. from their original position. The stonework of the walls is of the best quality, well cut and closely joined. The top of the wall is finished in a cornice of the simplest profile (A in Ill. 131). The bases of the columns consist of a heavy lower, and a thin upper, torus, without any dividing scotia, and a slender bead just below the shaft. The capitals and their details are wanting. It will be remembered that there are three portals in the Nabataean façade of the temple-mosque at il-Umtā'iyeh (Pt. 2, Ill. 69). It is quite probable that there was originally a small inner sanctuary here with a passage all around it, as was found in the two temples at Si^c. The cornice and the column-bases are substantially like corresponding details in the ruins of Nabataean buildings at Si^c. In a group of houses (VI on Map 2), about 70 m. to the north, several Nabataean inscriptions² were found together with an altar with a bilingual inscription³ in Greek and Nabataean upon it, giving the name of the Nabataean deity Dusares. The altar and some of the inscriptions undoubtedly were originally set up within the precinct of the temple.



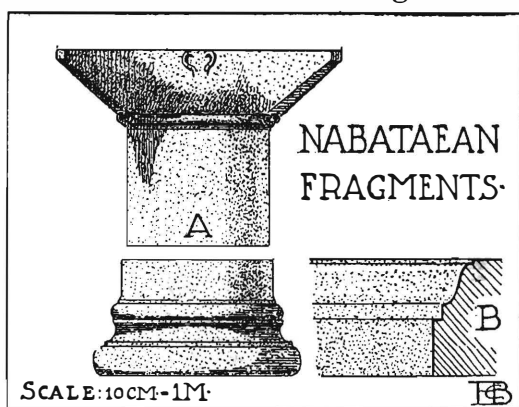
Ill. 131.

¹ Div. IV, Sec. c.

² Div. IV, Sect. A. inscs. 39, 40, 41.

³ Div. III, insc. 238. Div. IV, Sect. A, insc. 38.

The remains of another Nabataean building, presumably a temple, were discovered well to the northeast, about half way between the "Gate of Commodus" and the east wall of the city. Only a few sections of the foundations are visible, with the bases and capitals of two columns and fragments of the base moulding of the wall some of which is in situ. These fragments are shown in Ill. 132. The bases of the columns (A)



Ill. 132.

are of the ordinary Attic form; but the torus mouldings have the flat profile that characterizes the bases of the smaller of the two temples at Si^c. The capital is of that peculiar variety, known only at Petra, Boşra and Si^c, in which a greatly exaggerated abacus with concave sides, is the main feature of the capital. The illustration (A in Ill. 132) shows this capital with a round bead moulding below it, and a section of the shaft attached to the capital. The base moulding (B) is typical in profile. No plan of the temple could be made out in the ruins, without removing much

debris; but, judging by the scale of the details, this temple was larger than the other. Not far from the site of this temple another altar was found, – an altar of beautiful form with interesting ornament –, with a Greek inscription¹ giving the name of the Nabataean god Solmos. This probably belonged to the temple; and, being large and very heavy, it was not removed far from its original place.

Gates and Walls.

There are six gates still visible in the walls of Umm idj-Djimâl, two in the west wall, two in the south and two in the east. Only one of these, the more northerly of the two gates in the west wall, which bears the inscription of Marcus Aurelius and Commodus and which, for the sake of brevity, I have styled on the map, the "Gate of Commodus", has any pretensions to monumental character. One of the south gates was flanked by towers, and may have been similar to the Gate of Commodus, but it is much ruined. The main east gate also has towers, but is smaller and simpler in design. All the others are plain arched openings in the wall, in many cases placed between buildings built against the wall.

GATE OF COMMODUS: Date, 176–180 A.D. This was apparently the principal gate of the city, situated in the northwest quarter, at the end of a road from Kaşr il-Bâ'ik – the nearest ruin on Trajan's great road which was the main artery of commerce in the Arabian province. The gate is a very simple structure (Ill. 133), consisting of two towers, which project outside the walls, connected by two arches which spring from piers placed against the opposite faces of the towers. The towers probably served as guard-houses, and each had a doorway between the piers of the arches. The gate was almost devoid of ornament. The caps of the piers have a right-lined, but salient, profile; the arches were less than semi-circles, and had no mouldings. Ill. 134 shows the present condition of the gate: one tower is well preserved, having lost only one

¹ Div. III, insc. 239.

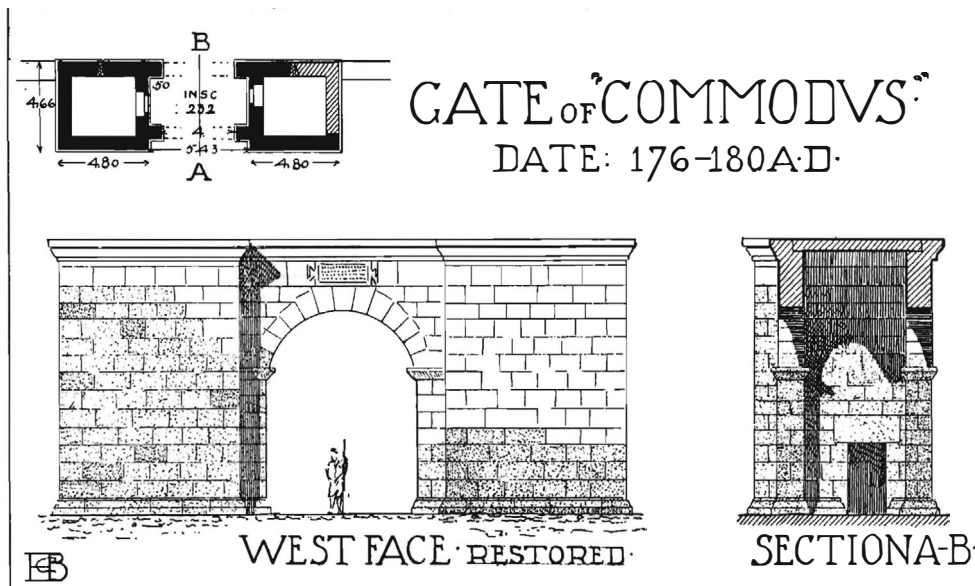


Ill. 134. "Gate of Commodus"; View from the West.



Ill. 135. East Gate; East ace.

or two of its upper courses and its cornice. The two piers on that side are standing with the spring-stones of the arches still above them. The opposite tower preserves only a third of its original height. The restoration (Ill. 133) was easily made; for all the material lies as it fell. Pieces of the cornice, which is of simple, right-lined profile,



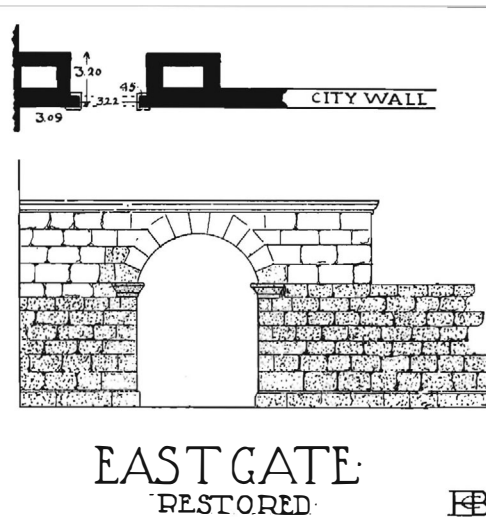
Ill. 133.

lie on all sides, and the inscription¹ of Marcus Aurelius and Commodus lies between the two towers; there can be little doubt as to its original position.

EAST GATE: The towers of the East Gate (Ill. 135) project inside the walls: there is but one arch, and this is narrower than the arches of the other gate. The photograph shows that only the arch has fallen, and restoration was a very simple matter (Ill. 136).

This gate was built in a wall of heavy, roughly quadrated masonry; only the piers of the arch and the arch itself were of finished stone. This arch, like the others, is not a complete semi-circle, and the archivolt is quite plain. The caps of the piers are of right-lined profile, like those of the other gate, and I do not hesitate to assign it to the same period, i.e., the end of the second century.

OTHER GATES: The West Gate, south of the Gate of Commodus, is a small affair, only 1.80 m. wide, in a late, and more crudely built, portion of the city wall. It had a lintel that was probably relieved by an arch of discharge. It seems to have been high enough to have permitted the passage of camels. Outside this gate there are some very late buildings that were never enclosed with a wall, within it is an open space, from which streets lead in all directions. The more westerly of the gates in the south wall which I have called the



Ill. 136.

¹ Div. III. insc. 232. *Wadd.* 2057 and *P.A.*, pp. 289 and 317.

Southwest Gate was only an arched opening between buildings that were built on the wall. The principal South Gate is completely ruined; but the remains of a tower are to be seen on the east side of the opening, as is shown on Map 2. The wall here seems to have been the original second-century wall, and most of the good material used in its construction was carried away at a late period, leaving only the smaller blocks and filling. The more northerly of the gates in the east wall, which we may call the Northeast Gate, is an arch, also in a part of the original wall; it joins the north side of the East Church, the east end of which was built against the city wall. There were probably other gates in the northern part of the town; but we found no traces of them.

WALLS: As I have said above, the lines of the original walls are well within those of the later walls at a number of points; but, wherever it has been preserved, the structure of the more ancient wall is of so much better quality, as masonry, that it may be recognized at a glance and easily distinguished from the later wall. The older wall was about 1.80 m. thick at mid-height. It was built in even courses of blocks of basalt of good size, quadrated but rough faced. North of the Gate of Commodus its foundations, about 2 m. thick, may be traced; south of that gate it has been replaced by the later wall. East of the "Praetorium", and from that point to the southwest angle of the city, it is lost among the buildings; for this entire section appears to have been taken down when the present west wall was built a considerable distance to the west of the older wall. The line of the original wall on the south side of the city was not changed in the later wall; but the remains of this end of the city suggest either that the larger blocks of the older wall were carried away at some late period when the city walls were dispensed with, leaving only the filling, or that a very poor wall replaced an older and better one. On the east side of the city the later walls were built well to the east of the older ones, north and south of the East Gate; but the East Gate itself appears to be on the line of the original wall. Traces of the older wall are to be seen in sections that were utilized as the rear walls of buildings at several points. A piece of heavy wall, about 2 m. thick, is still standing to the southwest of the East Church, well within the later wall, and another section of thick wall, running east and west, is to be traced in the ruins well to the east of the Gate of Commodus; this may be a part of the original north wall of the city.

The later walls were built to include a number of buildings that had been erected outside the original walls; consequently they follow most irregular lines. The construction is not so good, and the walls are not so thick as the more ancient constructions. A few sections are sufficiently well preserved to show what kind of wall building they presented. One of these (Ill. 137) is a curved piece of wall outside the East Gate, and to the south of it, at a point where the later wall was brought into the line of the older wall. As may be seen by the photograph, the lower half of the wall, to a height of about 2 m., is laid in roughly quadrated work about 1.20 m. thick; above this is a metre of height laid in herring-bone fashion, and, above this, a light loose wall that may or may not be original.

I have come to the conclusion, after careful observation of the older and the later wall and the barracks, that the original walls were out-grown in the third or fourth century, that the later walls were constructed at that time to increase the area enclosed, and that the old walls were destroyed wherever they no longer served their purpose.



Ill. 137. Section of Later Wall on East Side of the City.



Ill. 138. The great Reservoir; View from the Southeast.

It also seems probable that these walls, old and new, were abandoned after the building of the barracks or fortress, and the introduction of a garrison, early in the fifth century. The walls were once more preyed upon for building material for a century, or a little more, until the garrison was withdrawn, and the barracks were converted into a monastery. The walls then existing were repaired wherever necessary, and some very crude walls were built to take the place of such sections as had been taken away for building material during the period while the walls were deemed unnecessary.

Reservoir and Aqueduct.

The water supply of Umm idj-Djimâl was well provided for. Needless to say, the dry, sandy, and pebbly bottom of the wadi west of the city was, in ancient times, the bed of a perennial stream. The dam above the city retained the water for distribution, through the aqueduct, into the various reservoirs. There were no less than four reservoirs fed by the aqueduct, beside a number of independent birkehs, or cisterns, that were replenished with rain water from the roofs of buildings. It is an open question whether the reservoirs and cisterns were built of necessity, for the conservation of water during an annual dry season; but it is certain that they were made for convenience; for they are so planned that every group of residences had its supply of water near at hand. The great reservoir, 40 m. by 30 m. square, is situated a little east of the centre of the town. It was partly excavated in the solid rock, and, like all the other reservoirs and cisterns, undoubtedly served as a quarry for building material while in process of construction; for the entire city seems to be underlaid with a bed of basalt rock from 3 to 4 metres below the surface. The photograph (Ill. 138) shows that the bottom of the reservoir, and the lower parts of its side walls, are of the natural basalt rock. The upper parts of the side walls were built in courses of draughted masonry which is an indication that the reservoir was built in the third century or earlier, and probably under military influence; for this kind of masonry was commonly employed in military architecture during the period of strong Roman influence in Syria. The walls were covered with thick water-tight cement, i. e. *opus signinum*, and a flight of steps led down to the bottom of the reservoir at its southwest angle. The ground level at the top of the wall falls away on all sides to prevent the wash from the city streets coming into the reservoir, and the top of the wall has a coping of flat and well fitted slabs, two metres wide, further to insure cleanliness. The mound of sand outside the southwest angle of the reservoir is undoubtedly the remains of sediment taken from time to time from the bottom of the great reservoir. The branch conduit leading to this reservoir from the main aqueduct was sunk just below the surface; it was paved, had side walls, and was roofed with slabs. It was completely hidden when we first visited Umm idj-Djimâl in 1905; but an attempt to clean it out and restore it had been made when I saw it in 1909. This work, as I was informed by the Bedawin encamped here, had been undertaken, a few months before, by Druses from the mountain, and the Arabs believe that these mountain people are about to make an effort to settle in the deserted city; this would be possible only in case water can be brought to the ruins; and, since the wadi which gave the city its original water supply is now perennially dry, it will be necessary to cut an aqueduct from some point in this nameless wadi to a point on the Wâdî Buṭm a few miles to the north; for

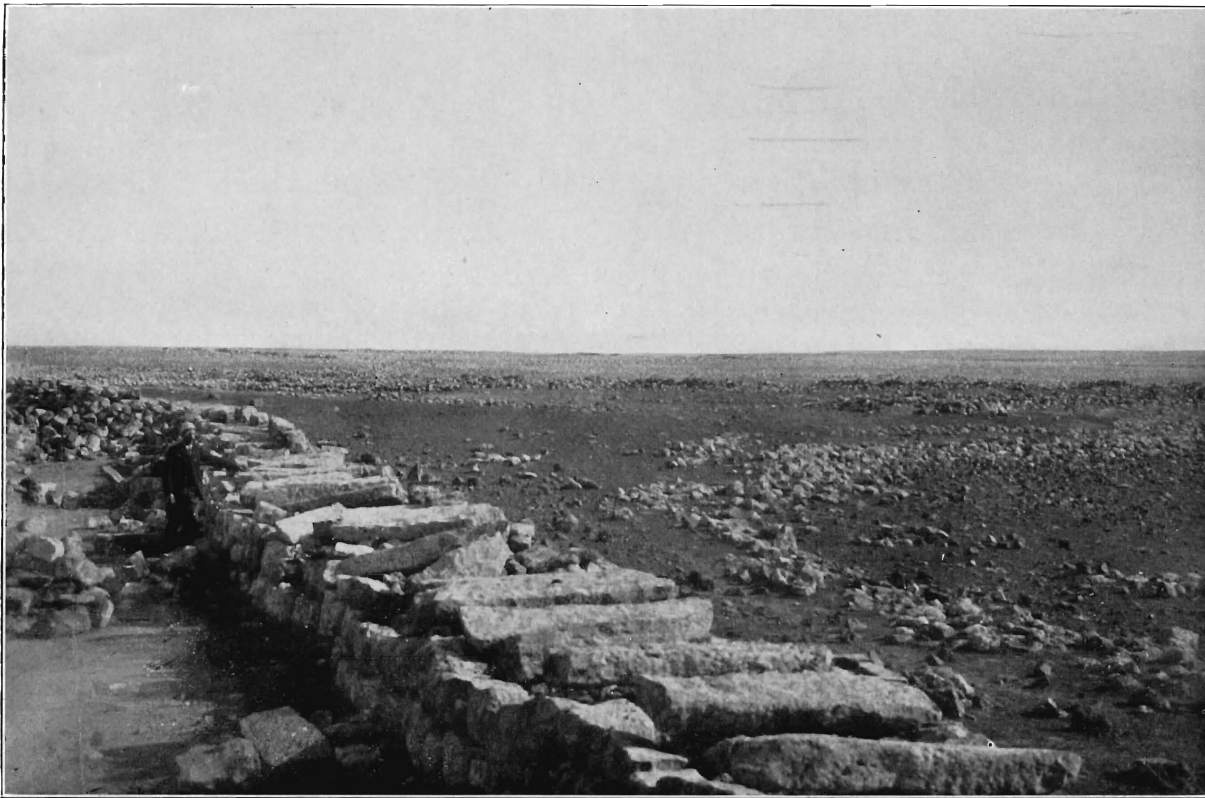
that wadi becomes a rushing stream once a year, for a month or less. We found it full of water in January 1904; but absolutely dry in March 1909. The other reservoirs and cisterns are far smaller; a few of them are rectangular in form, but the majority are oval. All were cut in the natural rock and were walled up to the surrounding level and provided with a coping. Many of the smaller rectangular cisterns were arched over and given a covering of stone slabs; in others, piers with beams from one to another carried the stone covering. The walls of the cisterns that are still protected by a roof still preserve their cement linings in excellent condition. It is probable that many of these covered cisterns are still intact and that they remain to be discovered. Many of those that are known are fertile sources of inscriptions; for, when they were built, the stelae of the tombs of past generations were brought in from cemeteries outside the walls and used as slabs for the covering.

From its source at the dam in the wadi to a point near the northeast angle of the city wall, the aqueduct is buried from 1 to 2 m. deep in the soil. Its course naturally follows the contour levels. Below the point near the northeast angle of the city, it appears as a paved and walled conduit with its covering of slabs on a level with the soil. This section is shown by double lines on Map No. 2. A branch of this section is carried through the wall, but its termination was not discovered. Below the water-gate, that is, the opening in the wall where the conduit to the great reservoir is carried through, the aqueduct again disappears entirely below the level of the soil to reappear at a point about 80 m. from its termination. Here the ground falls away, and the conduit is raised upon a solid substructure (Ill. 139) over a metre high. The photograph presented herewith shows the elevated portion of the aqueduct in a very ruinous state. At the end of the aqueduct there is a deep rectangular cistern with a ruined building beside it. The fall here is sufficiently great to have made possible the introduction of a mill-wheel, like those long in use in other parts of Syria; but it is difficult to know how early this sort of mill was employed in the Arabian province. There are water mills in the Ledjā which appear to be of considerable antiquity; many of them are in complete ruins and seem not to have been in use since the region had a settled Moslem population, long before the coming of the Druses.

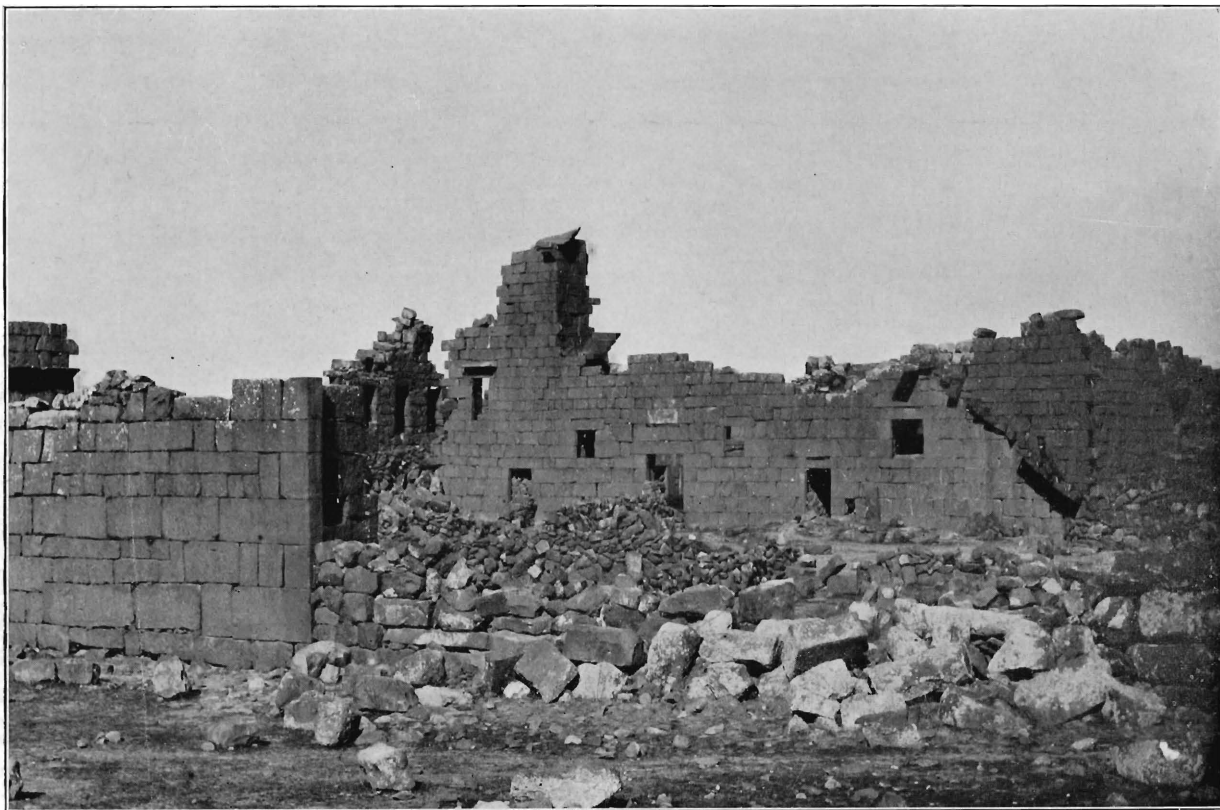
Civil Architecture.

"PRAETORIUM": Date 371 A.D. The building which I have called the *Praetorium* (Ill. 140) is situated near the west wall, south of the Gate of Commodus, and beside the broad, open, space that extends through the middle of the city. Its major axis lies east and west. South and east of it is a great courtyard, originally enclosed within a high wall. In the southwest angle of this yard, and extending for some distance along its west wall, is a row of residences of the same period, and in the same general style, as the main building.

Plan: The plan of the *Praetorium* (Ill. 141) is a parallelogram divided longitudinally into two main sections; one on the south subdivided into three main apartments (O.P. and R.), and one on the north having five smaller divisions (S.T.V.W.X.). The middle division (O) of the three main apartments, consists of a square *atrium* *Doricum*, according to the description of Vitruvius, i.e., a square court walled on all sides and having four columns, at the angles of a square compluvium, carrying a

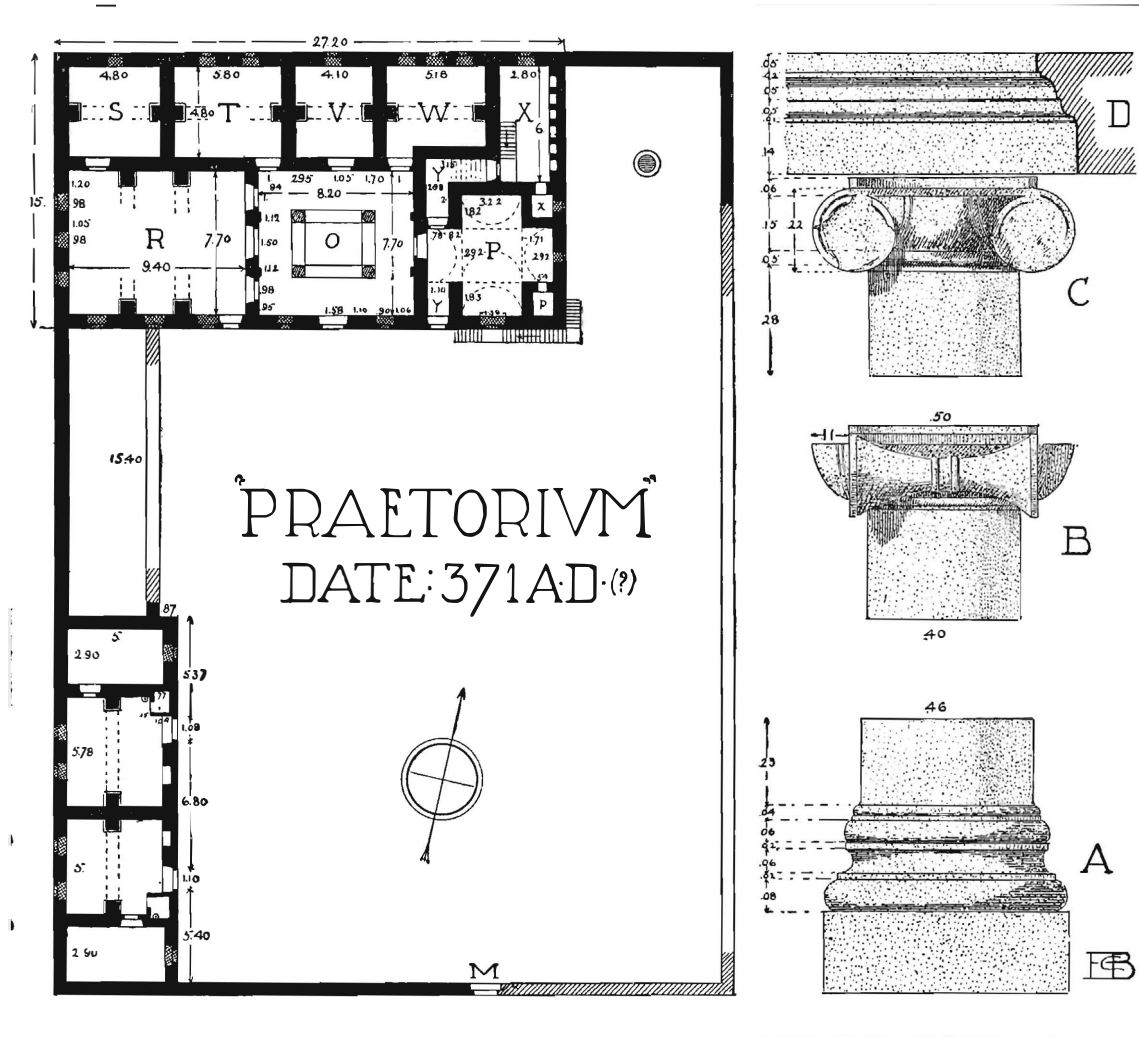


Ill. 139. Elevated Section of the Aqueduct, Outside East Wall; View from the South.



Ill. 140. The "Praetorium"; View from the Southeast.

slanting roof between the columns and the walls. The south wall of the atrium contains the principal entrance to the building and two large windows above two rectangular niches on the inside. In the east wall of the atrium, to the right as one enters, is a single doorway between two pilasters which correspond to the columns of the impluvium. This doorway opens into (P) one of the three main divisions of the building. This division consists of cruciform chamber, the four arms of the cross being



Ill. 141.

