

Persian Gulf and Lower Mesopotamia, 1894



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Persian Gulf and Lower Mesopotamia.

The unexpected change ~~in my plans~~ in my plans for the coming year and the unlooked for opportunities of studying a unique architecture under most favorable circumstances, brought about by my accepting an offer from the Babylonian Expedition of the University of Pennsylvania, now excavating the great mounds of Niffer, make it necessary to write a short report of my journey from Bombay to Baghdad, and from the latter city to Niffer across the desert to Hillah, and later by boat down the Euphrates and its lateral canals.

I left Bombay on the evening of March 24th, and about noon on the 26th changed to the Persian Gulf steamer in the harbor of Karachi. A trip up the Gulf is not a rapid one, and to one not fresh from the West must prove ~~to~~ monotonous and tiresome. ~~xxx~~. To me, however, the slow progress of the vessel - now skirting the mountainous coast of Beloochistan or touching at Persian ports, again crossing to the opposite shore of Arabia where arid rocky peaks rose over ~~and~~ uninhabited desert, or perhaps an occasional oasis of date trees, where a few pearl divers boats were drawn up along the sand - was anything but a disadvantage, even in an architectural sense, for it afforded opportunity for a glimpse at towns seldom visited, and at peculiarities in design and construction of houses unique and interesting. Our first stop was at Suadir in Beloochistan, but the length of trail at my disposal and the great distance ^{from shore} we were obliged to cast anchor, limited my examination of the town to what could be made out through a glass. It was of the usual oriental character - white walls and green palms - set against a background of towering gray cliffs. The only prominent buildings were a round whitewashed tower that formed a part of the fortifications, and a curious open structure, a little distance from the thickly built portion of the town, that may have been a sort of public diwan or other gathering place, constructed of palm logs and mats, in the coolest place to be found on these torrid shores. The houses of the town were long and low - one story high - with gable roofs, a rather uncommon feature in the East. During the night that followed we crossed the Gulf, and at 5 P.M. on the 29th had cast anchor in the little harbor of Muscat, ^{Arabia} Seldom, since I had the pleasure of visiting the Dalmatian coast, have I seen a more picturesque sea-port, than this little town of Muscat lying in a narrow crescent at the foot of the lofty rocks. These form an impossible barrier around the harbor, excepting at one place where a difficult pass leads to the neighboring town of Mettra and the interior. The echoes of our rattling anchor chain had hardly ceased before we were surrounded by a host of curious narrow canoes, and for the sum of two cents I concluded a contract with a villainous looking Arab to take me on shore. The town proved more attractive from the water than interesting from the streets - if mere passages between the houses can be dignified by that name.

As in Egypt, the custom here is to cover the bazaars, or streets where
are the shops, with mats of palm leaf to keep out the extreme
heat of the sun. The houses had a peculiarly venerable appear-
ance, due to the using over and over again of the same material
- a soft stone cut into rude blocks or simple boulders picked up
along the sea-shore. These rough walls were sometimes daubed
with a thick coat of yellow mud and whitewashed, but more
often this decoration had fallen to decay with results that
would be delight to a painter but despair to a thrifty European.
The ordinary houses are devoid of ornament excepting some rude
carving now and then on the wooden door frames. Openings
are bridged by mere logs of wood, excepting where in some of the
more pretentious buildings the arch, pointed in the Arab fashion,
makes its appearance. In the latter case, when over windows, the
tympanum is filled with tracery of geometric patterns moulded in
concrete or cut from a slab of the same material. The only buildings
of pretension were the house of the British Resident, an arched town
gate through the ruinous wall, and the palace of the Sultan of Muscat,
a barn of a structure with high plastered walls crowned by rude
battlements. On the surrounding crags were many small forts and
watch-towers, which added much more to the remarkable pic-
turesqueness of the place, and dignity of the Sultan, than real strength,
for their walls are falling to ruin and the threatening looking
ornament proves to be only dismantled old iron guns laid
along the parapets. Next day we passed close to the town of Muttra
but did not stop, and were obliged to be content with a passing
view of surrounding forts and a graceful minaret, of a type
resembling those of Upper Egypt, rising above the principal mosque.
The display of mountains, lit by the setting sun, was superb
as we moved out towards the Gulf again - range on range of the
richest purple, rising from a steel-blue sea, until they faded
into the tenderest tints on the distant peaks of the interior. When
we made our next stop - at Jask - we were opposite the coast
of Persia, but as the place appeared to be little more than a
collection of small houses and the modern telegraph station, I
waited until the next day - April 1st - when we reached Bender
Abbas, before I left the ship again to go on shore. This was a far
more important looking place than any we had thus far visited.
The town lies in a long line along the sandy shore at the foot of
a group of lofty, rocky mountains. The centre of the town groups
around a large building - the old Dutch Factory or warehouse - where the
strangely out of place glazed Dutch windows still exist. The houses are
rudely built, nearly all of large square sun-dried brick but a
few have their walls ~~built~~ up of rubble stone, laid up in herring-
bone fashion and coated with a thick layer of mud mixed with
straw. This mixing of straw with the clay has, as I have since
learned, the curious effect of allowing the mud to dry without
cracking. Even in old walls the covering of mud is still intact
and without a crack. This property seems to have been known from

