

THE TEMPLE OF SOLOMON.

A DEDUCTIVE STUDY OF SEMITIC CULTURE.

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[CONTINUED.]

EGYPT.

IX.

If the main lines of Phœnician temples are Egyptian, there may be some data in that same source tending toward the clarification of Solomon's Temple.

The ancient empire of the ten Memphite dynasties left no temples of type analogous to that in hand, their very great antiquity being naturally concomitant with more primitive formlessness. The middle empire, with the capital at Thebes, leaves hardly a trace of its architecture as relic of the great and strenuous history of that evolution which culminated in the Hyksos Kings' supremacy. It is the Sait empire (21st to 30th dynasties) that has left us most of what survives to-day, although the later Theban dynasties (Rameses II was of the 18th) seem to have worked toward the Sait style. Since it is not until Sheshonk I²⁴ that we get contemporary with Solomon's day, it is permissible to use the temple of the new empire alone as the prototype of Phœnicia's adaptations.

The temple of the new empire seems to be marked by nothing so much as by complexity. A simple example is hard to find. When a temple was complete in all its parts, any monarch who wished his name to be perpetuated there, simply added a new building to it, which addition could only be a replica of some part already standing. Indefinite accretions give us the apparent complexity of Karnak.

But a simple example is most surely found in the temple of Khons²⁵ (Fig. 7) whose simplicity seems to have been left un-

²⁴ His accession was 980 B. C.

²⁵ So used by Perrot & Chipiez (*Egyptian Art*, vol. I) and Lenormant (*Temple de Jerusalem*) e. g., pl. 19. (a cross section).

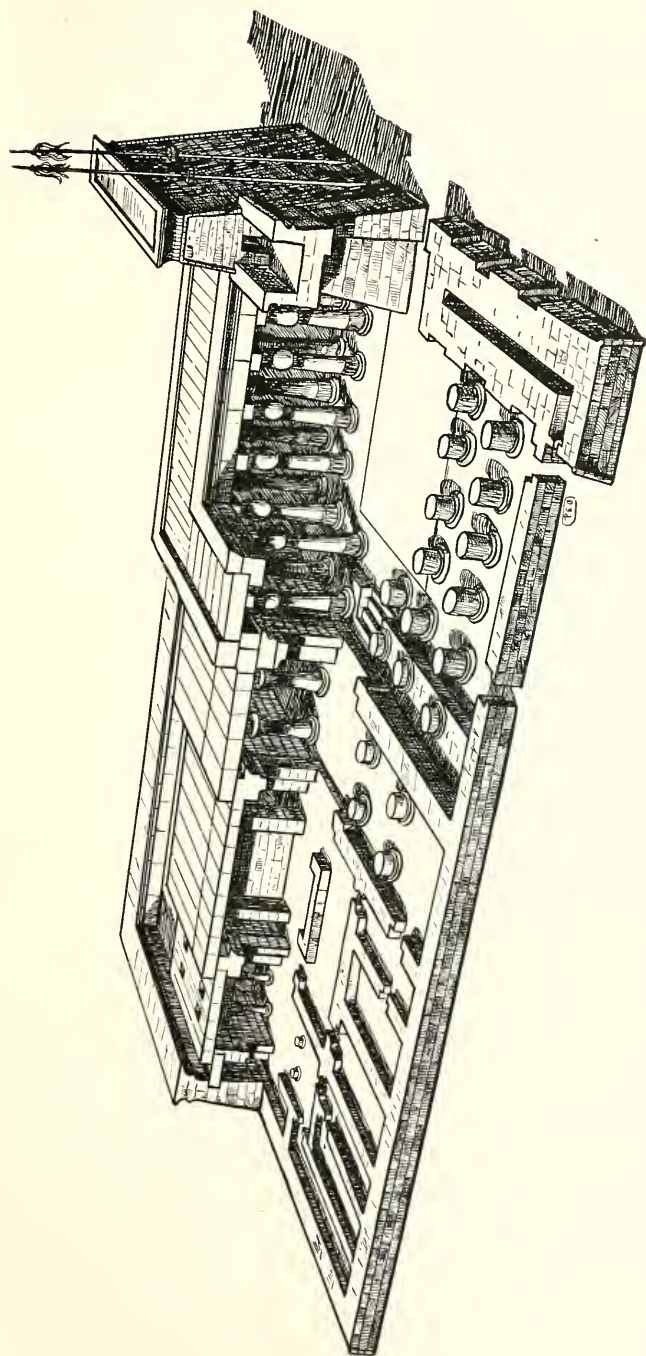


Fig. 7. THE TEMPLE OF KHONS: HORIZONTAL AND VERTICAL SECTION.
 From Perrot & Chipiez, *Hist. of Ancient Egyptian Art*. Vol. I, fig. 208.

touched from a very early date (Rameses III?), though in the near neighborhood of the great temple of Karnak itself.

