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THE MOSQUE OF IBN TULUN

As you enter the Mosque of Ibn Tulun your mind travels back a thousand years, and you stand in imagination within the great new building, white and beautiful, with its lace-like ornaments, crisp and clear, just as it left the hands of the architect and his co-operators; you hear a murmur of prayers and you see the vast area thronged with the white turbanned forms of men, bare-footed and with bowed heads paying reverent homage to "Allah, the compassionate, the merciful."

The building of the mosque was begun in the year A. D. 876, or according to a table given in Stanley Lane-Poole's "Cairo," in the year 263 of the Hegira, that is to say, early in the Mohammedan era. We can fix the time by remembering that King Alfred reigned from 871 to 901.

Ahmed Ibn Tulun had not been in office as governor more than a few years when he ordered the building of the mosque, partly because the original mosque of Amr, being of narrow dimensions, had become far too small for the number of worshippers, and partly, because he was a promoter of buildings, and considered that a great mosque in Fostat would add to the "dignity" of Egypt.*

Now the character of the man who ordered the building of this great mosque so soon after taking office and while he was conquering Syria, is comparable in its better elements to that of one whose loss, two years ago, the whole British Empire mourns. He was a man who knew what he wanted and carried out his plans with determination.

Of Ibn Tulun, Sir William Muir, in his *Caliphate*,

* It is true that Al Makrizy the Arab historian, who lived about A. D. 1420, speaks of a mosque called the *Mosque of the Camp*, but of this there is no trace. It is a pity there is no English translation of the generally accurate Al Makrizy.

writes thus: "A wise and able ruler, the land flourished under his government as it had never done before. The revenues instead of passing to Baghdad, were expended in public works at home; buildings, canals, and charities were the object of his care"; and Lane-Poole says that one of his chief aims was "to give the fellahin better security in their land." This was exactly the aim of Lord Kitchener in his Five-Feddan law.

Ahmed did not appear to have any committee, but he had no sooner given the order to build, than he found himself deeply perplexed and had to have consultations with at least his architects and masons. So great a mosque would require some three hundred of columns, to obtain which, in the usual manner, would necessitate the wholesale destruction of churches and other buildings which had columns as a part of their structure; but Ibn Tulun was politic, as well as a man acquainted with the arts and learning of his day and, although he could be ruthless when he deemed necessity demanded it, he promptly vetoed the destruction of other buildings in order that he might be supplied with material to build his own grand mosque. Herein he showed both political and religious wisdom; but what was to be done?

It was at this point that news of the governor's dilemma came to the ears of an architect, a Copt who was languishing in prison. He, too, was a man of parts and, longing to be at work again, conceived the idea of building a mosque in brick and declared that he would dispense with columns but would support his arches on brick piers. But he stipulated that four small columns should be found for the Mihrab or praying niche. Word was sent to the great governor, who ordered the architect's release and set him to work on his plans. Ahmed was satisfied with the design and provided 100,000 dinars for the building, a sum equal to about £100,000 of to-day and paid the architect, beforehand, ten per cent on the outlay or £10,000. Having completed the building in about two years, the fair-minded governor gave him, beside all this, as recorded in Lane-Poole's "History of Egypt," "a handsome allowance for life."

The site chosen for the mosque was nearly one mile and three quarters from the only mosque, (save the camp mosque) that of Amr, then existing in a north-easterly direction and about nine-hundred yards due west from the high salient of the Mokattam hills on which, at a later date, Sal-ah-al-Din built his citadel. The ground was high, an undulating rocky continuation of the foot of the citadel spur, affording an excellent rock bottom, above the infiltrations of the waters of the Nile for the foundations of the walls. This, together with the solidity of the brickwork, accounts for the comparative soundness of the walls after eleven hundred years.

By courtesy of Mr. Patricola, architect to the *Comité de Conservation des Monuments de l'Art Arabe*, I have been enabled to take levels of the foundations and find that the rock surface has a fall from east to west of 17 ft., 6 in. The foundations everywhere go down to the rock.

The area taken up by the mosque and its precincts is nearly a true square, measuring about 530 feet by 533 feet and containing over six and a half acres of land. At first the building was surrounded by cleared ground, access being had to it by several doorways in each of the surrounding walls, and, later, streets were formed on each of the four sides, along which we can picture the youthful but grave looking governor proceeding from his palace hard by, at the hour of prayer, attended by his hundred gaily-clad-men-at-arms, astride their richly caparisoned horses.