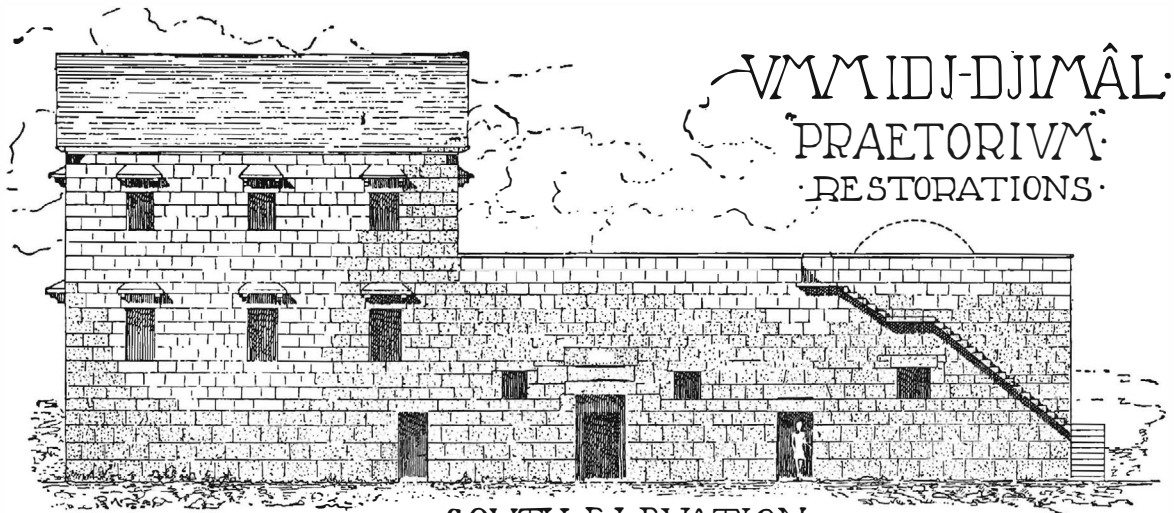
equal, and covered by tunnel vaults which meet in a square now open to the sky. The two square spaces between the arms of the cross and the east wall of the building are filled by two very small square chambers (p and x); the spaces at the opposite side are occupied by a passage (Y.Y.) which extends across the western arm of the cruciform chamber, opening out of doors on the south, turning the angle of the northern arm, and leading into a chamber (X) in the northeast angle of the building. This passage was a private entrance of some sort. On the west side of the atrium is a large hall (R) with two broad transverse arches, opening upon the atrium by means of three portals, – a large portal between two narrower ones –, separated by pilasters. The first bay of this hall has a small doorway and a window in its south

end; the second and third bays have windows to the south, the west end of the hall has three large windows, and the third bay has also a doorway in the north. This section of the building had two storeys. In the other longitudinal division of the building, (S) is a square chamber with a transverse arch, connecting with the westernmost bay of the great hall, (T) is a similar chamber adjoining it on the east, and opening upon the atrium by a doorway in the northwest angle, (V) is a smaller chamber, arched like the others, with its doorway in the middle of the north wall of the atrium, and (W) is a chamber corresponding to (T), but having three windows in its north wall where the other chambers have only one or two. This chamber is not so deep as the others; for its front wall is set back to give room for the passage (Y) mentioned above. (X) is an oblong chamber lying north and south, not arched; but having two storeys of corbel-and-slab construction.

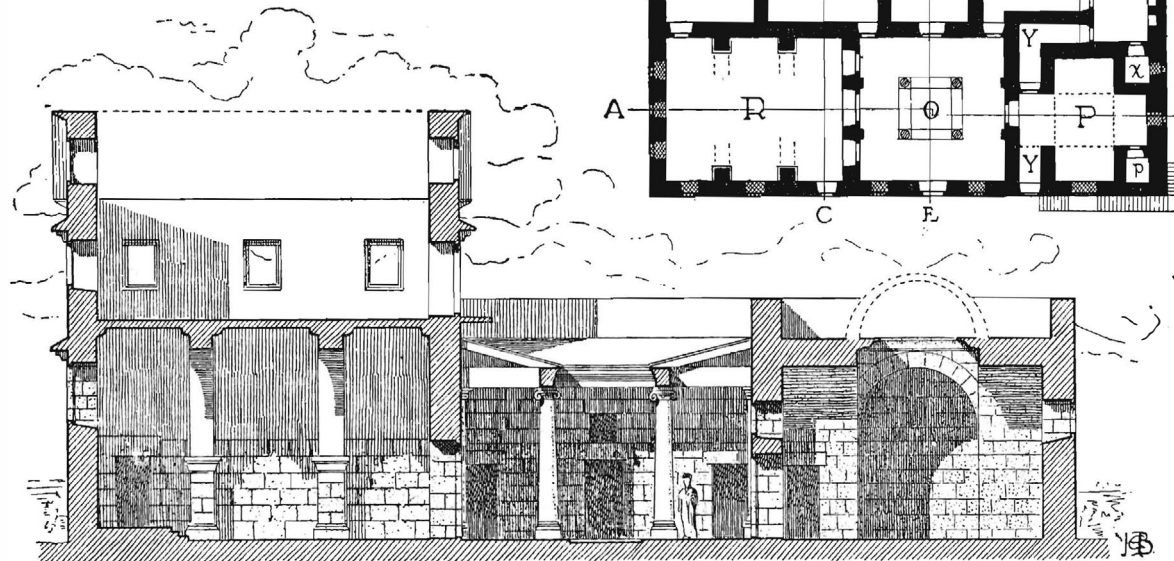
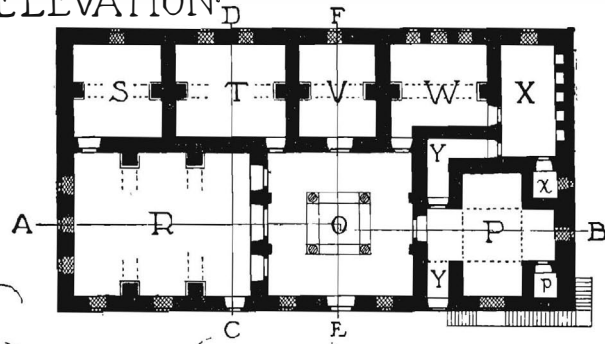
In its lower storey this chamber has a row of six recesses, like cupboards, in the east wall, and was apparently a cloak room, or a room for depositing arms; it opens into a minute chamber in the northeast angle of the cruciform chamber, and had a staircase on the west leading up to a small doorway over the passage (Y), where another stair, above the passage, led up to the roof. An outer stair, corbelled out from the south wall, leads up from the southeast angle of the building to the roof above the cruciform chamber; both stairs conducted to about the same point on the roof.

Superstructure. Upon the ground-plan described above, with the aid of the parts of the building that are still in situ, and by observation of the fallen parts, the accompanying elevations and sections (Ill. 142) were drawn. The photograph given in Ill. 140 shows just how much of the south wall is standing, and the south elevation, presented in Ill. 142, gives these parts slightly shaded, while the restored portions are left white. It will be seen that the chief entrance to the atrium, with a window on either side of it, and the little side entrance of the great hall on one side, and the doorway of the passage (Y) on the other, give symmetry to the middle of the façade. East of this are the large window in the end of the south arm of the cruciform chamber and the outside stair. On the west of the middle of the façade, stands the two-storey portion of the building, the entire height of which is preserved at its southeast angle, where a lofty fragment, embracing sections of wall on both sides of the angle, and carrying a small piece of the raking cornice, supplies data for the restoration of the south façade and the transverse section (E-F). The photograph (Ill. 140) shows one complete window, with its hood, in this section of the south wall, and the upturned sill of the window above it. There can be no doubt that there were three windows in the lower storey on this side, – two beside the one shown in photograph – and it is equally beyond question that there were three similar windows in the upper storey. The three windows in the west end of the hall are also to be seen in the photograph.

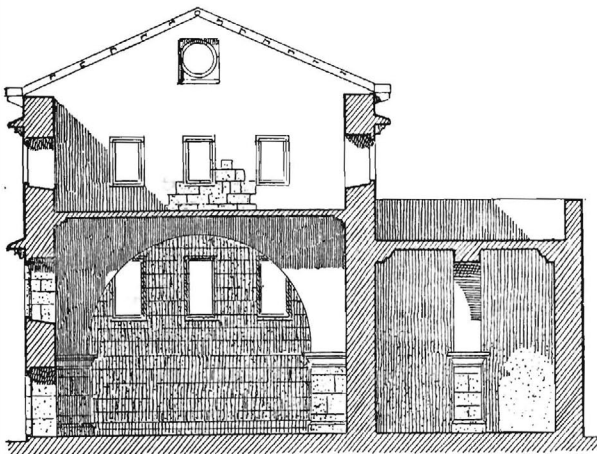
The longitudinal section (A-B) cuts through the great hall (R), the atrium (O), and the tunnel-vaulted cruciform chamber (P). The sections through the great hall and the atrium are self-explanatory in view of the description of the plan already given. The cut through the cruciform chamber shows the height and arrangement of the tunnel vault springing from the crowns of the others, over the square intersection which is now open to the sky. The intersection could not have been covered by a dome, for the entire square is provided with an overhanging cornice, leaving no place for pendentives, so that the choice must lie between a tunnel vault and a cloistered vault.



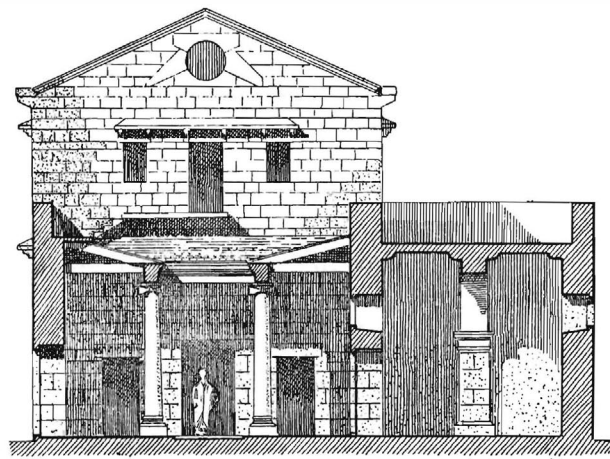
SOUTH ELEVATION.



SECTION A-B.



SECTION C-D.



SECTION E-F.

The former was used in a tomb of similar plan at il-Anderîn¹ with its axis at right angles to the major axis of the cruciform room below it; the latter appears in the baths at Boşra, and was apparently used in the Praetorium at Misimiyeh.²

The cross section (C-D) is taken through the great hall (R) and the arched chamber (T) beside it. The height of the piers of the arches of the hall is known. The arch was, of course, a semi-circle, probably a little stilted: this, in execution, gives the approximate height of the floor of the upper storey, which, judging from the ruins, was composed of stone slabs. This height suits the height of the windows of the upper storey which is a known quantity.

The other cross section (E-F) is taken through the atrium and the middle room (V) on the north of it. It shows, at the left, the two-storey, gabled wall at the end of the great hall, with the parts in situ and restored differently represented, and, at the right, a section through the arched room (V), which is but one storey high. The columns which lie in the atrium are placed in position, and the roof above them has been restored. The entrance to the storey above the arched hall must have been in the restored wall; for the stairs that led to it are partly preserved and are shown in a photograph (Ill. 52 published in Part 2). These stairs rose from the top of the south wall of the atrium; they were approached by a walk, corbelled out like a balcony, from the top of the wall, and held in place by a parapet. The doorway could not have been in the centre of the wall unless it opened upon a long balcony, as I have drawn it. The circular window in the gable has been restored from fragments of its framing stones found just within the middle doorway of the great hall. These stones of irregular shape are quite similar to the framing stones of a gable window still in place at Djemarrîn, just north of Boşra.

Ornament. The only ornament in this building is that of the columns and epistyle of the atrium (Ill. 141). The bases are well turned, and of good proportion, the capitals are of the Ionic order, having a plain square abacus and a very heavy echinus with a narrow torus below it. The interesting feature of the capital is that the volutes were not carved, but were executed in stucco upon flat faces; the egg-and-dart in the middle of the echinus was also applied in stucco to a smooth ovolo surface. The drawing of the capital (Ill. 141) shows a bit of the stucco volute still adhering to the capital. The architrave has a broad band below a heavy cymatium. The upper members of the entablature were omitted, as was common in architecture in Syria in which classical forms appear, later than the third century. It is very probable that other decorative features in stucco were employed in this building, and the remains of the hardest kind of plaster upon highly finished flat surfaces indicate that painted decoration was applied to the walls of the atrium; though no remnants of color were found.

Purpose and Date. There is no building thus far known in Syria, and none elsewhere, so far as I can discover, that reproduces the plan of this building. It is a curious and interesting mixture of native and foreign elements, some of its features being peculiar to the Haurân, and others distinctively of Greek or Roman origin. The vaulted cruciform chamber would seem to be the most significant part of the edifice, and this is plainly not religious or funeral in character; for no church in Syria

¹ II. B. 2. Ills. 54, 55.

² See fragment of vault, S.C. pl. 7. Note: This building is now destroyed, but records of it were made by M.M. Rey and de Vogüé.

is known to have had this form, and it is too large, and too well lighted, to have been a tomb. The plan of its vaults, however, is an almost complete reproduction of those of the so-called Praetorium¹ formerly existing at Mismiyeh (ancient *Phaena*) in the northern part of the Ledjā, the only detail lacking being a large niche, or apsis, in the eastern branch of the cross, and columnar, instead of solid, supports. It was this similarity that suggested the probability of the building before us having served a similar purpose. The Praetorium of *Phaena* was an earlier building, and its classical elements are far more in evidence; but, as we have seen in the general discussion of the architecture of this region², classical architecture never penetrated these southern parts of the Province of Arabia to the same extent that it did the northern parts, and the slight differences existing between the vaults of the two buildings, as enumerated above, are hardly sufficient to deny a similarity of purpose. The building at Mismiyeh stood by itself, a rectangular structure, cruciform within, and having a portico of columns in front. The present structure, as we have seen, was part of a larger building, of a plan very highly articulated for the locality, and absolutely unique in its form. It appeared, at first sight, that the edifice might have been a large public bath; but a more minute examination proved this conjecture to be wholly erroneous; for the most significant details of the baths in southern, and in northern Syria (the conduits and water pipes) are wanting. As I have said above, it is not possible to reconcile the building, as a whole, with any religious or sepulchral purpose; but if we assume that the vaulted chamber was of the same character as the Praetorium of *Phaena*, it is not difficult to conceive of the whole structure as a government building, the seat of the chief official, or officials, of this portion of the Arabian province. One may tentatively think of the vaulted chamber – the Praetorium proper – as the bureau of the chief civil and military authority, and of the great hall as a basilica, or court-room, in which cases were tried; the atrium afforded a suitably dignified and secluded entrance to both, and a passage from one to the other, as well as a waiting-room for persons having business in either of the other rooms. The square, arched chambers along the north wall may be regarded as various important dependencies, (S) as a private office, or retiring-room, opening off from a dais at the west end of the court-room, (T), (V), and (W) as bureaus of various officers, clerks or secretaries, and (X) as a general cloak room, or, perhaps, a library. (p) might be regarded as a store-room for archives, and (x), I believe, was a latrina. It would be possible, in the same manner, to assign uses for the upper floor; but I have proceeded far enough in this tentative allotment of uses to the various divisions of the building to convey my idea of the probable purpose of the structure.

The dating of the building involves a curious crux; for I propose to date it by an inscription³ found not in the building itself, but upon a stone now serving as a lintel of the southernmost of the three west portals of the "Cathedral", about 70 m. northeast of the edifice in question. This lintel is not the main lintel of the portal of which it is a part, but spans the doorway in a second wall, directly within the present front wall, built, apparently after the front wall, to strengthen it. The inscription is the famous Latin one, published by Waddington, giving the names of the Emperors Valentinian, Valens, and Gratian, and recording the erection of a *burgus*.

¹ S.C. pl. 7.² II. A. 2. p. 66.³ III, Insc. 233.

The inscription, of course, is not in situ; but it fits the lintel-less doorway of the entrance to the courtyard on the south side of the Praetorium, from which place I believe it was taken at a late period, after the government building had lost much of its original importance, and after the original building of the "Cathedral" which contains a dated inscription¹ of the year 559, A.D., probably the date of the erection of the building. The word *burgus* is rare; according to Waddington² it was adopted from the German *burg*, and was not derived directly from the late Greek *πύργος* of which there are so many examples in Syrian inscriptions; it passed into Arabic as *bordj*, and is of frequent occurrence. In the Greek inscriptions of Syria the word *πύργος* is usually applied to towers, numerous examples of which appear in the smaller ruins. Many of these towers were undoubtedly government buildings; their exact purpose is not known, but they must have been symbols of Imperial power, and were perhaps seats of Imperial authority in these small communities. The Arabic form is applied not only to towers, but to many other kinds of buildings; Burdj Bakîrîhâ³ is a ruined Roman temple, Burd id-Derûnî⁴ is a church in a wonderful state of preservation; both of these examples are from Northern Syria. The *burg*, or *bourg*, of northern Europe, in Roman times, is believed to have been a military structure; and it was also the seat of the Roman government. If this word found its origin in the Rhine country, it had travelled far before it reached Umm idj-Djimâl, and it is not at all improbable that its meaning had expanded: *πύργος* is a very similar, and perhaps the same, word, and this we find used as the name for towers, originally perhaps the only government buildings in small towns. Umm idj-Djimâl was a large city, its government building, i.e. its *πύργος*, was not a tower, but an extensive edifice, and, its inscription⁵ being in Latin, *burgus* seems to have been the term applied to it. The other government building – the barracks – is called *κάστελλος*, or, at least, there is another inscription⁶ referring to a military structure here by this name, and we know that *κάστρον* and *κάστελλος* were the Greek words, and *castellum* the Latin word, for the fortresses, barracks, and similar military structures in Syria. The date of the inscription of Valentinian, Valens, and Gratian, in the second consulship of Gratian and Probus, would fall about the year 371 of our era. The construction, style, and general appearance of the building, are wholly in keeping with this date. The high exterior finish of the walls, and the interior finish of the walls of the atrium, suggest an early date; they are the best examples of wall building in the town, with the sole exception of the Nabataean temple. The form and proportions of the Ionic columns are much nearer to classical models than the columns of the same order⁷ found in the church of SS. Sergius and Bacchus at Umm is-Surab, dated 489 A.D., and this fact, I believe, postulates an earlier date.

BARRACKS: Date, about 412 A.D. The largest single building in the ruined city, situated near the middle of the south wall, and standing quite by itself, free from surrounding buildings (Ill. 143) is called by the Bedawin "id-Dêr", and this word, – in translation the Convent –, has been applied to it by some of the few travellers who have reached Umm idj-Djimâl. A convent it may have been before the end of its career as a habitable building; but there can be no doubt that it was originally built to serve as a fort or barracks, preferably the latter; because it was built within the

¹ III. A. 3. Inscr. 260.

⁴ II. B. 4. p. 201.

² cf. Waddington's commentary under Insc. 2058.

⁵ III. insc. 233.

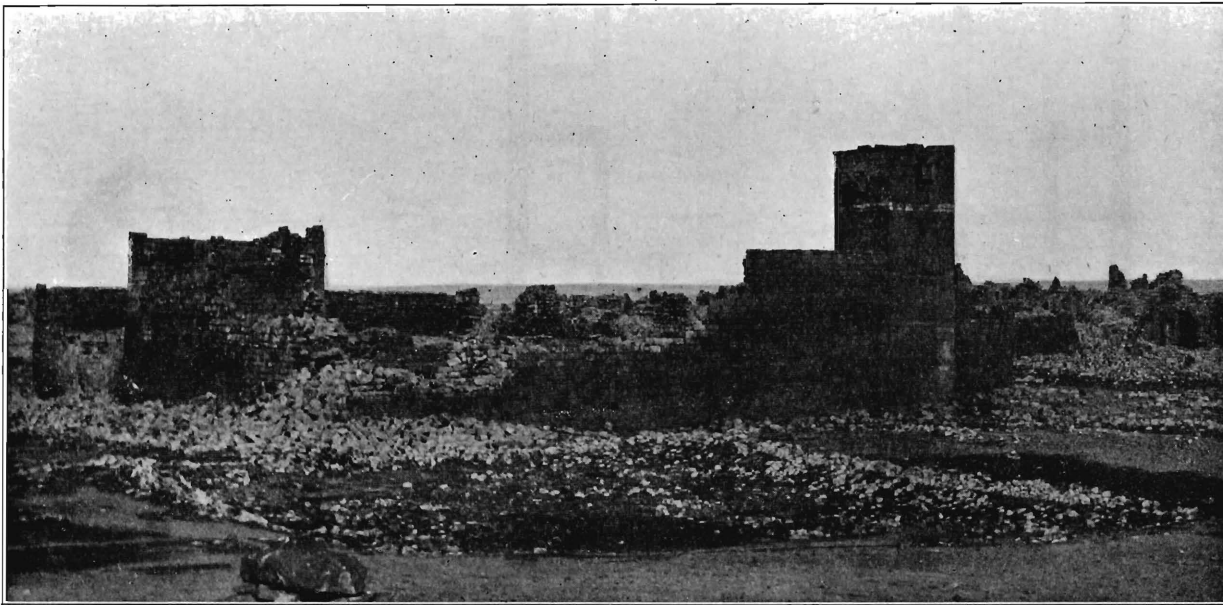
⁶ III. insc. 237.

³ A.A.E.S. II. p. 66.

⁷ See Ill. 78. II. A. 2.

city walls, and was intended for the housing of soldiers rather than as a stronghold for defence. The similarity, in plan and in construction, which it bears to the fortresses of *Ḳoṣēr il-Hallābāt*, *Ḳaṣr il-Bâ'ik* and *Dêr il-Kahf*, leaves no doubt of its military character. The last named building, it will be noticed, is also called *Dêr* by the Arabs of the desert, though, in its inscription, it is designated by the word *castellum*.

Plan. The building is a rectangle (33.75 m. \times 55 m.) with its longer axis lying north and south (Ill. 144); just south of the middle of its east side, a rectangular chapel juts out from the main building. The present entrance, – a low and narrow doorway with a stone door –, in the east wall, just north of the chapel, is not the original; for this part of the wall shows evidence of having been rebuilt at a period considerably later than that of the original structure. Rooms of varying depth are disposed on all sides within the heavy outer wall, leaving a yard of somewhat irregular

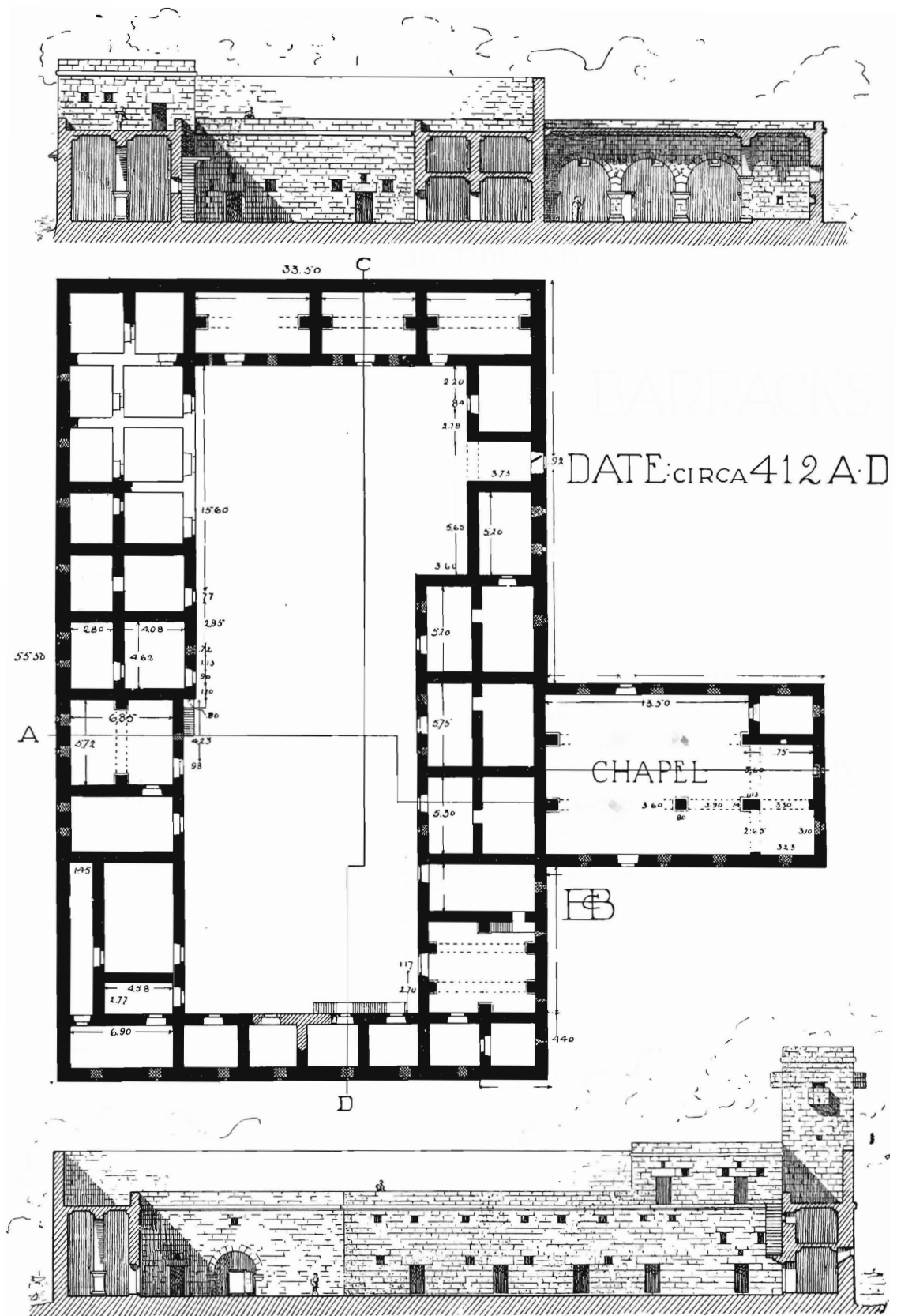


Ill. 143. The Barracks; View from the Southwest.

shape. A high tower, 4.40 m. square, and about 15 m. high, stands at the southeast angle; this does not break out from the straight lines of the two walls, like the towers at *Ḳoṣēr il-Hallābāt*,¹ but simply occupies the angle made by them, in the same manner as was seen in the fortress of *Ḳaṣr il-Bâ'ik*.² The other three angles of the building were not planned to receive towers. The south side of the rectangle is occupied by a row of shallow rooms of the same depth as the tower; the southern half of the west side, by a deep set of apartments of various shapes and sizes, and the northern half by a double row of barrack-rooms, deeper than the others, and having their front wall set a metre forward of the wall of the southern half. The north side is composed of chambers only 4 m. deep, but varying in width from 6 to 7 m.; three of these rooms have girder-arches. On the east side of the yard there are long shallow rooms on either side of the entrance, and then a double row of six rooms, three in each row, between which and the tower is a large square apartment with two girder-arches.