First of all, the temple proper of Egypt is enclosed by a high wall which serves (1) to mark the external limits of the temple, (2) to protect the sacred place from injury and (3) to act as a curtain between the curiosity of the profane crowd and the holy mysteries within. Avenues of Sphinxes lead up to the gateways from far away. Within the gates begins the sacred enclosure,²⁶ within which all religious ceremonies are performed. The temple proper may or may not have such honorable and majestic forecourts. Khons has no outer wall at all; Karnak has four successive courtyards to be crossed before the shrine is reached.

The universal form of gateway is the *pylon*, whether it be in the walls (pro-pylon) or in the temple building. A pylon is of three parts. (A) a tall, rectangular doorway flanked (B and C) by a truncated, pyramidal mass on either side, rising high above its lintel. The object is purely ornamental, the outer and inner faces being profusely carved in low relief with scenes representing the monarch as the friend of the temple-god. Inside, the pylons are partly hollow; access to the small chambers is by means of ladders (in the earliest examples) or by winding stairs about a central, square newel (in the later).

In front of the pylon generally stand two obelisks, a few feet away from the base of the pyramid-masses; and, in really complete temples, just behind the obelisks and in contact with the pylons sit colossal statues of the king. To two obelisks there may be four or six statues. The obelisks extant vary from sixty to a hundred feet in height and the statues from twenty to forty-five. The pylon and its decorations thus compose the entire façade of the temple.²⁷

Behind the *portico* comes a rectangular *Peristylar court*. The colonnade is of a double row of columns in front of a solid (sloping) wall. From this court a doorway leads into a hall of little depth, but of a width equal to the whole temple, whose roof is supported by close-set columns. This *Hypostyle hall* corresponds to the *Pro-naos* of Greek temples. It is the "Hall of Appearance," into which only kings and priests are allowed to penetrate. The outer "Hall of Assembly" must suffice all others. The hypostyle hall is so thickly set with pillars in some of the larger temples that little, if any,

²⁶ Called the *τέμενος* in Greek temples.

²⁷ In the temple of Khons there are neither obelisks nor statues, but whether this is due to the minor importance of the temple, or to the removability of such small-sized relics as would be here proportional, it is not possible to tell.

vista is possible. This comes from the limitations imposed by stone slabs as roofing material.

Behind the hypostyle hall, there is a rectangular chamber, separated on all its four sides by a wide corridor from small chambers which fill in the space left vacant. This chamber we easily recognize as the "Holy of Holies," the "Cella" of the shrine.²⁸ Fragments

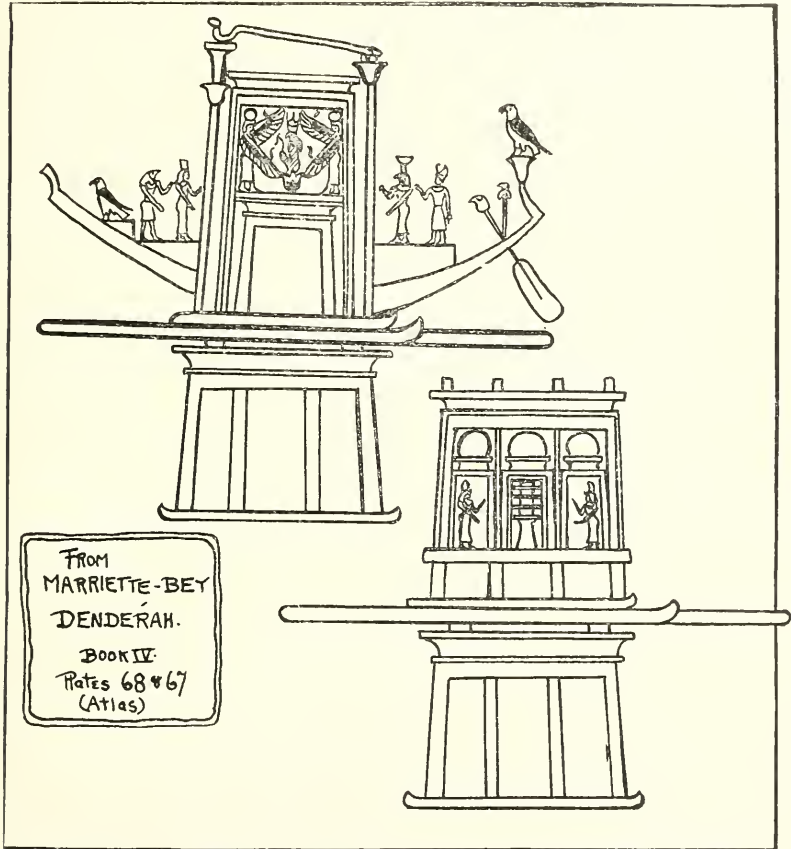


Fig. 8. THE SACRED BOAT (BARI) OR ARK OF EGYPTIAN GODS.

From Mariette-Bey, *Dendérah*, Book IV, pl. 67 and 68.

of a granite pedestal have been found here, upon which must have been placed either the "bari" or sacred boat, as often figured in bas-reliefs (see Fig. 8) or some other receptacle of the emblem of the local divinity. Strabo tells us with surprise²⁹ that there was no

²⁸ Strabo names it the *σηκός*.