The plan of the mosque was arranged as follows: Imagine a large inner court measuring 302 feet by 300 feet, nearly square; in the middle of this court stands the "fountain," 46¼ feet by 41¾ feet. The court is surrounded by covered arcades (called *liwans*, oratories, aisles, or places of devotion). There are five on the south-eastern side and these, with the Mihrab on the outer wall facing Mecca, formed the sanctuary; on each of the other three sides there were two arcades. Thus the mosque has a central court of two acres, and abutting it arcades covering two and one-third acres—a

great place for religious gatherings, indicative of the spacious times inaugurated by the son of Tulun.

In designing a building which was to be materialised out of the black clay of the borders of the Nile and the nodules of gypsum about the quarries of Tourah and Massarah, much artistic power was shown. These were the simple materials which the architect saw as he lay in the darkness of his prison, and saw them fashioning themselves into his fine, originally designed, yet simple building. The bricks were made near at hand and burnt into a deep red color. The foundations were laid on the rock as stated. The thick walls and stout piers were built and the arches were turned in rather thick mortar joints, somewhat irregular at times betokening a certain amount of hurry. The brick bond was what we call "English bond", but really old Egyptian, for it was a method of bricklaying practiced many thousands of years before by the ancient Egyptians. The columnar idea was not lost sight of; the designer saw that a great rectangular pier with sharp corners would look heavy, so at each corner the courses of bricks were shaped and formed into engaged columns making, with the body of the pier, a homogeneous whole and herein the architect, as in other details, showed true artistic power, for there was much more art in his able manipulation of brick, than there was in his subsequently applied ornaments of gypsum, good and of artistic proportions though that was. It should be noted that the architect's ornament was frank, it was not applied as a pretence for stone or marble.

There are two minarèts, the principal one being in the north-western outer court and a small one on the eastern corner of the mosque.

The building is about fifteen minutes' walk from the tramway station at the Citadel, or it can be pleasantly reached from Mohammed Aly street, through Helmia, Siufia and Rokbia streets, in continuation of one another. Reaching Tilun street at right angles you turn to the right and walk on until you come to Watawit street, where you turn to the right again and you are soon at the

steps to the mosque, at the end of a short blind alley. The streets here named are very interesting, both in old buildings, shops and work places, affording a picture of the industrial Cairene life of to-day, which has continued, with probably but little alteration, since the once high class residential quarter became the quarter of workingmen and shopkeepers a few centuries ago.

Having reached the blind alley, glance at the old stone-built houses adjoining the entrance, the one on the right is the most interesting, being a good specimen of mediaeval domestic and gives an idea of the class of residential house that was built in the middle ages. To see this house properly, you must enter its court yard through a dark passage, and then go up into the two "salons", having good, decorated woodwork in ceilings and niches. This house might have been the residence of the Chief Sheikh of the Mosque.

Now mount the steps to the mosque and enter the door at the top which opens at the south-eastern end of the outer courts. On the right is the north-eastern curtain wall, with houses built against the outer side of the greater part of it. On the left is the north-eastern wall of the mosque. At the end of the vista of the fore-court is the old well of the mosque, about 16 metres deep, with its broken *sakieh* wheels near by. Note the top of curtain wall. It has an interesting, deep, open-work parapet or cresting in brick, which, while the design is not good, shows a power in the manipulation of brick. Look at the elevation of the mosque on your left, with its round, star-like ornaments, its windows, niches and a parapet similar to that of the curtain wall.

Now cross the court diagonally to the wide, doorless portal of the mosque. Go up the few steps, stand on the top step and look up to the soffit or ceiling of the doorway, still in its place. It is made probably of Lebanon wood, two inches thick, framed in several widths, and skilfully tongued together and well carved in a pannelled pattern, with very conventional floriations. Note particularly the holes about three inches in diameter at either end. In these holes the wood

pivots of the great doors originally turned. There are three more of these soffits. The ornament though similar in design, is quite different from the plaster ornament; it shows the feeling of the wood-carver as contradistinguished from that of the modeller in plaster. A good piece of ornamental joinery of ancient times.

From this inner entrance, walking straight on between the arcading, and passing four arches, one comes on the left to a very ornate but shallow niche in gypsum modelled against the south-east (Mecca-facing) wall of the mosque. This is not the principal niche. It was built later to commemorate the lady (*sitt*) Nafisa. It has inscriptions and, like four other niches built against some of the sanctuary piers on either side of the sanctuary or principal mihrab, is one of the supplementary praying niches added at a later date. Some of these niches are much dilapidated, but their ornament and the varied character of their lettering are interesting.

