

A.H.	A.D.	Ruler.	Events and existing Monuments.
555 to 567	1160 to 1171	El-'Aḍid 'Abd-Allah	Nūr-ed-dīn's expeditions to Egypt, 559, 561. Saladin in Egypt, 561. Burning of El-Fustāt, 564, for fifty days, to save its falling into the hands of Amaury, Christian King of Jerusalem.

## VI.—HOUSE OF AYYŪB.

## (EGYPTIAN BRANCH.)

567	1172	En-Nāṣir Salāh-ed-dīn [Saladin] Yūsuf ibn Ayyūb	From 567-9 owns homage to Nūr-ed-dīn Annexation of Syria, 570. Crusades. <i>Citadel and 3rd Wall of Cairo.</i> <i>Restoration of Mosque of 'Amr.</i>
589	1193	El-'Azīz 'Imād-ed-dīn 'Othmān	Resists 4th Crusade. Syria separated.
595	1198	El-Mansūr Moḥammad	Reannexes Syria.
596	1199	El-'Ādil Seyf-ed-dīn Abu-Bekr ibn Ayyūb	
615	1218	El-Kāmil Moḥammad	Defeat of Jean de Brienne. <i>Tomb of Esh-Shāfi'y, 608.</i> Jerusalem ceded to Frederick II., 626.
635	1238	El-'Ādil Seyf ed-dīn Abu-Bekr II.	
637	1240	Eṣ-Ṣāliḥ Negm-ed-dīn Ayyūb	Jerusalem recaptured. Crusade of St. Louis. <i>College Eṣ-Ṣālihiya, 641.</i> Castle of Er-Rōda.
647	1249	El-Mu'aḍḍham Tūrān Shāh	Defeat and capture of St. Louis at Mansūra, 647. <i>Tomb Mosque of Eṣ-Sāliḥ, 647.</i>
648 to 650	1250 to 1252	El-Ashraf Mūsā (nominally joint king with the Mamlūk Sultān Aybek)	

## VII.—THE MAMLŪK SULTĀNS.

## A.—BAḤRY OR TURKISH LINE.

648	1250	Queen Sheger-ed-durr	Syria separated.
648	1250	El-Mu'izz 'Izz-ed dīn Aybek	
655	1257	El-Manṣūr Nūr-ed-dīn 'Aly	
657	1259	El-Muḍḥaffar Seyf-ed-dīn Ḳuṭuz	War with Hülāgū the Mongol. Syria annexed. Antioch taken.

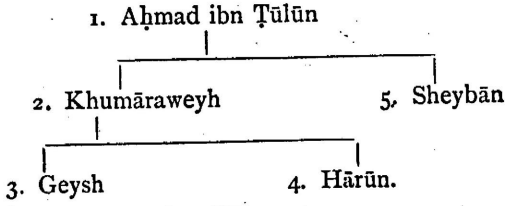
A.H.	A.D.	Ruler.	Events and existing Monuments.
658	1260	Edh Dhāhīr Rukn-ed-dīn Beybars I.	Campaigns against the Mongols and Christians. <i>Mosque of Edh-Dhāhīr</i> , 665-7. <i>Collegiate Mosque Edh-Dhāhīriya</i> , 660.
676	1277	Es-Sa'īd Nāṣir-ed-dīn Baraka Khān	
678	1279	El-'Adil Bedr-ed-dīn Selāmish	
678	1279	El-Mansūr Seyf-ed-dīn Qalāūn	<i>Mosque of Kalāūn, Māristān or Hospital</i> , 683. Campaign in Syria; sack of Tripoli. Capture of Acre, 690.
689	1290	El-Ashraf Ṣalāh-ed-dīr Khalīl	
693	1293	En-Nāṣir Nāṣir-ed-dīn Moḥammad. <i>1st reign</i>	
694	1294	El-'Adil Zeyn-ed-dīn Ketbughā	
696	1296	El-Manṣūr Ḥusām-ed-dīn Lāgīn	<i>Restoration of Mosque of Ibn-Tūlūn</i> . Defeat of Mongols in Syria.
698	1299	En-Nāṣir Moḥammad. <i>2nd reign</i>	<i>Collegiate Mosque En-Nāṣīriya</i> , 698—703.
708	1309	El-Mudhaffar Rukn-ed-dīn Beybars II.	<i>Monastic Mosque of Beybars</i> , 706.
709	1310	En-Nāṣir Moḥammad. <i>3rd reign</i>	<i>Mosque of En-Nāṣir in citadel</i> , 718. Persecutions of Christians and destruction of churches. <i>Mosques of the Amīrs Kūsūn</i> , 730; <i>El-Māridāny</i> , 738-40; <i>Singar El-Gāwaly and Salār</i> , 723 ff.
741	1341	El-Mansūr Seyf-ed-dīn Abū-Bekr	
742	1341	El-Ashraf 'Alā-ed-dīn Kūgūk	
742	1342	En-Nāṣir Shihāb-ed-dīn Aḥmad	
743	1342	Eṣ-Ṣalīḥ 'Imād-ed-dīn Ismā'īl	
746	1345	El-Kāmil Seyf-ed-dīn Sha'bān	
747	1346	El-Mudhaffar Seyf-ed-dīn Ḥāggy	<i>Mosque of the Amīr Aḥsunkur</i> , 747-8.
748	1347	En-Nāṣir Nāṣir-ed-dīn Ḥasan. <i>1st reign</i>	
752	1351	Eṣ-Ṣalīḥ Ṣalāh ed-dīn Ṣalīḥ	
755	1354	En-Nāṣir Ḥasan. <i>2nd reign</i>	<i>Mosque of Sultān Ḥasan</i> , 757-60. <i>Mosques of the Amīrs Sheykhū</i> , 756, and <i>Suyurghatmish</i> , 757.
762	1361	El-Manṣūr Ṣalāh-ed-dīn Moḥammad	
764	1363	El-Ashraf Nāṣir-ed-dīn Sha'bān	<i>Mosque of Umm-Sha'bān</i> .
778	1377	El-Manṣūr 'Aīā-ed-dīn 'Aly	
783	1381	Eṣ-Ṣalīḥ Ṣalāh-ed-dīn Ḥāggy deposed by Barkūk 784/1382, but restored, 791, with new title of El-Manṣūr Ḥāggy, and finally deposed by Barkūk, 792.	
to			
792	1390		