²⁹ Strabo Bk. XVII, I.

statue of the divinity here; but there must have been something to distinguish it from the less sacred parts of the building, and the identification of this something with a little shrine is patent. It is therefore far from guesswork to find in Egypt the prototype of at least the Ark for which Solomon built the Temple, and the thought of a Holiest Place therein where the sacred chest should rest.

The smaller rooms round about must have been used as subsidiary chapels for consort and subsidiary gods, and for store-room and treasury purposes as well. They are indefinitely multiplied in larger temples.

Such was the basic idea of the Egyptian temple. Its details I postpone until I come to the Temple at Jerusalem, where some of them are of possible use.

X.

THE TEMPLE OF SOLOMON.—GENERAL ENVIRONMENT.

The actual reconstruction of the Temple at Jerusalem is incomplete without some slight idea of its setting. In the adornments of his capital, Solomon included the Temple within the citadel, his castle. The group of structures thus included comprised not only the king's residence, the palace for his chief wife, the daughter of Pharaoh (built in Egyptian style that she might feel at home?), the apartments of his other wives, but also a magnificent hall of audience for state occasions,³⁰ a smaller hall of judgment and the Temple (cf. Fig. 9). There seems to be no doubt left as to the site.³¹ It is known in the Old Testament both as Zion and Moriah; in modern times as the Haram esh Sherif. In all probability it had been David's citadel, now enlarged to take in more of the hill for the accomodation of Solomon's more comprehensive and impressive massing of buildings. The natural unevenness of the ground was largely overcome by filling in the lower places, with retaining walls such as Herod later built. The enormous number of laborers required to "build the Temple" expended most of the seven years ascribed, not on the comparatively small building itself, but on the wonderful masonry substructure necessitated to raise the plateau to the level of the Temple court. Probably as much as one-third of the hill had to be built. The artificial plateau must have numbered at least fifteen acres. To-day it rises eighty feet above the

³⁰ The House of the Forest of Lebanon.

³¹ There has been much controversy between the advocates of the western and the eastern hills, but it seems to be settled in favor of the western one by excavations (Wilson and Warren) which show the substructure intact.

debris,—debris so great that the bed of the Kidron has been moved laterally eighty feet and raised forty. Excavations have shown it to reach to the depth of twenty-five meters. The foundation stones thus exposed are well finished, showing they were originally in

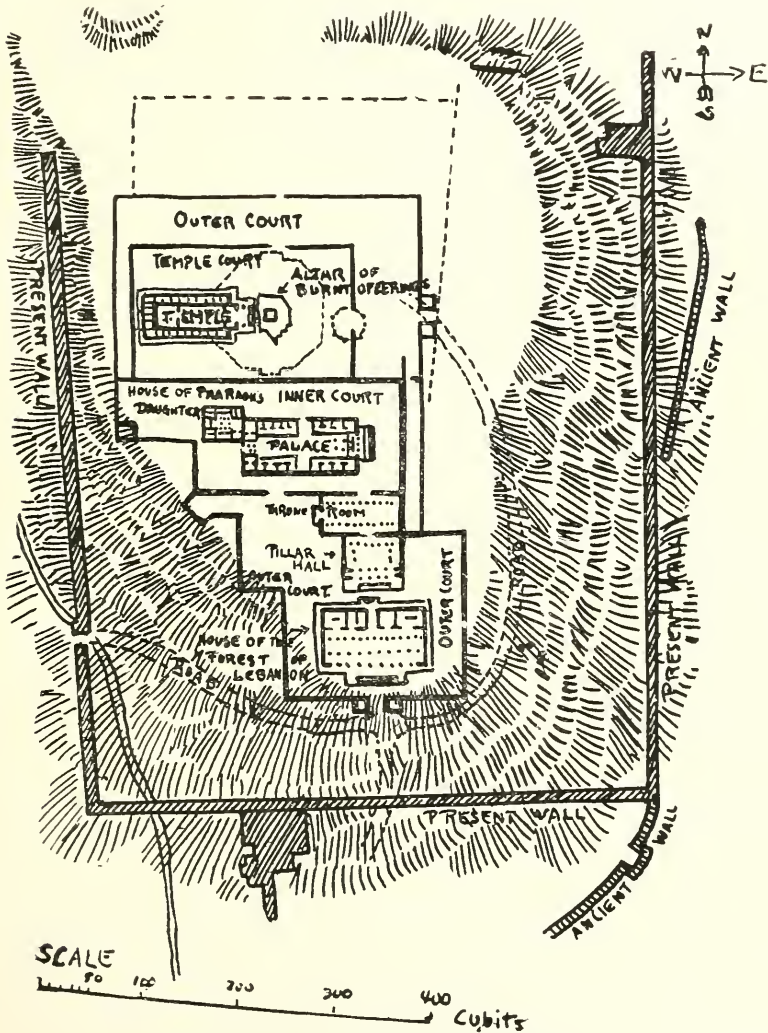


Fig. 9. MAP OF SOLOMON'S CITADEL.

view. The method of their finishing is that called "rusticating," i. e., the main surface of the stones is left rough, but the edges are sunken and smoothed, so that when the blocks are *in situ* the joined

edges form shallow, sunken channels. But this is a method of stone-dressing it is hard to carry further back than the time of Herod.³² The enormous size of the blocks,³³ reminding one of those in the wall of Baalbek, is remarked upon by Josephus of Herod's temple. Solomon's substructure, if anything, goes yet deeper.