¹ II, A. 2, Ill. 55.

² II. A. 2, Ill. 61.





Ill. 145. The Barracks; View from the Southeast, showing Tower and South Wall of the Chapel.



Ill. 146. The Barracks; Part of Wall on West Side of Courtyard.

Superstructure. On the ground-plan described above, the superstructure is of equal height on all sides, except where the two towers stand, though some parts have two storeys and others only one, the former having an intermediate floor and a roof of slabs carried on corbels, the latter having high girder-arches also carrying a roof of stone. The angle tower rises three storeys above the roof of the apartments adjoining (Ill. 145), and there were two high rooms, one above the other, in the middle of the west side, making an oblong tower-like structure at that point. The outer wall is solid and thick (from 0.80 m. to 1.10 m.); it is broken only by loop-hole windows, disposed at regular intervals on the south side, and irregularly placed on the other sides. On the outside the wall was carried up 3 m. above the roofs. The wall itself was constructed in the same manner as the outer wall of the fortress at *Ḳaṣr il-Bâ'îḳ*. The tower, above the ground storey, is of totally different workmanship, being of the most highly finished quality of stonework found in the Christian architecture of Southern Syria (Ill. 145). The northern half of the west wall of the court-yard of the barracks shows the same high quality of workmanship (Ill. 146); the courses are comparatively low, but the blocks are long and accurately joined; the edges are sharp, and the surface is so smooth as to give the effect of having been polished. The upper floor of this part was reached by a stair which led up in the angle of the projection, and a balcony, composed of long and highly finished slabs corbelled out from the wall, extended across the front; traces of this are to be seen in the photograph (Ill. 146), though most of the slabs have been broken off. The remainder of the structure was built in the more crude style of *Dêr il-Kahf* and *Ḳaṣr il-Bâ'îḳ*, where rough quadrated masonry was used. The entire northern half of the west side of the building was devoted to barrack-rooms, like those at *Dêr il-Kahf*¹; the southernmost of them was highly finished on the interior, and has a moulded corbel course below the ceiling; it was probably an office of some sort; for it is larger and better lighted than the other rooms. The southern half of the same side has one large arched apartment, one smaller room, two passages, and a long narrow unlighted room in the rear; the group, if it belonged to the original military structure, may have constituted the residential quarters of the commandant, or, if it belongs to a later reconstruction, which from the difference in construction appears probable, it may have no relation to the building as a military structure. The small rooms on the south wall appear to have been stables. The large arched room in the southeast angle of the yard, which had another arched room above it, was perhaps another officers' quarters. There are two piers within it, which show that the room was originally spanned by a single girder-arch set at right angles to the present pair which support its ceiling of stone slabs. Adjoining this large room on the north is a long passage, also in two storeys, and, beyond this, the second series of double barrack-rooms, two storeys high. The purpose of the narrow arched rooms on the north side is somewhat problematical; they were probably barrack-rooms of another sort, like the large arched rooms on the south side of the fortress at *Ḳoṣêr il-Ḥallâbât*. The entrance, as I have said above, does not seem to me to belong to the original structure; yet, from my observation of the wall at this point, I am convinced that the original portal, a much larger one, occupied the same position; for an entrance in the middle of the east side, like those at *Ḳoṣêr il-Ḥallâbât*

¹ II. A. 2. III. 127.

and Dêr il-Kahf, would have opened into one of the barrack-rooms which I believe belong to the early building. It seems as if the frame of the original doorway had been removed, and the wall on either side of it and above it had been rebuilt, and the present narrow entrance substituted for the old one. At this time the lintel bearing the building inscription was carried away, perhaps with other material, and used in the building of a private house about 200 m. to the west, near the west wall of the town. This house, by every sign, is one of the very latest buildings in the city.

Tower. The high tower in the southeast angle, which is almost completely preserved, and is perhaps the most striking feature of the city as viewed from a distance, rises practically unbroken in six storeys. No architectural distinction is made on the outside between the ground floor and the one above it; but each of the other storeys is marked by a narrow course which projects slightly. The storey below the uppermost floor has a small square window in each side. The top floor has four large openings, one in each face of the tower, those on the north and south faces being set two courses higher than those on the other two sides. Each opening is four courses – about 1.50 m. – high. At the bottom, on either side of each opening, a corbel projects from the wall, and upon these is built a structure, like a high-walled and bottomless balcony, three courses high (see Sect. C–D in Ill. 144). On the face of each of these structures is a large incised cross and the name of an archangel; Michael, Gabriel, Raphael or Uriel. The use or purpose of these projections is not apparent; similar constructions, with stone floors having one or two holes in them, are not rare in towers and other structures in northern and southern Syria; some of these, when placed above doorways, were of the nature of machicolations for the discharge of missiles upon the heads of enemies forcing an entrance; others were unquestionably latrinae. In the present instance, however, the placing of this feature on all four sides precludes either of the uses mentioned above; while the absence of a floor and the presence of inscriptions fail to suggest any particular purpose. I am inclined to look upon this tower as an early belfry, in which some sort of resounding instrument, the *semanterium* perhaps, was placed. The outer structures may have been for the protection of this. There are several other inscriptions¹ upon the tower, one in beautiful large letters upon a belt-course, and others which are partial belt-courses. All of the inscriptions are of a religious character: but I believe they are coeval with the original building of the barracks.

It is plain that the tower, like all the rest of the building, was covered with stucco. A band of this material is still plainly visible near the top of the tower, and patches of it are to be seen in many parts of the building. Here, as in numerous other examples, one finds that two kinds of stucco were employed; one, of ordinary quality, which was used to cover most of the surfaces, and which has almost entirely disappeared; and another, of particularly durable quality, which was laid on in bands and discs, usually upon smoothly finished walls, and was probably intended to receive a painted design. This quality of stucco, in many cases, is well preserved. If there were ornamental features in this building they must have been executed in stucco or colour.

Chapel. The chapel is a basilica of medium size. Like many of the churches in this region, it has a nave of three bays. Its presbyterium is almost square and

¹ III, inscs. 245–255.

opens into the prothesis, on the south side, by a broad arch, almost as wide, though not so high, as the chancel arch; an arrangement unique in the churches of southern Syria, as far as I have observed. The prothesis opens upon the south aisle by another arch. All three of these arches are in situ. The diaconicum is an oblong chamber on the north of the presbyterium; it has a narrow doorway and a small window. The superstructure is exceedingly simple. The outer walls were built of rough quadrated masonry, the interior piers and arches of large blocks of stone highly finished; the walls were built up to the height of the crowns of the arches; a corbel course projected from the walls, double corbels were laid upon the arch walls, and the whole interior was covered by a flat roof of stone slabs. A few small windows were placed high in the walls, and a narrow doorway in the north wall, with another in the south wall, provided the only entrances.

Character and Date. As I have said above, the resemblance which this building bears, in its construction and in parts of its plan, to the fortresses of Dêr il-Kahf and Ẓaṣr il-Bâ'ik, gives sufficient evidence of its military character. The double barrack-rooms on the east and west sides are the only rooms of this particular plan and arrangement that I have seen in southern Syria, outside the fortress of Dêr il-Kahf. The outer walls have the thickness common to walls of many castles and forts in Syria; while there is nothing in the plan or arrangement of the building that recalls features in any of the monastic edifices of the neighbourhood. The religious tenor of the inscriptions upon the tower need not offer a barrier to the belief that the original building was a barracks, or that the tower belongs to the military period of the history of the building; for religious inscriptions abound in the military structures of the Christian period in Syria.¹ There is no other building in Umm idj-Djimâl, or remains of one, to which the inscription of Pelagios Antipatros might have belonged. This *dux Arabiae* built the castle of Ẓaṣr il-Bâ'ik in 411-12, and there can be little doubt that the inscription found in Umm idj-Djimâl belongs to about the same year. It is not possible to say at what time the main entrance to the barracks gave place to the small doorway which we see today, or to venture more than a conjecture as to the period when the barracks became a monastery. One cannot assume that the erection of the chapel was coeval with the conversion of the purpose of the building; for chapels are found in fortresses and barracks from one end of Syria to the other, though, in all known examples, the chapel is within the enclosure of the military structure. There is now no part of the interior of this barracks that might have been the chapel of the guard, and I am inclined to believe that the present church edifice was added to the barracks while it still served its original military purpose. When the present entrance was made, the crude overhanging structure above it was added. This is a single machicolation corbelled out from the wall and provided with thin walls. It is of late and poor construction.

Ecclesiastical Architecture.

The fifteen churches of Umm idj-Djimâl may be classified under two general types: those with undivided naves spanned by transverse arches, i.e. the hall-churches, and the basilicas. Both types present numerous varieties from a fixed form, in ground-

¹ cf. III, inscs. 865, 915, 947.

plan as well as in superstructure. The former class – the hall-churches – may be said to embrace all the churches without side aisles, from the extremely elongated form with many transverse arches, to those which are nearly square in plan and have but one transverse arch. In this class we find the presbyterium sometimes rectangular and sometimes semi-circular, in one case concealed on the exterior by flanking chambers, and in another showing a complete exterior curve; while a narthex is present in one example and absent in another, or is replaced by a lateral portico. The ground-plans of the basilicas also present several varieties of arrangement; while the variations in their superstructures are even more diverse, and consequently very interesting. We find curved protruding apses, and apses concealed between side chambers, naves divided into aisles by broad arches carried on piers and narrower arches supported by columns. In some of the basilicas the side walls are of equal height with the interior arches, the whole nave being covered either by flat slabs on one level, if the middle aisle be narrow, or the side aisles covered with slabs and the main nave with a simple double-pitched roof of wood. In other instances the superstructure has the typical Latin basilical form with a clearstorey raised above low side aisles, with this difference from the Latin type, that the side aisles are roofed with flat slabs of stone. A single example has clearstorey windows directly above the nave arches, opening into a gallery, as if the clearstorey and a triforium gallery had been combined. Many of the basilicas have a colonnaded porch, or narthex, others have a porch composed of arches and piers; while an isolated church had a broad single-arched narthex between projecting towers. The diversity of plan and arrangement is indeed great, and especially significant in a city so far removed from the great art centres.

The churches represent various grades of excellence in the matter of construction; though none of them can boast of having been built in the best manner known in the Haurân, neither does any find its place among the poorest examples of masonry in this region of extremes in the matter of construction. Three churches were built in part of highly finished quadrated masonry; each one of them contains fragments of classical ornament built into the walls, suggesting that the highly finished quadrated blocks also were taken from some abandoned building of the Roman period, or earlier, perhaps a temple. The majority of the church buildings were constructed of smooth quadrated masonry, and the remainder of rough quadrated work, the best of its class.

One-half of these church edifices seem to have been connected with monasteries, or, at least, are integral parts of larger or smaller groups of residential buildings; the other half stand quite free, or have no more than very small residential quarters attached to them; one is the chapel of the barracks. Only two are definitely dated by inscriptions; one in the first half of the fourth century, the other in the second half of the sixth; and these two dates are hardly sufficient to be useful in determining the dates of the other churches. I do not believe that the types represented by the two dated churches were confined to the fourth and sixth centuries respectively, although they are widely different types. The earlier of the two dated churches, which is the earliest of the dated churches in all Syria, and the earliest of churches anywhere in the world that is given a definite date by an inscription, is of the hall-church type of which there are other examples that are certainly very early, like the church at ʿAnz¹

¹ II. A, 2. p. 133.

the ornament of which can be hardly later than the first half of the fourth century. The type was undoubtedly derived from the long halls in later Roman buildings in the Ḥaurân, like that in the Kaṣarīyeh at Shaḡḡā which is a second or third century building, and was itself converted into a church. But it is quite possible, even probable, that the type persisted throughout the Christian period in the Ḥaurân, if not in its original very elongated form, at least in the shorter form with one or two transverse arches; for the reason that it was the simplest kind of structure to build when a small church, or chapel, was desired.

The later church, built over two hundred years after the other, is a basilica. This type too is early in Northern Syria where there are examples dating from the fourth century. But in the South the type is rare at best, except in the form, unknown in Northern Syria, in which the clearstorey is omitted and the entire roof is flat and on one level. However, I shall begin the description of the churches with the earliest dated examples, and let the other hall-churches follow immediately, leaving the basilicas until the last.

One cannot fail to observe, in looking over the larger map of the town, that the churches, though having their apses in a general way toward the east, show great irregularity in their orientation, the differences between them varying at the maximum as much as 20 degrees. Recent attempts, – successful, I believe, in the main –, have been made, as is generally known, to date Greek temples according to the degrees of their divergence from an orientation based on the true north; but I am unable to say whether a similar rule would be applicable here. Nor have I been able thus far to discover whether the churches that have the same, or nearly the same, bearing are to be assigned to approximately the same dates. It is true that the Church of Julianos, built in the fourth century, is so placed that the bearing of its front wall is almost exactly due north, and that the Cathedral, which is a sixth-century structure is so oriented that the bearing of its front wall is north 25° east. Most of the churches in the town conform to one of these angles or the other. In one or two cases the diagonal of the nave lies due east and west, throwing the axis of the apse to the south of east. It is an interesting field for further investigation.

CHURCH OF JULIANOS: Date 345, A.D. This most ancient of the churches of Umm idj-Djimâl is hidden in a large group of buildings to the north of the centre of the town (See plan of city). Some of the buildings which surround it on three sides belonged to it, as residential buildings for the clergy who served within its walls, others certainly were not dependencies of the church, and were probably ordinary residences, either owned by private individuals or rented from the church. They are not directly connected by doorways or passages with the church enclosure; though they make use of the walls of the church buildings as party walls. The building is unfortunately in a sad state of dilapidation. So great is the mass of debris within it that it is not easy to trace its outlines without time and care; but when these are applied, a complete plan of the church itself can be made out owing to the very simplicity of the design. The apse is preserved to the springing of its half dome, and the residential buildings are exceptionally well preserved, presenting no difficulties of restoration. The inscription which gives the name by which I have designated this church, and the date 345 A.D., is not in situ. It was inscribed upon the lintel of the middle portal in the south wall of the church, and now lies in the court, not four metres from its

original position. I have no doubt that this inscription, set up by Julianos, and recording the erection of a memorial, was the original dedicatory inscription set up at the time of the completion of the church. One or two epigraphical scholars, with whom I have discussed the question, appeared to be somewhat in doubt as to whether the Greek word *μνημεῖον* used in this inscription, was applied to churches at so early a period, and raised the question as to whether this lintel might not have been brought here from a tomb while the church was in process of construction. The word, however, probably occurs in the inscription¹ on the lintel of the main west portal of the Church of S.S. Sergius and Bacchus at Umm is-Surab,² where it is applied to the church; the inscription is dated 489 A.D. The inscription of Julianos, moreover, is placed upon the lintel of the principal portal of the church – the middle portal on the south side –, and is a stone far larger than the lintels of tombs in Southern Syria, and shows no signs of having been re-cut. I may add that there is no example in Syria, within my knowledge, in which there is evidence of a Christian tomb having been despoiled to build a church. The bearing of the axis of this church is almost due east.

Plan. The nave (Ill. 147) has ten bays divided each from those adjoining it by arches of seven metres span which are carried on piers that project .75 m. from the walls. The bays are all of equal depth except the westernmost which is nearly twice as deep as the others. The presbyterium is a semi-circular apse, almost as wide as the nave, separated from the nave by an arch, only five metres wide, carried by two deeply projecting piers. The apse wall is preserved up to the level of the half dome (Ill. 148). Along the north side of the nave extends a low, narrow building divided into rooms by three walls which, with its east wall, abut against the first, third, fifth and eighth arches of the nave. Three of the rooms are connected with the church by doorways, and a window in every other bay of the nave opened out over the roof of the side building. A colonnade of eight columns, three of which are in situ, was carried along the south side of the church, from its western end to the line of the seventh arch; beyond this is a vestibule opening upon the end of the colonnade by an arch, and out of doors by a broad doorway. The colonnade gives upon an oblong court, at the east and west end of which there is a small residence, comprising each a large room, in which the well-built transverse arch is still preserved, and one or two smaller apartments in two storeys. The south side of the court is occupied by shallower buildings, in two storeys, with rooms of different sizes and shapes, one of which is a long stable fitted with stone mangers. These buildings preserve the walls of their two storeys in completeness.

Superstructure. The restoration of the east end was not difficult for the reason that the apse wall and both of the apse piers are preserved. The wall was built of well finished quadrated blocks, as is shown in Ill. 148, with narrow bonding courses at intervals. One or two piers were preserved on the south side of the nave adjoining the apse, giving the difference in height between them and the apse piers. The arches which sprang from both had their crowns on the same level, as is shown in Section A–B of Ill. 147. The restoration of the nave as shown in Section C–D, Ill. 147, is based upon the height of the piers, which is a known quantity, and semi-circular arches

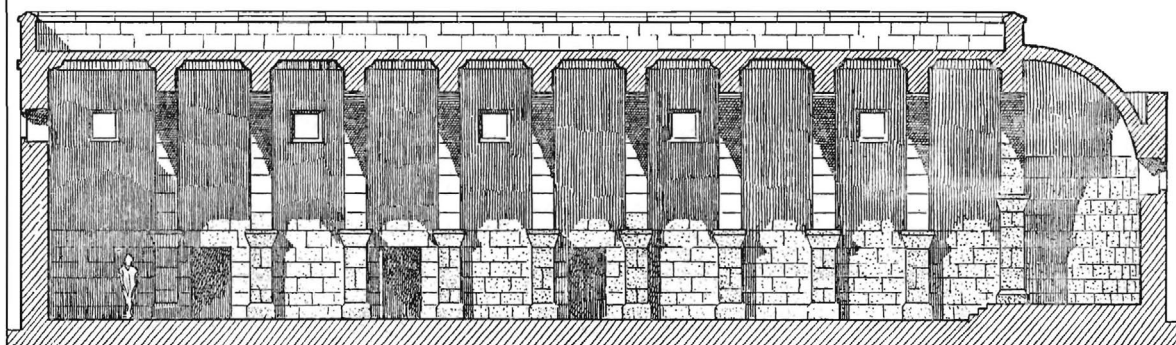
¹ III. A. 2. insc. 51.

² II. A. 2. pp. 95–99.

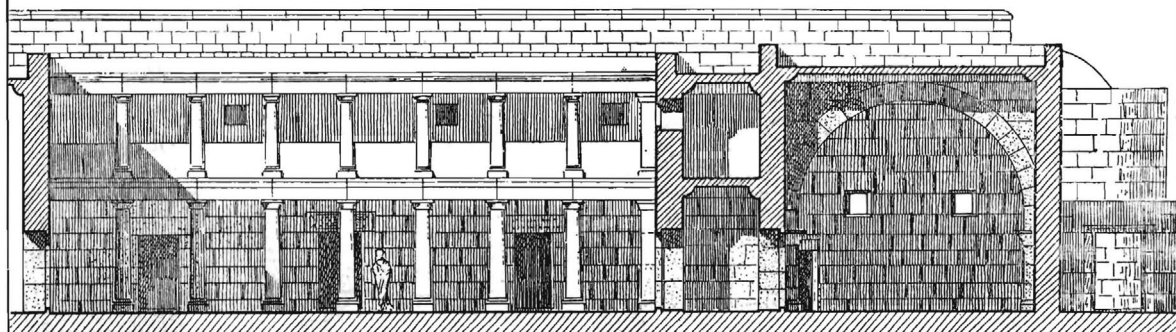


CHVRCH
OF
IVLIANOS.

DATE: 345A.D.



SECTION C-D
RESTORED



SECTION E-F
RESTORED

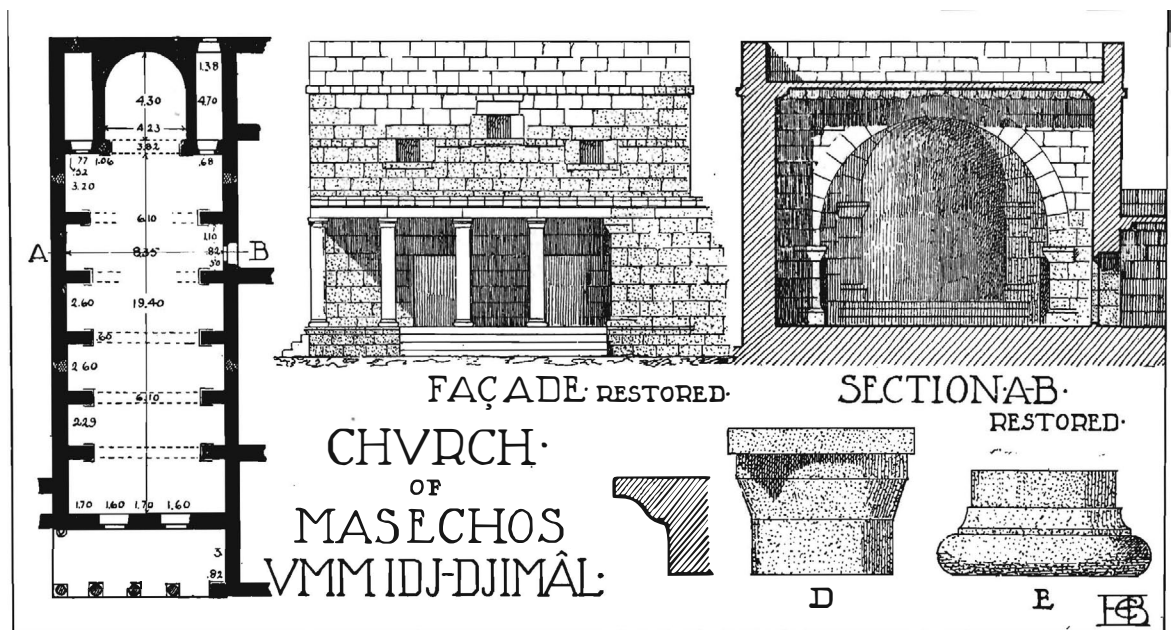
RESTORED
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14

the width, and consequently the height, of which is known. There can be little doubt as to the accuracy of the restored Section E-F, which shows the south side of the church and a cut through the residence at the east end of the court; for the residence is still standing, and two columns of the colonnade on the south side of the church are still in place, while the bases of the others are also in situ. The presence of architrave blocks and of Doric columns of a smaller scale than those still in place proves conclusively that the colonnade had two storeys.

CHURCH of MASECHOS: This church forms the northern boundary of a large group of buildings in the southeast quarter of the town (See Map N^o. 2), just south of the East Gate. The ancient wall of the city was apparently removed when this church and the buildings south of it were erected, and a new wall was built out to the eastward to include them; the north wall of the church being made to serve duty as a part of this new wall. A short inscription¹ above a doorway at the east end of the narrow chamber on the south side of the apse contains the proper name that I have chosen for the title of this church; for one Masechos was probably the builder of it. The photograph (Ill. 149) gives a picture of the street upon which the Masechos church fronts. Looking up the street one faces north; at the extreme left of the picture, but on the right side of the street, one may see the front wall of this church with the corbels of the porch roof protruding from it, above a mass of debris. At the right of the picture stands the west front of the Southeast Church, which will be taken up next. A view of a part of the north wall of the church is given in Ill. 135; it shows the character of its construction.

Plan. An undivided nave of six bays separated by arches of over six metres



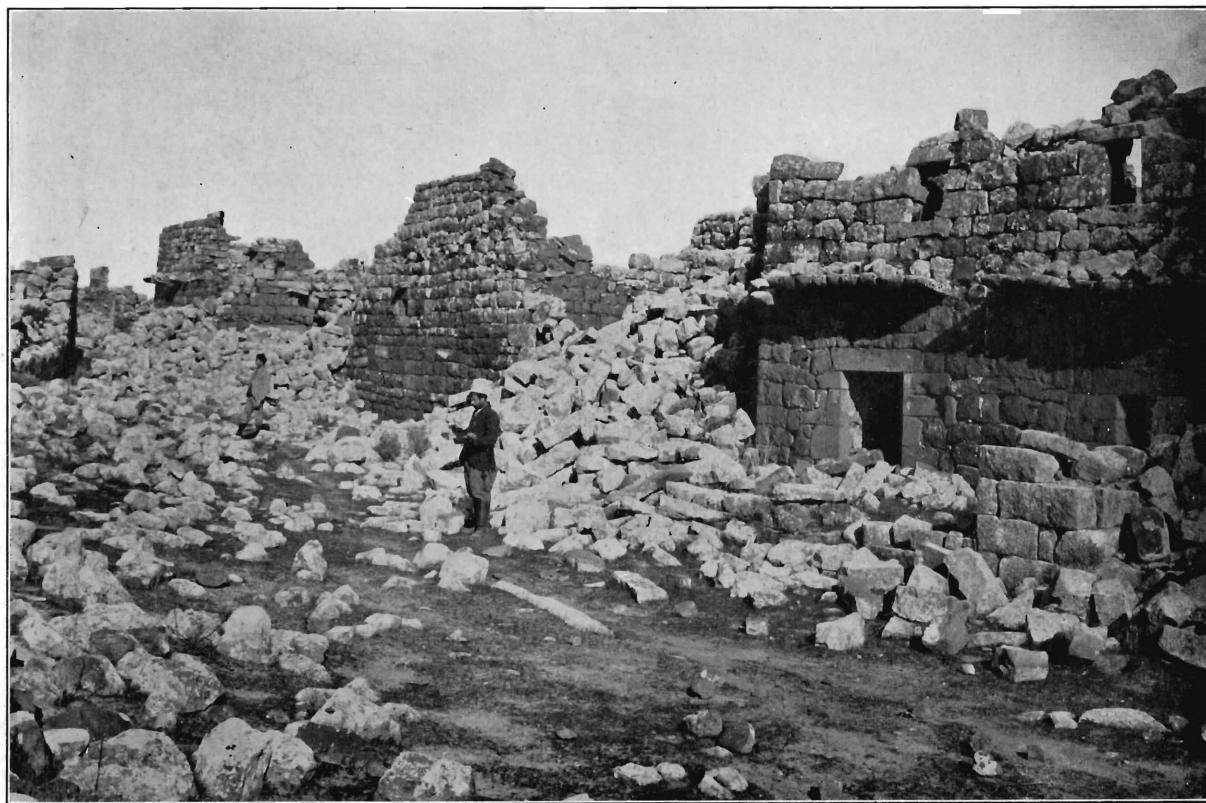
Ill. 150.

span, and carried on salient wall piers, a deep-set semi-circular apse between long, narrow side chambers, and a colonnaded porch of four bays, closed at one end and

¹ Ill. A. 3., inscr. 264.



Ill. 148. Apse of Julianos Church; View from the Southeast.



Ill. 149. Street with Façades of Masechos Church and Southeast Church on the Right.