## B.—BURGY OR CIRCASSIAN LINE.

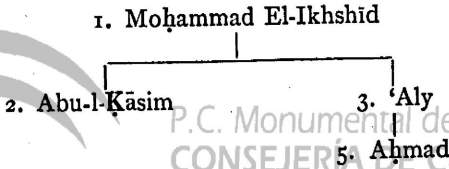
A.H.	A.D.	Ruler.	Events and existing Monuments.
784	1382	Edh-Dhāhir Seyf-ed-dīn Barḳūḳ (interrupted by Ḥāggy, 791-2)	<i>Tomb Mosque of Barḳūḳ.</i> <i>Collegiate Mosque Barḳūḳīya</i> , 786. War with Tīmūr (Tamerlane).
801	1399	En-Nāṣir Nāṣir-ed-dīn Farag. <i>1st reign</i>	Peace concluded with Tīmūr.
808	1405	El-Manṣūr 'Izz-ed-dīn 'Abd-el- 'Aziz	
809	1406	En-Nāṣir Farag. <i>2nd reign</i>	
815	1412	El-'Ādil El-Musta'in (the Khalif)	
815	1412	El-Mu'ayyad Sheykh	<i>Mosque of El-Mu'ayyad</i> , 818-23. Campaigns in Syria.
824	1421	El-Mudhaffar Aḥmad	
824	1421	Edh-Dhāhir Seyf-ed-dīn Taṭār	
824	1421	Eṣ-Ṣālih Nāṣir-ed-dīn Moḥammad	
825	1422	El-Ashraf Seyf-ed-dīn Bars Bey	<i>Collegiate Mosque El-Ashrafiya</i> , 827. <i>Tomb Mosque of Bars Bey.</i> Expedition against John, King of Cyprus, 827.
842	1438	El-'Aziz Jemāl-ed-dīn Yūsuf	
842	1438	Edh-Dhāhir Seyf-ed-dīn Gaḳmaḳ	
857	1453	El-Manṣūr Fakhr-ed-dīn 'Othmān	
857	1453	El-Ashraf Seyf-ed-dīn Ināl	
865	1461	El-Mu'ayyad Shihāb-ed-dīn Aḥmad	
865	1461	Edh-Dhāhir Seyf-ed-dīn Khōsh- kadam	
872	1467	Edh-Dhāhir Seyf-ed-dīn Bilbāy	
872	1467	Edh-Dhāhir Temerbughā	
873	1468	El-Ashraf Seyf-ed-dīn Ḳāit Bey	<i>Mosque of Ḳāit Bey (intra muros).</i> <i>Tomb Mosque of Ḳāit Bey.</i> <i>Wekāla of Ḳāit Bey.</i> War with the Ottoman Turks, who were repeatedly defeated.
901	1496	En-Nāṣir Moḥammad	
904	1498	Edh-Dhāhir Ḳānṣūh	
905	1500	El-Ashraf Gānbalāṭ	<i>Mosque of the Amīr Ezbek</i> , 905.
906	1501	El-'Ādil Tūmān Bey	
906	1501	El-Ashraf Ḳānṣūh El-Ghōry	<i>Mosque and Tomb Mosque Ghōryya</i> , 909. Battle of Marg-Dābik, and defeat of Mamlūks by Selīm I. Invasion of Egypt.
922	1516	El-Ashraf Tūmān Bey	
922	1516	Egypt annexed by the Ottoman Sultān Selīm.	

GENEALOGICAL TREES OF THE FAMILIES REIGNING IN EGYPT.

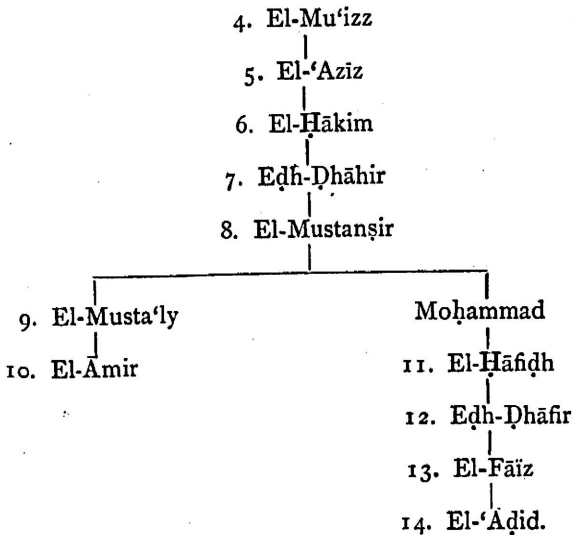
HOUSE OF TŪLŪN.



HOUSE OF IKHSHĪD.

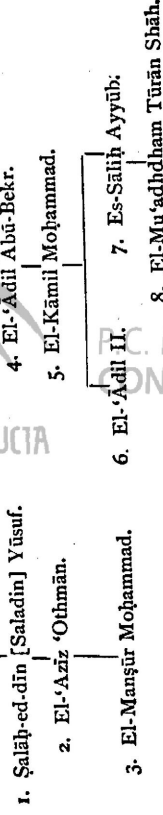


FĀṬIMY KHALIFS.



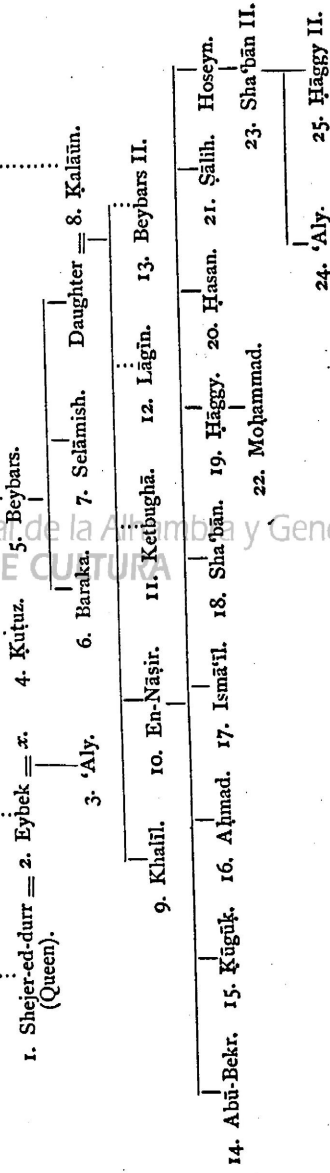
HOUSE OF AYYÜB.

Ayyüb.



BAĪRY MAMLŪKS.

(A dotted line denotes the relation of master and slave.)  
Es-Şāliḥ Ayyüb. (See above.)



The Bury Mamlūks present some instances of a son succeeding his father, but as a rule the Sultans of this second line have no blood relation to one another.

## CHAPTER II.

### ARCHITECTURE.

THE arts of the Saracens are for the most part intimately connected with their buildings; they are chiefly employed for the decoration of their mosques and houses. Of the examples of Saracenic art that have come down to us, the large majority form part of the ornament and furniture of mosques, or, in a less proportion, of private dwellings. Thus wood-work mainly consists of carved panels from the doors of mosques, pulpits, ceilings, and the panelled doors and lattice windows of houses; the mosaics and marble ornament, no less than the stone carvings, are chiefly derived from the walls of mosques and other buildings. The finest ivory is found in the doors of Mohammadan pulpits and the screens of Coptic churches; glass is represented by mosque lamps and perforated stained windows; pottery is mainly displayed in the form of tiles on the walls of mosques and houses; and of existing textiles, the most important, though not native to Egypt, are the prayer carpets. The only branch of art industry that does not more or less share in this intimate connection with a building is the metal work, which includes many small objects which have no stated position, but might be placed anywhere without violating their natural intention; and even metal-work in Cairo is best seen in the embossed bronze doors of the mosques. As a whole, it may be said that the art of mediaeval Egypt was centred in the beautifying of its mosques and palaces, and that in most departments of artistic labour there is a certain architec-

tural relation which shows that the various objects were elaborated with a direct eye to their effect when in the mosque or house. Of course, it does not follow that because the extant examples of Saracenic art in the middle ages are chiefly of this decorative character, there was no art of a less obviously relative nature. The artists who carved the wood and ivory of the mosques must have employed their skill on other things as well. But the sanctity of the mosques has procured for them a measure of respect which has preserved much of their decoration comparatively perfect to the present century, and a similar protection was not to be expected in the case of mere portable articles of furniture which could be burnt and broken and melted with no imputation of sacrilege. Objects of art which form part of buildings, whether sacred or not, stand a far better chance of survival than movable things, and this is, no doubt, to a large degree the cause of the one-sidedness of Cairene art as we now study it. Another cause is the simplicity of the Mohammadan idea of furniture. A Muslim grandee had much fewer modes of gratifying his artistic tastes than an English nobleman. The law of his Prophet, in the first place, forbade luxury, prohibited gold and silver ornaments, rich silks, and sumptuous apparel; it was impious to paint or chisel the image of man or any animate creature; and if a prince were not strongly under the influence of his religion, yet the general custom of his countrymen, and the conservatism of the East, would restrain him from eccentric innovations in the embellishment of his palace. Divans offered little scope for the artist; their frames, if not constructed of ordinary masonry, were made of palm sticks, or an unornamented framework of wood; the coverings alone could be sumptuous. A little low round table formed almost the sole piece of movable furniture in the room; there were no chairs for the Egyptian Chippendale to exercise his fancy upon; no bureaux, sideboards, book-cases, mirrors, mantel-shelves, or other pieces of decorative furniture, to be carved or inlaid; the little dining-table, or, rather, stool, with

its round tray instead of a cloth, permitted no array of fine glass and silver, though the few dishes that could be ranged upon it were often of very exquisite workmanship, and inlaid with the precious metals. Thus it happened that in the house as in the mosque the chief skill of the artist was expended upon the decoration of the structure, by mosaics and tiles on the wall, painting the ceiling, panelling and carving the doors and cupboards, and designing the stained windows.