The natural unevenness of the hill cannot, however, have been entirely overcome, for constant usage speaks of "going up" from the palace to the Temple. The Temple must have stood at the highest point, with the palace lower down to the south, and still lower the houses of the town. The sacredness of hill-tops is common to all Semitic religions. So we are justified in assigning this native summit as the original reason of its consecration. Probably we may go further and say it was already consecrated to the *genius loci* before David captured the city, in which case Yahveh simply adopted the locality; as at Gibeon, a Canaanitish town, he had displaced the local Baal, or become merged in him. This was no unusual process.

That the threshing-floor of Araunah the Jebusite had been within so short a step of David's palace is hard to believe, especially since the palace must have been the highest fortified point in Jerusalem. The site of Solomon's Temple could not have been determined by this. It is natural to suppose that the Temple gradually attached to itself legends originally concerned with other sanctuaries and that this is one such. Solomon built his court chapel in the citadel near his palace. As a hill-top it may have been sacred, but mere convenience of location, as better lending itself to the scheme of the whole, must have been the determinant motive of its situation.

XI.

SOURCES (DOCUMENTARY).

The scantiness of information concerning Solomon's other buildings seems to be for the sake of giving space to the description of the Temple. Some may claim that the description of the palace etc. represents about the true quantum of the knowledge the writers really had and that whatever accuracy and description of glories goes beyond that quantum in the Temple-depiction is invention, pure and simple. But difference of estimate would be enough to

³² The red vermilion marks on the bottom stones cannot be defined as a dated Semitic alphabet, but are probably mason's marks.

³³ Some of them weigh at least 100 tons.

make the Temple bulk larger in their eyes than any palace buildings, since they wrote from a pietistic standpoint. The Temple, even while it remained an innovation, was of cardinal interest.

In the Old Testament there are three accounts of the Temple:

(1) 1 Kings v-viii. This leaves out much that is absolutely essential to a clear understanding of the structure, using technical terms whose meaning seems to have disappeared as completely as has the Temple itself. Attempts to reconstruct their contents must always be attended by a high degree of uncertainty.

The last important event known to the author is in the latter part of the exile, making it therefore entirely possible to doubt whether the writer had any first-hand knowledge of what he is describing here. Yet the ground work of Kings seems to have been a more or less contemporary compilation from the archives, later worked over into our present form. At any rate the text is very corrupt as we have it, and needs careful emendation. There is, probably, a residuum of first-hand knowledge as the kernel of the account, but it is so overgrown with traditions as to the cost of the materials, the number of laborers, gold plating, etc. that little reliance can be put on anything not elsewhere duplicated.

(2) 2 Chronicles ii-vi. This is the latest of the three versions of the Temple description. Chronicles, however sincere may have been the spirit of the compiler, was written from the point of view of a Jerusalem priest sometime after the return, whose one idea was to glorify the past and make the true Israel seem as orthodox three hundred years earlier as in the priest-ruled, restored nation. David is therefore represented as having received the plan of the Temple from Yahveh himself; and the long description of the Temple is filled with little but the enumeration of the costly gold and brass, and the skill which decorated it. With no first-hand knowledge, the Chronicler doubles or quadruples measurements, exactly as his priestly, orthodox, and esthetic eye would like to have seen the original Temple.

(3) Ezekiel xl-xlii. In this alone do we get apparently first-hand knowledge. Ezekiel had been a priest in the Temple before the Exile. Probably it had changed little from Solomon's day, however much its ritual and significance to the nation had altered. The vision of the Temple which the prophet saw on the banks of the river Chebar must have been based more or less upon the actual, though now destroyed, Temple in Jerusalem. His visions are full and exact, and enable us to fill in many gaps in the other accounts; but at the same time we must remember that this passage describes

an imaginative temple and is not hampered by facts if Ezekiel's ideal is otherwise. Besides, how much of the dimensions of his church can even the most long-settled minister remember, once away from it for years? Ezekiel may be our best authority for the reconstruction of Solomon's Temple, but even he is pitifully inadequate.

Secondary references may be found in Josephus and the Rabbinical *Tract Middoth*, but these are both so based on Herod's Temple as to be worthless, unless in some few points where we need them not at all.

Our information is small, both documentary and monumental. "Historic probability" is the best guide. And this can be so variously twisted that it is small wonder an amateur museum might be stocked with the diverse ideals and reconstructions it is used to justify. I do not claim to have found the solution which will set the discussion of Solomon's Temple at rest; my claim is to add to the collection a reconstruction I have not been able to find, but which seems just as probable as any. Certainty is happily beyond the reach of any man.

XII.

WAS THERE A ROOF ON THE TEMPLE?