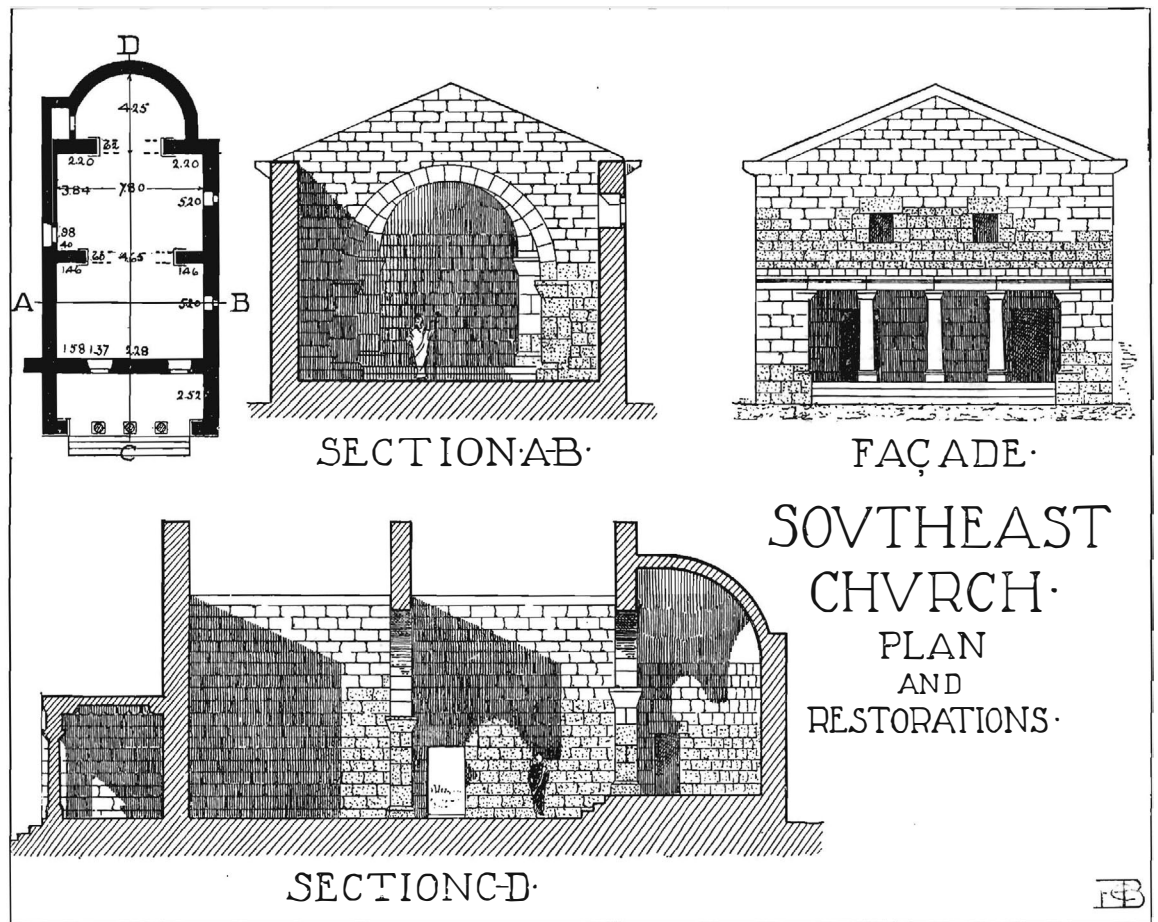
open at the other, make up the simple plan of this church. This church, with one other in the city, has the unusual feature of a double west portal, and the columns of the porch are so spaced, with reference to the wall and pier at the south end, that one column stands in the middle to accommodate the two doorways. The porch is a paved platform raised about 60 cm. above the street. There is a doorway in the south wall of the church leading into a room which forms a part of the group of residential buildings about the court, or cloister, on the south side of the church. The prothesis and diaconicum are long rooms of extreme narrowness, being hardly more than a metre wide. The room on the south side of the apse, which was probably the prothesis, has a doorway in its eastern end opening out into the space between the church and the town wall.

Superstructure. It seemed hardly necessary to give a longitudinal section of this building; for its arrangement is similar to that of the Julianos Church. The three westernmost arches of the nave, and the apse arch, are still standing. The nave arches having outlived those of the Julianos Church owing, I believe, to the fact that their piers are more salient and that they are consequently more firmly buttressed. The drawing (Section A-B in Ill. 150) shows the proportions of the nave arches and their relation to the apse arch which is flanked by the doorways leading into the side chambers. A few of the roofing slabs are still in place. The drawing of the façade explains itself; a distinction is shown between the parts of the wall that are standing and those which are restored. The height of the columns was easily discovered from the fallen shafts and capitals. The moulding of the edge of the platform, probably taken from some other building, is shown in Ill. 150. The capitals and bases of the columns are illustrated by (D) and (E).

SOUTHEAST CHURCH. At the extreme right in Ill. 149, the dilapidated front of this church may be seen. It stands in the midst of houses, and connects, by means of a doorway in its north wall, with the court yard on the south side of the Masechos church. The building is less well constructed than the former, and appears to be of later date. Its plan and arrangement are totally different from those of the two hall-churches described above, and I have prepared a full set of drawings to illustrate its structure. The plan (Ill. 151) is oblong, with a semi-circular apse, showing most of its exterior curve, opening into the nave by a comparatively narrow arch, and having a minute chamber on its north side. The nave, instead of being provided with several transverse arches for the support of slabs, has but one arch which spans the middle of the nave, and was carried up to gable-form to support a double pitched roof of timbers. This church, like the one just described, has two front portals with a porch of three columns between returned end walls. The columns are not in situ, but lie in the ruins of the porch. The two sections and the drawing of the façade, all given in Ill. 151, illustrate the peculiar features of the church, and show, by shading the preserved portions, which of the walls are still in place.

EAST CHURCH. This is a complete little convent situated near the middle of the east wall of the town, and utilizing a part of the ancient town wall as its own east wall. The church itself abuts upon the south side of a small arched gate in the wall, and the residential buildings with the cloister court, lie to the south of the church. The single nave has six bays, a small rectangular presbyterium flanked by narrow chambers, and a colonnaded narthex of three bays (Ill. 152). Near the middle of the south wall

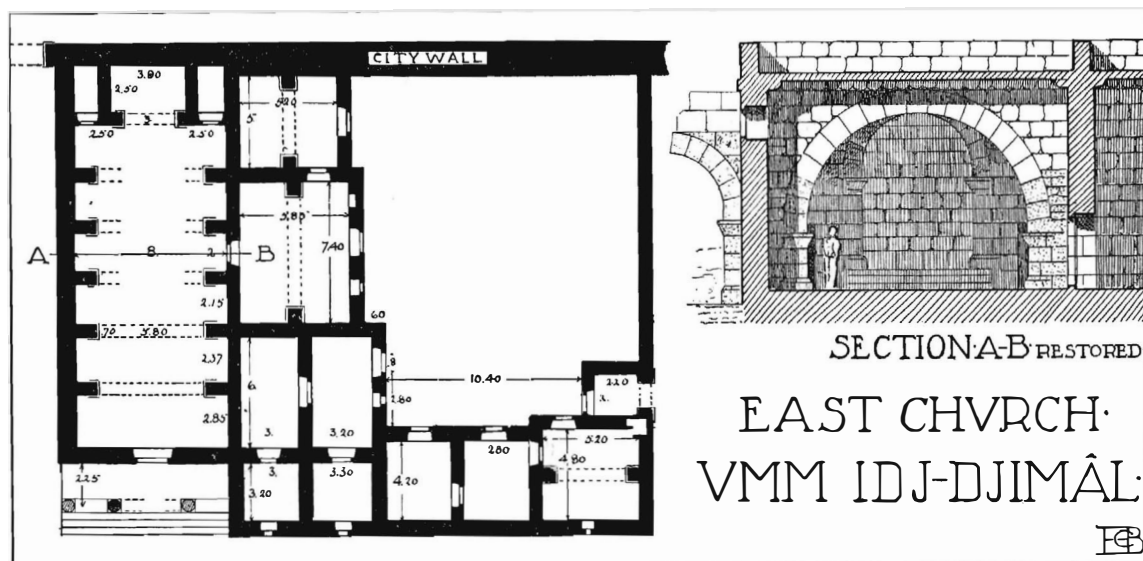
there is a doorway opening into one of three apartments that flank the church on that side, and occupy the north side of the court. Two of these apartments are square and are spanned each by a transverse arch which brings their flat stone roofs to the height of the similar roof of the church: the other is divided by a transverse wall into two rooms on the ground floor, and is two storeys high. To the westward of this apartment are two small square rooms in two storeys, which project beyond the front wall of the church. On the west side of the courtyard are three rooms, two of them small and in two storeys, the other somewhat larger, and spanned by a high transverse arch. Next to this, on the south side of the court, is a small vestibule with a



Ill. 151.

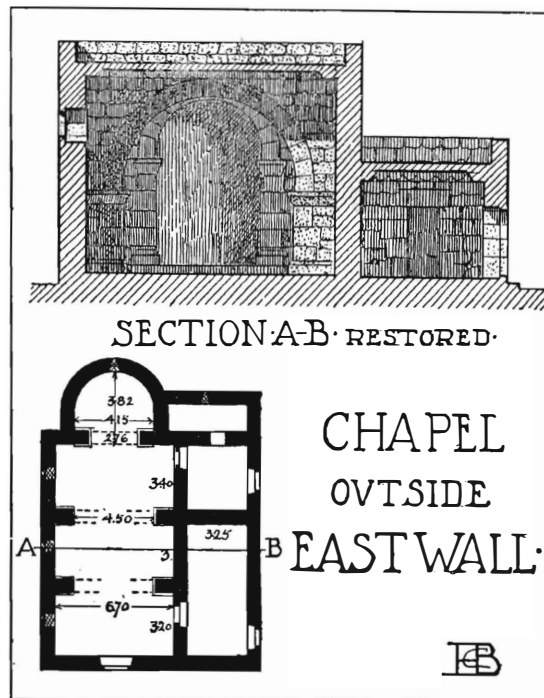
doorway on the interior and an arch opening into the street. The bearing of the major axis of the church is almost the same as that of the Julianos Church, and, if the same angle of orientation indicates coincidence of date, we have here another fourth-century church. Considerable portions of this building are in situ: the front presents quite a striking appearance with its steps partly visible and with one of its columns still standing full high and others half high. From the ruins, that is from the spacing of the two middle columns and from the voussoirs that lie in the portico, it seems quite certain that the middle intercolumniation was arched. Two of the transverse arches at the west end of the nave are still in place with the slabs of the stone roof above them, and the narrow arch of the presbyterium and parts of its roof are still preserved. The buildings about the court present a well preserved and interesting group.

CHAPEL OUTSIDE EAST WALL. On the top of a knoll, about 60 m. from the east wall, and half way between the two gates, is a small church, or chapel, which belongs



Ill. 152.

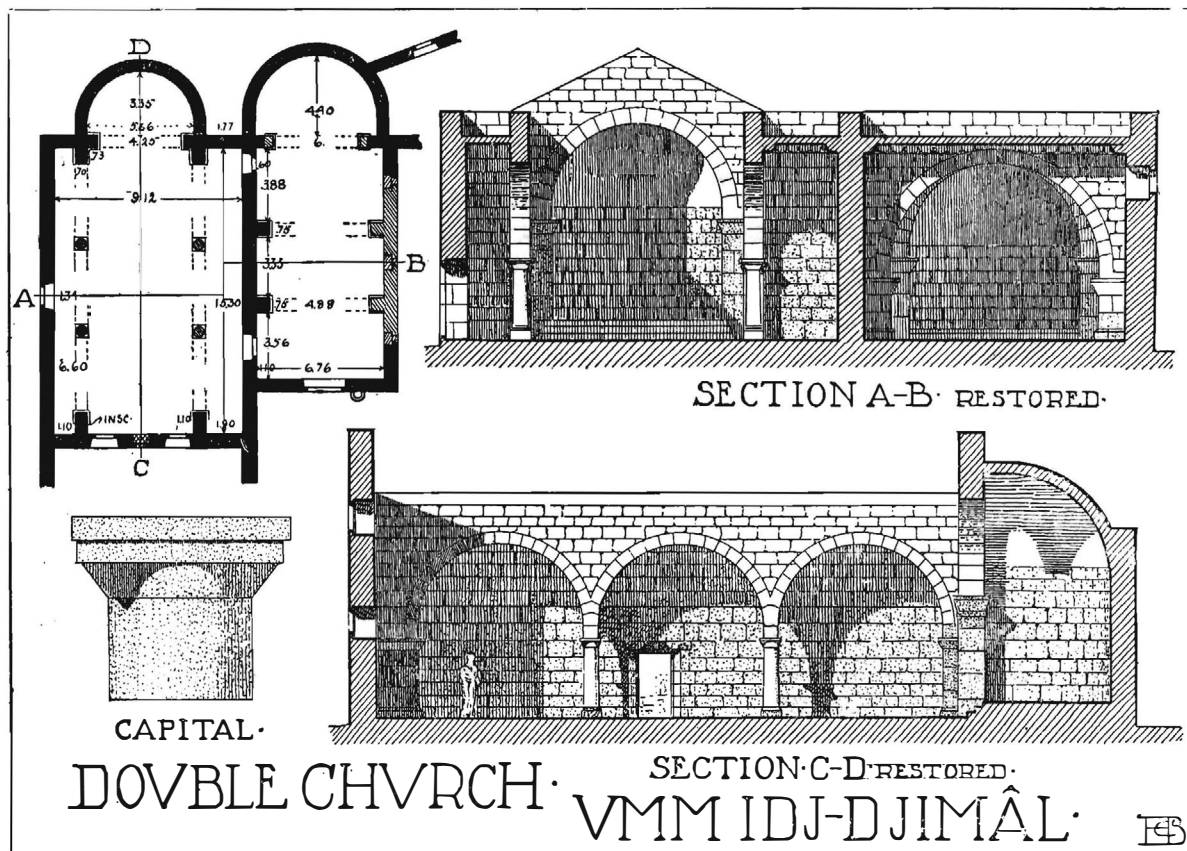
to the class of aisleless buildings with transverse arches. The nave (Ill. 153), only 12 m. long and 6 m. wide, is spanned by two transverse arches, and has a semi-circular projecting apse. Along the south wall is a narrow low structure (Sect. A-B) divided into two chambers; east of this is a small chamber adjoining the apse but not connected with it. The two smaller of these rooms probably served in place of the side chambers that often flank the apse, providing a prothesis and a diaconicum. The western half of the nave of this chapel, and the east wall with the arch of the apse and its curved wall, up to the springing of the half dome, are well preserved though the building belongs to the poorer class of structures being of roughly quadrated masonry throughout, except its arches and doorways. I presume it is a rather late church and may have been either a memorial chapel or a cemetery chapel; for it is in the ancient burial grounds on the east side of the city.



Ill. 153.

DOUBLE CHURCH. This building may be taken as the last of the hall-church group and the first of the basilicas; for both classes are represented in this pair of twin churches which were constructed as one. The double church is situated in the southeastern quarter of the city, well within the walls, and quite surrounded by private houses, except on the north side where an open place stretches away toward the Roman Reservoir. It seems probable that none of the residences in the immediate neighborhood belonged to the church which appears to have

been an ordinary parish church and not part of a monastery. The ground-plan (Ill. 154) shows the two naves side by side, the basilica on the north, the hall-church on the south; both having deeply curved apses which protruded conspicuously from the east wall. It is quite plain, after a careful examination of the structure of the walls at the points where the two churches join, that the hall-church was added to the other. The nave of this half of the church has three bays, divided by transverse arches of broad span, and an apse which embraces the entire width of the nave, although the apse arch was somewhat narrower than the nave-arches. The west portal is unusually high and broad: the only indication that there was a porch here is a row of corbels projecting from the wall. The west and north walls are preserved to their full height;

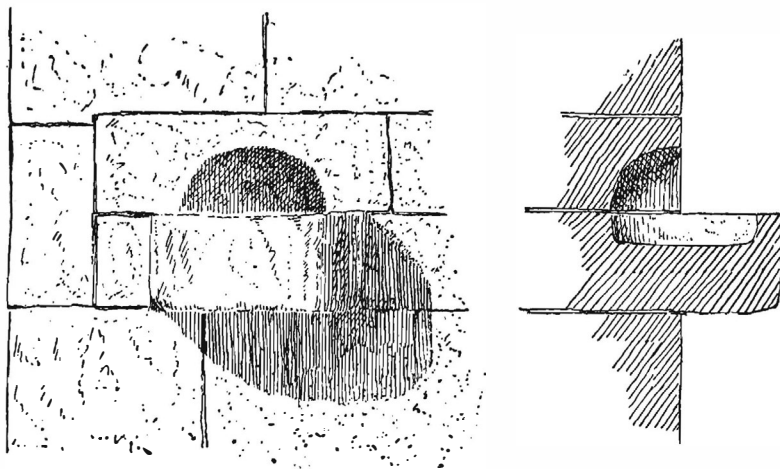


Ill. 154.

the apse wall is standing to the height of about three metres; but the south wall has collapsed, carrying the interior arches and the stone roof with it. An interesting feature here is a stoup, or basin for holy water, called *colymbion* in the early Greek church, which protrudes, in bracket-form, from the wall of the church just at the right of the main entrance (Ill. 155). There are similar details in other churches of this city, and at least one example from another ruin in the Southern Ḥaurân, viz., that in the church of St. John at il-Umtā'iyeh¹. The photograph (Ill. 156) gives a view of the west front of this southern half of the church. The street, as may be seen, is filled with the debris of a house immediately west of the other half of the church, which has collapsed. The broad and high main portal, with the colymbion beside it, show well

in the picture; while the fallen arches of the interior and part of the apse wall may be seen through the doorway. The quality of the roughly quadrated masonry of the walls also may be seen in the photograph.

The northern half of the double church is one of the most interesting examples of ecclesiastical architecture in all Southern Syria, a unique specimen of the basilica type; yet one which would appear to have influenced early Moslem architectural forms throughout Syria. The ground-plan (Ill. 154) is that of a simple basilica, with an unusually broad middle aisle and extremely narrow side aisles which, however, are not of equal width; the north aisle being half as wide as the other, and only a metre wide. The deep protruding apse is of equal width with the middle aisle. There are two doorways in the west end, — a peculiarity which we have seen also in the Church of Masechos and in the Southeast Church; these opened into a closed narthex with only one entrance, that in its south end. The church has three other doorways, one opening upon the space to the north, one opening into the westernmost bay of the other church, and a very narrow doorway also leading into the other church just west of the chancel arch. The most interesting feature of the plan, however; one which is more fully illustrated in the Sections A-B and C-D, is the use of columns for the nave arcades.



Ill. 155. Waterbasin in wall of Double Church.

These columns are widely spaced and carry arches of broad span; they are employed exactly as piers are employed in all the large class of broad-arched churches in Southern and Northern Syria. The columns are quite slender and well proportioned, and the arches which they carry sprang from small cubical plinth blocks which gave the arches a very slender impost. The arches carried roofs composed of stone slabs over the side aisles, and a timber roof over the middle aisle. This roof of wood had the gable form, and was set directly upon a low wall above the arches, corresponding to the parapet of the outer edge of the roof; there was no provision made for a clearstorey, unless there were open spaces in this low wall, or parapet, which seems improbable. The north wall is devoid of window openings, so that all the light must have been admitted through windows in the west end. The piers of the chancel arch are much higher than the columns of the nave arcade, and the bema was elevated upon three steps. The capitals of the columns (See drawing in Ill. 154) are interesting examples of late Doric, with a perfectly straight echinus and a banded abacus; all are well executed.

It is a curious and interesting fact that among the numerous and varied examples of arch building furnished by the hundreds of known churches in Southern and Northern Syria, there is no other example of columnar supports for an arcade of arches of broad span; the universal arrangement being piers for broad arches and columns for narrow ones. It is quite as if the great majority of builders did not realize the strength of a comparatively slender column to resist a simple downward pressure, nor under-

stand that a row of arches of almost any width could be supported by very slender uprights provided the row was sufficiently buttressed at the ends. The drawings show how deep were the piers which buttressed these two arcades, and the structure, though so much lighter and more open than was common, proved the technical skill of its builders; for, by every sign, these arches have fallen only very recently, indeed the fractures in the fallen arch stones looked very fresh in 1905. But however uncommon this method of arch construction may have been among the Christian architects of Syria before the seventh century, it became the generally accepted method for the construction of the arches of mosques of the early and late Moslem builders in Southern Syria, even in buildings where no other technical skill was shown. In a great number of ancient mosques throughout the Ḥaurān and the Nuḡrah, many of which have been long deserted and are in a partial state of ruin, a slender column shaft, often not a whole column, taken from some Christian or Roman building, will be found acting as the support of two interior arches, if the mosque be small as is usual; or two columns in arcades of three arches, or more, according to the size of the mosque.

This church was built throughout of rough quadrated work, with door-frames, columns, piers and arches of exceptionally high finish. The walls were treated with three coats of plaster, first a coarse coat to fill up the uneven interstices, then a thinner coat which was roughened to receive the third layer – a thin and extremely fine hard coat which was laid over the other coats and over the details which were executed in highly finished stone. The photograph (Ill. 157) shows some of this plaster still adhering to the walls and the more highly finished details such as the pier and part of the arch near the middle of the picture. and the fallen capital in the immediate foreground. These bits of plaster have been so long preserved for the reason that they were protected until quite recently by the roofs of the side aisles, which, as I have said above, collapsed not so very long ago. A fragment of this roof may be seen in the photograph, consisting of a few slabs over the west end of the north aisle, with the fine mortar, the pebbles, the volcanic scoriae and the beaten clay, which were laid in successive layers upon the slabs insuring a perfectly water-tight roof. Two inscriptions were found in this church, and both of them in situ; one¹ a painted inscription in Greek over the north doorway, outside, now very faint, and one in Arabic of the earliest form and therefore very important as an example of pre-Islamic Arabic. This is on the south side of the pier at the west end of the northern arcade of the nave, directly behind the arch-stones shown in the photograph (Ill. 157). That this inscription belongs to the Christian period cannot be gainsaid, for it was covered with plaster at some time when the interior of the church was undergoing repairs and decoration, and there is no evidence that the building was ever used by the Moslems. The plaster which covered the inscription is of the same quality as that which covered the highly finished details, which is to say the best quality employed by the Christian builders of Syria.

“CATHEDRAL”: Date 557 A.D. The ruined basilica which we have called the “cathedral” is by far the largest of the churches of Umm idj-Djimāl and stands in the most commanding position, free from other buildings, in the great open space, or common, which occupies the middle part of the city, and upon the main street which extended

¹ III, insc. 263.



Ill. 156. Southern Half of Double Church; View of West Front from the Street.

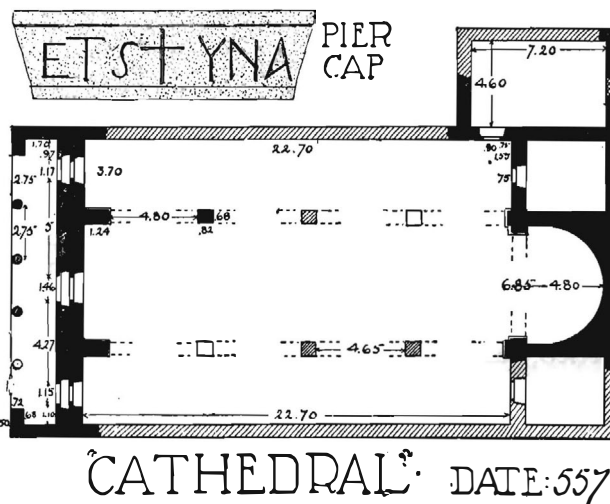


Ill. 157. Interior of Northern Half of Double Church; West End and North Wall.

southward from the Gate of Commodus, passing the Praetorium, to the Barracks. It is a pity that this largest of the churches, and one of the two that is dated by an inscription, should be in so ruined a condition. Its plan (Ill. 158) may be easily traced; but the form of the superstructure can only be conjectured from fragments in the fallen masses of stone. One storey of the west façade (Ill. 159), the wall of the north aisle and a part of the apse wall, are standing; but the entire south wall and all the interior arches have fallen. The date¹, in large letters, reading only $\epsilon\tau\varsigma\tau\upsilon\eta\alpha$, was found upon the fallen cap of one of the piers of the apse arch.

The plan (Ill. 158) is that of a nave of four broad bays, the arches being carried on high oblong piers, and a deep semi-circular apse between side chambers, making a straight east wall, and a shallow narthex closed at both ends and having five arches carried on columns. Adjoining the north wall of the church, at its east end, is a low structure communicating with the south aisle; this may have been a sacristy or an outside chapel of some sort. The whole plan is such as one would expect to find in Northern Syria; but whether the superstructure was carried out on the lines of a northern basilica, and was roofed entirely in wood, one cannot determine definitely; though the comparatively small amount of debris lying in the nave would indicate that nothing more than the nave arches and a clearstorey wall had fallen here.

At some period in the church's history the west wall was reinforced by the construction of an inner wall directly within the original one: new lintels were placed inside the older ones of the three doorways on a slightly lower level. One of these was not a newly cut stone; but was a lintel from another and older building.



Ill. 158.

This is the lintel with the famous *burgus* inscription² upon it, already referred to as having been perhaps the lintel of the gateway of the Praetorium. It was set up in the reign of the emperors Valens, Valentinian and Gratian, about 371 A.D.

SOUTHWEST CHURCH. This church stands on the northwest limits of a compact group of buildings in the southwest angle of the city. The other buildings of the group are of a domestic residential character, and though they are well preserved, and the plan of the whole group is easily traced, yet I am unable to say, with any degree of certainty, whether the houses were dependencies of the church, and formed the residential part of a monastic institution, or whether they were the homes of individual citizens which grew up independently in the space between the church building and the angle of the city wall. A third solution of the problem, dependent upon questions of land tenure, and of church proprietorship, in Umm idj-Djimâl between the fourth and the seventh centuries – questions about which practically nothing is known –, would be to assume that the land belonged to the church, and the householders either rented

¹ Ill. insc. 260.² Ill. insc. 233. *Wadd. insc.* 2058.

the land and built their houses upon it, or rented houses built by the church. The houses are of the better class of domestic architecture found in the city, superior in construction and finish to the architecture displayed in the church edifice itself. The church building is quite well preserved (Ill. 160); the high outer walls are almost intact; but the interior arches and the half-dome of the apse have collapsed, though the piers of the apse and part of its wall are standing.

The ground plan of the church (Ill. 161) is that of a simple basilica, its nave divided into three aisles by two arcades of three arches each, its semi-circular apse being set deeply back and showing its whole projection; the only singular feature being the presence of two doorways in the east wall, one on either side of the apse, and in the end of each side aisle, exactly where the doorways to side chambers would be placed; but opening out of doors. There are two other entrances, one in the north side and one in the south. Upon this ordinary plan was erected a type of basilica peculiar to the Haurân; the outer walls were built up to the level of the crowns of the arches of the nave, and the whole building was covered with a flat roof all on one level. The side aisles were certainly roofed with slabs of stone; and I am inclined to believe that the middle aisle was covered in a similar way; but all the roofing materials of this church, even most of the arch stones, were carried off for the construction of a bridge on the line of the Hedjaz railway. The width of the middle aisle, 5.20 m. was not too great a span to be roofed with slabs on projecting corbels in the fashion of the country. The corbel course of the side aisles and the parapet above them are to be seen in the photograph (Ill. 160) at the extreme right. The picture also shows a row of brackets in the south wall, which carried the stone beams of a portico, and the quality of the masonry, with remnants of stucco still adhering to it. Attention should be called particularly to the fragment of ornament in stucco which appears on the exterior, over the doorway beside the apse; it is a little moulding describing a trefoil, which gives the appearance of a cusped arch over the entrance. The windows are mere slits placed high in the side walls.