No examination of the industrial arts of Egypt, therefore, would be intelligent which did not start from a clear comprehension of the characteristics of the buildings round which they were grouped. In a work of the present scope it is of course impossible to attempt a history of Saracenic architecture, even in its Cairene development; such a task is worthy of the best endeavours of an architect, and would demand a volume to itself. It will be sufficient for the present purpose if the principal buildings of Cairo are briefly described in general classes, the chief distinctions of style and plan noticed, and a clear conception offered of what mosques and houses are like. For this purpose it will not be necessary to take many examples. A large number of the 300 mosques that still remain in various stages of preservation in that city offer no elements of originality, and not a few are modern and unworthy of study, except by those who would carry the history of an art down to its lowest stage of decadence. In houses we have unfortunately but a small choice to select from. Most of the noble palaces of the Mamlūk lords have long ago fallen to ruin, and there are now probably very few that can be called representative of the great period of Saracenic architecture. Still, while the palaces, for the most part, have passed away, there are here and there smaller houses of remarkable beauty, which preserve some of the best features of the true Cairo style.

The first idea of a mosque was extremely simple. The Prophet's mosque at Medīna consisted of a small square enclosure of brick, partly roofed over with wooden planks, supported on pillars made



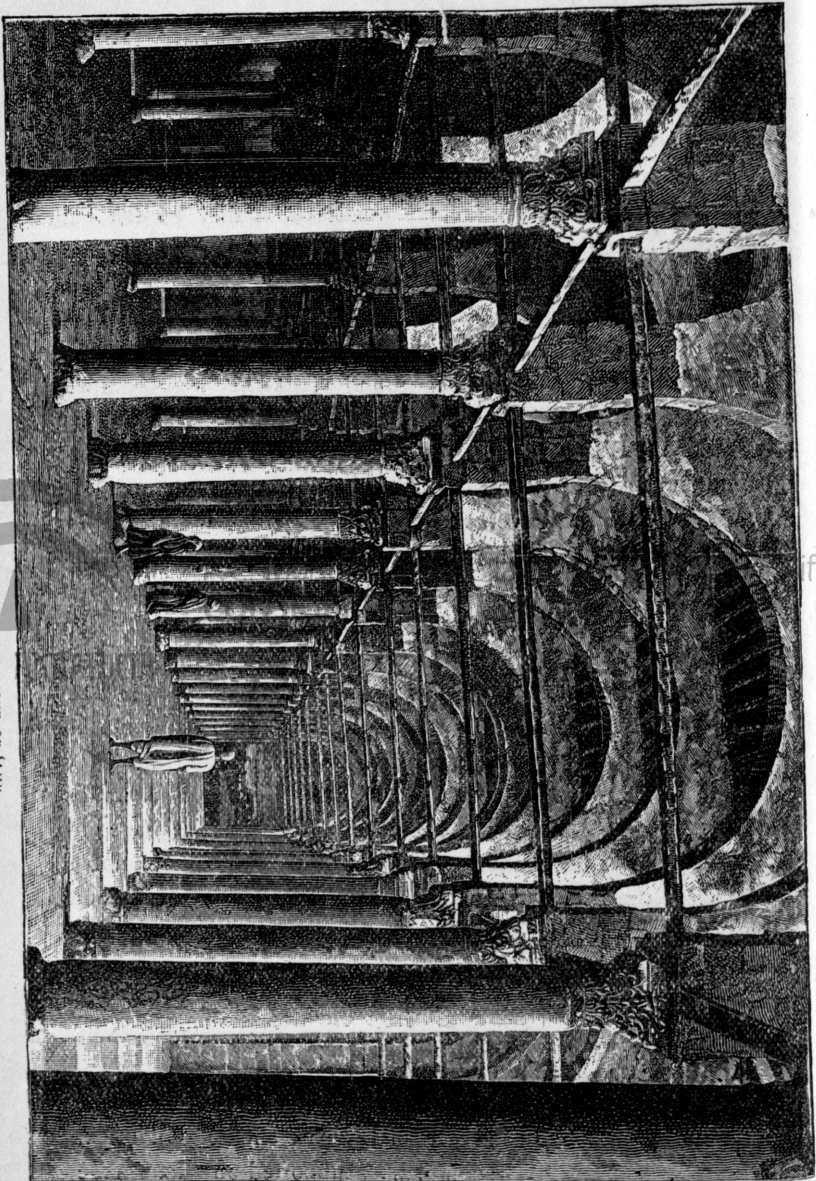


FIG. 2.—EAST COLONNADE OF THE MOSQUE OF AHR.

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of palm stems plastered over. All that was needed was retirement from passing scenes, and shade from the sun's rays. It was not necessary that the whole of the square court forming the mosque should be roofed in, for the number of worshippers who remained for any length of time in the mosque would be small, and, for the

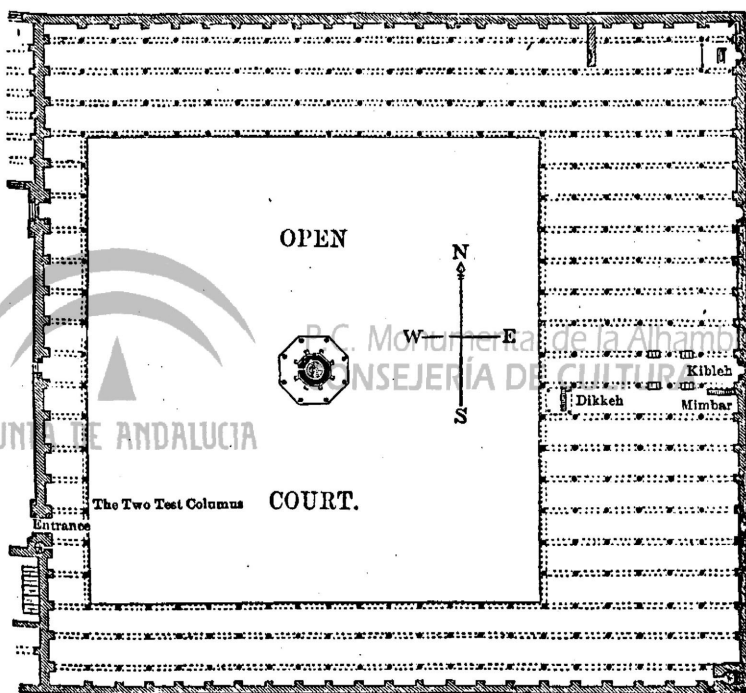


FIG. 3.—PLAN OF THE MOSQUE OF 'AMR.