the most ancient times, for traces of straw are to be found even in the mortar and plastering of times previous to the reign of Nebuchadnezzar the Babylonian King who dates at least 2800 B.C. Bunder Abbas did not lack in buildings of some pretension. Numbers of domes marked the site of mosques or Sheikh-Tombs - always tall and conical after the Persian fashion - but here without the gorgeous tile covering that is characteristic of that country. One dome was a strange exception, and showed a surface made up of superposed panels and angle pinnacles such as are seen on the tall towers of the Jain temples in India. The suburbs of the town were made up of miserable huts of palm-leaf mats - mere tents of the rudest sort, and affording a minimum of protection and comfort. The better class of houses afforded a striking contrast to the latter. They often stood at the back of a court surrounded by a high mud wall, and were always two stories high. The windows were often filled with stained glass of brilliant colors, or with the pierced ornamental concrete screens that I have already mentioned in describing Muscat. The most prominent and characteristic feature, however, of these houses was the so-called badgir or wind tower, a structure built high above the flat roof of the house, usually closed on three sides and open on the side towards the sea from which direction the coolest winds usually blow. These towers open into shafts that lead to the principal rooms below, and afford during the heated season a possible breath of refreshing air which otherwise would be lost. Life, it is said, is almost unbearable here in the summer in these Gulf towns - 125° , 130° - I am afraid to quote what I heard from some people - in the shade is the temperature for weeks together, while gales as from a furnace sweep over the dusty desert and swoop down on these devoted places like a pestilence. From what I have already experienced here on the plains of Mesopotamia 400 miles north, I can imagine that these reports are not much overdrawn. I had the pleasure while at Bunder Abbas of an invitation to inspect the interior of one of these better class of houses. After the usual coffee and compliments I had time to look about. The interior was to western eyes a little bare - there was an almost entire absence of furniture, but its lack was made up in a way by brilliant rugs and curtains. There were the usual wooden screens at the windows and the plastered walls were decorated in a peculiar manner. This was done, while the plaster was still soft, by pressing a stamp against the wall which being repeated formed panels of the pattern carved on the stamp. If I may be allowed the comparison, they gave the impression of numberless butter pats such as one sees in the country in America moulded with flowers and leaves. The use of the arch here was as common as it was uncommon in Muscat. Nearly all doors and windows were spanned in that way, and a com-

most feature was a small pointed relieving arch over a door lintel, treated as an ornamental window. It was here that I first began to meet the roof that is universal from this point on. It is made by laying beams of palm, across the walls, on which are spread mats woven from palm leaves - in Mesopotamia of reeds split and spread out flat - On these mats is placed a thick bed of brush, usually the bushes cut in the desert, on this a second layer of mats, and the whole covered with a thick coat of mud mixed with straw.

These roofs are the most prized part of the house during ^{nights of} the hot season, when sleep is impossible in the heated rooms below. Our next stop was at Singah, also in Persia,

which made an imposing appearance as we approached from the sea, stretching for two miles or more along the water.

It lay on the border of a plain that stretched away to the north-east until it met a range of lofty mountains - high white cliffs and irregular red peaks of bare rock. An isolated group of mountains on the south hemmed in the town on that side, and far behind rose the peaks of another range, of which these seemed to be the spurs. The city appeared well and substantially built, and many of the houses were two stories in height, showing usually an open arched story above, occasionally closed with ornamental perforated screens. Nearly all the arches that I saw were semicircular - a peculiarity that I hear exists throughout

Persia, and if true would be of great interest in tracing the rise of Roman art, for there is little doubt that the idea of the arcade originated or developed someplace in this part of the world. There were many domes both of the hemispherical and of the Persian type. ~~and~~ I might mention here that I saw numbers of isolated domes in the country round about, here as at B under Abbas, apparently resting on the ground without a building or even a dome below them. They were entered on the four sides by arched openings, and on inquiry I discovered that they covered wells.

Wells are a precious possession here that cannot demand too great care. We were rowed to shore by a mixed crew of white Persians and black negro slaves, who made their heavy boat fairly fly over the waves to a monotonous but vigorous chant "In the name of God" - a sentiment which they expressed with their lips but really meant in the name of the almighty Kerim, which they managed to squeeze out of each of us before we could land. The town at once impressed me as a large and busy one, as eastern towns go, and I was highly interested in examining real Persian rugs of exquisite designs and colors at exasperating prices. Singah is a place famous for ^{its} rugs, and I hope I may be pardoned for ^{once} in a way neglecting architecture for its sister art of weaving which is seen nowhere as in these truly oriental cities. I