Further on is a door leading to a dark room of no interest. In the middle of the wall one comes to the mihrab or principal praying niche. It is also called the kibra which means that it gives the direction toward Mecca. This niche should be carefully noted. It is the original and has been repaired more than once. Lane-Poole says in a note in his *Cairo* that "El Afdal built a mihrab in 1904," but that may mean one of those mentioned above. The niche juts out at the back from the main wall. The plan is semi-circular, somewhat deeper than usual; it is flanked by two marble columns on either side with finely carved capitals of Byzantine character, probably taken from some pre-existing building. Up to a height of nearly nine feet the niche is lined with red, green, white and black marble in narrow widths, set in pleasing patterns emphasized by little fillets, with rounded edges slightly projecting. Above the lining comes a band of gold mosaic, twenty-two inches wide, containing an Arabic inscription (in a character later than the Kufic), in black—"There is no God but God and Mohammed is his Prophet." The inscription is very well done (now somewhat broken) and

is relieved with ornaments and points in red, green, white and pearl, the whole is bordered with a guilloche ornament, having pearl roundels. Above the inscription is a semi dome, lined with thin boards and ornamented in colour. This, while the shape is good, is an indifferent piece of work and makes a poor substitute for the mosaic that was, probably, intended but left unfinished like many other old works in Egypt and elsewhere. The bold, now partly broken, plastered ornament, surrounding the niche, shows by patches of colour, that it was at one time painted and had a character given to it which it now lacks. From this point lift up your eyes to another inscription, beautifully carved in raised Kufic characters in wood. The reading being the same as in the mosaic inscriptions below. Above this comes a large, painted ornamental panel, probably intended for painted inscriptions though none are now visible and its Persian-like ornament is indistinct. Above this again runs a cornice or shallow gorge-and-roll in gypsum ornamented in relief and above this again a wood fascia in three boards, two feet eight inches wide, the middle board of which is carved with Koranic texts in raised Kufic letters similar to that described above. Note especially here, that the ornamental gypsum gorge, the wide wood fascias and the Kufic inscriptions were at one time continued all round the walls of the mosque. These long lengths of finely carved inscriptions are probably unique in their extent as ornament. In all probability they measured, at one time, no less than 8187 feet. Besides this the greater number of the 128 windows had inscriptions around them, many of them still extant.

Above the wood fascia is the roof described later. Rising through the roof over the praying niche, is a domed lantern, the only roof-light in the mosque, designed to illuminate the niche and its inscription. It is square in plan and constructed in timber with stalactite supports to the circular dome. Its windows have colored glass. It is probably a later construction and has been repaired quite recently.

Adjoining the niche is the *minbar* or pulpit. This

is a kind of box open on one side, the floor of which, approaching by a stair-case, stands about twelve feet above the mosque floor. It is placed with its back to the wall and the steps jut out at right angles to it, into the mosque—an awkward position for the preacher who, in facing the congregation, has to speak over the steps, but this is the usual position. The pulpit is an elaborate piece of the craft of the joiner and carver in the 13th century A. D. It must be seen and the fine original part of the work must be closely looked at to be appreciated. It has been faithfully repaired by the committee for the preservation of Arab mounments. Over the doorway to the pulpit is carved an inscription stating that it was made in Damascus in the year of the Hegira 696 A. D. 1278 and presented to the mosque by Al Malek el Mançour. The original timber is cedar.

Near the pulpit is an opening in the wall, having a very dilapidated old door with its wood pivots still swinging in their old sockets. Through this door you enter some roofless rooms, the inner one is at the back of the niche. Still in position are the remains of an elaborate painted ceiling, the most interesting part being several corbels carved to represent huge locusts; they are the only approach to a graven image of any living thing to be found even within the precincts of the mosque. I have never seen any visitors going into these rooms. By way of this doorway it is said that Ahmed entered the mosque in time of prayer.

Under an arch of the second arcade in front of the praying niche is the *dikka*. Nearly opposite the *mihrab* is a large portion of the marble slab on which was carved in Kufic character Koranic texts and the founder's inscription and date, the latter remaining intact. A photograph of the inscription with the date A. D. 879 is given in Lane-Poole's *History of Egypt* (middle ages), also in Mr. Corbet's book on the mosque. This date conflicts with some other dates, but it is probably the date of the opening or consecration of the building.

The arcades. The original 171 arches have been re-

duced to 158 with a corresponding number of piers. This was caused by the removal of the fifth outer arcade of the sanctuary, after damage from an earthquake early in the last century, (1814).

The arcades are "pointed" or "Gothic" and they prove that this form of arch was commonly used in Arab architecture some two hundred years before it became common in Europe. They are well formed, have a slight inward turn and spring clear from a bold, supporting pier without the ugly tie so often met with in Arab work.