brief periods occupied by the ordinary prayers, the open court could be used if the roofed portions did not afford space enough. The same principle was observed in the plans of the early mosques of Egypt. An open court for occasional use, and roofed cloisters for the regular congregation, were the essentials; and in the older

mosques in and around Cairo we find this plan carried out by a spacious open court surrounded on the four sides by covered colonnades or cloisters. The mosque of 'Amr at Fustât (or Old Cairo) has been so repeatedly restored that it is not safe to draw conclusions from its details; but it is certainly as old as the 10th century in its main outline, which consists of an immense court surrounded by covered colonnades (fig. 2). The mosque of Ibn-Tûlûn, which preserves, for the most part untouched, its original form and ornament as completed in the year 265 of the Hijra (A.D. 878), consists also of a vast open court surrounded by arcades or cloisters, which differ considerably in the details from the colonnades of 'Amr's mosque, but show the same general plan. The mosque of the Fâtimy Khalif El-Hâkim, finished in 1012, resembles that of Ibn-Tûlûn in plan and many of the details, and the Azhar, though frequently restored, preserves its original colonnaded court of 971. The mosque of Edh-Dhâhir Beybars, to the north of Cairo (1268), and that of En-Nâsir Mohammad in the Citadel (1318), are also of the arcade plan, resembling Ibn-Tûlûn, and the same form was adopted by Kûsûn (1329), El-Mâridâny (1339), and Aksunkur (1347), for their mosques in the first half of the 14th century, by Barkûk at the end of the same century for his tomb-mosque in the eastern cemetery of Cairo, and by El-Muayyad for his mosque (1420) in the Ghôriya, now in course of restoration.

The plan of an open court surrounded by colonnades is, as will be readily recognised, simply a survival of the ancient Semitic temple, as we see it in Phœnician and other ruins, and also in the porticos surrounding the Ka'ba at Mekka. The Arabs naturally adopted the form most familiar to them, and also best suited to the climate, and to the religious rites to be performed. This plan is universal in Egypt from the 9th to the 13th century, so far as extant buildings permit us to judge. From the 13th century the older plan shared the favour of the Cairene architects with a new form, which was, however, rather a develop-

ment of the former than a new departure. As space became more valuable in Cairo, and as architectural skill improved, and the art of spanning wide intervals by great arches became better understood, the cruciform mosque was naturally developed out of the old columnar or cloistered court. Instead of surrounding a spacious court with shallow arcades, a smaller court was enclosed by four deep recesses or transepts, each of which was covered by a single large arch; the plan thus resembles roughly a cross, of which the centre was formed by the open court, and the arms by the four covered recesses. A reason for this arrangement is perhaps to be found in the four sects into which the Mohammadans of Egypt were divided: for some of the cruciform mosques have inscriptions which show that a separate transept was allotted to Mālikis, the Hanafis, the Shāfi'is, and the Hanbalis. This plan seems to have been introduced into Cairo by the Ayyūby Sultans of the family of Saladin. The earliest examples are the buildings of El-Kāmil Mohammad, Saladin's nephew, whose collegiate mosque in the street known as Beyn-el-Kasreyn, or "Betwixt-the-Palaces," was erected in the year 1224. Two sides of this building were standing in 1845 when Mr. Wild made some sketches of the ornament, which he described as more like the Alhambra than anything he had seen in Cairo. The most famous extant specimen of the cruciform mosque is that of Sultan Hasan, built in 1356-9, where the arches opening into the transepts are of magnificent dimensions. Barkūk's medresa or collegiate mosque in the Beyn-el-Kasreyn, 1384, and the two mosques of Kāit Bey, one in the city, the other and more celebrated in the eastern burial-ground, one of the most beautiful monuments of Cairo (1472), also belong to the cruciform order, as does that of El-Ghōry (1503), besides many less important mosques.

The standard example of the *cloistered mosque* is that of Ibn-Tūlūn, the bold and massive style of which recalls our own Norman architecture. This is the oldest mosque of Cairo, or rather

of the quarter called El-Katâi', or "the Wards," which was the residence of the princes of the dynasty of Tûlûn, when Cairo was not yet founded. It occupies a space of about four hundred feet. The exterior is very plain, as is always the case with cloistered mosques. A high wall surrounds it on three sides, leaving a space of some fifty feet vacant between the wall and the mosque itself. The outer courts thus formed, in close resemblance to the plan of the Egyptian temple (as seen, for example, at Edfu), were intended to isolate the worshippers in the mosque from the noises of the street without. The front or east side is shut off from the street by houses and various apartments; and wash-rooms and other chambers for the mosque attendants or for worshippers block up part of the western outer court. The walls of the mosque have no ornament, except a crenellated or embattled parapet. Originally the mosque was entered by two doors in each of the three outer courts; the doors are simple and without any of the elaboration of later mosques.

Passing through the inner partition wall we find ourselves in a cloister or arcade looking into a magnificent court ninety-nine yards square (fig. 3), in the centre of which is a square stone building surmounted by a brick dome, which was built, however, a century later than the mosque itself, in the place of the original marble fountain covered by a painted dome resting on marble pillars. This vast court is surrounded on all four sides by arcades of pointed arches resting on piers of plastered brick. It is related that Ahmad Ibn-Tûlûn intended to have 300 columns for his mosque, but when he was informed that this would involve the destruction or dismemberment of numerous churches throughout the land of Egypt—for the Muslims took their pillars from Roman and Greek buildings—he abandoned the project. His chief architect, a Copt\*, whose religious sympathies may have had something to do with Ibn-Tûlûn's clemency towards the Christian

\* It is worth remarking that the almost contemporary Nilometer was built by an architect from Ferghâaa.

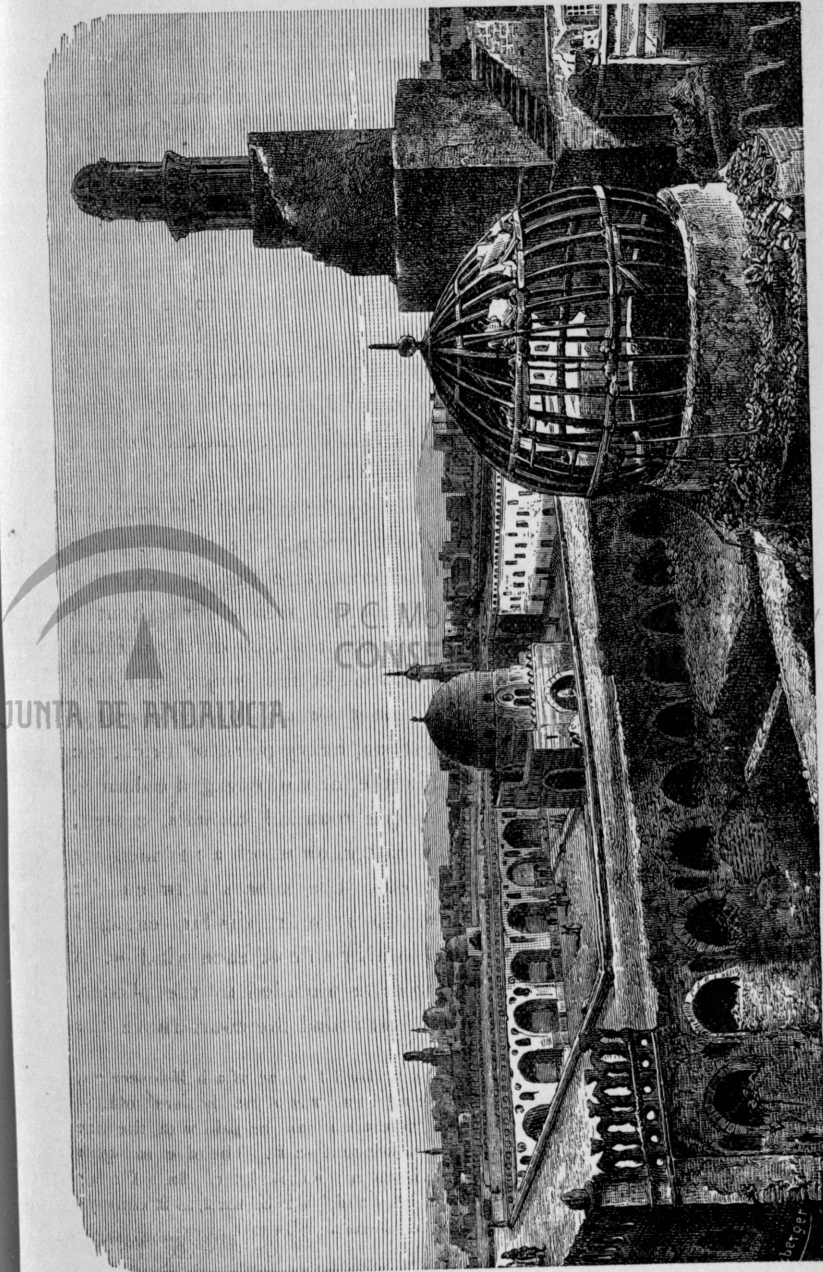


FIG. 4.—MOSQUE OF IBN-TULUN.