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did not, however, forget myself so far as to neglect looking up
a minaret that I had seen from the ship - one gorgeous
in glazed tiles, and of the true Persian type. I met with
many of them afterward, especially in Baghdad, in fact
this one was built by a Baghdad mason. It was a-
bout noon on April 4th when we cast anchor, nearly
5 miles from shore owing to the shallow sea, before the
town of Menaméh, the most considerable place on the
Bahrein islands, and centre of the pearl fisheries that
have made the name of Bahrein famous. The follow-
ing day we made up a small party, - under the guidance
of a young American missionary located here, and the
only white person in the place, - for a donkey ride to the
interior of the island. As we rode through the town I had
time to notice that, although most of the place was built up
in the rudest way possible of fragments of coral rock washed
up by the sea, here and there was a facade where there
was an attempt at architecture. In the most of these cases
the facade of the house showed a large horseshoe arch resting
on short engaged columns and enclosing the windows of the
upper story, which were collected in a group. The first
place of interest that we reached was Suk - El - Khamis
with its ancient baths and ruined Cufic mosque. The latter
in its day must have been a remarkably fine building
for the country, and still shows signs of its former
magnificence in two lofty round minarets and numerous
ruined arches and columns in the interior. It is chiefly
interesting as being an example of what the earlier mosques
were before in this part of Arabia before Persian influ-
ence became dominant, for it almost surely dates
from the time of Khalif Ali himself. It is remarkable
for its lack of ornament - there are even no capitals
to the columns - yet this very bareness brings out the
merits of graceful forms and effective masses that
might otherwise be lost. The only attempt at decoration, besides
some panelling and beautifully cut Cufic inscriptions, are
bands formed of brickwork ^{or concrete} below the galleries of the minarets
which resembled the Greek lattice balustrade in design. For
the most part the mosque is built of small rubble stone
laid in a coarse mortar, but part, - perhaps the ancient or-
iginal building - is of well cut stone. Several miles further
on we reached the small village of Ali - the objective point of
our excursion - the site of an old necropolis where the plain
is dotted with scores of tumuli varying from 20 to 40 feet in
height. Two of these were opened in 1889 by Theodore
Bent and were found to contain curious sepulchral
chambers. The one that I examined consisted of a central tomb

Chamber in two stories covered by a mound of gravel about 30 feet high and perhaps 100 feet in diameter. The chambers were in the form of passages about 30 feet long, the upper story 4 ft 8 in. high the lower 8 ft. high and both about 5 feet wide. They were built of massive blocks of stone - one that I measured was 6'6" x 7'0" x 1'2" - although I believe no stone is found on the island. The lower chamber was plastered with a coarse clay mortar laid on by the hand - distinct hand-prints were visible - and both chambers showed side niches. At various places were holes in the walls perhaps for supporting-pins to shelves on which were the vases that were found broken on the floor among cinders and fragments of bones. It is hard to guess at ~~the~~ date - their excavator, I believe, attributes them to the Romans, but I am inclined to think they are much older, if not actually prehistoric. The next day we reached the town of Bushive. There was little to see in the place, but I looked longingly over the dusty plain back of the town to the pass in the hills beyond and thought of the short 200 miles only that lay between me and the wonders of Persepolis and Passagardae. If I had only known of the long delay in stone for me at Baghdad that trip would surely ^{have} been added to my journey. As it is I can only regret the loss and hope for a future time when I can not only see these ancient sites but explore completely the Persia of mediæval times and of today - an undertaking I am firmly convinced full of interest and importance in the study of architecture. I have met men fresh from Ispahau, Erzeroum, Shiraz, Teheran and ~~Tabsreez~~ ^{Tabreez}, and although merely merchants, they were impressed with the barbaric splendor of the mosques and remarkable domestic architecture which if nothing more has the virtue of originality. Moreover it is to Persia that we are to look for much of the art of the Mohammedans, and perhaps for that curious overflow of Chinese ideas and taste that seems to have had more influence in the West than we are likely to suspect. It was about noon on April 7th that we left the blue waters of the Gulf behind us and entered the yellow flood of the noble Shat-el-Arab, which bears the united waters of the Euphrates and the Tigris to the sea. Low-date grown shores bounded the view, and with the exception of a couple of stops - one at Mohammerah at the mouth of the ~~Karun~~ ^{Karun} river, the present route to the ruins of Susa, - made an uneventful trip up to Basrah where I was to change to the Tigris river steamer.

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Here I was entertained by a colony of young men - three young Americans who with our friend at Bahrein constituted the Dutch Reformed Mission to Arabia - until the steamer Kalifah arrived and I took possession of a state room. Busrah like most of these towns is dirty and uninteresting, but with a tile domed mosque, brilliant in blue and green, and a bazaar of considerable importance. I left for Baghdad on the evening of the 11th of April and by daylight the next morning we were already in the Tigris stopping at the imposing buildings that surround the traditional tomb of Ezra. The tomb itself is sheltered by a mosque with the usual Persian dome of glazed tiles and is a popular place of pilgrimage for the population of Jews that have inhabited lower Mesopotamia ever since the Babylonian Captivity. The scenery of the Tigris was what would be called monotonous in the extreme. Beyond the low banks of the yellow stream a sea of green verdure or brown desert stretched to the horizon, broken only by an occasional cluster of reed huts, a camp of the black goat's-hair tents of the Bedouins, or a long low mound of brown earth that raised itself a few feet above the general level. The famous reed huts of the Tigris and Euphrates are made by tying up bundles of reeds and planting the ends in the earth so as to form a series of arches. ~~Then~~ these are fastened horizontal rafters of the same material and all finally covered by large mats woven of reeds split on one side and spread out as a band an inch or more in width. With this simple material the great majority of the houses of the country are built and no doubt were for decades of centuries. But it was the other apparently insignificant breaks in the general dead level of the plain that most interested me. They rose in every direction - now a long low mound of brown earth, again rising almost to the dignity of a hill, or crowned by what appeared to be a water worn rock or ruined wall, but everywhere and by scores. I could hardly at first bring myself to believe the truth as to their origin, but finally felt convinced of it - that here was the wreck of ancient Babylonian civilization. Each of those mounds represented a canal, a village or a city when this valley was the garden of the world, and the stage where appeared in succession some of the most famous characters in history - where Chaldean, Assyrian, Babylonian, Greek, Parthian, Sassanian and Turk appeared and disappeared only to finally leave all a desert, the home of lawless savages and wild beasts. I know of nothing more impressive than these silent deserted mounds, no longer even bearing the resemblance to ruins in most cases, and but for the immense masses