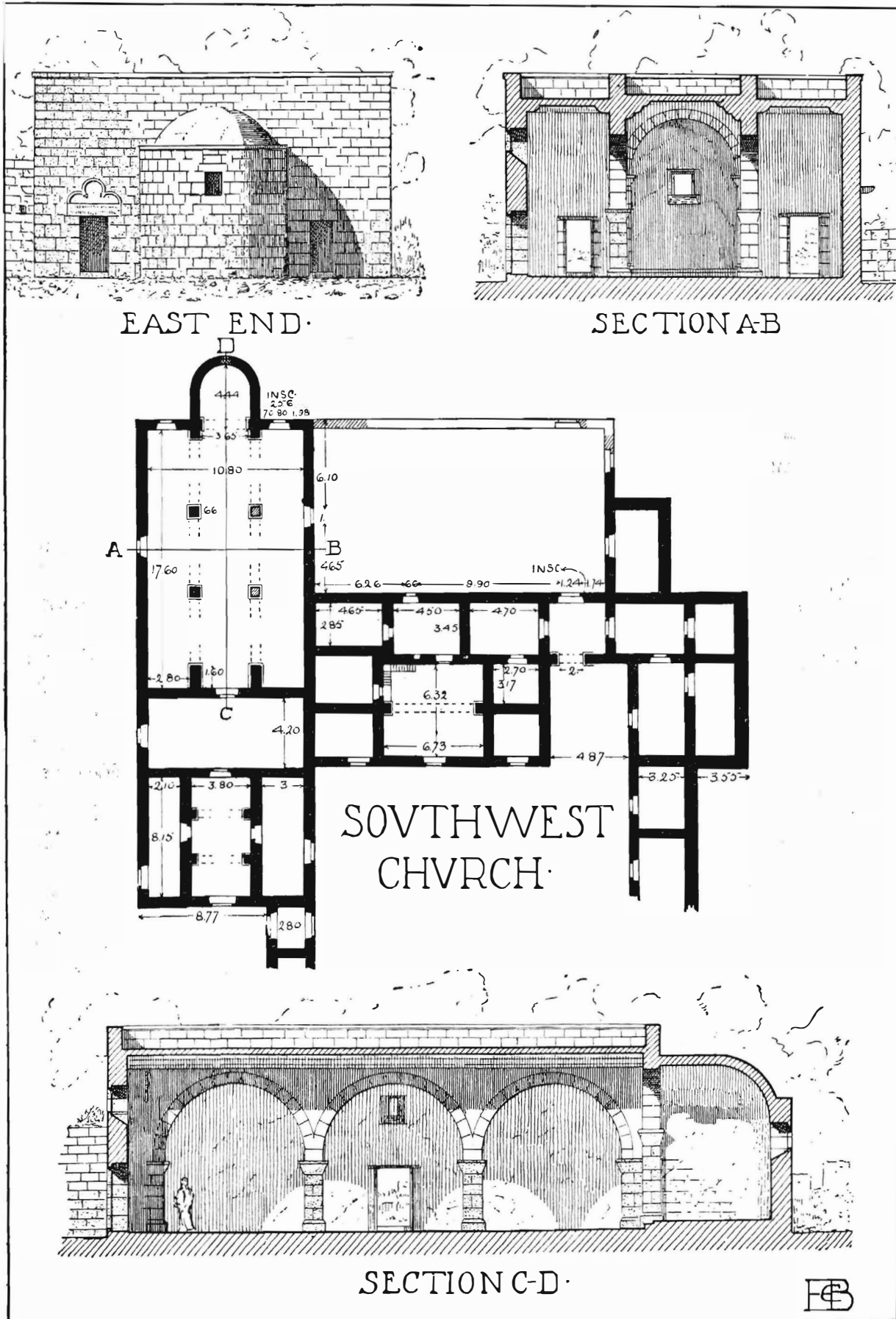
NORTH CHURCH. There are two churches of the basilica class, both of medium dimensions, in the northern part of the city. One, the North Church, is shown on Map No. 1; but it is too far north to be included in the large map. This church (Ill. 162) is of different proportions from the church described immediately above; its nave is more nearly square and its middle aisle is wider in proportion to the width of its side aisles; but otherwise the plan is quite the same, but for the doorways in the east end of the side aisles, which are peculiar to the other building. The north aisle is considerably narrower than the south, – a peculiarity found in two or three other churches in these ruins. The chief entrance was a rather small doorway in the west end, and another entrance opened southward from the easternmost bay of the south aisle. West of this entrance a long low building (See Sect. A-B) extended along the south wall of the church as far as the west wall. This low structure was divided into two chambers, the westernmost opening into the church by three spaces divided by monolithic piers, the other, much smaller, being entered directly from the south aisle. The apse wall and the chancel arch of the church are both standing, but the half dome has fallen in. The interior arches of the nave have collapsed, carrying the roof with them. This roof certainly consisted of flat slabs laid on corbel courses over the aisle. It seems probable that the middle aisle was provided with a flat roof of wood,



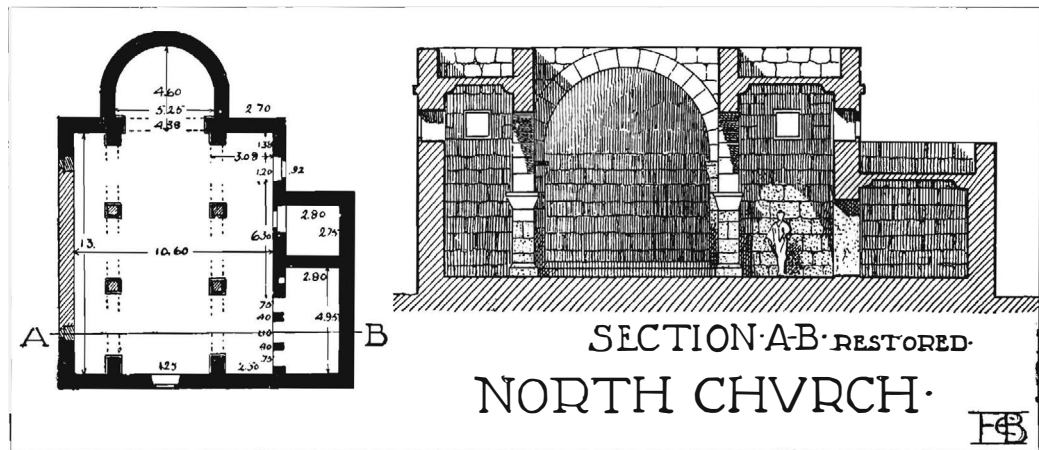
Ill. 159. Façade of the "Cathedral."



Ill. 160. Southwest Church at Right, — Buildings on Court at Left; View from the Southeast.



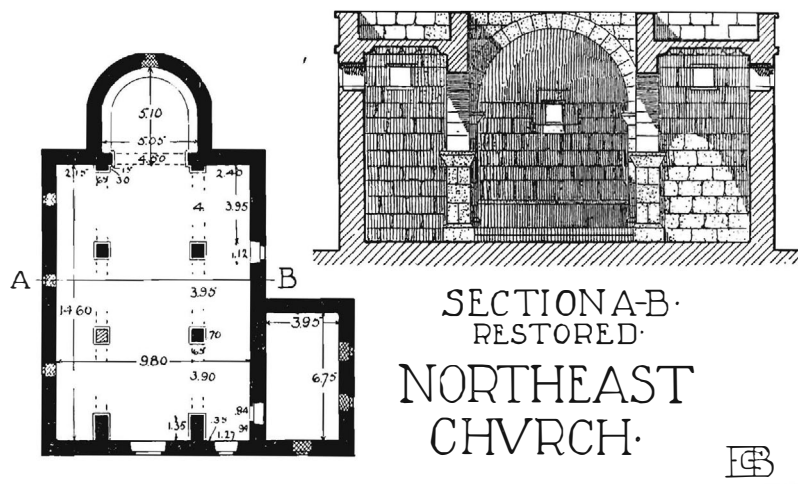
on the same level as the aisle roofs, and covered with the same protective layers of cinders and beaten clay.



Ill. 162.

NORTHEAST CHURCH. Almost precisely similar to the building just described, in ground plan (Ill. 163) and superstructure, this church also preserves its apse wall and apse arch, but not its half dome. Three of the four interior piers, made of well dressed stone in small blocks, are preserved intact, and the outer wall stands to its full height on two sides. The west entrances are two; one at the end of the middle aisle, the other at the end of the south aisle. The long, low building along the south wall is entered by a single doorway and is not divided as in the North Church. The entire building, with the exception of its piers and arches, and its door and

— window frames, is built of roughly quadrated work; but the walls were coated with stucco on both sides, as one may still see in the lower parts of the apse. An interesting detail in this part of the building is a stone bench, — 50 cm. wide and apparently of about the same height —, which extended all around the apse, from pier to pier. The bench was built of roughly quadrated blocks, and was originally covered with stucco. So far as I could see, the bench



Ill. 163.

was not broken in the middle for a seat of special dignity, like the bishop's throne which was often given this place in early apses. This bench was a feature in all the apses of Southern Syria; though in the great majority of cases they have been destroyed, or at least concealed by the collapse of the masonry half-domes, almost all of which have fallen. A well built bench, it will be remembered, is still to be seen in the Church of St. George at Zorā in the Ḥaurān, one of the few churches in which the half-dome of the apse is preserved.



Ill. 164. West Church; Façade from the West.



Ill. 165. West Church; View from the South.

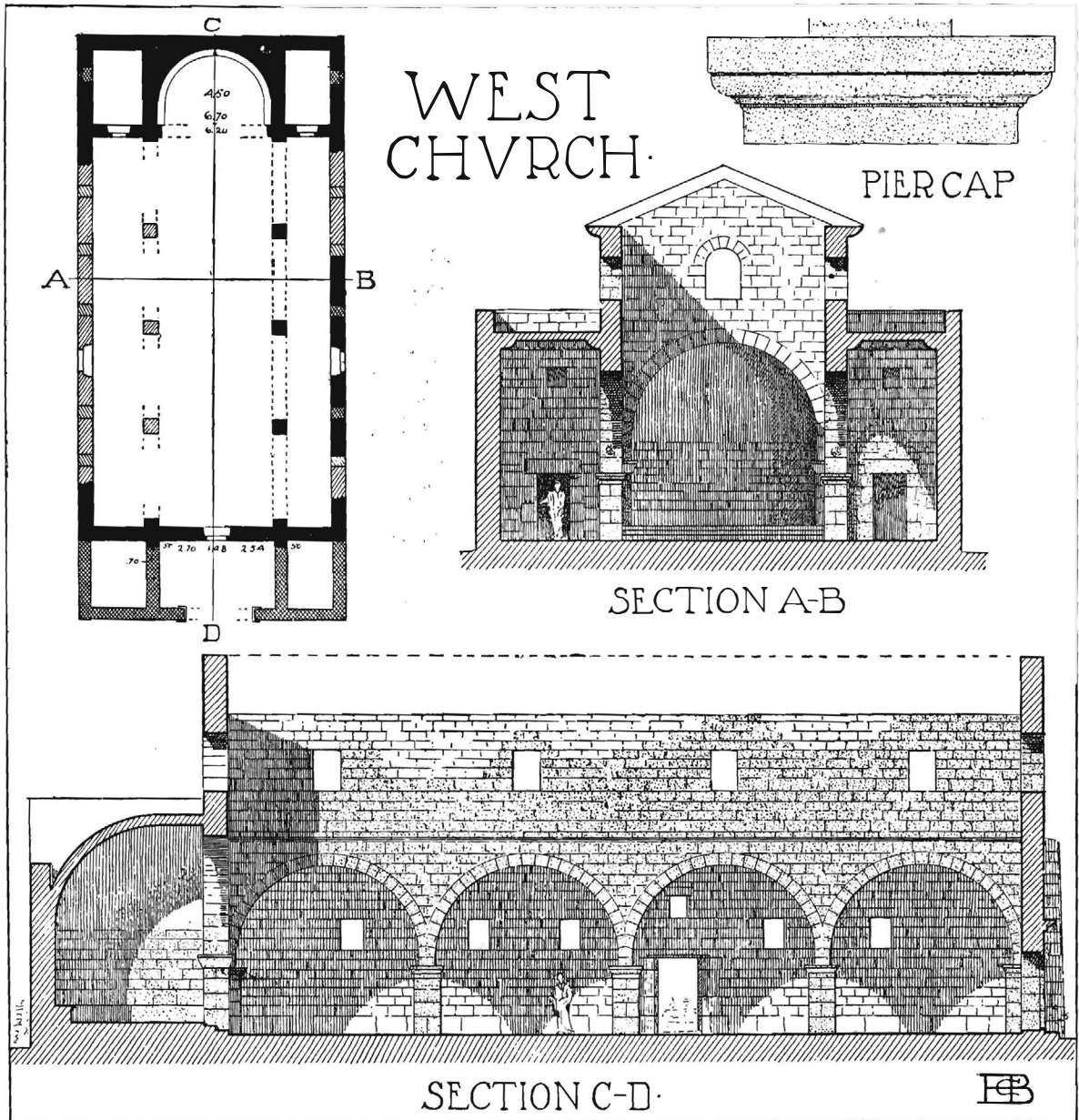
WEST CHURCH. One of the largest, and quite the best preserved, of all the fifteen churches of Umm idj-Djimâl, and one which was apparently the most imposing and the most beautiful, is the church near the gate of Commodus, just outside the west wall of the city. Though outside the city wall, it is connected with the city by one wall that connects its east end with the Roman gate and another that extends southward from its southwest angle and turns to join the city wall north of the Praetorium. A ground plan and a photograph of the church were published by Schumacher¹ in 1897. I have made only one, slight correction in his plan by deepening the apse, adding a cross section and a longitudinal section and two new photographs to what has already been published. The west end preserves two storeys, quite completely (Ill. 164). The south arcade of the nave is standing with the clearstory wall above it (Ill. 165), the east end is almost complete, the crown of the half dome only having fallen, and a large section of the south aisle wall still stands with a portal in it.

In taking up the study of this building, we find ourselves immediately transported from Southern Syria, from the Ḥaurân, to the regions of Northern Syria, for in ground plan and in superstructure, this church is foreign to the region in which it is located; but conforms to plans and methods of building which are common in the North. Even the black basalt of which it is made does not stamp it as a product of the South; for this material is found in many northern churches in the basalt country between the mountains and the Euphrates, in the 'Alā, at Kerrâtîn, il-Anderîn, and the Djebel il-Ḥaṣṣ. The plan (Ill. 166), it will be observed, consists of a well proportioned nave divided into aisles by two arcades of four arches each, carried on square piers. The deep-set apse is flanked by spacious side chambers, giving a straight east wall to the building, and the west end has two square towers with an arched narthex between them. The broad arches of the nave were built of very shallow voussoirs, i. e., voussoirs which were long in the soffit but very short from extrados to intrados, and these were brought together upon small impost blocks, not nearly so large as the piers upon which they rest (See Sect. A-B and C-D). The tall clearstorey wall above the arches was pierced with square-topped windows, one above each of the arches of the nave. That the roof of the nave was gabled may be seen from the fragment of a gable still in place and shown in Ill. 164. The west wall was pierced on this level by a large round-arched window. The half dome of the apse was built of concrete with volcanic scoriae in it. The side aisles were roofed with flat slabs of stone resting upon the aisle walls and upon a corbel course above the nave arches which may be seen in Ill. 165. This whole system of roofing is exactly like that employed in the church at Ẕalb Lauzeh in Northern Syria.

A great part of the church edifice, including the aisle walls and the lower storey of the west façade, in addition to the piers and arches, was built of highly finished quadrated work, and the presence of a Classical moulding dividing the storeys of the façade suggests that all this beautifully finished material was taken from some building of the Roman period. The whole of the clearstorey, the upper part of the façade, and the walls of the chambers beside the apse were built of smooth quadrated masonry of good quality. The towers which flank the west façade, and which originally had an arch between them, like the western towers of the church at Ẕalb Lauzeh in Northern

¹ *Z.D.P.*—V. '97 pp. 157, 158.

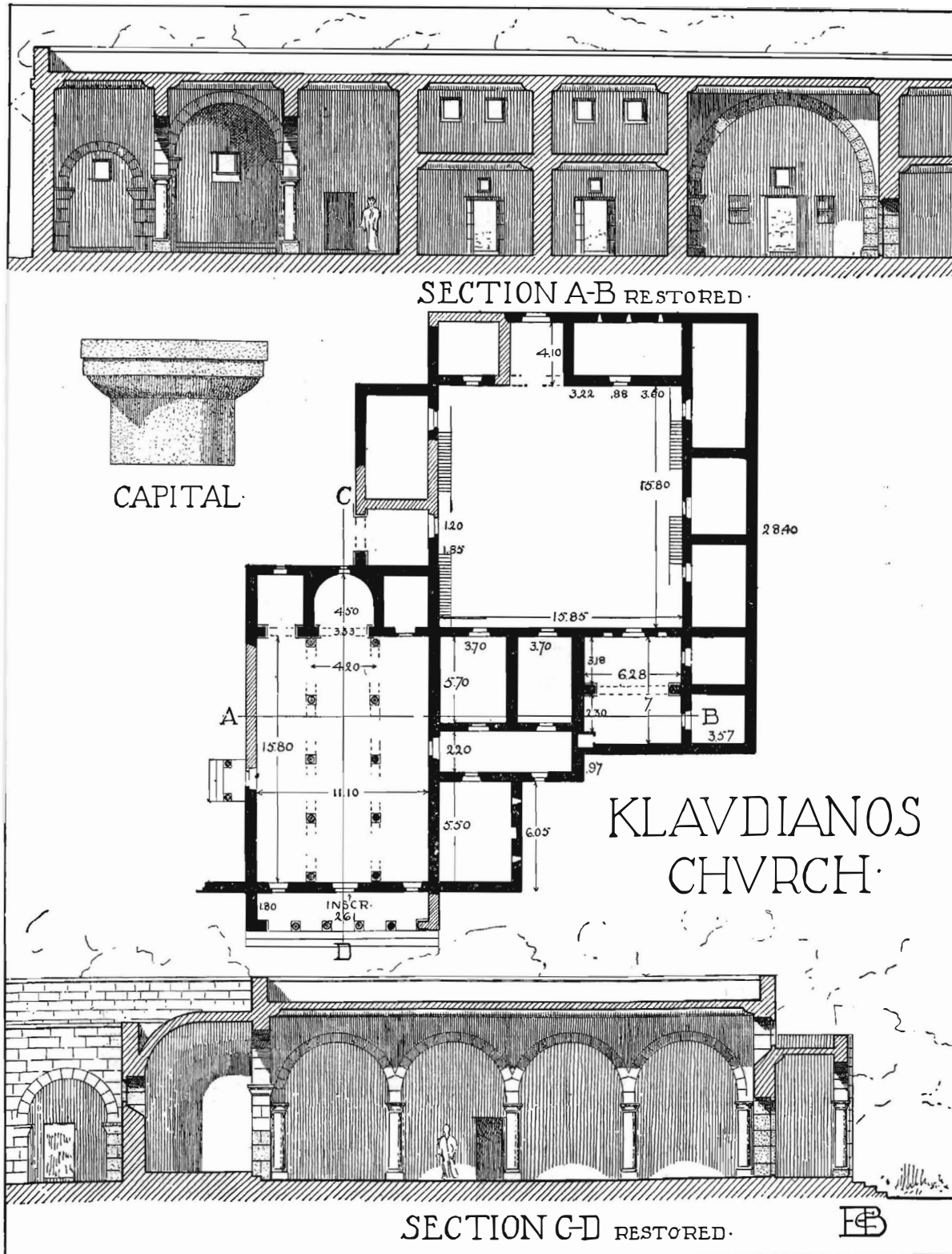
Syria, are built of roughly quadrated masonry, and are certainly later than the rest of the church; because the highly finished wall of the façade and its Classical moulding are visible behind the walls of the towers at the points where they join, as may be seen in Ill. 164. Schumacher's plan shows buttresses in the west walls, outside, at the points opposite the ends of the interior arcades.



Ill. 166.

The interior ornament of this church is more profuse and more interesting than that of any other of the churches in this place. The caps of the piers of the nave have mouldings of excellent profile, well executed; though the piers have no base mouldings. The soffits of some of the arches are ornamented at the springing with carved discs containing the cross and other Christian emblems; one of these may be seen in Ill. 164, by looking through the western doorway to the first arch on the south of the apse. The entire floor of the nave was paved with mosaic work of geometrical

patterns in various bright colours. Wherever this pavement was uncovered it showed patches in cement, showing that the pavement was of good age before the church was abandoned.



III. 167.

from a Greek inscription¹ on the lintel of the main west portal, which names a citizen Klaudianos, who was the builder, or at least a benefactor, of the church. The building forms a part of a group of houses almost directly east of the Gate of Commodus. The church faces upon the open space which extends north and south through the middle of the city, and stands on the north side of the group of houses which were in all probability the residential buildings of the clergy connected with the church; they are hardly extensive enough to have formed a monastery proportional to the size of the church.

Again we have a three-aisled basilica (Ill. 167) with apse and side chambers making a flat east wall, three west portals, and a narthex of four columns closed at the ends. In the nave the supports of the four longitudinal arches on either side of the middle aisle are columns, and the responds at the ends of the arcades are columns placed against the walls. The entrance to the prothesis, which in this case is on the north of the apse, is an arch. There seems to have been a porch of two columns outside of the north portal.

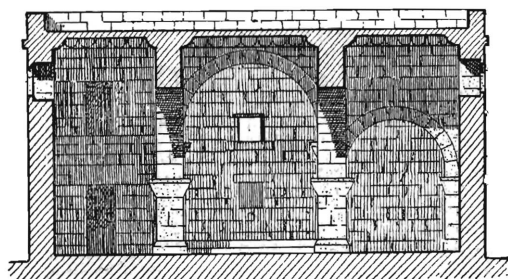
The structure is in a sadly ruined condition; the apse wall and the chambers beside the apse are preserved, the west wall is standing (Ill. 168) well above the lintels of the portals, and two of the columns of the interior are in place; but the side walls of the church and the interior arches have fallen, filling the nave with the ruins of arches and roof. It seems improbable that there were galleries above the side aisles. Since the three aisles are of about the same width, the roof must have been of stone, flat, and continuous over the entire building.

There is a large court, or cloister, at the southeast angle of the church; this is bounded by buildings on all sides. Those at the west and along the south wall of the church form an interesting group built of well finished stone. The photograph (Ill. 169) shows the ruins of the façade of the church at the left, and the arch of one of the large buildings south of the church. One of these large arched apartments is finely finished in the interior, and is provided with a *latrina*. The entrance to the cloister was a double-arched passage on the east side, flanked by buildings one storey high, and having a porter's lodge in its upper storey. These buildings certainly belonged to the church, and, with it, may have constituted a small monastery; but it is quite as probable that they were the residential quarters of the ordinary clergy. I am of the opinion that the monasteries of Southern Syria were isolated, like that at id-Dêr,² and that these groups

of ecclesiastical residences about the city churches were the homes, not of monks; but of the regular priesthood.

CHAPEL OF THE BARRACKS. The small church, or chapel, attached to the barracks has been discussed in connection with the greater building of which it was a part, on page 170. I wish, in this place, only to call attention to some of its more important features so that they may not be omitted from the general discussion of the religious architecture of the city. The plan of the church and a longitudinal section on a small scale are given in Ill. 144, to these is now added a cross section on larger scale (Ill. 170).

CHAPEL OF BARRACKS.

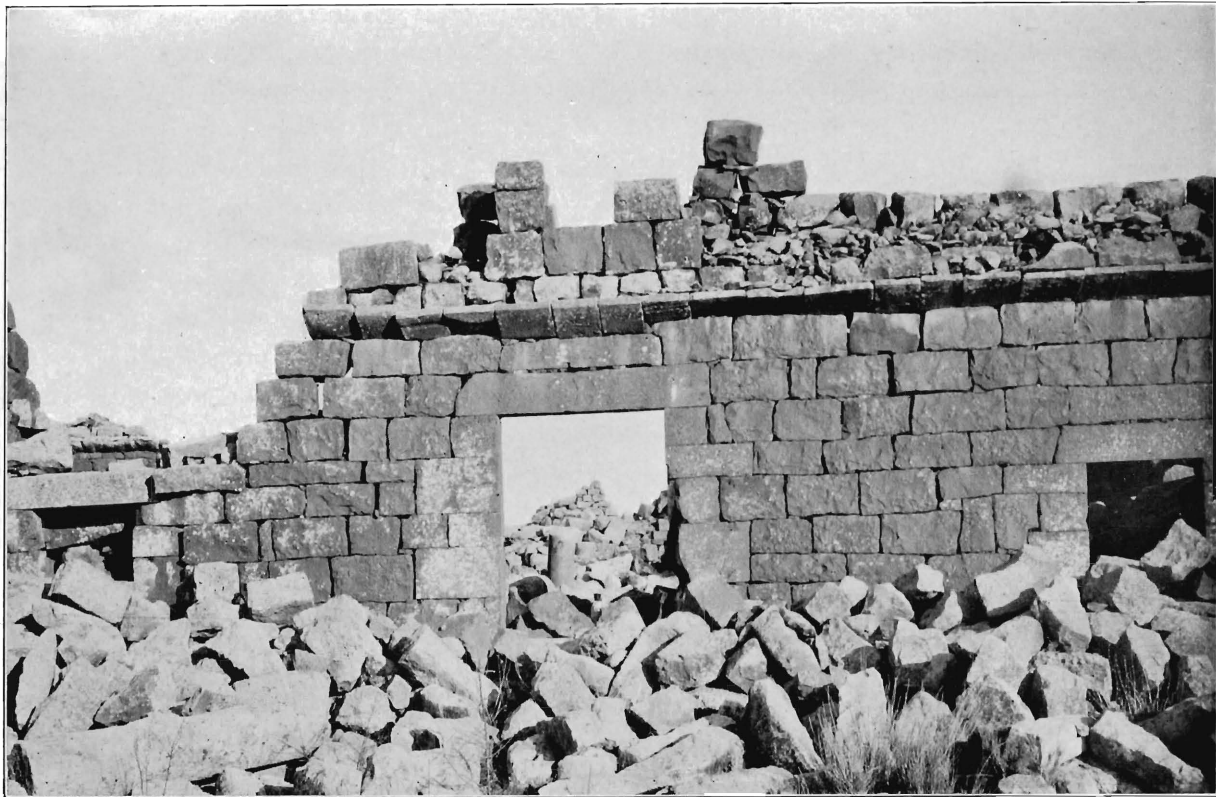


SECTION E-F.