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churches, then undertook to build a mosque without columns, save two at the niche which marked the direction of Mekka; and when he had drawn his design on parchment, and shown it to the prince, it was approved; and he was given a dress of honour, and furnished with 100,000 gold pieces, or about £60,000 to build the mosque. He began the work in A.H. 263, and completed it in 265 (878), when he received a fee of 10,000 pieces of gold.\* It is clear from this account, which is derived from the historian El-Makrizy, that the mosque of Ibn-Tūlūn was the first experiment in brick piers instead of stone columns. Three sides have two rows of arches; the fourth, that which lies on the side towards Mekka, has five.†

All the rows of arches run parallel to the sides of the court, so that standing in the latter you look through the arches. The arches are all pointed (fig. 5), and constitute the first example of the universal employment of pointed arches throughout a building, three hundred years before the adoption of the pointed style in England. They have a very slight tendency to a return at the spring of the arch, but cannot be said to approach the true horse-shoe form. They rest on heavy piers of brick, the four corners of which are shaped in the form of engaged columns, with no bases, and only very simple rounded capitals, coated, like the rest of the building, with plaster, on which a rudimentary bud and flower pattern is moulded. The spaces between the arches are partly filled by windows with similar engaged columns and pointed arches. On either side of each window, in the face fronting the court, is a rosette moulded in the plaster, and a band of similar rosettes runs all round the court above the

\* By gold piece I mean a *dīnār*, a coin about the size of a half-sovereign, which then weighed 63 grains on the average, and was of nearly pure gold.

† As is well known, the prayers of Mohammadans are said with the face directed towards Mekka, which at Cairo means south-east. The older mosques are more correctly placed in the proper direction than the later. In referring to the Mekka side of a mosque the term "east end" will be used, as it conveys a more familiar idea to Europeans than south-east.

arches, over which is the embattled parapet. The faces of the arcades in the interior are somewhat differently treated. Round the arches and windows runs a knop and flower pattern, which also runs across from spring to spring of arch beneath the windows, and a band of the same ornament runs all along above the arches, in place of the rosettes, which only occur in the face fronting the court; over this band, and likewise running along the whole length of all the inner arcades, is a Kūfy\* inscription carved in wood, and above this the usual crenellated parapet. The arcades are roofed over with sycamore planks resting on heavy beams. In the rearmost arcade the back wall is pierced with pointed windows, which are filled, not with coloured glass, but with grilles of stone, forming geometrical designs, with central rosettes or stars; but it is not quite certain that these belong to the original mosque; they may have been introduced in one of the restorations which are known to have been made. To whatever period they belong, they may compare favourably in variety and beauty of design with any Gothic tracery in existence. With the exception of these grilles, the central fountain, and the two marble columns by the niche in the east end, the entire mosque is built with burnt brick, plastered on both sides.†

The Mekka side, which is the *ḥwān* or sanctuary, and specially the place of prayer, is deeper, as has been said, consisting of five arcades instead of two, and the arches fronting the court are

\* Kūfy is a form of Arabic writing, older in its general application than the ordinary cursive hand, which is termed Naskhy, though the latter existed contemporaneously with the Kūfy in the first century of the Hijra. Kūfy is a stiff rectangular monumental script, whilst Naskhy is rounded and flowing. An example of the former may be seen in fig. 9, and of the latter in fig. 10. The oldest Kūfy is more rectangular than the later, which allows various curves and tails which were not used in the earliest form of the character.

† The bricks, according to Mr. Wild's measurements, are small and flat, about  $7\frac{1}{2}$  inches long, by  $2\frac{1}{2}$  inches wide, and  $1\frac{3}{4}$  inches thick; the joints of mortar are very thick, generally about an inch. Wooden beams are introduced here and there to tie the brickwork together, especially at the spring of the arches.



filled almost to the height of the piers by wooden screens or partitions, which rail off the sanctuary from the court. It is ornamented in the same manner as the other arcades, except that the back wall, which in the other sides is plain, save for the grilled windows, in the east end was once carefully decorated, though at present little remains of the original mosaic and colour which El-Makrizy says were used for its embellishment.

The essential parts of the east end of a mosque are the *mihṛāb* or niche indicating the *kibla* or direction of Mekka, the *mimbar* or pulpit for the Friday sermon, and the *dikka* or tribune, a raised platform from which the Korān is recited and the prayers intoned by the imām or choragus. The niche is generally an arched recess in the centre of the east wall, richly inlaid with mosaics of marbles and mother-of-pearl, and often bordered with Arabic inscriptions. The niche of Ibn-Tūlūn is adorned with marbles of different colours. Very often the whole of the east wall is covered with ornament; dados of mosaic, friezes of inscriptions, panels of marble and tiles, are arranged with exquisite taste over the whole surface, broken only by the stained glass windows which form so beautiful a feature in the later mosques.

At each end of the sanctuary of Ibn-Tūlūn is a small minaret, and there is also a great stone minaret, in the west outer court, which has the unique peculiarity of an external winding staircase (fig. 4), reminding one of the traditional tower of Babel of the children's picture books. This is, however, quite phenomenal, and the ordinary minaret, which forms the most beautiful external feature of the Cairo mosques, if not, as Fergusson says, "the most graceful form of tower architecture in the world," has an internal winding staircase, and consists of a slender tower, constructed in several stories, which generally diminish in size and shape, from a substantial square at the base, through graduated octagons, to a cylinder or a group of dwarf columns at the top, on which is a small cupola surmounted