of broken pottery that are scattered over their surface would show no sign whatever of their past history. The only modern buildings more substantial than the huts and tents are an occasional Sheikh tomb, such as are seen along the Nile, and almost identical in design - a dome over a simple square chamber, and the watch towers of the Arabs that are a common feature all over the plains of the two rivers. These are tall towers, built of mud, square or round, with a single small door and perhaps a window or two protected by stout wooden bars high up on the wall. The only other openings are loop-holes for muskets, for these people are almost constantly at war with one another. - To anticipate a little I might say that only the other day we had a large draft on our workmen to recruit the army of one of our neighboring sheikhs who was to fight a battle only a few miles north-west of us, and that we ourselves live in a castle and keep a "standing army" of ten men. All this gives an idea of the total desolation of the country that once boasted of the Garden of Eden, and of cities that were the ambition of all nations. On the 15th of April we reached the site of ancient Selucia - all that remains are countless mounds and a large fragment of the city wall. Opposite rise the imposing ruins of the great palace of Chosroës I, the sole relic of the famous city of Ctesiphon which fell under the invasion of the Arabs during the early Khaliphates. I was pained to find that only a few years ago one half or more of the magnificent facade with the celebrated arch had fallen, and the remaining part of the facade will soon follow. All that will then remain of this once fine example of Sassanian architecture will be the great barrel vault of the audience hall and the walls at its sides, already stripped of all ornament. I was unable to land, partly owing to the high water and was obliged to postpone a special visit until my return to Baghdad next year. It was the same evening, after running for miles through beautiful gardens of dates, pomegranates and other fruits, in an atmosphere heavy with the perfume of orange blossoms, that on rounding the bend in the noble river the domes and minarets of the City of the Khalifs burst in view, brilliant in the colors of their tile roofs, and gilded by the rays of the setting sun. It seemed almost a sufficient reward for the long journey and that which is to follow - that first sight of Baghdad, the City of our imagination. At that distance we could still think it in its palmy days, its degradation hidden behind the palm groves, and that those golden domes and slender minarets were the mosques and palaces of the good Harun-ar-Rashid and his magnificent court. That one view was the one to preserve in my memory, what I saw later was not the City of Peace, the Home of the Khalifs but modern

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Turkish Baghdad, where, true enough, the blind beggars, and dogs remain, but not the glories of the Arabian Nights. Perhaps before beginning an architectural description of the city it would not be uninteresting to give an outline of the history of Baghdad such as I read it in the interesting but rare memoirs of Captain Jones to whom we owe much of the accurate information in regard to the district. The city seems to have been laid out in A.D. 762 on an ancient Babylonian site by the Khalif Al Mansur and perhaps reached the height of its prosperity during the reign of Harun ar-Rashid in the 8th century. From the annals of the arab Abulfeda we learn that Khalif Al Moktadar received a Greek ambassador with a drawn up army of 160,000 men. He, with his ministers and slaves, appeared covered with gold and jewels. He quartered his guest in a palace hung with 38,000 pieces of silk embroidered tapestry, where the courts and rooms were ornamented with gold and silver. Trees on which sang mechanical birds studded with precious stones, and the floors were covered with 22,000 rugs. Vessels covered with gold floated on the river while scores of lions in the care of keepers paraded the streets. All this of course has a smack of oriental exaggeration, but we may believe that the Baghdad of that day far surpassed the city we see in the end of the 19th century, for then it was not only the capital where tributary provinces poured in the enormous tribute of 3280,000,000, but where learning had its home, and books were so plentiful that it is said that a Baghdad doctor had to refuse a brilliant offer from the Sultan of Bokhara because he would require 400 camels to carry his books alone! But all this splendor had a terrible end, weakened by luxury, the city fell an easy prey to the first of those Tartar invasions that successively devastated western Asia. Halaku plundered the city in A.D. 1257, and in 1392 and 1400 the famous Timour the Tartar ~~visited~~ the

place and is said to have left a trophy of his prowess before the city gate in the shape of a great pyramid composed entirely of 90,000 human heads laid in mortar. Timour restored the city to Sultan Ahmed, but that monarch was chased out by Miran Shah a son of Timour. After this until 1508 the city was held by tribes called the "Black and White Sheep" when it was seized by the Persian Shah Ismail Sufi. The Turk Sultan Suliman I took it in 1534, but it was lost to that nation when Shah Abbas the Great recaptured it. The Turks again took it in 1638, led by Murad IV in person, and since that time it has been under the rule of the Sultans. Attempts were made to take it by Nadir Shah during the first years of the 18th century, and by Mahomet Ali Mirza, Prince of Kermanshah, as late as the beginning of the present century. So completely have the ravages of war carried away the early city that it is now disputed on which side of the river the more important part of the Khalif's city stood, but in the opinion of a learned French ^{Cornelite} ~~man~~ father, whom I had the pleasure of meeting, ~~after considerable investigation~~, it lay on the right or west bank of the river. At any rate it is here that we find the Babylonian remains; that the suburb, now on that bank, rises on a considerable elevation formed by ancient debris, and that is located the Tomb of Zobeidah. At the present time, however, most of the city and by far the more important buildings are on the left bank. The city is perhaps the most perfectly oriental of any now in existence, for notwithstanding a weekly line of English steamers from Basrah, several large English mercantile firms and telegraphic communication with Europe, Baghdad is to its inhabitants the metropolis of the world, the centre of all that is desirable. Here a chair is only indulged in as we affect the divan-pantaloon and worn only by "carpetbag" Turkish officials, and the church bell is supplanted by the melancholy cry of the muezzin. The feature that first strikes a visitor as he steps from