Ill. 170.

¹ III, insc. 261.

² II. A, 2, p. 102.



Ill. 168. Façade of Klaudianos Church; View from the West.



Ill. 169. View of Klaudianos Church and Buildings South of it, from the West.

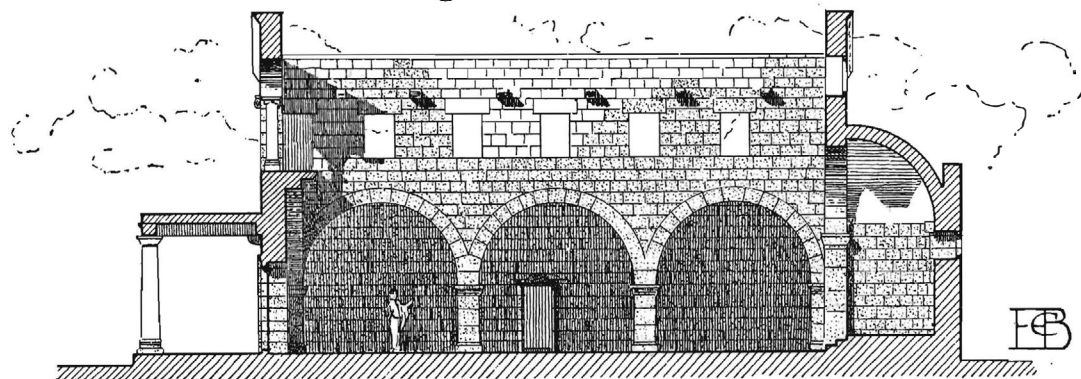
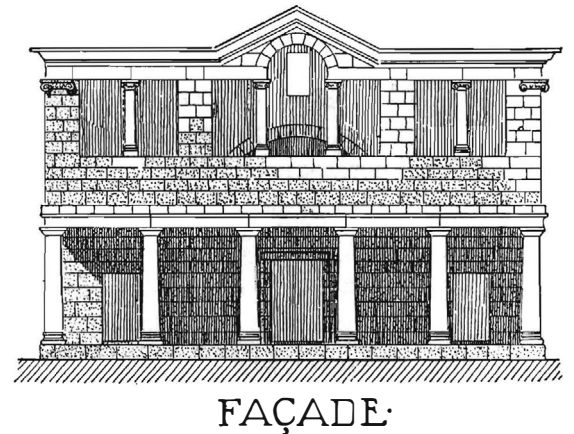
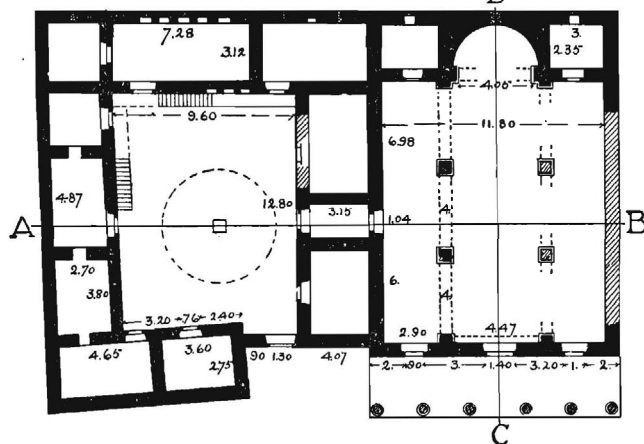
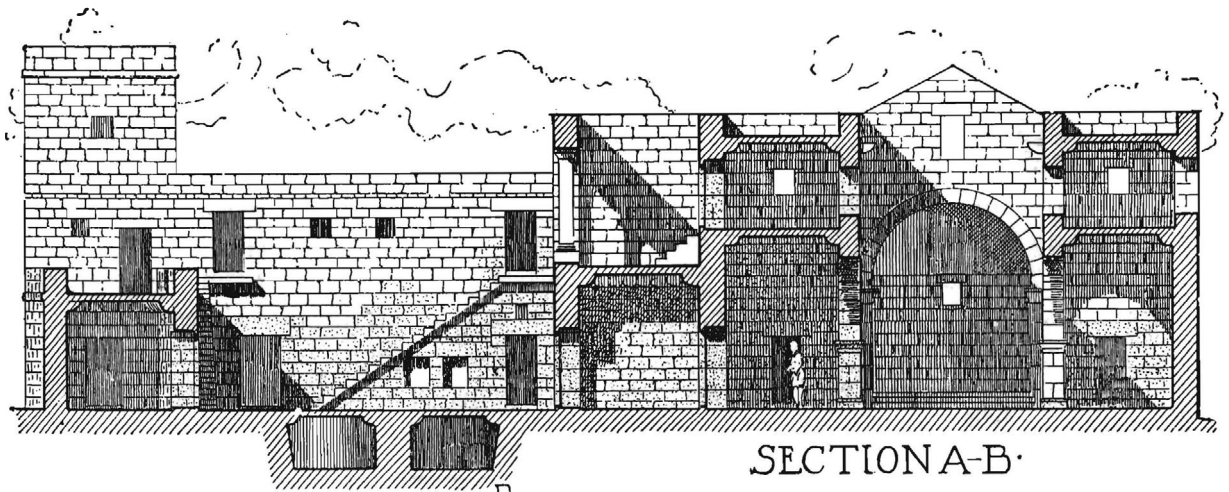
The outer walls are quite completely preserved, the arches of the nave have fallen, but their piers are standing. The unusual part of the church is at the east end, where there is a chamber of the ordinary kind on the north of the rectangular sanctuary, but no chamber on the south side, the space for the prothesis being divided from the sanctuary and from the end of the aisle by arches. The arch of the sanctuary and these two arches of the prothesis are still standing, all three being carried by a single pier. The remains show conclusively that the whole church was covered by a flat roof at one level, the side aisles certainly with slabs of stone, and the middle aisle in the same manner, in all probability. The roofs of the sanctuary and side spaces were also of stone and on the same level. The interior still preserves bits of plaster in three coats upon its walls, and shows other signs of having been well finished. The exterior was also covered with stucco, but few traces of it are now to be found.

CHURCH OF NUMERIANOS. North of the barracks, and in the middle of the open common, is this interesting church, built, according to the inscriptions,¹ as a vow by Numerianos, Johannes and Maria, and which I have called the Church of Numerianos for the sake of brevity. A compact group of residential buildings surrounds a small cloister court on the north. The ground plan (Ill. 171) presents nothing that is unusual in church plans, and it is only when the superstructure is examined for restoration that the unique features of the building become evident. The plan is that of the ordinary three-aisled basilica with apse and side chamber giving a flat east wall, and with a colonnaded porch at the west. The supports of the broad arches of the nave are square piers, two on a side, to carry the six arches. The first unusual feature to be noticed is a wall-arch above the central west portal, springing from one to the other of the piers at the west end. The opening of the apse has been closed by a wall built probably by Arabs after the rise of Islam; the front wall of the chamber on the south side of the apse was apparently in part rebuilt at the same time.

The west wall is completely preserved in its lower storey, and, at its north end, a section of the upper storey wall, crowned with an angle pilaster cap of the Ionic order, gives the height of the wall at that point. The entire south wall and the south arcade of the nave have collapsed, and the south chamber beside the apse is in ruins; but the apse wall still remains up to the level from which the semi-dome sprang; the chamber on the north side of the apse is completely preserved. The northern half of the church preserves much of its original form intact (Ill. 172), enough, in fact, to give ample material for a complete restoration of the nave. The three arches on this side of the nave are not only standing, but they still carry a large part of the clearstorey wall intact to its full height, and the stone roof of the north aisle, which is composed of well fitted slabs. This, of course, involves the preservation of the north aisle wall. Section C-D in Ill. 171, shows, by shading, just how much of the clearstorey is in place: at the east end its full height is given, the remainder shows that there was a rectangular window centered over each arch, and one over each pier. There were corbels in the wall above the windows, which had to do with the support of a wooden roof above the middle aisle. The curious and interesting feature of this church is that the apparent clearstorey windows did not open to the light of day, but into a gallery above the side aisle. The wall of the side aisle was carried up in an upper storey equal in

¹ III, inscs. 257-259.

height to the wall above the main arches. This wall was pierced with windows opposite those in the clearstorey. The opening which may be seen in the photograph (Ill. 172)



CHURCH OF NEMERIANOS AT VMM IDJ-DJIMÂL.

Ill. 171.

partly concealed by the ruins of the front wall of the nave, is one of these windows and is not in the same wall with the other two windows as would appear at first sight. This outer wall terminates toward the west in a sort of pilaster, as may be seen in Ill. 172, and in the drawing of the façade (Ill. 171); the lower courses of another pilaster, or pier, stand at the end of the clearstorey wall. I have drawn a column in the



Ill. 172. Numerianos Church; View from the Southwest.



Ill. 173. Numerianos Church; Part of Façade, View from the West.

space between the two pilasters, having found a small column in the ruins of the porch. The gallery thus formed was roofed with slabs of stone, the corbels for which are still visible. It is most probable that the south aisle is to be restored exactly like the north aisle, as I have done in Ill. 171, Section A-B. It was possible to pass from one gallery to the other by a narrow platform corbelled out above the transverse wall-arch at the west end of the main aisle, as is shown in Section C-D, Ill. 171.

I have restored the remainder of the façade from small columns and other broken details lying in the porch, on the basis of certain façades in Northern Syria; of the architrave and cornice there can be little doubt. The porch was a free-standing colonnade carrying a roof of slabs: the walls, which are now found in ruins at the ends of the porch, are late additions. The Ionic angle-pilaster cap from the south end of façade is now lying near the southeast angle of the chapel of the Barracks. The entire lower storey of this church, including the outer walls and the piers and arches of the interior, was built of the most highly finished stone, admirably laid and fitted (Ill. 173); the upper parts were built of smooth quadrated masonry in blocks of unusual size. The mouldings of the main west portal, which are very simple and the only mouldings visible in the church, have the appearance of not having been made for the place which they now occupy; for the moulding of the lintel is not returned and brought down at the ends of the lintel; but the inscription of Numerianos is complete and is undoubtedly coeval with the building. The bases of the columns of the porch were well moulded Attic basis, but the capitals were in plain Doric style.

The ecclesiastical buildings on the north side of the church (Ill. 171) are grouped about a nearly symmetrical court with a circular cistern in the middle; the cistern was originally covered with slabs level with the pavement of the court. The buildings are all small, only those adjoining the church and those on the west side being two storeys high; a tower of three storeys occupied the northeast corner. The two rooms adjoining the church, with a passage, or slype, between them, are still preserved in part and have a stone ceiling a little lower than the ceiling of the side aisle within. Upon the outer wall of these rooms there apparently stood a colonnade of columns about 3 m. high carrying a roof of wood. None of these columns is in situ; but there are several in the ruins, and I cannot find any other place where they might have stood than that I have shown in Section A-B, Ill. 171. This open loggia would have been reached by a long flight of steps leading up from the court along the east wall, and it would have been necessary to have steps to reach the gallery of the church from the open loggia. Most of the rooms in the court were for residence, one was a long stable with five mangers. Beside the doorway in the southeast angle of the court, at the left hand, was a bracket, in the form of a diminutive altar, with a slight depression in its top and an inscription¹ upon its side. Similar altar-like brackets² were found beside other doorways in Umm idj-Djimâl; I believe that they belonged originally to Pagan buildings, but I am unable to suggest what their use may have been. This is one of the few buildings in Umm idj-Djimâl, if not the only one, which shows unmistakable evidence of Moslem occupation. No demonstration is required to prove that Moslem hands built the wall which closes the apse, and there is little doubt, if the south wall of the church were not in ruins, that we should find it pierced to receive

¹ Ill, insc. 240.

² Cf. p. 211, Ill. 193.

a mihrâb, or its portal fitted with the Mohammedan prayer niche. It may well have been that the Moslem occupants of the city were nomads who lived in tents and did not inhabit the houses of their Christian predecessors, and that this church was the only building restored or altered for Moslem uses.

Domestic Architecture.

The greater part of the ruins of Umm idj-Djimâl are, naturally, those of domestic architecture. Almost the entire area within the walls, exclusive of that devoted to the open common in the middle of the city, and of that devoted to the churches and their courts, is occupied by private residences in a better or a worse state of preservation. These houses represent such various classes of domestic architecture, as may be indicated by differences of size, quality of construction, and minor details of luxury. They are, for the most part, grouped in irregular blocks divided from each other by narrow, crooked streets and lanes. The houses in a block usually open upon one large court-yard, though, in a number of cases, two or three courts are found in a block of unusual size separated by rather narrow buildings. The outer walls present plain unbroken surfaces to the streets, with no windows except in the upper storeys. The entrances to the court-yards, usually two in each, are occasionally arched, and several of the houses have towers which rise one or two storeys above the surrounding roofs. The doors, and most of the windows, the staircases and balconies, in fact all of the more attractive features of the houses, are to be seen only from the court-yards. The exteriors were severe and forbidding in the extreme, just as one finds the case to have been in those residential quarters of Pompeii in which the private insulae were not surrounded by shops; and for plainness they were not unlike the street fronts of English and American city houses of the 18th and early 19th centuries. All the different qualities of stone work and wall building that have been described as belonging to the architecture of the Christian period in the Ḥaurân¹ appear in these houses most of which are two storeys high, though there are blocks of one-storey houses, and many residences of three and even four storeys. The most common form of house is that in which two high arched storeys composed of large rooms are combined with four storeys of smaller rooms, all under one flat roof; like the majority of houses in other parts of the Southern Ḥaurân,² except that the smaller rooms are placed at the side of the large arched rooms instead of behind them. The transverse arch, the corbel courses and long stone slabs for roofs and intermediate floors, described in a former Part,³ are the important features of construction in all these houses, and determine their form and style. Stucco on the outside, and several coats of plaster within, gave a finish to these buildings which the present appearance of their ruins would hardly suggest. It is quite unnecessary to draw an odious comparison between the appearance of these ruins and that of wrecked houses in any great modern city.

The larger of the two maps of the city presented herewith shows twenty groups of private residences, with detailed ground plans measured and drawn to scale. Almost as many more houses were in a state of preservation to have been added to the map in the same manner, if there had been time to devote to the long and somewhat tedious process; most of these are given on the map as blocks with shaded sides, the

¹ II. A, 2, p. 67.

² Ibid. pp. 120, 122.

³ II, A, 2, p. 68.

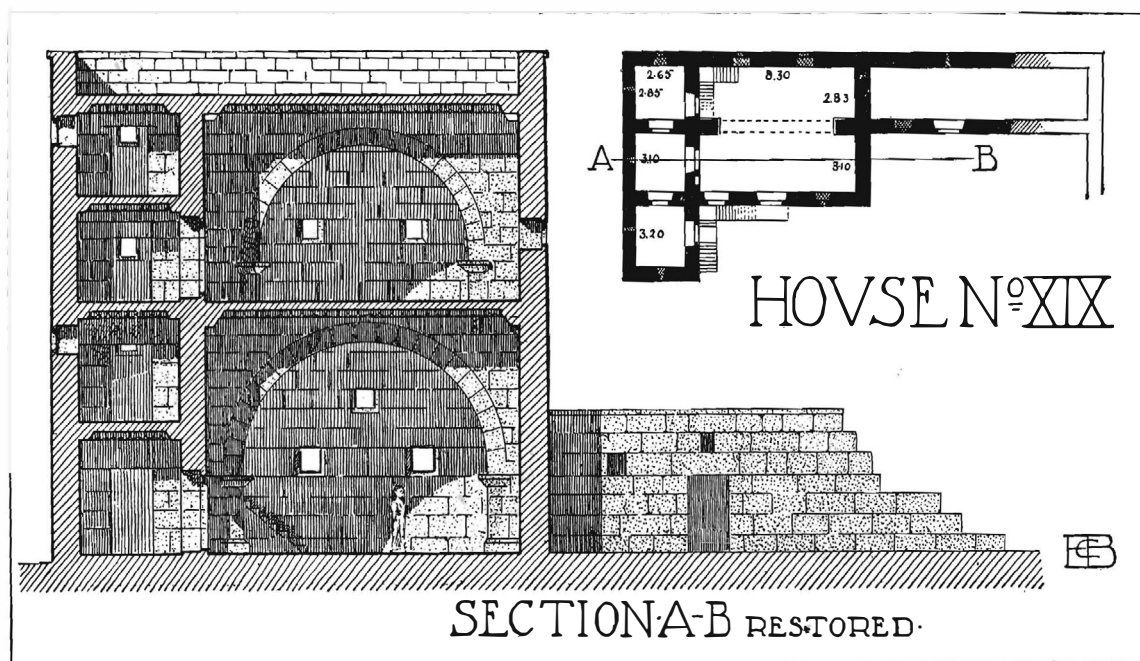
outlines having been measured and drawn to scale. These, taken together with the blocks drawn in detail, would have represented about two-fifths of the residences of the town; the other three-fifths, situated chiefly in the north and northeast quarters, have been so completely demolished that it would be very difficult to secure plans of the houses, or even trustworthy outlines of the blocks. I estimated, on the occasion of a visit to the ruins in the spring of 1909, after this map had been drawn, that there were originally from 130 to 150 blocks of houses similar to those given in detail on the map. The blocks presented in measured drawings on the map were chosen to represent as many types of houses as possible, or by reason of some particularly interesting feature, and not entirely because they were the best preserved; for there are a number of blocks given here only in outlines that contain houses in a remarkable state of preservation. It will be noticed that the houses are numbered, not by blocks, but by court-yards, each court bearing a Roman numeral: the houses grouped about the churches are not numbered. It seemed to me that, having so complete a plan of about one-fifth of the residential portions of the town, it should be possible by some means to arrive at an approximate estimate of the population of the city in the fifth and sixth centuries. In attempting to make such an estimate it would be necessary to know how many separate residences were included in a block of houses. A careful examination of many different blocks suggests that, ordinarily, each family had one large room, usually arched, with several smaller rooms, square or oblong, disposed about it and opening into it; this seems particularly probable in many groups in which we find one *latrina* to every large room. In cases where there were two or more storeys I estimated both, or all, the storeys as belonging to one family, and, where two large arched rooms had a connecting doorway, I gave both to a family which might be supposed to be of somewhat larger means than a family which had only one such room. According to this scheme, there would have been from eight to ten families in each block, and, taking seven as the average number in a family there would have been from fifty to seventy persons to a block, which seems a conservative estimate, taking into consideration the fact that a majority of the blocks are composed of houses of more than one storey. The whole city, then, with its one hundred and fifty blocks, would have contained a population of from seven to ten thousand persons within the walls. The houses of most of the smaller towns of the Southern Haurân, were usually provided with stables which were a part of them; in Umm idj-Djimâl, on the contrary, only a few houses have stables, and there is no evidence to show that any considerable number of domestic animals were housed within the city gates. For this reason the above estimate of the probable population is rather conservative, it allows, moreover, for a degree of luxury which is to be thought of as a modern development, providing, as it does, at least one room to each member of a family which is probably too much. In ancient times, the lower and middle classes, the tradesmen and merchants, everybody, in fact, except royalty and the great families, lived in far more cramped quarters than the same classes do today, and I believe it is not improbable that, at the height of its importance as a city, Umm idj-Djimâl could boast of a population of perhaps fifteen thousand souls.

These extensive ruins of domestic architecture undoubtedly represent houses of several centuries; but, so far as one may judge by comparing them with buildings of known date, there are probably few houses standing which are earlier than the latter

part of the first century A.D. There are probably many which were built during the second, third, and fourth centuries; but the great mass of private architecture here is undoubtedly to be assigned to the fifth and sixth centuries. It will be seen that many buildings of one class or kind of masonry have been repaired, or added to, in masonry of another sort. The repairs and additions are, of course, later than the original building, and, as it happens that they are constructed in a poorer manner, it is safe to assume that whole buildings built in the poorer style are later than those which are better built. Furthermore, those buildings which I believe to be of the more remote dates, besides being constructed in a better manner, do not contain inscribed stones placed at random in their walls; while the buildings which represent the poorer class of work often contain Pagan inscriptions and old grave-stones worked in in hap-hazard fashion.

Owing to the absence of dated inscriptions upon the houses, and the consequent difficulty of determining their dates, in spite of the differences of construction, it is not possible to take up the description of the residences in chronological order. I shall begin with an example of the domestic architecture of the town, in which the plan is very simple, and the superstructure typical of a large class, and then take up the houses of more complicated ground-plan.

HOUSE No. XIX. This house is probably to be considered as a single residence of the better class. It occupies the east side of a small court, the south and west sides of which were once occupied by other houses which are now fallen in ruins. It had fourteen rooms, yet it is so planned that it could have been divided for the use of two



Ill. 174.

families, only on the plan of a modern flat, allowing a storey and a half to each family. The ground-plan (Ill. 174) speaks for itself; it shows a large arched room, facing west, with three small rooms in a row on the north of it, one of which protrudes beyond the west wall of the large room, and with a long narrow room on the south. The transverse arch of the large room raises the ceiling to such a height that there is room



Ill. 175. House No. XIX, View from the Southwest.

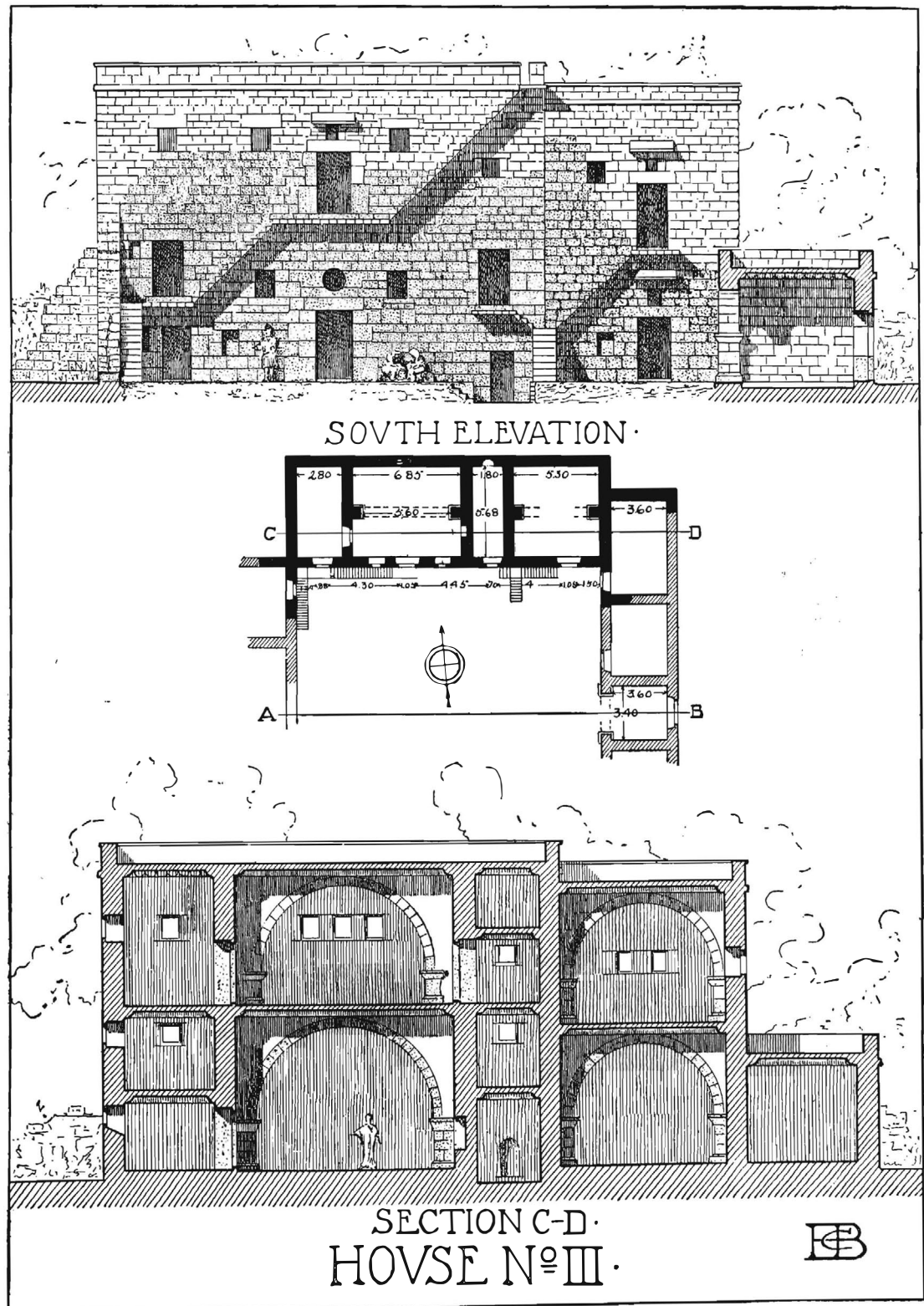


Ill. 176. House No. III, View from the South.

for two storeys of corbel construction in the three small rooms, within the same space. The upper rooms were reached by two stairs, one in an angle of the large room and one in the court outside. The plan of the upper part of the house is a repetition of that of the lower; a second arched chamber being placed above the first and a third pair of small rooms in two storeys on the north of it; but the projection was complete in two stories, its flat roof serving as a terrace for the higher rooms beside it. A considerable part of this house is still standing as the photograph (Ill. 175) shows; that is, the lower girder arch, and the piers and springers of the upper, with all four storeys of the rooms in the northeast angle, and three storeys of the intermediate rooms. The projection preserves its two storeys intact, with stone floors and roof. A few of the long slabs of the roof of the upper arched chamber are to be seen in the photograph. The greater part of the front wall of the house is standing; but most of the steps of the stairs which were corbelled into the walls, have been broken off; yet it is still possible to see that the outside stair led up to the upper doorway on the north side of the court, and then mounted by two steps to a platform in the angle, from which it led on, by another flight, to the upper storey of the main part of the house. The interior stairs are likewise traceable in stumps of corbels projecting from the walls. It is worth while to call attention to a bracket adorned with good Roman mouldings, which is one of two that supported a shade-stone above the doorway of the upper arched room. This house is the best example in the ruins of a type quite common in Umm idj-Djimâl, viz., the four-storey and two-storey house in one.