I take my major problem first. So far as I know, the existence of a roof on the Temple has not been doubted. The Old Testament accounts have seemed to take it for granted. Modern consciousness seems to think one necessary to every building, ancient or modern. Yet, despite all this, I have ventured to doubt the existence of the roof in this present case.

(1) *Historic Probability.* The section on Phœnician temples had an ulterior motive; i. e., to show that Phœnician architecture did not contemplate a roof when concerned with temple-building. But the conclusion grew by simple study of the data, not from pre-conceived intent to be original. The endeavor to prove that the type of architecture depicted on Paphos coins (Figs. 1-5) was identical with that which was contemporary with Hiram of Tyre, so noted as a temple-builder, gave the basis for the claim that both were hypæthral.

Phœnicians did not build hypostyle courts like those of Egypt, for they were unable to afford such luxuries. The Phœnician genius was adaptation, and adaptation always omits that structural portion which is not essential to the *idea*, especially if at the same

time that portion happens to be the most difficult one to reproduce. In Phœnicia there was no proper stone out of which the necessary roofing material could well be made. To be sure, on the Egyptian temple there was a covered court, but this was the very portion that was least essential to its idea. The hypostyle hall was so thickly set with pillars (because of the shortness of the roofing slabs) that the congregating of any number of people was out of the question; ritual itself was banished to the outer, peristyle court. The hypostyle hall served its purpose well. It was put there to act as a screen, pure and simple; to keep the gaze of the vulgar and curious from the sacred oracle of the god. The hypostyle court was the implement by which the taboo-separation was enforced. Phœnicians had two alternatives in their adaptation if they did not care to copy slavishly and lose that precious modicum of originality upon which they seem always to have insisted (perhaps unconsciously), so that Phœnician gods were trade-marked as such, though their motives, likely enough, were frankly borrowed. The first alternative was to cover in the whole court, i. e., to enlarge the "cella" until its mystery should compass the whole shrine and leave the openness of the outer court enough for all the popular worship. The other was to keep the shrine small, perhaps to reduce it to the god's symbol only, (though small chapel-like shrines of tiny size have been authenticated as the center of the open-courted temple) and to increase the open space by making one more courtyard intervene before the shrine;—that is, the central object (in whatever form) being the "Holiest Place," whether the next outer concentric circle of impression should be a mere enlargement from within of the same quality of building, sacred and mysterious, or whether it should be something more definitely marked from the point of view of the incoming worshiper as an approach *to* that sacred presence. It is natural that the question should be decided in favor of the simpler open court, doubly so when the deities of the nation were so simply embodied in rocks, trees, and posts, and the "Holy Place" of the god or goddess was reduced at its very core to a simple cone, uncovered by vestige of mystery. If precedent probability does not require a roof, neither does the evidence of subsequent architecture. For we are certain that, if Solomon's Temple had a roof, it was an engineering feat of such great originality, and an innovation in architecture so complete, that the effects must have survived somewhere in the following years. But such we cannot find. Roofed buildings of so great an expanse do not come for centuries.

(2) *Practical Possibility.* If we are historically justified in daring to doubt the roofed character of Solomon's Temple, we are likewise justified in acknowledging the practical difficulty of roofing such a space.

Solomon's Temple was twenty cubits broad and sixty-odd long, inside measure (i. e., not counting the surrounding stories of chambers). A cubit seems to have corresponded to an Egyptian ell, which was about $20\frac{2}{3}$ inches. The building cubit apparently was a handbreadth longer than the cubit in ordinary use.³⁴ This necessitates a roof that shall clear a little over thirty-four feet, the shortest way for the timbers. Could cedar beams support a roof of planks and stamped earth of such dimensions, when the longitudinal sagging would still more increase the weight? On the face of it, it is absurd.³⁵ Some other shift must be devised to meet the demand. Stade³⁶ suggests some kind of trusses springing from the upper walls on both sides, but this is both ungraceful and unsupported by historic precedent or Biblical data (though the latter lack is not overmuch to be considered). Even so the weight would be most uncomfortably great, and no competent means of fastening such braces to the wall is thinkable for the period considered. It has been suggested that the ceiling beams may have been warped before they were put in place, to counteract by the upthrust of their artificial curve the downthrust of the roof. Disregarding the historical possibility of such knowledge, there are still two other facts that make such a thing doubtful: (a) a warped beam under pressure will not stay warped forever, especially if moisture can get at it (as moisture eventually could through stamped earth), and (b) there would be a lateral thrust exerted upon the walls which would be considerable from such weight, if the warping carried the center of the beam anything above the level of insertion. These walls were thick, but were put together without cohesive cement of any kind.

A still further possibility is that of Schmidt³⁷ who suggests columns five cubits from each side wall to form a support for the rest of the wall (making a clerestory), basing his suggestion on 1 Kings x. 12. Aside from the unreliability of the verse, such a

³⁴ Deuteronomy iii, (עֲשָׂרֵי אַמּוֹת) as compared with Ezekiel xl. 5 and xliii. 13, and 2 Chron. iii. 3.