The engaged columns, at the corners of the piers are ornamented with floriated capitals and square moulded abaci and the bases are of a more pleasing form than is usual in Arabic work. They are composed of a low panelled die with three roll mouldings at the junction between the die and the shaft. These bases may have been added in the 13th century. Very few of them remain and they should be looked for near the praying niche. The faces or archivolts of the arches are of the same ancient Egyptian, gorge-and-roll pattern, as the horizontal cornice mouldings already described, but somewhat shallower, and ornamented in bold, very conventionalised floriations. The pattern is always or nearly the same, but there is a good deal of difference in the use of the spatula, or modelling tool, by the various modellers, some of whom have endeavoured to make the fronds bend outwards as if moved by the wind, while others have worked flatly and without imagination. Not only were the perpendicular faces or archivolts of the arches ornamented but the soffits or under sides of the arches were also elaborately enriched with geometrical patterns, filled in with leaves and bordered with several lines of interesting design. The original finish of the arches gave them a very rich appearance. But only a little of the soffit ornament remains. Unfortunately, repairs to the ornament were done by covering it up with plaster or destroying it. In making this statement, it should be understood that the preservation of the remains of an ornament, not its "*restoration*" is meant by "*repairs*."

It should also be admitted that the covering up process did preserve some of the ornaments, bits of which may be observed just showing under the broken patches of the later plaster. The little that remains of this soffit ornament is to be seen on the outer arches of the south-west arcades, where one half of the soffit of an arch is nearly complete and three others have parts in position. The patterns are all different, but enough remains for a sympathetic observer to make a complete and very rich picture of the whole of the series of arcades as they appeared when new.

The openings made between the haunches of the arches should be looked at carefully. They serve three purposes; that is, to diffuse light, to lessen the weight on the piers and to give elegance to the design. These are ornamented with colonettes and richly designed archivolts, the ornament of which is often exceedingly pleasing and varied. Above the arches everywhere runs the ornamental gorge-and-roll moulding or cornice and over that the painted fascia boards and Kufic inscriptions, the whole elevation forming a pleasant composition.

Some of the original, or at least, very early timber roof remains. It was well built of beams none too strong, boarded over from the earth, lime and slab floor above. The beams and the spaces between them are lined with panelling of a bold design, thus forming a deeply coffered ceiling. The whole was painted and deeply enriched with Persian-like line and floral ornament, white and red predominating. Parts of this painted work may still be seen, and may date from the repairing of the mosque in the 13th century. The ends of the beams rest on shallow corbels, one and only one, of those that remain has been carved. It looks as if it were a sample of what might have added to the richness of the work. It is curious that there are no wood mouldings, bevellings taking their places.

In the outer walls of the mosque are arched windows, placed very high and opposite the opening in the arcades; they are filled with grills of gypsum in geometrical patterns interspersed occasionally with the fleur-de-lis.

The original grills, possibly not older than the 13th century, are of very intricate and often pleasing patterns.

Having contemplated the arches and windows you walk across the court yards to the principal minaret, which, in many ways is a singular building, quite unlike the usual ornate kind. It is built within the thick curtain wall on the north-western side and some distance from the north-west wall of the mosque, to which it is attached by an arched bridge, giving access from the minaret to the flat roofs over the arcades. Before mounting the steps of the minaret in the usual way, take note generally of the architecture of the minaret and its bridge. The style is quite different from the mosque. The arches are of the round, pronounced horse-shoe type. The work seems to be later and is of stone with but a small admixture of brick in the lower plain walls.

Standing under the bridge and looking up and at both ends of it, one notes the barrel vaulting of the bridge, the thrust of which is contrary to that of the horse-shoe arches, but the longitudinal bearing is lessened very cleverly by corbelling the pilasters over which runs a cornice of two orders of concave mouldings. It is an interesting piece of architectural composition in stone, though now frayed and chipped. A proof that the bridge was not built at the same time as the mosque is afforded by the awkward way in which it cuts into one of the windows.

The minaret is built in three stages: the first is rectangular, 28 feet by 28 feet and 67 feet high, a solid mass of 32,900 cubic feet of masonry above ground. This mass is relieved by four blank windows of two openings, divided by twisted marble colonettes and spanned with horse-shoe arches. Above the rectangular stage is a similarly built unrelieved circular stage 20 feet in diameter and 29 feet high. Up to this stage the staircase winds its way externally by 171 steps. The platforms of these two stages, would take the place of the usual balconies, whence the muezzin calls the faithful to prayer. Above the circular stage rises the octagonal open-work stage, within which is

another series of 15 steps. The whole of the octagonal stage seems to have been rebuilt in recent times. The total height is 130 feet and as the minaret stands on high ground, the view obtained from its summit of Cairo and its surroundings is well worth the exercise of going up.