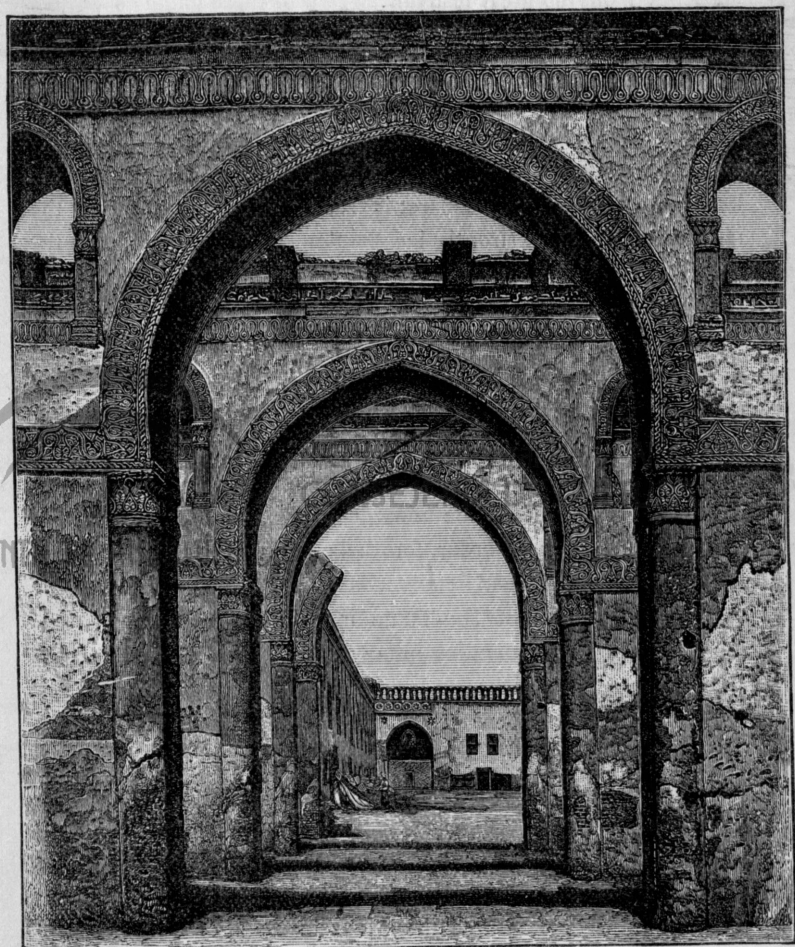


FIG. 5.—ARCADES IN THE MOSQUE OF IBN-TULUN.  
Ninth Century.

by a knotted pinnacle and crescent, with several wooden staffs fixed at angles to the round of the cupola, from which lamps are suspended on the great festivals. Two or three galleries project at various heights, supported by stalactite corbels and cornices, and from these the muezzin proclaims the call to prayer five times a day. It is recorded by El-Makrīzy that the first stone minaret in Cairo was that of the mosque of El-Māridāny, built by the Master Suyūfy—all the earlier ones being of brick.\* A very beautiful example of a minaret is seen in the engraving of the mosque of Kāit Bey (frontispiece). Sometimes the cupola at the top is fluted, as in a very pretty little minaret in the southern burial-ground of Cairo, which tapers upwards from the square by a series of diminishing octagons till the transition to the round can be gently effected. The transitions are ingeniously managed by those stalactite or pendentive ornaments, which are the peculiar property of the Saracenic architect, and are freely used to mask angles and to modulate such transitions as those in the dome and minaret. In describing the minaret we are, however, anticipating the true chronological order, for the earlier mosques do not present many of the graceful details which we see in that of Kāit Bey. The great minaret of Ibn-Tūlūn indeed diminishes by stages, but there are no stalactites in any part of this mosque, except over the *mihṛāb*, or niche, and these are probably a later addition.

Nothing has been said so far about the dome, and for this reason, that the mosque of Ibn-Tūlūn has none. It is a mistake to suppose that the dome is an essential feature of a mosque. The minaret is essential, because there must be a raised tower from which the *Adān* or Call to Prayer may resound over the city, though even this was dispensed with in the Prophet's own mosque at Medina, where the Muezzin Bilāl of the stentorian

\* El-Māri'āny's mosque is well illustrated in Ebers' *Egypt*, ii. 70; and the minaret is separately engraved in i. 61. It is converted from the square into an octagon very near the base, and thence at the first stalactite gallery into the round; above the second gallery (there are but two) is a stone neck or pinnacle, twelve courses high supporting a conical bulb-like crown.

voice shouted the call from the gate. A dome, however, has nothing whatever to do with prayer, and therefore nothing with a mosque. It is simply the roof of a tomb, and only exists where there is a tomb to be covered, or at least where it was intended that a tomb should be. Only when there is a chapel attached to a mosque, containing the tomb of the founder or his family, is there a dome, and it is no more closely connected with the mosque itself than is the grave it covers: neither is necessary to the place of prayer. It happens, however, that a large number of the mosques of Cairo are mausoleums, containing chambers with the tomb of the founder, and the profusion of domes to be seen, when one looks down upon the city from the battlements of the Citadel, has brought about the not unnatural mistake of thinking that every mosque must have a dome. Most mosques with tombs have domes, but no mosque that was not intended to contain a tomb ever had one in the true sense. The origin of the dome may be traced to the cupolas which surmount the graves of Babylonia, many of which must have been familiar to the Arabs, who preserved the essentially sepulchral character of the form, and never used it, as did the Copts and Byzantines, to say nothing of European architects, to roof a church or its apse. The form of the true Cairo dome is not quite the same as that of Italy and St. Paul's; like most Saracenic designs it is based upon simple geometrical proportions. To draw the outline of the ordinary type (fig. 6), to which, however, there are exceptions, describe a circle *A*, draw tangents *BB*, to the length of three-fourths of the radius, join the extremities, and from each of the extremities draw a circle *c*, the radius of which shall equal the whole diameter of the first circle plus an eighth; and where these circles intersect erect the pinnacle. The whole can be done with compasses and rule.

Domes are generally built of brick, not moulded to fit the curve, but simply laid each tier a little within the lower tier so as to form the proper curve; the plaster which coats most domes

inside and out conceals the slight irregularity of the brickwork. Wooden frames are also sometimes used to support the lighter plaster domes, as is shown in the foreground of fig. 4. Some domes, however, are of stone, which is cut to the shape of the curve, and carved with the desired pattern. As a rule I have observed that plain and fluted domes are of plastered brick, whilst those ornamented with zigzag, geometrical, and arabesque devices are more commonly of carved stone. The surfaces of the domes

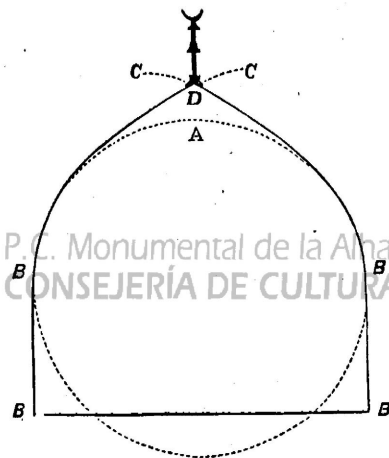


FIG. 6.—DIAGRAM SHOWING PROPORTIONS OF A DOME.

are ornamented in various ways. Sometimes they are covered with an intricate geometrical design, with star centres, as the domes of Kāit Bey and Al-Ashraf Bars-Bey in the eastern cemetery. A common decoration consists in bands of zigzags, or chevrons close together, running horizontally round the dome from base to apex, such as we see in the tomb-mosque of Barkūk (1407). Many domes are fluted, and these would seem to belong to all periods of Cairo architecture, for we find the fluted cupola surmounting the *mibkharas* or quasi-minarets of the mosque of El-Hākim (1012; but these may belong to the

restoration, in 1303, when it is known that the mibkharas were shored up with massive bases), and also in domes in the southern burial ground, which apparently belong to the end of the 15th century. A rarer and late form of dome ornament consists in covering the whole surface with arabesques arranged in large outlines, which form a sort of diaper, with a much richer effect than mere geometrical ornament. There are a few

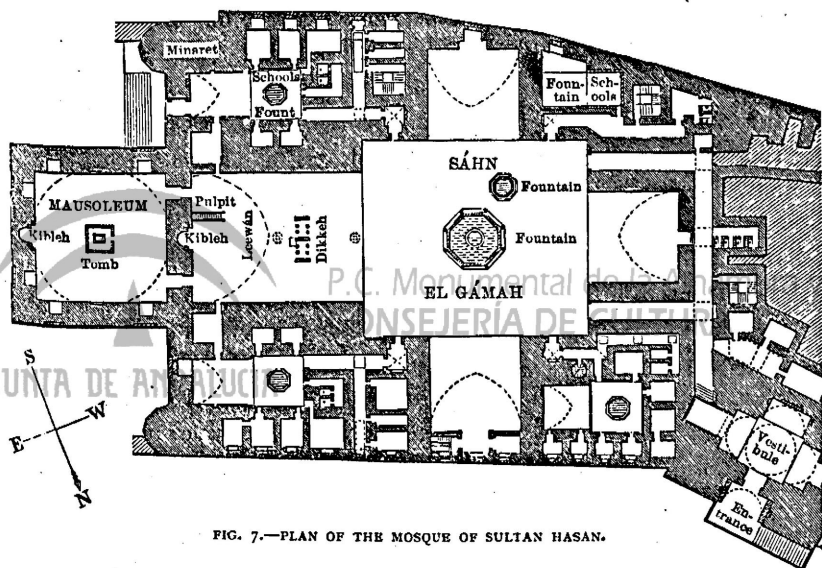


FIG. 7.—PLAN OF THE MOSQUE OF SULTAN HASAN.