the Keffah - a wicker-ware boat, round as a tub and smeared with asphaltum, the characteristic craft on the Tigris since the days of Xenophon which has brought him from the steamer, is the great Bazaar that stretches away in the distance on either hand. These arteries of the business of Baghdad are perhaps the most curious sight of their class to be found anywhere. Beautifully vaulted they can be compared to nothing but an enormously extended aisle of a Gothic cathedral in each bay of which on either side is established a miniature shop filled with all the curiosities of oriental trade. People this with a jostling, shouting crowd of Turks, Persians, Jews, Christians, Kurds, Arabs and wild nomad Bedouins, dressed in every imaginable cut and hue - the rich banker, the laborer staggering under a 300 pound bale of wool, the Baghdadi swell with rings in his ears on his fingers and toes and a long row of silver buttons down the front of his robe, the proud desert Arab dressed in abba and Keffiah - all in an indescribable confusion mixed up with braying donkeys, neighing Arab horses and yelping mangy dogs, and you have the interior of the city. Streets such as we understand them do not exist. These covered ways seem more like corridors or passages in a building, and the open lanes, where are located the residences, are so narrow that they appear like mere openings between the houses. The central part of the city is what might be called well built for this part of the world - large houses in two stories, with a single great door that leads into a court and a great well window - are about all that is seen on the outside, but the interior often is comfortable - even luxurious with gallery surrounded court, open lounging rooms for

the heated weather and chambers heated with fireplaces for the few short weeks of winter. A peculiarity of Baghdad houses - one which they have in common with all the greater towns of the district - is the sardab - chambers - rooms built under ground and often beautifully vaulted. Here the inhabitants - at least those who can afford it - retreat during those fearful Mesopotamian "blizzards" - blizzards where the freezing but at the same time bracing blast is replaced by a scorching simoon which shrivels the few leaves on the trees with its 120° or 130° temperature, and the driving snow is mimicked by clouds of dust and sandstorms that almost draw blood through the exposed skin. The sardab and the roof are all important in the building economy of the Baghdad architect for it is there that his clients spend their days and their nights for at least nine months of the year. Of the ancient Baghdad of the Khalifs little remains - a fragment of the old College of Mustanser now incorporated in the custom house, a single isolated minaret which dates from the same Khalif, and a couple of tombs are all that is left for us to judge from. As with the ancient Babylonians and Assyrians, brick has been the all important material of construction, and I think that even our expert masons would look with admiration on the beautiful ornamental work seen in these few fragments - work that I can only liken to a mosaic in relief, where the intricate patterns and all the variety of color, light and shade are represented by the raising or lowering of the simple bricks. The color is almost universally a pale cream tending at times to a greenish-yellow or when stained by time taking on a rich russet. In workmanship, although ordinarily bricks laid in clay mud constitute the house walls, ^{this masonry}

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pared with the best, especially the masonry of the vaults. These are quad-
ripartite - spherical surfaces, - without ribs, ~~with~~ pointed transverse and lateral
arches. One of the most remarkable of all the vaulted apartments is the
so called Khan Soufmech - a huge hall about 35 by 100 feet spanned
by a single pointed barrel vault of most peculiar construction. It con-
sists of a series of broad transverse pointed arches, on which, to fill
the intervening spaces, rest two tiers of structures that can be likened
to nothing more than large domes. It would be a most interesting
problem to determine the effect of this construction on the thrust of
the great arches - it certainly must resist the tendency to rise at
the haunches - whatever this may be, the interior is a triumph
of constructive skill, a perfectly lighted hall, and one of the most
profoundly effective ceilings that I have ever seen. I fear that
these poor sketches that I was able to make will convey but
little idea of the building, and still hope to be able to bring home
a satisfactory photograph. Although at present a mere ware-house
for storing wool and hides, yet the elaborate inscription over the
door, which gives it the date 1356, and its proximity to the old
mosque Merjanijeh seem to suggest a higher object in connection
with that establishment. The citadel is now a mere skeleton
showing a few traces of elaborate colored tile work - and the ^{city} walls
have lately been removed, consequently there is nothing to study in
the way of military architecture excepting two gates: the Bab-el
Hakim, still used as a gate, and the Bab-el-Telism now a
powder magazine. Both are circular in plan and rise as out-
work towers at some distance from the walls with which they were
connected by covered bridges over the moat. The passage from the
outside, in a direction parallel to the walls, led over a bridge through
a gate elaborately ornamented, then in the centre of the tower turned
at right angles into the city. The entrance was thus commanded in
two directions, and offered the least possible opportunity for breaching.
The decoration of the ~~former~~ ^{former} gate was mostly in colored glazed tile,
what remained of it, but the ornamentation of the spandrels and frame
of the Bab-el-Telism was ~~one~~ of the most beautiful ~~and~~ interesting
piece of work that I had met since leaving India. The tower was
of well laid cream-colored brick with a band of stone ^{near the top} wrought into
an elaborate text from the Koran, ~~repeated~~. The gate was spanned by
a pointed arch, with voussours intricately fitted together, above which
was a square frame enclosing the whole. The arch rested on ~~two~~
imposts ^{each} with the figure of a lion, ~~on each side~~ which in
turn were supported by short octagonal columns of gray marble.
But it was the spandrels that displayed the remarkable work. These
spaces were filled by the twisted and knotted bodies of two dragons whose
tongues were grasped by the squatting figure of a King placed over the
keystone of the arch. Although evidently of Mohammedan date, this work
was almost unique with people of that faith in representing human
and animal forms, but the design of the King's garments. The pattern
of the all-over-work that filled the background, almost exactly similar to
that seen on the great mosque screens at Kutb, Delhi, and the "Hall of
Two Days" at Ajmere, as well as the exquisite workmanship led me to con-
clude that it was executed by Indian workmen, imported perhaps by the
art loving Khalifs under whom the gate may have been erected.