HOUSE No. III. An extension of the plan illustrated in the house just described is found in this residence (Ill. 176) which occupies the north side of a large courtyard, in the southwest quarter of the town. The plan (Ill. 177) shows parts of buildings on the east side of the court, but these, with the residences on the south and west sides, are in ruins. The part I shall describe is in a remarkable state of preservation, and represents the best quality of domestic architecture in the city. The arrangement of the house on the north side of the court gives a double set of arched rooms in two storeys with four storeys of narrow rooms between them, and three storeys at the west end. The larger pair of arched rooms, with the three-storey section of the house on one side of it and the four-storey section on the other, originally constituted a single residence; the smaller pair were added to this at a later period and in poorer masonry, as the photograph (Ill. 176) plainly shows. This earlier residence consisted of two large rooms and seven smaller ones. The floor of the lowest storey of the four-storey part was sunk below the level of the arched room in order to give sufficient height for three floors above it. This sunken room (Ill. 177, Sect. C-D) has a niche in its north end with an opening in the wall above it, like a rudimentary chimney, and may have been a kitchen. It is not directly connected with the large room. The floors above this room are of about equal height; that directly above it was reached by an exterior stair, the third opened upon the upper arched room, and the fourth was probably reached by a stair in the northeast angle of the large upper room. The lowest room on the other side has a very low ceiling, it has an outer doorway and one connecting with the large room. Above it is a chamber reached from a landing in the main outer stair. The third, or uppermost, chamber opens upon the upper arched room, and its ceiling is as high as that of the arched room. The photograph (Ill. 176) and the elevation (Ill. 177) show the main outer stair corbelled out from the walls. It begins on the

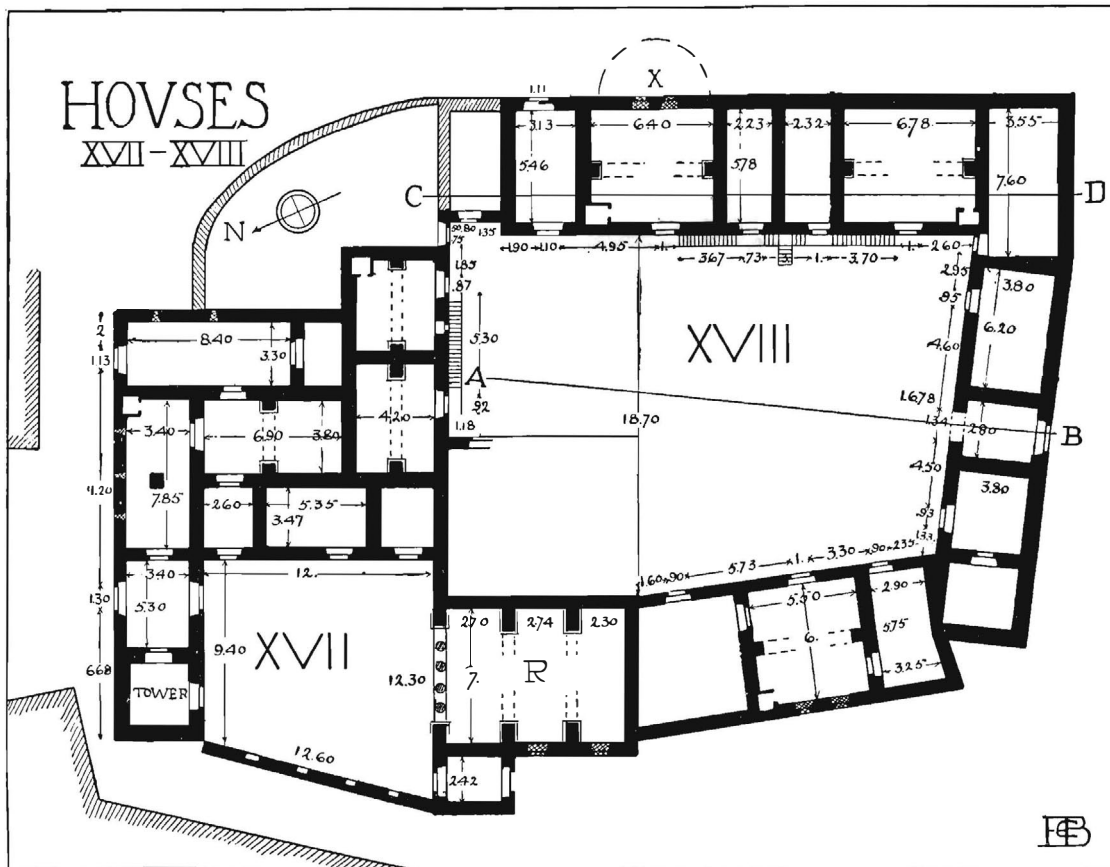
west side of the court, rising to the platform just mentioned, and then, ascending to a



III. 177.

platform before the door of the upper arched chamber, continued to the roof. The great arch of the lower room is still in place; the upper arch is represented only by

HOUSES XVII and XVIII. The most interesting block of houses on the east side of the city (Ill. 178) is that which comprises the two court-yards marked XVII and XVIII on the maps of the city. Number XVII is bounded on two sides by narrow



III. 178.

streets, and on the third side by a small enclosed garden belonging to number XVIII. Number XVIII itself gives upon a street to the south, and upon a small open square to the west; but its east wall faces a broad space just inside the east wall of the city a little to the north of the main East Gate, occupied in part by an open cistern. House XVII is unique among the houses of the city; it is not planned like an ordinary residence or group of residences. Its courtyard would be symmetrical but for its west

wall, i. e. the wall separating it from the street, which is brought out at a sharp angle to accommodate a vestibule in the southwest corner. Within the vestibule, immediately to the left, and facing the court on its south side, is a building about 8 m. by 10 m. square; its lower storey, entered by a narrow doorway, is divided transversely by walls into three oblong chambers. Its upper floor, which I have chosen to represent in the plan (Ill. 178, R) had an open loggia of four columns above the entrance, and two broad arches above the transverse walls below, making one large room, larger by half than the largest of the arched living rooms in ordinary houses. Across the court, in the angle, stands a tower of five storeys that must have been fully 15 m. high. Beside the tower is a second entrance to the court-yard in the form of a large vestibule. On the remaining side of the court is an irregular group of seven rooms of various sizes opening into each other, and two arched rooms, of the ordinary type, not connected with the group of seven, but opening upon the court of number XVIII. Of the seven rooms, not one resembles the ordinary living room with its transverse arch; three of them are rather small and give upon the court; three others are large, but long and narrow; one of them is spanned by an arch across its shorter axis and another has a square pier in the middle, which supports a cross wall in the floor above. This room is also provided with a *latrina*. This house, with its spacious arched apartment and loggia on one side, its tower on the other, and its carefully planned group of rooms in two storeys, seems more like a public, or semi-public, building of some kind, than like the residences with which we are already familiar in the towns of the Southern Haurân.

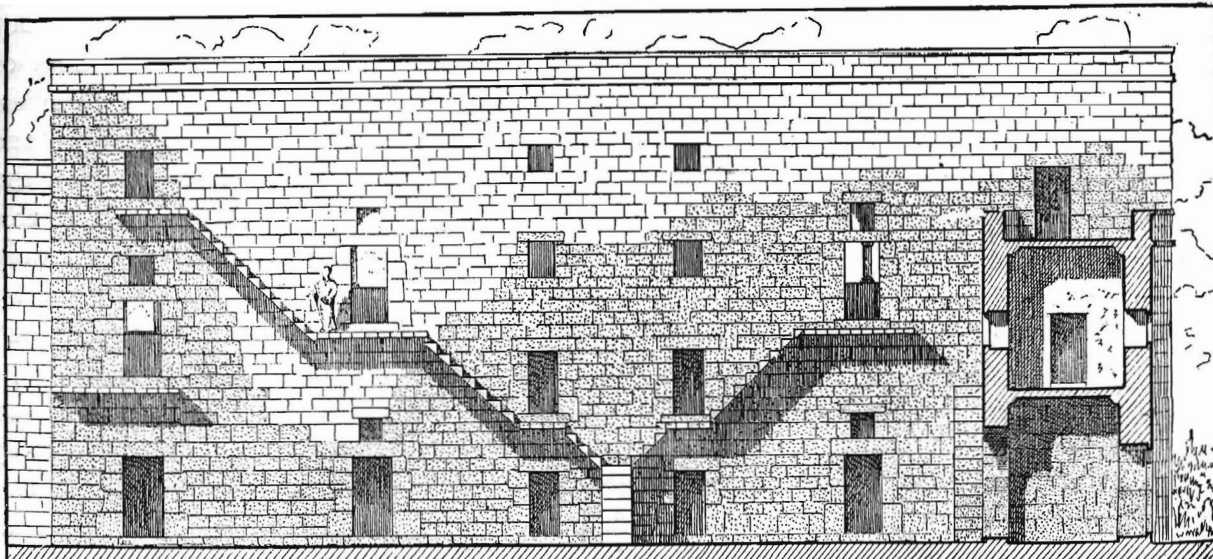
House XVIII is more the typical large group of residences of the better class. On the north side of its court is a residence, or two residences, composed of two arched rooms of medium size above a low groundfloor without arches. Its west side is occupied by one side of the double-arched room of House XVII, and by a fine large arched room of one story, flanked by rooms of irregular shape, the group constituting probably two residences. The buildings of the south side of the court are shallow, only 3.80 m. wide inside. In the middle is the vestibule, having a doorway outside and an arch within, which was the chief entrance to the compound. It is the residences of the east side of the court that are of particular interest, and to which I shall devote three illustrations. The plan is perfectly well seen in Ill. 178 where two suites are shown, probably two large residences, each consisting of an arched living room with a narrow room on either side of it, making six rooms in all on the ground floor. The present state of the building is shown in two photographs (Ills. 179 and 180), both of which give the northern half of the building, 179 being the front on the court and 180 the exterior wall. It will be seen that the arches, lower and upper, have fallen; but the three-storey part at the north end, and the east wall with the large windows in its upper storey, are standing. By means of these photographs, and with the aid of the Sections given in Ill. 181, a clear idea of the arrangement of the house may easily be had. The drawing, also in Ill. 181, showing the actual state of part of the building is the same view as Ill. 180, but drawn to scale; the other drawing is an enlarged view of the great window which gives this house its special distinction: it is also drawn to scale. The two sections should be examined together. The two residences are almost precisely similar although arranged reversely; the four-storey parts coming together, and the three-storey parts at the ends. In plan and superstructure,



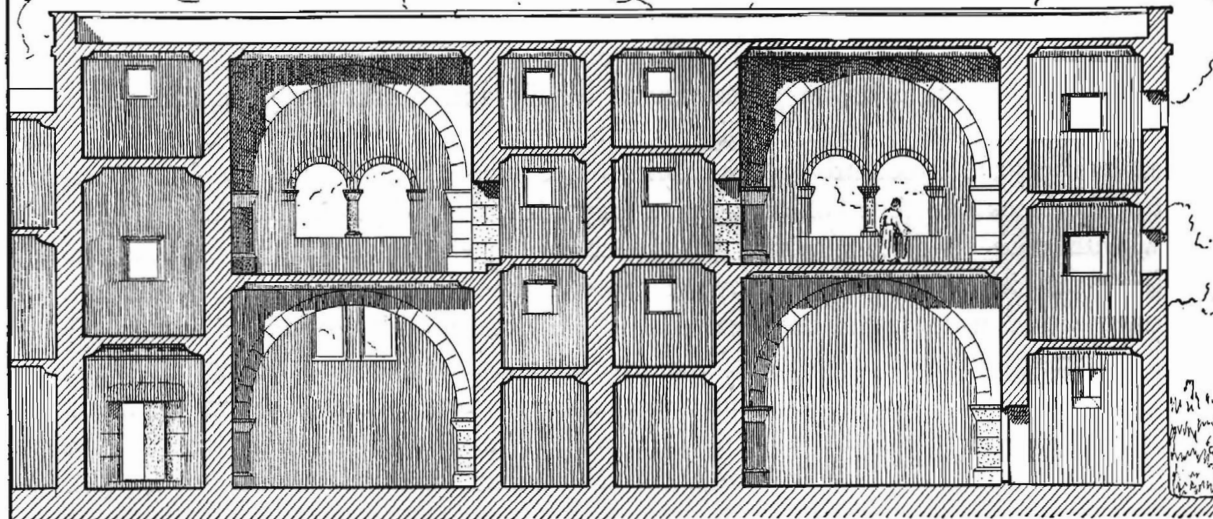
Ill. 179. Part of House No. XVIII, Northeast Angle of Courtyard.



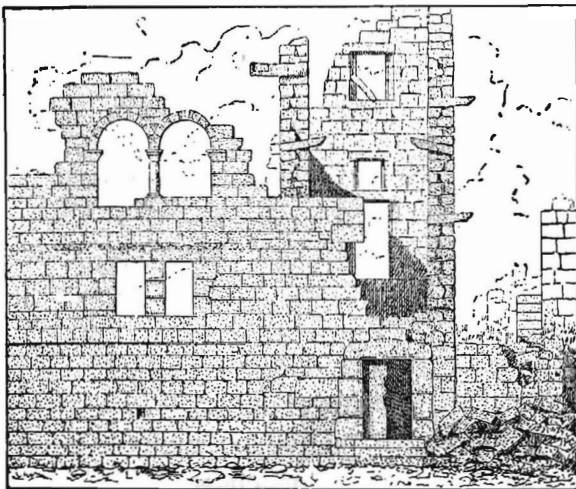
Ill. 180. Part of House No. XVIII, East Wall, Exterior.



SECTION A-B RESTORED.

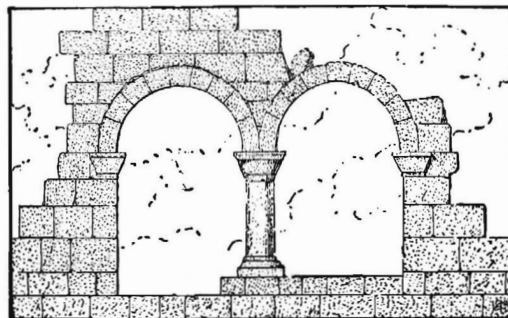


SECTION C-D RESTORED.



EAST WALL NORTH END.
ACTUAL STATE.

HOUSE N^o XVIII



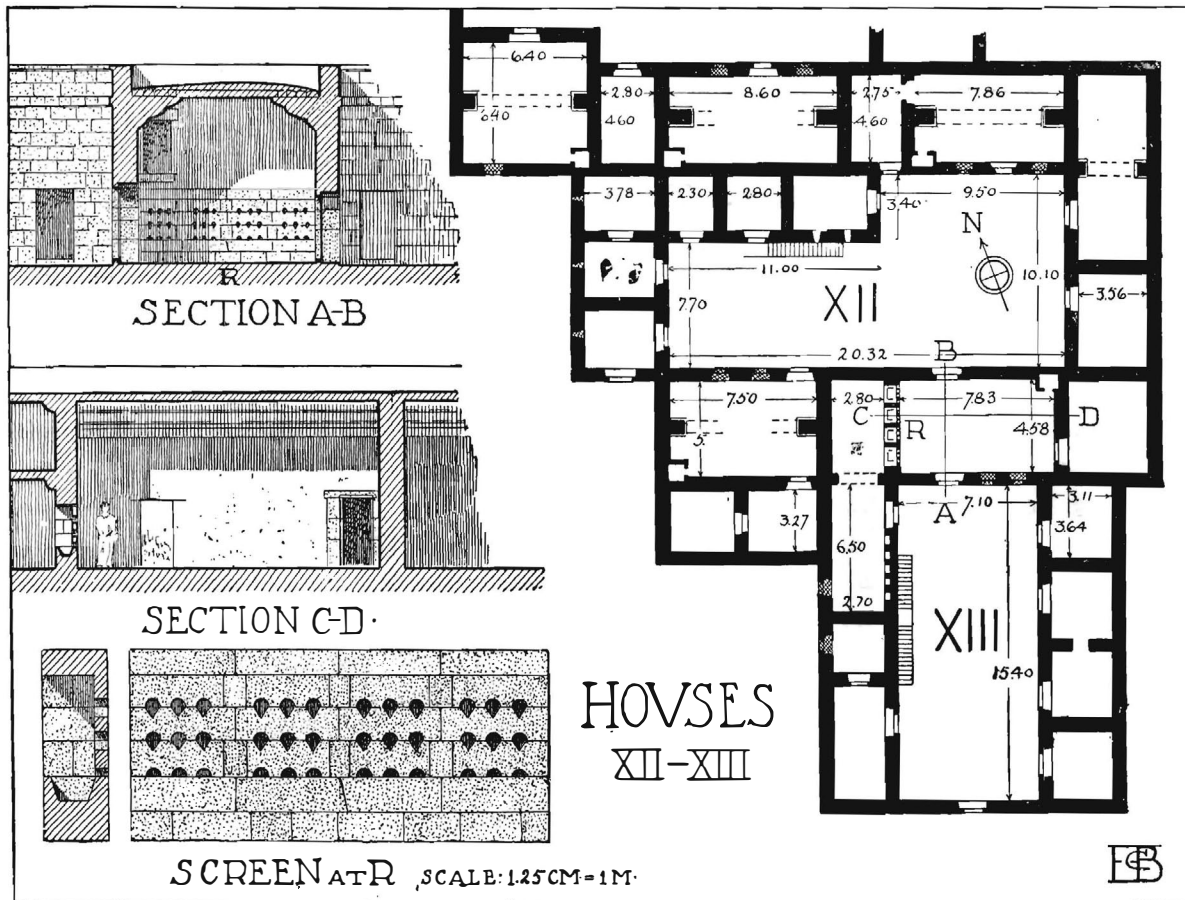
WINDOW AT X.
SCALE: 1/25 cm. = 1 M.



and in number and arrangement of rooms, these residences resemble House III; but they are built on a larger scale. There can be no question as to the correctness of the general lines of the restoration; for what one residence lacks another supplies. Only the double arched window in the residence on the south and the placing of one or two small windows could be questioned. Section A-B shows just how much of the front wall is standing; the full height of the walls is preserved in one place in this wall, and in three other places in other walls. The corbelled stairs are restored only in part, and show how most of the rooms were reached; the others were reached by short stairs inside the upper arched rooms. The whole structure is interesting in point of plan and construction; but the most important details are to be found in the passage on the ground floor at the north end, and in the coupled arches of the upper storey windows. The passage is a long vestibule entered from without by a doorway framed in draughted stone-work of excellent quality, and closed by stone doors in two leaves, two metres high, beautifully finished on both surfaces and swung upon ball-and-socket hinges; one of these doors is still in place. The corbel course which supports the ceiling of the passage is a moulding of salient cyma-recta profile highly finished, and the walls are covered with plaster in three coats, the uppermost being carried over the surface of the moulding and over the ceiling, and painted in designs in red and yellow, the pattern of which is no longer to be distinguished. The arched window is an interesting feature as an architectural detail, and because it commands a superb view, over the city wall, of the rolling country that lies to the east of Umm idj-Djimâl. The capital of the colonette which divides the two arched openings is important in that it reproduces the form of Nabataean capitals in the Djebel Haurân. The second window with coupled arches, which I have shown in the other residence, is not now in existence; but its sill and the lower courses of one of its piers were found in place, and leave no doubt that it once existed. The date of this house, or rather of these two residences, like that of most of the domestic architecture of the city, is very much in doubt. Two or three features, however, are suggestive, not so much by themselves as when studied in connection with one of the tombs on the east side of the city. The tomb in question is one in which the Nabataean inscriptions are in situ (Ill. 185, see p. 206); these inscriptions quite definitely fix the date of the tomb within the first century or the early part of the second. It is only a matter of stone-cutting and surface finish that seem to link the house described above with this tomb; but this, taken together with the capital of the colonnette which is strikingly like Nabataean capitals in the mountain, one of which bears a Nabataean inscription, and with the draughted masonry about the doorway, is sufficient basis for an hypothesis in favor of an early date for the house, a date not later than the middle of the second century after Christ.

HOUSES XII and XIII. In quite another quarter of the city, almost in the middle of the town, east of the "Cathedral", and west of the Roman reservoir, is a block comprising four courts, the southern half of which, with two courtyards, was measured, and is herewith presented as houses XII and XIII (Ill. 182). There is nothing particularly significant about the former; its rather wide and shallow arched rooms are but one storey high; its smaller rooms have two floors. In its northwest angle are two large apartments, separate residences in all probability, which open upon another court and belong to another house. All the larger rooms here are provided with latrinae. But house XIII is peculiar; it has its own little court, though it has also an entrance upon

the court of No. XII. It has but one large room, and that without the usual transverse arch. Its roof, as is shown in Sections A-B and C-D in Ill. 182, is carried on three tiers of corbels which project 1.20 m. from the side walls. A photograph of these corbel courses is given in Ill. 51, II, A. 2; the slabs of the roof were 2.60 m. in length. At the west end of this room is a screen composed of thin slabs of basalt pierced with holes, which divides it from the northern half of the long room adjoining it. This screen is one of the most interesting details of domestic architecture to be seen in Umm idj-Djimâl, but it is not easy to suggest a plausible use for it. Its position



Ill. 182.

is indicated in the plan and sections by the letter R; a drawing on large scale is also given in Ill. 182, and a photograph will be found under Ill. 183. The drawing and photograph render further description unnecessary; the beautiful stone-work of the screen is now in strong contrast with the rough walls which were originally covered with plaster. At first a woman's apartment suggested itself as the probable room on the other side of the screen, and this might have been a possible explanation of the screen itself: but an examination of the room beyond the screen dismisses any such theory. And, on the basis of much evidence gathered in all parts of Syria, I think it highly improbable that the harem, in its modern sense, was an institution among the Christian and pre-Christian inhabitants of the Haurân, or that the women of the early centuries of our era were screened off from masculine eyes. The room beyond the screen is an unusually long one giving partly on the court, divided in halves by a narrow arch

and provided with cupboards. The bottom of the screen rests directly upon four basins cut from single blocks of stone and separated each from its neighbour by thin walls of highly finished basalt as high as the screen. The basins bear a slight resemblance to the mangers in the better class of ancient stables in the Ḥaurân; but I can think of no good reason for screening the sight of cattle from the living room in this instance, when it was common in all quarters in the country for the heads of horses or cattle to protrude into the lower living room. It is not impossible that the basins were connected with a fullers shop or a dyeing establishment. It would be necessary to give light and air to the operators of the one or the other; and perhaps important to protect the bleaching or dyeing stuffs from those who commonly made use of the large room. One of the latrinae, so common in this town, is to be seen in the northeast corner of the large room. It is set partly in the thickness of the two walls of the room, its own side wall and the wall where its doorway is, being made of very thin slabs of basalt, highly finished and carefully joined. The edge of the doorway is carefully countersunk to receive a wooden door, and the holes for the hinges are small and well cut. Just within the door are a small basin corbelled out of the wall and a shelf to hold a jar of water, all very much like the wash-hand-basins in the better class of city houses in Syria of the present day. The upper part of this little structure is visible in a photograph (Ill. 51 II, A, 2).

OTHER HOUSES. It is hardly worth while to multiply examples of domestic architecture in a case like this, in which we have a whole city with hundreds of houses built on the same plan, but, for the sake of record, I shall run rapidly over the houses of which I have made measured plans, and which are shown only on small scale in Map No. 2. House I is composed of two and three storey residences, rather poorly constructed and having no arched rooms. No. II is shown, in part, with the plan of the Southwest Church (Ill. 161). I doubt if the house was a part of a group of religious buildings of which the church was the nucleus, although it has a small rear entrance from the courtyard adjoining the church. It, of course, may have been inhabited by a priest or by some dignitary of the Church; but it is an ordinary example of a residence of the better class. It has one large arched room in one storey, and seven smaller rooms two storeys high, fifteen rooms in all. From the standpoint of construction and quality of finish, it is far better built than the church. Interesting features of detail are found in the arched room which, until recently, preserved its roof intact; the arch is still in place. These features are two wreaths of bay leaves executed in stucco, in relief, upon the soffit of the arch at its springing, and a painted design of conventional flowers, like tulips, which appears upon both faces of the arch. The colours on the wreaths and in the flat design are much weathered, but still show green, red and blue.

HOUSE No. IV is situated on the city wall, protruding beyond it. It is a crudely built structure of three storeys, without arches, and its walls are full of more ancient grave stelae brought in from deserted cemeteries near the city. No. V is a very well built house, and very well preserved. Some holes for pipes set vertically in its walls suggested the possibility of this having been a small bath. House No. VI is later than No. V, and is not so well built; but it represents a good class of domestic architecture. Its walls contain no less than five Nabataean inscriptions, and its court is the present site of a Nabataean altar. The ancient Nabataean temple was not far away.

One of the largest groups in the city is that which includes VII, VIII and IX;



Ill. 183. Screen Wall in House No. XIII.



Ill. 184. Southeast Angle of Courtyard No. VIII.

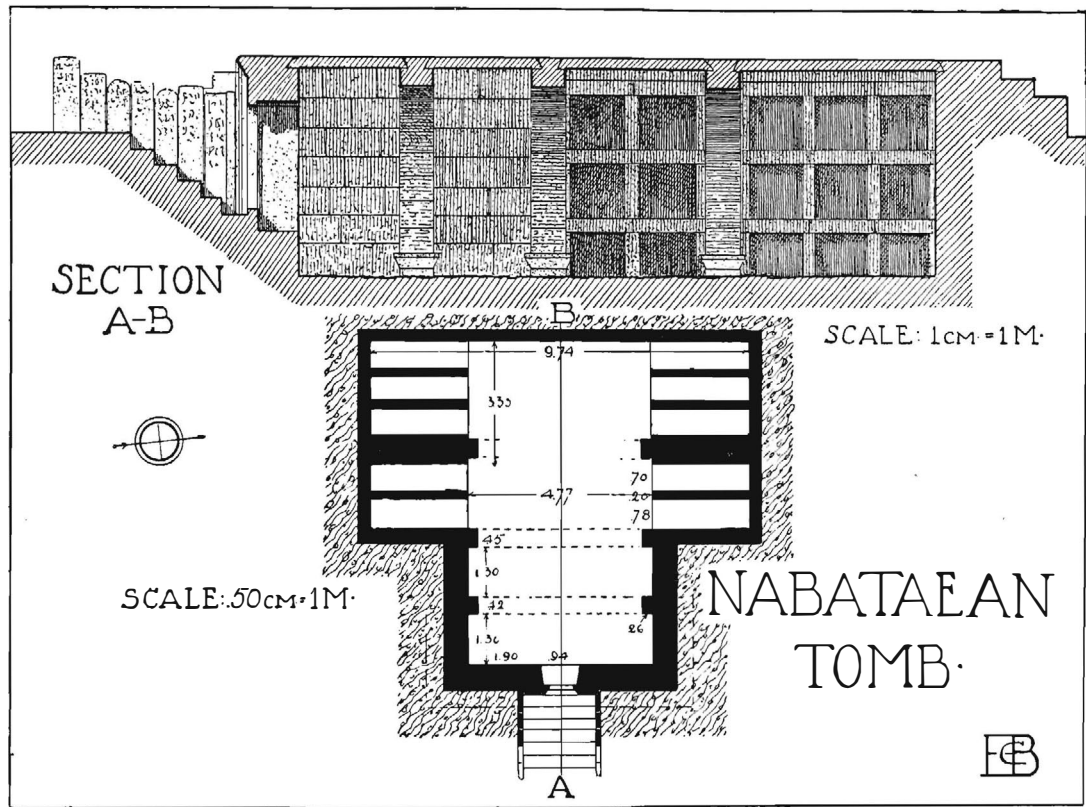
these represent a good class of houses, in one and two storeys, built of smooth quadrated masonry. The front of a house in the southeast angle of courtyard No. VII is shown in a photograph (Ill. 184). In these groups the arched rooms are one storey high, the other rooms are in two storeys. I estimated that these houses accommodated about twenty-five families. Houses X and XI are of no particular interest, XII and XIII have been described, XIV is irregularly planned and poorly built, XV is interesting because it consists solely of a vestibule flanked by two small rooms, at one end of the court, and a large room with two transverse arches at the other; being more like a small public building than a private residence, it should be compared with XVII described above. No. XVI attracts attention only by its lack of symmetry and the manner in which its rooms are fitted into a very irregular plan, XVII, XVIII, and XIX have been described in detail. XX is a well built house on the city wall, but has no striking features.