³⁵ Strabo (Bk. XIV, C I, Casabeb 634) says: "The Milesians built a temple which exceeded in size all others, but it remained without a roof on account of its size." This is much later. If we only knew the dimensions!

³⁶ Siegfried Stade, ZATW, iii, *ad. loc.*

³⁷ Cf. Commentary on Kings *ad loc.*

possibility is unthinkable. Clerestories were first heard of in Romanesque and Gothic architecture. Also think of the weight the "almug tree" supports would have to carry; the roof weight (though narrowed, still appreciable) and all but ten cubits of the side walls, i. e., twenty vertical cubits of stone! To say nothing of the difficulties this would get us into with the peripheral chambers!

Fergusson³⁸ argues for eight pillars in the Holy Place, supporting the roof nearer its center. This is most reasonable of all. But the difficulty of forty-five or fifty-foot pillars made of wood is obvious, as is also the necessity of some lateral tie, part of the distance up. 1 Kings x. 12 and 1 Kings xviii. 6 are cited as his justification, and also the existence of the ten lamps etc. as arguing ten spaces to be filled.³⁹

But all these difficulties are overcome in the idea of a court, open to the sky, with a peristyle surrounding it; which takes in all the pillars necessary, which can very easily contain all the cedar beams and planks mentioned in the "cieling"⁴⁰ and which, besides, has the merit of historic lineage.

Such a reconstruction, however, is open to two substantial objections, which must be faced. In the first place we are expressly told in all the accounts that the temple was sheathed within with cedar so that not a stone was to be seen. It would be difficult to keep sheathing in good repair above the line of the peristyle, and it would look queer to see wood on the inside and stone on the outside. I have only two possible suggestions to make. (a) May not "within" mean within the peristyle, i. e., under its cover, where also only the floor would be laid, and no stone seen? (b) May not the "within and without"⁴¹ ascribed to the gold floor covering be analogy enough to prove a like obvious tampering with the text allotting to the carving of the cherubim, palm trees, etc. a similar position?⁴²

The second difficulty is the crucial one. Cyprus has no rainy season of any considerable violence or duration. Neither has Egypt. In Palestine, however, more rain falls in three months than the average rainfall of the whole year round in England. An open-court temple would be a dismal and sloppy place during the rainy

³⁸ Fergusson. *The Temples of the Jews*, p. 28 f.

³⁹ I do not consider as worth consideration any such anachronous conjectures as a gable-roof implies. Such a roof cannot have appeared before the time of Herod, at least, i. e., until Greek influence gave the example. Semitic roofs are flat.

⁴⁰ 1 Kings vi. 15-18, etc.

⁴¹ 1 Kings vi. 30.

⁴² 1 Kings vi. 29.

season. The table of the shewbread etc. could be moved back under the cover of the peristyle, but further protection is necessary. This protection awnings would provide, awnings either of skins or of Tyrian stuff, which was often so thick as surely to be water-proof. Figures 4 and 5 above may evidence the validity of a conjecture also suggested by the common use of awnings in Egypt and Assyria.

So far as the rainy season goes, Phœnicia proper, too, gets its share of rainfall; and the Phœnician style of architecture starts, not in Cyprus, but at home. If Phœnicia itself had possessed any rain-proof structure, we probably should have found some evidence of it in her colonies. She would not have been able to keep one style for "home consumption" and another for her "colonial export trade." If the Temple at Jerusalem is faced by the problem of the rainy season, so are the neighboring ones in Tyre and Sidon, whose open courts seem well authenticated.⁴³

(3) *Biblical Possibility.* There is evidence of pillars of some kind within the house, as they are repeatedly mentioned. There seem to have been four in the Holy of Holies, but they are not the only ones in the "House" by any means.

As to the ceiling, the Hebrew text need give no data for more than that of a peristyle if there is no preconceived notion to be gotten out of the text. 1 Kings vi. 9 ("he covered the house with beams and boards of cedar") is taken by the Septuagint and a small modern minority to mean the covering of the walls, and 1 Kings vii. 7 certainly shows the same verb can be so used for wainscoting. 1 Kings vi. 15 has the word ceiling in it⁴⁴, but it can apply equally well to the ceiling of the peristyle. The beams must have been covered above with limestone as protection from the weather, wherever placed.

I find no decisive reason for abandoning the conclusion to which the architectural pedigree of Solomon's Temple brought me, that it had an open peristylar court. Heredity seems to hold true.

XIII.

THE TEMPLE BUILDING.

(1) *General Dimensions.* There are curiously few variations in the ground-plan of the Temple (Fig. 10), since all the data are so comparatively devoted to length and breadth, and not to elevation.

⁴³ Cf. Biblos, Fig. 6.

⁴⁴ Instead of "walls" we must read "beams"—making it "From the floor of the house unto the beams of the ceiling"—which helps the contention above that the sheathing extended only "within" the colonnade.