examples, which are probably of very early date, with a lantern pierced with small windows, and roofed with a little fluted cupola on the top of the larger dome. These are in the southern burial-ground, but are in so ruined a condition that there remains no evidence as to their date that can be regarded as positive. Certain characteristics of the stalactites, however, lead to the belief that they may belong to the Ayyuby period (1170—1250). Some of the more elongated domes have a second and lower dome structure inside them, from which spring

walls to support the outer dome. "The dome," as Franz Bey remarks, "is blended with the quadrangular interior of the mausoleum by means of pendentives [stalactites]; while externally the union of the cube with the sphere is somewhat masked by the polygonal base of the dome. In some cases the transition is effected by means of gradations resembling steps, each of which is crowned with a half-pyramidal excrescence of the height of the step. These excrescences might be regarded as external prolongations of the pendentives of the interior, but do not correspond with them in position. The architects, however, doubtless, intended to suggest some such connection between the internal and external ornamentation." Sometimes the dome is set simply on the cube of the building with no gradation at all. A row of windows commonly surrounds its base.

We have digressed thus far in order to finish what had to be said on the subject of domes, which form, with minarets, the most prominent features of Cairo architecture. As has been remarked, they are not found in the mosque of Ibn-Tūlūn, nor indeed in most of the cloistered mosques. That of El-Hākīm has no dome, nor have the Azhar, the mosque of En-Nāsir in the Citadel, that of El-Māridāny, and several others, owing to the absence of tomb-chapels. Barkūk and El-Muayyad are buried in their mosques, and domes are therefore proper. There is a domed structure, indeed, in the centre of the court of Ibn-Tūlūn, but the date of this is much later than the mosque; and it is a question whether the original dome built in this place by Ibn-Tūlūn was not intended to cover his own tomb: when he died, and was buried in Syria, the domed edifice may have been converted into its present use as a fountain for ablutions. There is, however, a feature in the cloistered mosques, or in some of them, which has a close resemblance to a dome; this is a small cupola, which seems to have been not uncommonly erected over the niche. There is such a cupola over the niche in Ibn-Tūlūn, and though this is probably of the date of the restoration by Lāgin, in 1296, to

judge by the wooden stalactites which are found in no other part of the mosque, yet it is probable that the restorer only replaced an original cupola with one in the style of his own time. The Azhar University mosque, a century later than Ibn-Tūlūn, has a raised portion of the arcade over the *kibla*, which once carried a small dome or cupola, and the same feature is observed in the Citadel mosque of En-Nāsir Mohammad, where the cupola, which stood on high columns, has also disappeared. There are probably other examples with traces of this arrangement which have been overlooked; but it was not necessary or universal. These cupolas over the niche are not domes properly speaking, though they have the melon form; they are smaller than the true dome, and correspond rather to the lantern of a house.

The ornament of the cloistered mosque consists partly in the borders and frieze which run round and above the arches, and beneath the crenellated parapet; the capitals of the columns; and the geometrical grilles of the windows, of which Ibn-Tūlūn and Edh-Dhāhir Beybars offer very fine examples.\* Some beautiful grilles were still standing in the ruins of the mosque of Kūsūn in 1883, though the ex-Khediye had run a road through the bulk of this splendid edifice. These ornaments are in stone or plaster. In wood, the chief decorations are the Kūfy frieze, which may also be of plaster; the ceiling, which is often exquisitely painted and carved; the junction with the wall, masked by a cornice or stalactite corbels; and the pulpit. Mosaics and tiles are chiefly, or exclusively, used in and round the niche in the east end, and metal-work and carving are employed for the massive doors. All these several modes of decoration will be found described under their separate headings.

Of the principal examples of the cloistered mosque in Cairo, those of Ibn-Tūlūn, El-Hākim, and Barkūk have the arches supported on piers, and running at right angles to the side

\* See the plates in Bourgoïn's *Les Arts Arabes*, and Owen Jones' *Grammar of Ornament*. And for Kūsūn's grilles, see Prisse d'Avennes, pl. 46.



of the court; but the mosques of 'Amr, the Azhar, of En-Nāsir in the Citadel, of Kūsūn, El-Māridāny, El-Muayyad, and others, have columns instead of piers, and the arches sometimes run parallel with the court. The marble columns employed in mosques, which are often very numerous (the Azhar has 380 in the sanctuary alone), were generally abstracted from Roman buildings or Christian churches, with capitals of various orders, arranged with little regard to symmetry, and prolonged in a quaint fashion, if too short, by a pedestal or inverted capital used as a base. There is, however, a Saracenic capital, derived from simple Ptolemaic models, of a distinctive character. It is used both as a capital and as a base, and is contained by four surfaces proceeding in curves from the square abacus, and joining at the round of the column. Above the abacus of this, and also of Roman or Corinthian columns, is placed a second abacus of wood, joined from pillar to pillar by a wooden bar. The mosque of Barkūk is not only surrounded by arches on piers, but instead of a ceiling has a groined brick roof, which is very exceptional in mosques, though frequent in other buildings—as in the great stone city gate, the Bāb-en-Nasr.

The second style of mosque, with the *cruciform* plan (fig. 7), cannot better be exemplified than by the mosque of Sultan Hasan. This magnificent edifice, the loftiest and in some respects the most imposing in Cairo, was built during the years 1356—9, at the cost of 1,000 dīnārs of gold a day, and the legend is related that the Sultan took the futile precaution of cutting off the architect's hand in order to prevent any further efforts of his genius. The interior of the mosque consists of a cross, of which transept on the east side, which may be compared to a chancel, is larger than the three other arms, while the founder's chapel (over which is the dome) occupies the position of a lady-chapel behind the chancel. The outline of the founder's chapel is visible on the outside, but the cross-shape is not; the spaces in the right angles, between the four transepts or arms, are so filled with offices

and schools and other apartments (as is the case with most cruciform mosques) that the exterior has the form of an irregular oblong, the sloping outline of which is partly due to the line of the street which runs past the mosque to the Citadel which it confronts. The exterior walls from the base to the top of the cornice are about 113 feet high, and are entirely built of finely-cut stone brought from the Pyramids. The broad expanse of wall is slightly relieved by windows, of which the most prominent—those of the founder's chapel—consist of two horseshoe-headed lights, surmounted by a single round window, placed in a tall shallow recess, which is brought forward at the top to the face of the wall by stalactite corbelling supporting a trefoil arch. The other windows are plain rectangular grilles (sometimes as many as eight, one above another), similarly placed in tall shallow recesses with stalactite tops, or small circular windows set in square recesses. The eastern corners of the main building resemble polygonal towers, and the angles of the chapel are ornamented with graceful pilasters or engaged columns, carved in a spiral or twisted design, with stalactite capitals, reaching to nearly half the height of the wall. The cornice, which is unusually prominent in this mosque and forms one of its most beautiful features, consists of six tiers of stalactites, each overhanging the one below it, till the top projects some six feet; the coping is plain, without the usual crenellated parapet. The other external ornaments are—(1) the dome, which was rebuilt in the last century, and though large, is squat, and wholly unworthy of the mosque; (2) the two minarets, of which that on the south-east angle of the mosque is the tallest (280 ft.) in Cairo, a handsome structure, with two galleries, and a cupola on the summit, resting on graceful pillars, erected on a third gallery; another lofty minaret, over the portal, was thrown down by an earthquake in 1361, soon after its completion, killing three hundred children in the adjoining school; the other surviving minaret is a puny erection, and gives the mosque a lop-sided aspect; and (3) last, but by no means least, the splendid main