On the way down from the minaret, one should cross the bridge to the roof of the mosque to take note of the little secondary minaret on the south east corner. This was erected for the convenience of the muezzin's call to prayer from that point. Walking around the parapet one observes the encroachments made by builders on the grounds of the mosque.

Near the south-west corner, on looking between the interstices of the open-work parapet, the remains of a good sized room, built in ashlar masonry, may be seen. At one time the room seems to have belonged to the mosque, an addition. It was well built, and has remains of some interesting timber stalactite corbelling, part of a wood ceiling. A large, walled up doorway from this room faces Sharea Ziadah. The room may have been a library or school.

At the foot of the minaret, toward the north-west are the dilapidated remains of four rooms. The larger room, the roof of which was supported by two rows of columns of Cairo stone, was built as a supplementary mosque, as the dismantled praying niche plainly proves.

One of the compartments is a shrine to the memory of Sheikh Booshi, whose tomb is still in its place, a wooden erection covered with faded cloth, with a dusty green turban on a post at the head. The shrine is in a dilapidated condition. Its door and parts of the roof and of the adjoining, broken roofs have been repaired, to somebody's shame be it said, with pieces of the Kufic inscription boards that had become accidentally dislodged or torn from their places in the mosque, so careless were the former custodians of the mosque of their heritage. The worshippers at the shrine of Sheikh Booshi are few, if any, in these days.

Beyond these crumbling buildings and further west, is another interesting tumble-down building—the sani-

tary and ablutionary court of the ancient mosque. It has the appearance of great age and may be coeval with the mosque. It is rectangular in plan, measuring about 42 feet by 35 feet. In the center is a large reservoir at each of the four corners of which are built up stone columns, with slightly moulded bases and caps. These columns at one time supported a roof, some of the beams of which remain. At the four angles of the reservoir are semi-circular, backed seat cut in stone. Around the reservoir is a gangway abutting on which are the remains of twenty water closets. The place is full of dust and refuse, is used in fact as a dustbin for the house built against its back.

From this point you turn back and walk under the bridge adjoining the minaret. You look at the barricaded door in the curtain wall near the minaret and you continue to the old well and sakieh already mentioned.

You now retrace your steps and enter the central court again. You look at the building in the center called the "fountain." The building is lofty and stone built, excepting the arches and dome which are of brick; it is rectangular in plan, the dimensions have already been given. On each of its four sides are large pointed arches. The gathering-in, from the square from the circular, for the dome is interestingly done, save that wood is used in place of stone for corbelling. There are inscriptions just below and in the center of the dome. There are window openings on each side of the building which, from remains in one of them, may have been once glazed with colored glass.

As to the general design of the mosque, it is that of the earliest type; that is to say, a large central court with covered parts on four sides supported by arcades; the side deemed the most holy, that towards Mecca, having at least, double in the number of arcades; on the other side, with a niche in the outer wall, the plan recalls the hypostyle courts of the ancient Egyptians. The design is simple and good. Its great interest lies in the originality of the designer in adopting brick as his building material throughout, in its solidity, and in its series of

early pointed arches. The modelled ornament in gypsum gave the well formed and proportionate brickwork a very rich appearance. And when the whole was white and new—relieved with touches of delicate color, the coffered ceiling in like manner, lighted up and the Kufic inscriptions standing out boldly from its tinted background, and the marbles and mosaics of the niche were new, the whole building must have been pleasant to look upon.

As to the character of the ornamentation, it is difficult to trace the origin of the modelled forms. If the living plant, foliage or fruit inspired the modeller and carver, then their conventionalisation was carried to the point of excess. By close scrutiny, however, one may discern vine leaves, grapes, trefoil, acanthus, lotus, and the fleur-de-lis. The ornament of the smaller arches and windows is the more interesting in that the patterns run more freely. But the carved Kufic inscription in wood is the finest piece of ornamental work in the whole building. It does what all ornaments do whenever possible, it tells a tale or teaches a lesson.

The building is an exceedingly interesting one, not only by reason of its age, but also because of its design and the manner of the execution of its details. The lesson which the building carries to architects and the promoters of good building is sincerity. There is nothing in the building which it is desirable to copy. I say this emphatically, for today the copyist is the bane of good architecture. The architect of the mosque of Ibn Tulun was not a copyist, he used his common material sincerely, and made it serve its ends in the production of an original work based on an ancient plan. True he covered over his work with plaster and ornamented its principal features with gypsum, but nowhere did he wish observers to believe that his plaster was other than plaster. He did not try, by the tricks of color and jointing, to make us believe that he had wrought his building in stone or marble.

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