Perhaps not the least remarkable part of this decoration was its perfect preservation - executed as it was in sandstone and with such delicate carving - and I tremble for its future when I think of it as being part of the walls of a powder magazine and outside of the city exposed to any destructive whim that might take possession of some irresponsible boy or half-savage arab. Strangely enough I did not meet with a single person in Baghdad who had ever noticed it, much less knew anything as to its history. On at least three or four occasions I acted as guide to show it to persons whom I imagined might bring it to notice, and took occasion to even exaggerate its importance and value with the hope that perhaps it might be removed to the museum at Constantinople, or at least protected in a way in its present position.

This gate has played its part in the history of the city, for it was by it that the conqueror ^{Al-Nurad} left for Constantinople, ~~and~~ ^{and} by his order it was walled up behind him, according to an old custom, and has so remained to the present day. Of course by far the most important group of buildings in the city is its mosques. I was at first led to expect a very interesting study from the fact that here we have a series of buildings covering parts of every century from about A.D. 1250 to the present day, but partly from the great difficulty, I may say impossibility, of gaining admittance to the interior of these buildings - for I only saw at considerable risk a few from their fore courts - and partly from the fact that nearly all of the older mosques are small unimportant buildings almost identical in design the examination did not ~~of~~ produce the results that I expected. But

in a few of the later examples - notably the noble Jamma Shereh - Kehya - El Meidan - with its brilliantly colored dome and minaret there was enough to repay the trouble experienced. The minarets of Baghdad are almost universally round in plan, have a projecting gallery near the top, supported on honeycomb corbelling, and are crowned by a small pointed cupola either with plain or reeded surface. The entire outside of these minarets is covered with intricate geometric patterns of colored glazed tile - blue, green, white, brown, black and yellow, while the cupola top is always a solid, very brilliant blueish-green. The domes are low and hemispherical, or pointed more or less sharply, reaching a limit in the bulb shaped Persian dome ^{in a few cases}, where they are always covered with brilliant blue tiles ornamented with flowing foliage patterns in white, brown and yellow. In plan they seem to follow two designs, or rather two varieties of the same plan. Both take the design of the older Egyptian mosques - the great courtyard surrounded by an arcade, with the mosque proper rising before the Ribla wall. In ~~one~~ ^{of these varieties} the mosque consists of a couple of aisles and a porch, divided into equal compartments each covered by a low dome - the Jamma-el-Pacha is a good example of these - while in the other class there is a large central dome flanked by much less important domes, often entirely concealed by the parapet, and forming a single aisle before the Ribla wall and sometimes an open porch facing the court. Of this class the El Meidan before mentioned is the principal example and perhaps the finest mosque in the city. I never was able to get a satisfactory look at this mosque although I often stepped within the court until remarks and gestures suggested retreat, once even succeeded in making a hurried sketch.

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of the facade, but I was never able to ever catch a glimpse of the interior, which is said to be richly decorated. But even these flying glimpses of the building and its guthy portals and arcades was enough to convince me of the richness of the effect of glazed tile when used in such profusion, and of its suitability, more especially durability when used for architectural decoration. There was something more than barbaric magnificence in the facade with its great central arch and elaborate decoration, the slender minaret and enormous but graceful dome of turquoise-blue forming the culminating point. I saw, however, one specimen that was of barbaric magnificence, and although not equal to these marvels of their kind, the tomb-mosques of Hassan, ^{Hassan} and Ali, at Kerbela and Nedjef (Meshed-Ali), yet gave the visitor some idea of what a building covered with gold looked like. This was at the town of Kasrajan, or more properly Kuthamein, where are the tombs of the Imams especially revered by the Shiah sect. Like all these Shiah shrines it is not for a European to ever approach the district in which the mosque is located, and I was obliged to be content with a distant view of the two domes and four minarets glowing like masses of pure gold in the brilliant sunshine.