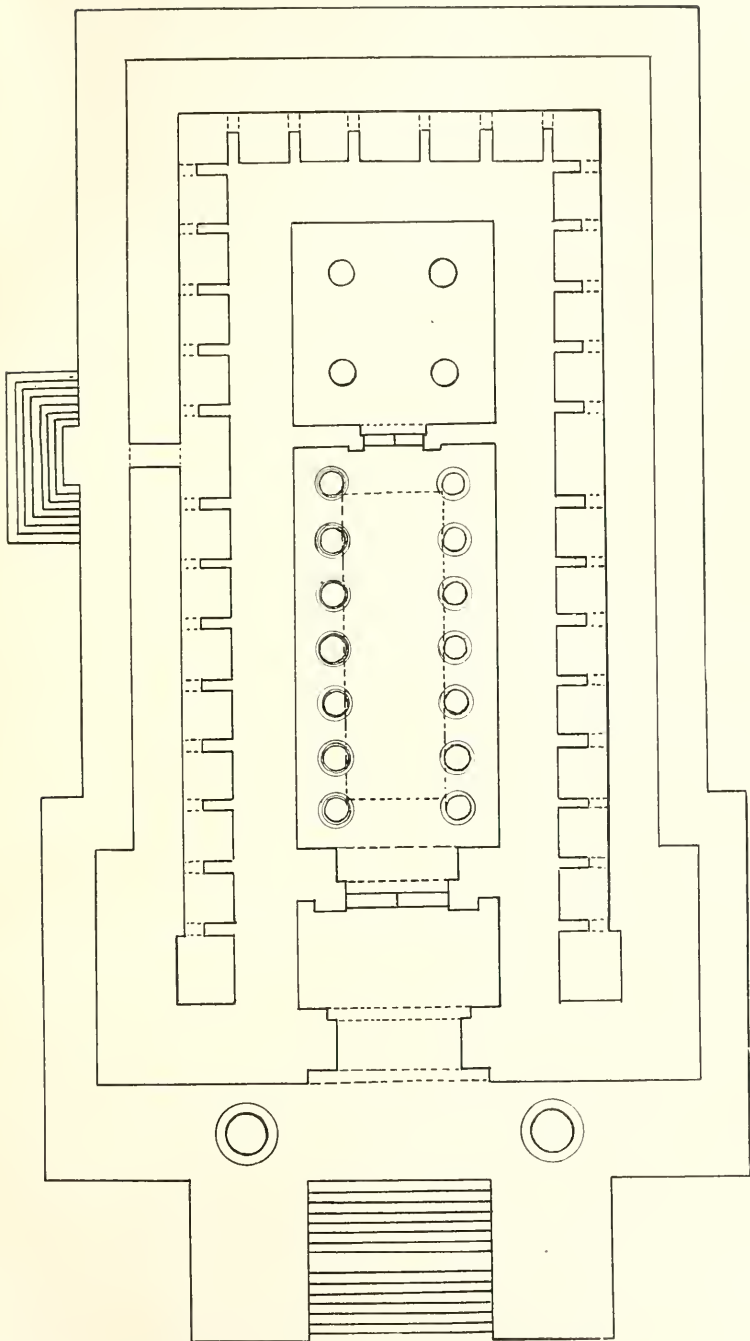


Fig. 10. GROUND PLAN OF TEMPLE.

The Kings and Chronicles accounts give us the length of the "House" (i. e., of the Temple proper, exclusive of the porch and the surrounding tiers of rooms, which are spoken of continually in a very *removed* way) as sixty cubits in all;⁴⁵ forty in the Holy Place (the *Hekal*) and twenty in the Holy of Holies (the *Debir*).⁴⁶ These are apparently inside measurements, with no allowance made for the thickness of the dividing partition. Twenty cubits is given as the breadth of both Hekal and Debir.⁴⁷ Ezekiel gives the length of the Temple, on the other hand, as one hundred cubits⁴⁸ (east to west) and from his account we get our data to fill in the *plan*. The Holy of Holies is twenty cubits, the court is forty, and the porch ten.⁴⁹ The rooms back of the Debir are five cubits wide.⁵⁰ This gives for room space seventy-five cubits. The chamber-wall at the back is given as five cubits,⁵¹ the "wall of the House" is six cubits,⁵² which is both back and front of the "House," the porch door jamb is six cubits likewise,⁵³ and the dividing wall between the Debir and Hekal fills in the remaining two. This foots up the necessary hundred. The same elements give us the width of the building as fifty-two cubits. The height throughout is given as thirty cubits.⁵⁴ On the old and accepted idea of a roofed building, discussion centered much, therefore, on the question whether there was a room over the Holy of Holies, whose cubical form⁵⁵ would leave ten cubits' space below the roof, or whether the Debir was externally lower than the roof of the house, or even whether there might not be an upper room over *all* the house.⁵⁶ This problem disappears with the open-court idea, leaving the Debir as the only roofed room set in the end of a rectangular space, enclosed by a thirty-cubit wall.

For these and the following details cf. the plan (Fig. 10) and the longitudinal, vertical section (Fig. 11) which better visualize them.

⁴⁵ 1 Kings vi. 2b.

⁴⁶ 2 Chron. iii. 8.

⁴⁷ 1 Kings vi. 2b.