portal. This gateway, which is approached by some seventeen rather insignificant steps, laid sideways along the face of the wall,\* is the chief subject of external decoration in the mosque. It consists of a square arched niche, or recess, 66 feet high, open to the outside, and vaulted in a half sphere, which is gradually approached by twelve tiers of stalactites, ingeniously arranged so as to modulate the square recess into the semi-domed summit. At each side of the portal, on the outer wall, are tall borders of bold arabesques, with stalactite summits, and arabesque medallions at the base, running up the whole height of the portal. Beyond these on either side are geometrical panels, and then twisted corner columns with stalactite capitals, which bound the slight projection or buttress in which the portal is set. The inner angles of the gateway are decorated with smaller columns (not twisted), with stalactite capitals and borders of fine geometrical and arabesque (fig. 8) designs. On either side of the niche, inside, is an arched recess for the doorkeepers, set between columns, and surmounted by stalactites and patterns of coloured stone, and over the central bronze-plated door, which leads into the mosque, is a window with similar side columns and stalactites. The surfaces of the interior walls of the gateway are variegated by alternate courses of black and white marble.†

Passing into the mosque, through a handsome vaulted vestibule and some bent passages, we find ourselves in the hypaethral court, or *sahn d-gâmi*, which is 117 feet long by 105 feet wide. It is

\* These were put up in 1422. The original platform and steps had been destroyed, together with the galleries of the minarets, by Bârkûk, in 1391, in order to prevent the military factions using the lofty position afforded by the mosque as a battery upon the Citadel opposite. Guns have been frequently engaged between the Citadel and the mosque; and some of Napoleon's shot can still be seen embedded in the wall. The original bronze door and lantern were also removed during the period of interdict referred to, and were bought by the Sultan El-Muayyad for his own mosque.

† Fair views of Sultan Hasan's mosque, exterior, portal, and interior, may be seen in Coste, *Architecture Arabe*, pl. 21-6; Ebers' *Egypt*, i. 238, 262, 268; and my supplement to *Picturesque Palestine, Sinai, and Egypt*, entitled *Social Life in Egypt*, 95.



FIG. 8.—ORNAMENT FROM THE PORTAL OF SULTAN HASAN.

UNTA DE ANDALU

Alhambra y Generalife  
U.A.

paved with marble slabs and medallions arranged in various patterns. In many mosques massive granite slabs taken from the ancient temples of Egypt, and sometimes carved with hieroglyphics, are laid in the pavement, especially at the threshold. In the centre is a *meyda*, or tank for ablutions, crowned by a ruinous plastered wood cupola, resting on eight marble columns, by the side of which stands a smaller octagonal fountain, or *hanafiya*, with taps, for the use of the sect of the Hanafis, who require running water for their washings preparatory to prayer. Each of the four transepts, opening out of the court and raised a step above its level, consists of a single deep arch, the arching being continued throughout the whole depth of the transept. On either side of the north, south, and west transepts is a door set in a stalactite recess, with windows over it. The transept at the east end is larger and loftier than the other three. It is ninety feet high, ninety feet deep, and sixty-nine feet wide. The framework of this vast arch is stated to have cost 100,000 francs. Like the rest of the mosque, the interiors of the transepts are built of brick plastered over; but the facing of the arches (where every third course is coloured red) is of stone, and the walls which connect and surround the arches, forming the square outline of the court, are also of stone, but are plastered over. The coping of the court is formed by an embattled parapet. The smaller transepts are almost plain, but the chancel or sanctuary at the east is adorned with a marble dado, which runs round it to the height of about four feet; and the east wall or back of this is richly decorated with marble slabs, which rise to the height of thirty feet, and are arranged in rectangular panels and borders of contrasted colours, black, white, and yellow. In the centre of the east wall is the *mihrab*, or niche, indicating the direction of prayer towards Mekka.\* This consists in a semicircular recess about six feet wide, the front edges of which are composed

\* This direction or point of the compass is called the *kibla*, and the common application of this term to the niche itself is an error.

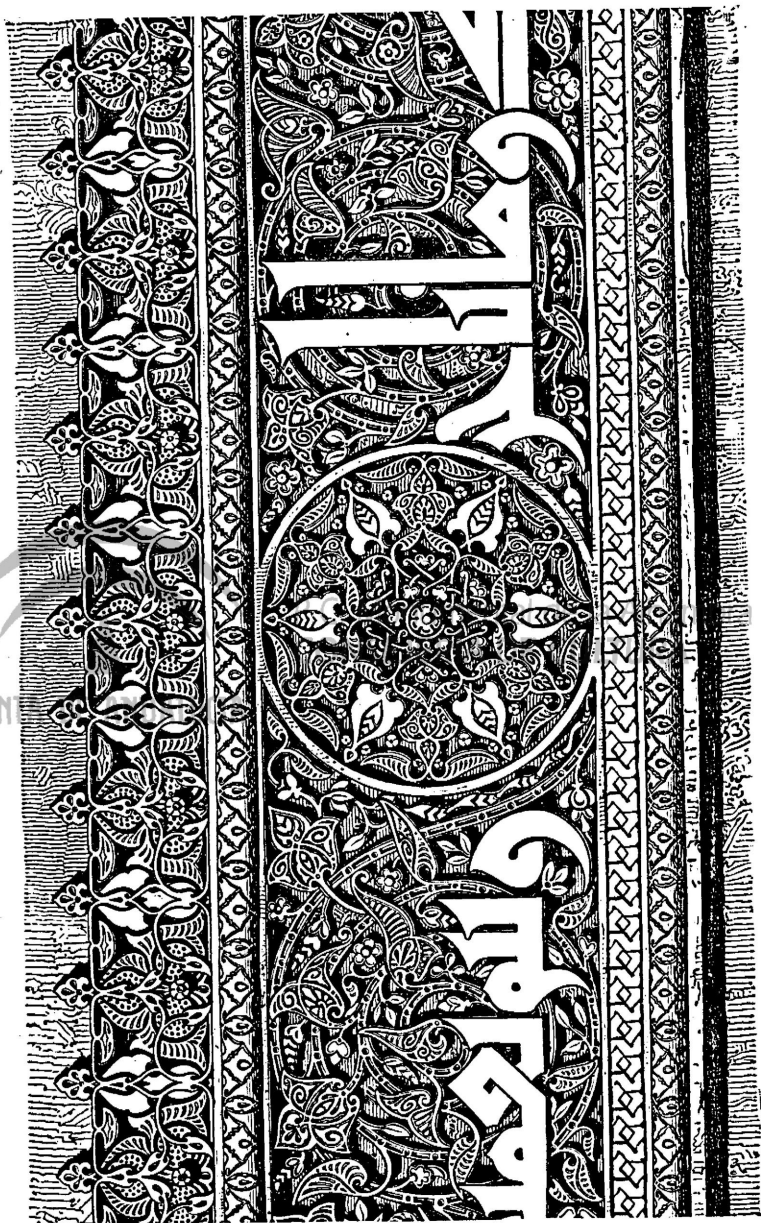


FIG. 9.—KUFIC FRIEZE IN MOSQUE OF SULTAN HASAN.  
Fourteenth Century.