Baghdad is not behind its sister oriental cities in the matter of pretentious tombs. Of those of domical design - that of Abdul Kadir, covered by a large low dome on polygonal drum and with a glazed tile vestibule dome, and that of Sheikh Maruf are the most important. Two others are crowned by those peculiar pine-cone shaped structures that are typical of the older tombs in the far east. They rise to a considerable height in successive rings made up of convex scale like members that give to the whole tower its peculiar appearance. One of these is within the limits of the city on the east bank of the river - that of Sheikh Amer Shahabuddin. The tower is built up of excellently laid brick work, and is in good preservation considering its age, A.D. 1225. The other tomb is on the west bank of the river, its substructure is octagonal and shows some beautiful brickwork. It dates from the early Khalifates, A.D. 827, and is by far the oldest building in the city. Like the Amer tomb it is crowned by a ~~similar~~ pine-cone dome, but each scale is pierced at the top by a small round hole and by this ^{curious} means the interior, which is open to the dome, is well lighted. This tomb stands on a slight elevation at the edge of the city just where the great caravan route from Aleppo, Damascus approaches, and in a way serves as a sort of beacon to the ~~convict~~ tired muleteer and exhausted camel driver - and what could be a more suitable beacon to the City of the Khalifs than the tomb of the favorite wife of Harun-ar-Rashid - the Lady Zubaidah of the Arabian Nights?

Not far from midnight on May 21st the caravan ~~left the house~~ ^{in Baghdad} of the "Babylonian Expedition of the University of Pennsylvania" left the house that I had almost come to consider a prison, on account of my long delay in Baghdad, and wound along through the deserted bazaars, the jangling mule-bells and shouts of the drivers rousing the few late loiterers in the cafes and the

homeless dogs that followed us by scores, howling and barking until we had crossed the crazy old pontoon bridge and reached the farther side of the western suburb. Here we camped for the night on the edge of the great inundation that covered the country to the horizon. We slept none the worse for our long-eared companions and their noisy bells, and before dawn were up and ready for the eighteen mile sail that lay between us and dry ground. The Euphrates had broken its banks and was now pouring a great flood across the country to swell the Tigris ^{itself} already far above the danger level. Once landed we loaded the animals and crossed the dusty, scorching desert to our halting place for the night - the great Khan Mahmoudieh. This building is typical of its class, the hotel and fortress of the Traveller in the East. From the outside it has all the appearance of the latter - an immense square structure surrounded by high, blank walls, with round bastions at the corners and a huge portal closed by castle-like gates. Passing these gates the traveller enters a large court-yard surrounded on all sides by niche-like apartments, each entered by a pointed arch-opening and open to the air. In the centre of the court are two long platforms of masonry raised about five feet above the level of the ground, which serve as sleeping places for travellers in warm weather. In the body of the building which surrounds the court on all sides is a passage with vaulted roof also like the court - lined on both sides by the niche-apartments, these for use in the winter. This passage and the open part of the court serve as warehouse and stable for the merchandise and its bearers. We pitched our camp beds under the sky, on the roof, where we found some relief from the approach in the court below, and caught what little breeze was to be had. The view from the roof was strange, yet very characteristic of Mesopotamia. The great plain extended to the horizon on all sides, and presented a strong contrast to the brilliant orange, pink and deep ultramarine blue of the oriental sunset in its dull brown dusty extent. Flocks of sheep and herds of cattle driven by savage looking Arabs were gathering in towards the village for mutual protection, and belated caravans were hurrying into the Khan before the "thieves hour" might arrive. Far away to the ~~west~~ ^{east} I could see the massive form of the Palace at Ctesiphon, and in an opposite direction, among a score of other ancient mounds, rose the shapeless masses that marked the site of Sippara, once famous but now even lost to the ear under the name of Abw Habba. All the next day we followed the dusty desert road, meeting and passing the merchants' caravans from Hillah, or pilgrims to the holy shrine of Kerbela in couples or hundreds as their inclination led - camels with great bales of wool, diminutive donkeys almost hidden under enormous loads of tannirisk roots, dug up in the desert.

~~As~~ they were laid, many of these frail layers of needs are not only recognizable but the material nearly as strong as ever. From Babil we visited the lower but more extensive mounds call the Kasr. The entire surface of this mound is broken into numberless pits and hummocks such as might be formed by the collapsing of vaults and the falling in of heavy earthen roofs. Near one side - next to the river - rises a finely built piece of pale yellow brick masonry pierced at one place by a small door. All that has saved this fragment is the excellence of the mortar, for it has been found impossible to remove the bricks without breaking them. Near the middle of the mound in one of the pits, lies a huge, strange group of statuary - a lion standing over a fallen human figure; - Roughly finished, yet it shows vigorous drawing and a skilled hand in its execution. It has been suggested that what remains may be only the matrix, and that the finished outside may have been metal. However that may be it appears most strange that in the scarcity of Babylonian sculptures this remarkable group has lain so long within a few rods of the Euphrates whence it might be removed easily to any part of the world. Beyond the Kasr we came to the so-called mound Anram, named from the domed tomb of a saint of that name which rises on its summit. These mounds are almost shapeless, and it seems as

if they would never be anything more, even to the skilled in unravelling such matters. Of Hillah, which we made our stopping place for a few days to prepare for our long exile, I shall say little, although an interesting town of about 30,000 inhabitants yet its reputation depends on its being the modern representative of Babylon, and it is far less interesting than Baghdad. We left this last station in our journey, amid the good wishes of some of the people who had made our stay most pleasant, about 4 o'clock one bright hot afternoon, floating down the swollen Euphrates with our small flotilla of two river sail boats. We slowly drifted past the date gardens and orange groves until we reached the more open country, with only an occasional garden surrounded house or tomb. In this way we passed the traditional tomb of Job, and just as the sun was sinking behind the horizon I had a clear view over the western desert with famous old Birs Nimrud, the no less famous Temple of Borsippa in ancient times, that for so long figured in the minds of us all as what was left of the Tower of Babel. When I woke next morning we had left the Euphrates and were traversing one of the many canals that wander away from the mother stream to be lost in the interminable marshes that cover the plain. It was after sailing through the latter for a number of hours that I saw suddenly rising over the bright green needs of the marsh the enormous mounds of Niffer - and my journey was ended.