Tombs.

It is particularly fortunate that the funeral architecture of Umm idj-Djimâl, though for the most part in ruins, preserves enough examples of tombs in a sufficiently well preserved state to enable us to reconstruct them with a considerable degree of accuracy; for few tombs of any architectural significance have been discovered in the Ḥaurân, and little is known about the funerary architecture of Southern Syria, as compared with that of the North, and with that of Arabia as we know it in the tombs of Petra and those of Medâin Şâleḥ, recently published with ample illustrations by the Rev. Fathers Jaussen and Savignac¹. We may believe that the specimens of tombs at Umm idj-Djimâl are typical, and, by them, some light may be thrown upon a more or less dark subject. Quite the reverse of conditions in Northern Syria and in Arabia, none of the tombs at Umm idj-Djimâl is rock-hewn. All were wholly or in part excavated in the soil and were paved, walled, and roofed with stone. There are three kinds illustrated in the tombs which were found in a condition to be measured and restored. One wholly excavated in a flat surface, one excavated in a hill-side and showing a front wall, and a third only partly excavated and having a building of some height constructed in plain view above the ground level. The earliest of the tombs has Nabataean inscriptions in situ, and therefore can not well be later than the middle of the second century after Christ. In all the others the inscriptions are in Greek, the names are often Greek or Roman, and there is no direct evidence that they are Christian; we may therefore assume that they are earlier than the fourth century. How the Christians buried their dead, if differently from their predecessors, we do not know. The tombs of Umm idj-Djimâl were partly destroyed at an early date for building purposes, and partly in comparatively ancient times by marauders who rifled them ruthlessly, and not in search of antiquities; for the tombs are strewn with broken glass of the highest iridescence, fragments of which show that the vases and bottles were of beautiful and intricate forms, often highly ornamented with threads of glass. In one tomb we found a few simple bronze objects, such as buttons, buckles and little bells which had escaped the eye of the plunderers; some of the buckles were inlaid with glass or enamel; the bells are of two forms, one the ordinary campaniform, the other like two cockle shells holding a tiny ball. In another tomb two small bottles, highly iridescent, had been miraculously spared.

¹ *Mission Archéologique en Arabie*, Paris, 1909, pp. 307-404.

NABATAEAN TOMB. This is the earliest and the most important of the tombs discovered by us at Umm idj-Djimâl. It lies far to the southeast of the ruined city, where the ground is flat and level, and is almost entirely sunk below the surface. It is given the number 10 in Map No. 1. A flight of steps on the east side descends to a doorway with moulded jambs and lintel. Within the doorway are two more steps, of loose stones, by which one descends to the present level of the floor of sand which is probably not the original floor level. The plan of the interior (Ill. 185) consists of a chamber,



4.77 m. wide and 8.30 m. long, divided by three transverse arches into four unequal bays. The first two bays within the entrance are equal, being 1.30 m. deep, and their sides are closed with highly finished walls; they constitute a sort of chapel in front of the tomb proper. The other bays measure 1.80 m. and 2.50 m. deep, respectively; their side walls are composed of the ends of loculi (Ill. 185, Sect. A-B) arranged in three tiers, two on each tier in the first bay, and three in each tier in the second. A fourth tier may be buried in the sand below the present floor level. The loculi are separated laterally by thin walls of basalt, and the tiers are divided by thin slabs like the division walls. The bodies of the dead were slid into the loculi, probably upon a board, the funeral offerings, objects of ornament, vases of pottery and glass were placed around the body, and then the opening was closed by a single thin slab which fitted it nicely. When the loculi were all closed, the interior of the tomb presented much the effect of an oblong church spanned by transverse arches. The stonework of the interior is most highly finished. It is not impossible that a building of some kind was constructed over the whole, or a part, of this underground tomb. Two long steps are still to be seen extending on either side of the entrance. The chief interest of this



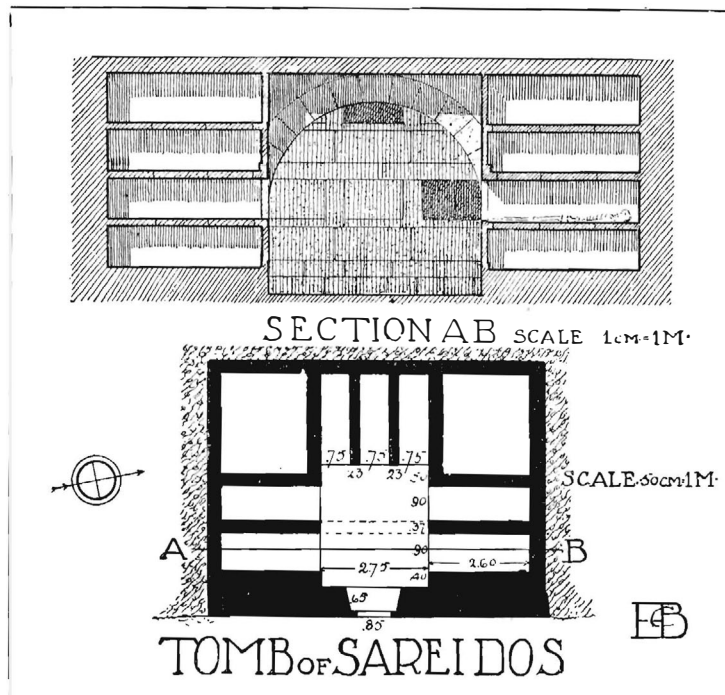
III. 186. Nabataean Tomb with Stelae. View from the Northeast.



III. 187. Tomb with Many Stelae. View from the East.

tomb lay in the finding of a row of eight stelae, with Nabataean inscriptions,¹ flanking the south side of the staircase at the entrance. There was undoubtedly a second row on the opposite side, making a lane of stelae before the door of the tomb. Hundreds of such stelae, with Nabataean and Greek inscriptions, have been found by travellers in the Southern Haurân. It has heretofore been supposed that these were stones placed at the heads of simple graves like modern tombstones; but the discovery of these stelae in their original position (Ill. 186) and the finding of a large collection of Greek stelae in place in front of another tomb here at Umm idj-Djimâl (Ill. 187), presents the stelae in a new light. They are not to be thought of as grave-stones in the ordinary sense, but as tablets set up outside a built tomb, giving the names of those interred within. Dr. Littmann finds that, in the majority of cases, the stelae with square tops were those for the names of men, while the rounded ones were for women.

TOMB OF SAREIDOS. In the opposite direction from the city, i. e. to the northwest, across the wadi, is a good example of the second type of tomb, i. e. that which is excavated in a hill-side. This tomb faces the east, and is marked 19 on Map No. 1. An inscription gives us the name of Sareidos. In preparing the ground for this tomb no tunnel was made; the hill is low, and the tomb was placed near the top. A cutting was made in the hill-side wide enough for the tomb and carried back to the required depth; then a heavy front wall of highly finished masonry was made, the interior was



Ill. 188.

lined with loculi of stone, and a roof of stone slabs was laid over the whole excavation. The plan, (Ill. 188) is a slight variation of that described above. The tomb is altogether on a smaller scale and space was economized. Within the doorway is a chamber, 2.75 by 3 m. square, spanned by a single transverse arch. Three walls of the chamber are made up of the ends of loculi in four tiers arranged somewhat differently from those in the Nabataean tomb. In Ill. 185 I have shown all the loculi open, in Ill. 188 I have shown all but three of the loculi closed. In the Nabataean tomb all the loculi could be opened, each having its own door-slab moveable; but in the tomb of Sareidos only the loculi of the second and third tiers from the bottom could be opened at the end and, originally, only one intermediate floor was built, that in the middle. When a burial took place, at first, a slab in the second or third tier from the bottom was removed, and the body was deposited in the tier below, as if in a sarcophagus, this receptacle was then covered with slabs just below the level of the opening and an upper loculus was thus created

¹ IV. A. Nab. inscrs. 60-67.

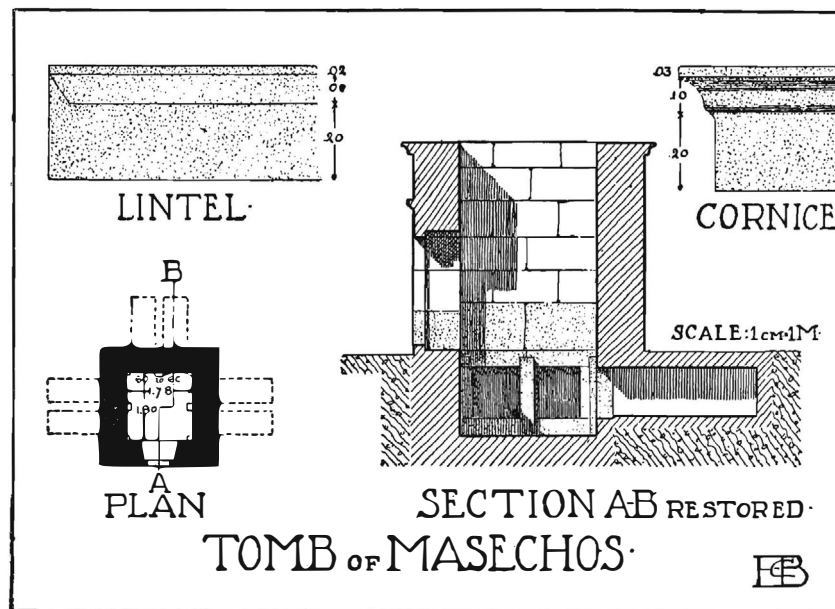
to receive another body which would be slid in as in the Nabataean tomb, and the slab would be put in place. Thus six openings in the end wall served for twelve loculi, and eight openings in the two side walls accommodated sixteen loculi.

No stelae were found in or near the tomb of Sareidos. There were perhaps never any stelae here, for the names of the dead are found in inscriptions¹ that were painted in red upon the slabs which closed the loculi. Some of these inscriptions are still legible. It may be that these painted inscriptions were placed here for the convenience of the family and of those who were admitted to the tomb chamber, and that a conventional row of stelae outside the tomb set forth the names of the dead within to the casual passer-by. Stelae were so well adapted to the making of corbelled stairs, that the Christian builders of Umm idj-Djimâl allowed very few stelae of Pagan tombs to remain in their places, and the mere absence of stelae from the front of a tomb does not necessarily mean that there were never any stelae there. But if the use of these name tablets was an Arabic, that is to say a Nabataean, custom, it would be interesting to know for how long, and to what extent, the custom was projected into Roman and Christian times in Southern Syria. The square compartments in the angles between the loculi opening upon the sides and end of the chamber were also used for interment. They were divided into two tiers, instead of four, and the intermediate floor and the roof were supported by a pier in the middle as shown in the plan. These receptacles for the dead could be reached only from above, by making an opening in the stone roof. In all probability the intermediate floor was not put in

until the bottom floor had received its complement of bodies.

TOMB OF MASECHOS.

A large number of the ruined tombs on the west side of the city, particularly those near the high-road, were of the type illustrated in the tomb of Masechos (Ill. 189). This is the third form mentioned in the introductory words on the tombs. Here we have a little building, a diminutive square chapel, with its doorway on the south or east. Within the doorway, which is on the



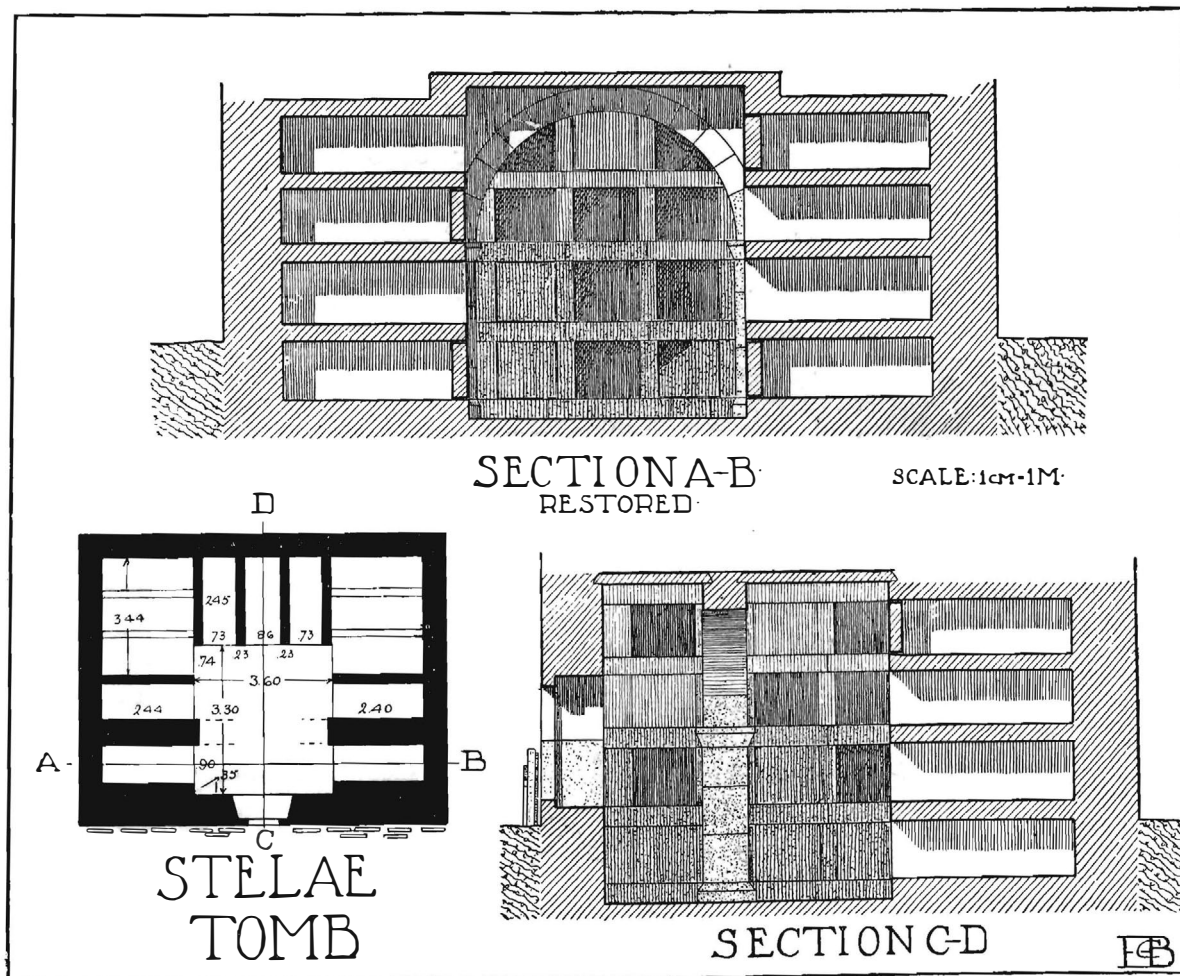
Ill. 189.

ground level, the floor is found to be sunk 1.10 m., and the walls of this sunken part, on three sides, are made up of the ends of loculi, as in the larger tombs, but in only one tier. The outer ends of these loculi project far out beyond the walls of the little tomb building. The loculi were closed in with thin slabs; but the tombs were further protected by a floor of stone slabs inserted at the level of the door-sill.

¹ III, inscs. 279, 280.

Alternate posts and brackets for the support of these slabs are found in each wall. Within the chapel, upon this floor, one or two sarcophagi may have been placed; for I found several sarcophagi near the tombs of this type near the West Church. The superstructure of the tomb of Masechos has been destroyed; but pieces of its cornice and the lintel of its doorway were found in the ruins. A Greek inscription¹ on the lintel gives the name of Masechos, who I believe was an earlier resident of the city than that Masechos whose name occurs in an inscription upon the church near the East Gate. If he was the same man, he devoted greater pains and skill to the building of his tomb than to the construction of the church.

STELAE TOMB. A combination, one might say, of the types represented on the Nabatean tomb and in the tomb of Masechos, is found in this tomb of many stelae;

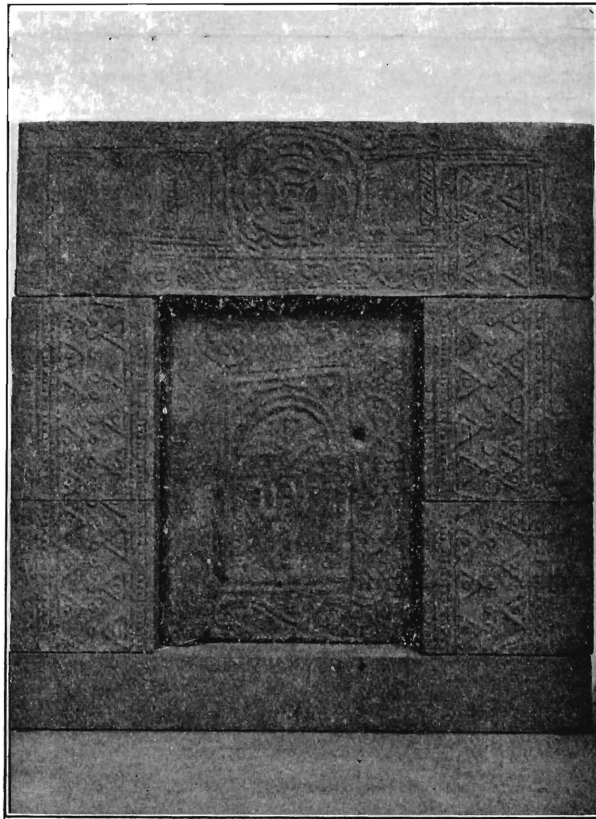


Ill. 190.

for it has the burial system of the former of these, but is built, for the most part, above ground like the latter. Its number in Map No. 1 is 16, as I remember; it stands at a good distance to the north of the city. Its plan (Ill. 190) is only a slight modification of the tomb of Sareidos. Only the two lower tiers of loculi are in existence; but the springers of the transverse arch of the tomb chamber are in situ, and these,

¹ III, insc. 276.

giving the height of the arch, suggest the full height of the tomb, which would accommodate two more tiers of loculi. In the Sections A-B and C-D, I have shown some of the loculi open and others closed with slabs. Some of the slabs which used to close the ends of the loculi were actually in place, the rifling of a closed loculus having been accomplished by breaking through the bottom of the loculus above. In this tomb where so many stelae were found in situ that I called it the "Tomb of Many Stelae", the name tablets were not arranged to flank the approach to the entrance to the tomb chamber, but were set up in a line (Ill. 187) against the front (east) wall of the tomb, with their lower third well sunk in the ground. As the number of interments increased a second line of stelae was set in front of the first, and in two places a third row



Ill. 191. Cast of Doorway and Door of a Tomb, from the Princeton Collection.

was begun. The outer rows, of course, made it impossible to read the inscriptions on the inside rows of stelae. There are nearly twenty stelae visible in the photograph, but these do not represent the full number of burials, if all the loculi were full; for there were places for fifty-two separate interments. The square spaces in the angles between the loculi which open upon the sides, and those which open upon the end of the tomb chamber, were treated in a different manner from those in the tomb of Sareidos, where they were reached from above. Here, these spaces, divided into four tiers, have openings 74 cm. wide upon the tomb chamber. Each tier in these spaces had room for three bodies; the first was slid through the narrow opening, and then moved sideways over to the west wall, and a partition was built beside the body; the second was deposited in a similar fashion and a second partition was built, leaving a loculus of the ordinary type just inside the opening. The third was slid in the ordinary manner, and the loculus was closed.

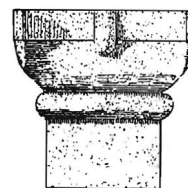
DOORWAY AND DOOR OF A TOMB. Among the debris of a ruined tomb near the West Church I found the lintel and jambs and the door of a tomb of the same type as the tomb of Masechos (Ill. 189). Lintel, jambs and door were ornamented with carving in flat relief, quite unlike anything to be seen elsewhere in Umm idj-Djimâl. I had squeezes made of all these details, had them cast in plaster, and set up in Princeton as in their original position, with the door swinging on its ball-and-socket hinges. A photograph of the cast (Ill. 191) is given herewith. The lintel measures 1.50 m. long, and 45 m. high. The door of basalt was chosen by Schumacher for one of the illustrations in his article¹ on Umm idj-Djimâl. It was 92 cm. high, and 69 cm.

¹ *Z.D.P.*-V. xx, '97. p. 159.

wide. It is now broken in two pieces. The ornament is executed in exceedingly flat relief. The design of the lintel consists of a disc of interlacing ropes in the middle, flanked by two pairs of columns with twisted flutings which appear to support an entablature divided into discs and squares like a late Doric frieze. Below the disc and the columns is a border of square nail-head pattern above a rinceau of grape-vine. The ends of the lintel are decorated with pilaster-like designs bordered with reeds and rows of square nail-heads, which are carried down the jambs. The faces of the panels are adorned with triangles and rings. The door has a counter-sunk panel bordered on three sides with a running grape-vine, within which, over the panel, is the small figure of an eagle with raised wings. The panel itself, surrounded with a flat reed, contains an arch supported on two twisted columns, and having rosettes in its spandrils. Beneath the arch is a palm tree which fills the space. There is a small wafer on either side of the trunk of the palm tree. The grape-vine is a common motive in the Pagan and Christian ornament of Syria. The eagle was a favorite subject with the Nabataeans and the later inhabitants of Southern Syria and Arabia, and occurs frequently in the tomb-sculptures of Petra and Medâin Şâleḥ, the palm tree, often associated with emblems of Christianity, was certainly used by the pre-Christian peoples of Syria. Neither the cross, nor other purely Christian symbols, occurs among these designs.

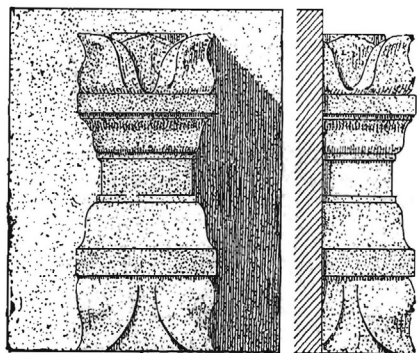
FRAGMENTS. Carved architectural fragments are not common among the ruins of Umm idj-Djimâl; yet a number of small details were found which are worth noting, and a few bits of sculpture were discovered which are enough to show that, in the Nabataean and Roman periods, the city was not barren of statues. A capital (Ill. 192) was found lying in the courtyard of House No. V, which has no counterpart, so far as my

knowledge goes, in all Syria. It is the cap of a square pier; its lines follow, in general, those of the Nabataean tombs of Medâin Şâleḥ.



SCALE: 1=10.

Ill. 192.

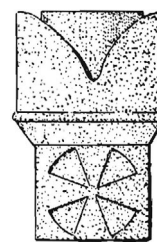


SCALE: 1=10.

Ill. 193.

protect the entrances from evil influences.

Another detail presented in a drawing¹ by Schumacher is the upper part of a small square shaft. This also has the form of the upper part of an altar (Ill. 194), but the cross represented in relief on one face marks it as Christian. It is probably the upper part of the post of a chancel rail from one of the churches. It was found between the Double Church and the Roman reservoir. Two real altars, both already mentioned in these pages,



Ill. 194.

¹ *Z.D.P.-V.* xx, '97. p. 161.

are presented in drawings in Div. III, under inscriptions 238 and 239. The first of these is an exceedingly plain pedestal with a tall and slender die having a Nabataean

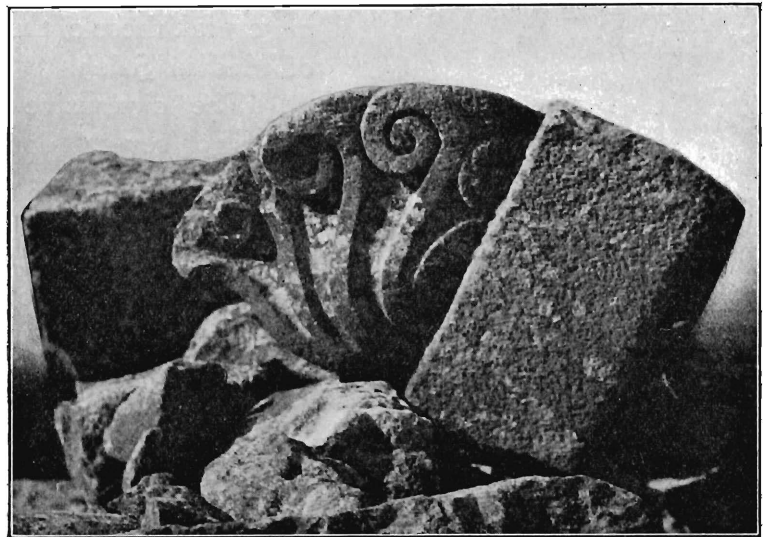


Ill. 195. Ionic Angle-Pilaster Cap.

scription¹ on one side and a Greek inscription on another, and with bevelled faces in base and cap. The second also has the pedestal form, but is more of the Classical type. Its base moulding, an inverted cyma recta, is elevated on a high plinth; one face of its die is ornamented with a wreath of leaves in relief, and its cap is a delicate cyma recta above a reed. The over-cap, or attic, is a plain block, one face of which bears a dove-tailed plate in relief containing a Greek inscription, dedicating the altar to Salmos, a Nabataean deity.

Another fragment worthy of mention is an Ionic pilaster cap (Ill. 195), which was found near the east wall of the barracks chapel, but which must have come from the southwest angle of the Numerianos Church, since a similar cap is still in place at the northwest angle. It is probable that both originally belonged to a building of the late Roman period; for they bear no resemblance to the Christian rendering of the Ionic order.

A corner acroterium (Ill. 196) was found lying in the courtyard of House XV. It is well executed in the hard black basalt, and is almost perfectly preserved. The acroterium is 32 cm. high, exclusive of its base, which is 19 cm. high, and measures 37 cm. along its base. This may have belonged to the roof of a building of the Nabataean period; for acroteria almost exactly similar were employed on the Nabataean gate, and on the Temple of Dushara at Sî', or it may be Roman, and might have belonged to the cover of a large monumental sarcophagus.



Ill. 196. Acroterium found in House No. XV.

¹ IV. Nab insc. 38.

The fragments of sculpture consist, almost entirely, of pieces of drapery, some of them well executed, others stiff and crudely wrought. One fragment, found outside the walls, near the chapel outside the East Gate, is the lower part of a torso (Ill. 197),



Ill. 197. Torso in Basalt.

from knees to waist, 40 cm. high. It belonged to a statue a little less than life size, and compares favorably with the remains of sculpture from about the ruined temples of the Djebel Haurân.