Niffer July 31st 1894 J. J. Meyer.

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or perhaps a group of nomad. Arabs, mounted on graceful snarves, ~~and~~
who looked with curiosity on my companions and my linen suits and
pith helmets or, what was more dangerous, cast a covetous eye on the
long string of box-laden mules that represented our subsistence
for the year to come. We stopped for rest and a lunch at Khan
Hasswah, and while the kettle was boiling I amused myself ex-
amining the houses of the hamlet that lay before the door of the
Khan. An exception to the general rule, even the humblest were
built of substantial masonry. Each house was built of an aggre-
gation of square compartments, built with pointed arches - filled
by a brick wall - on the four sides. On these arches rested spher-
ical pendentives while from these, in turn, rose hemispherical domes
Where the houses were large, a number of these compartments opened
into each other and formed a long narrow room. Walls and domes
were built of the square flat bricks of the country, but the voussoirs
were moulded from a lime concrete made with the fine gravel
that is found only here - the watershed between the two great
rivers. That night we slept at Khan Mahawil, and when
we climbed to the roof we could trace the course of the Euphrates
for miles by the long green line of date groves, and at one
place even caught a gleam of the river itself. But what was
more exciting than all was a huge dark form that rose high
above date trees and all other surrounding objects - hill-like and
yet different in appearance from any hill that I had ever seen,
with long flat top precipitous sides ending near the level of the
plain in a sloping hill-side, furrowed by rain gulleys yet
bearing a strange resemblance to a great ruined building. This was
my first sight of Babylon, "the great city", the famous mound
Babil. About 9 o'clock the next morning - May 24th - after a ride
of two and a half hours we turned our animals heads from the
main road, just where it crosses the ancient Shat-el-Nil,
and rode over to examine Babil. All morning we had been
passing mounds and crossing ancient canals, that showed us
that we were already within the limits of the old city, but here
at Babil we were in the centre of the site. Babil like all the
other ruins of Babylon is a mystery that there is little hope of
solving. It was from these apparently inexhaustible quarries that
the material, not only of modern Baghdad and Hillah, but the old
city of the Khalifs, even Selucia and Ctesiphon, was drawn, and it
can easily be understood that all shape and form has been hope-
lessly lost in this turning and ret turning of the mass of the mound.
The mound still rises to a great height above the plain, and at many
places shows not only ~~burned~~ walls, crossing and recrossing, of burned
brick - perhaps a sort of frame-work to support the great platform of
crude brick - ~~but~~ also immense walls of the unburned article which
is so characteristic of buildings in ancient Babylonian times. One
of the most remarkable features of this latter construction is the
reed mats that were placed at short intervals to bind together the
unstable material. Even at this late day well on to 3000 years after

Niffer Asiatic Turkey
August 3rd 1894.

Dear Professor Chandler.

I send you one of my so-called reports just as I wrote it, for some time I have tried to find time to copy it so that it might not only be more readable but more presentable. So it is I must ask your indulgence, and that you picture to yourself that we are at the excavations from 5.30 A.M. until 6.15 P.M. - even taking our lunch there - with a temperature ranging from 100° to 115° in the shade. Sundays are spent in necessary fixing up of our domestic affairs, and in my case drawing the small antiquities found during the week. - With these excuses I hope you will shut your eyes to the material part of the report and try to open them to the intensely interesting experiences I have been able to meet through the generosity of the Institute - for it was the continuance of the fellowship that made India and Mesopotamia possible for me.

From the letter I had written to Prof. Tyler, I suppose you know how I came to accept this offer from the Babylonian Expedition of the University of Pennsylvania. I still consider myself under the wing of the Institute, however, and most sincerely hope my leave of absence may be continued. I think, if I live to return, that I shall ask permission to change the subject of my

final thesis - perhaps to The Architectural History of the Great Temple of Bel at Biffer or something of that sort. It might be considered as more purely scientific than the other, and would at least have the virtue of originality. We are busy in the excavation of this building - although it is an enormous undertaking - and partly through my pleadings many of its architectural peculiarities have been brought to light. If I can continue to add to my note book as I have in the past months, I think the results would not only be interesting but of some small value in placing early Babylonian architecture in a clearer light. However it is a most difficult problem - the temple has been restored again and again, presenting much the appearance of an onion with layer on layer - and I may not prove equal to the occasion.

I often think of the Institute, and especially of the Department, and look forward to the time ~~that~~ ^{when} I shall return to spend a year there again - as was imposed on me by the faculty. I hope that if I am gray-headed before I cease being a student there that it may not be entirely to my own advantage. Please give my best greetings to Mr Homer, Lawrence, Shedd and Miss Hunt if they are all still with you. My address will be: care of John Henry Haynes Esq. Baghdad Asiatic Turkey, until Jan. 1st 1895, when it will again be American Ex. Co., 35 Milk St London E.C.

Sincerely yours.

Just Meyer Jr.

Will you please hand the enclosed note to Prof Tyler?