⁴⁸ Ezek. xli. 15

⁴⁹ 1 Kings vi. 3; 2 Chron. iii. 4.

⁵⁰ 1 Kings vi. 6. Ezek. xli seems to be wrong (four cubits).

⁵¹ Ezek. xli. 9.

⁵² Ezek. xli. 5.

⁵³ Ezek. xl. 48 plus the extra cubit of the breadth of the porch he gives.

⁵⁴ 1 Kings vi. 2.

⁵⁵ 1 Kings vi. 20.

⁵⁶ Basing the question on the meaning of מַבְרַחֵי (Septuagint τὸ ὑπερῶον) in 2 Chronicles iii. 9, which more obviously means the upper surrounding chambers.

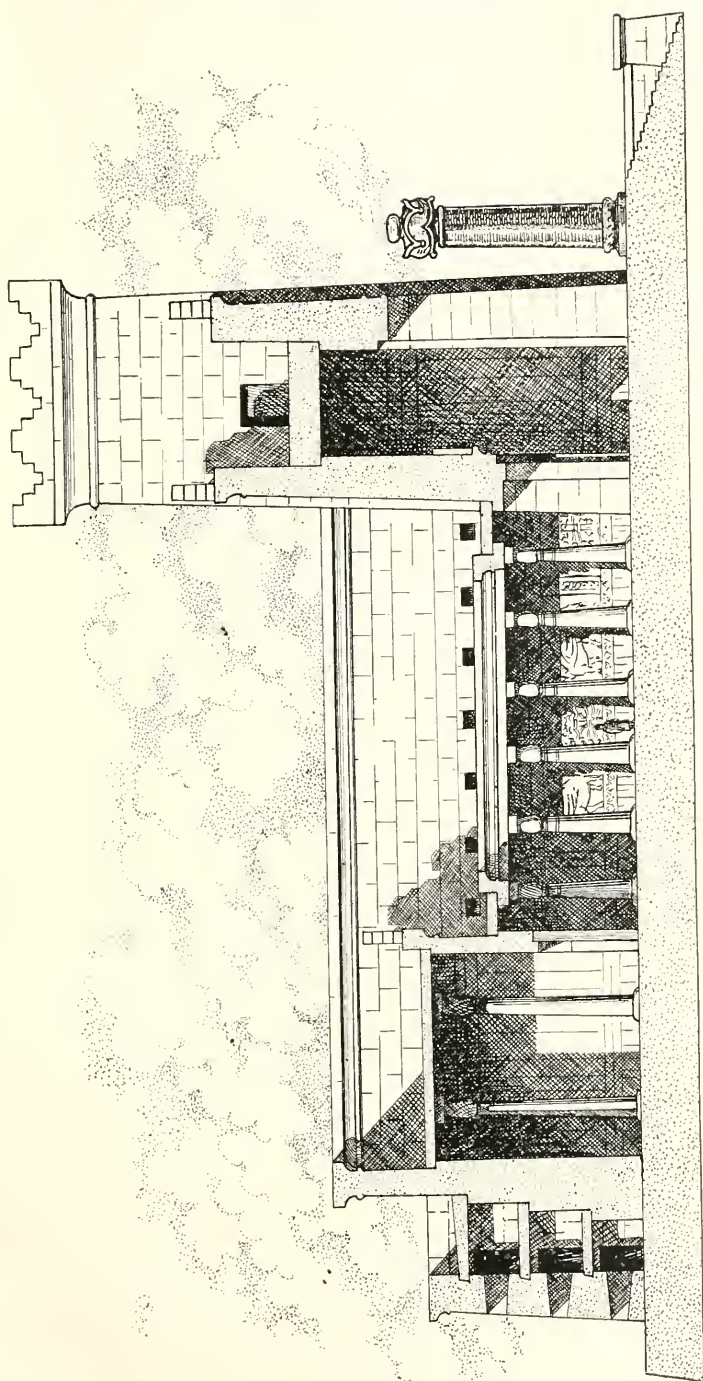


Fig. 11. SOLOMON'S TEMPLE. LONGITUDINAL SECTION.

(2) *The Porch.* Upon the front of the building rose the porch, though it is always spoken of almost as though it were not joined to the House. Its dimensions are variously given. Twenty cubits seems to have been the width⁵⁷ corresponding to the breadth of the House. This, of course is interior measure. The depth (again interior) is given in Kings as ten cubits,⁵⁸ but by Ezekiel as eleven.⁵⁹ Ten is, of course, the correct number, since Semitic love of proportion would make the porch half the Debir's length, which in its turn was half that of the Hekal. Ezekiel's accuracy, however, I do not doubt; but suggest the usual Egyptian section of the door-jamb which gives the actual door-post a buttress of a few inches; in this case probably a round cubit. This gives the door-jamb a thickness of five cubits, but the wall one of six (cf. plan, Fig. 11).

The height of the porch is not told us except in Chronicles.⁶⁰ where it is put at 120 cubits! This is not believable, (though Perrot & Chipiez, recognizing Ezekiel's temple as ideal, give this height as a good climax to the successive gateways.)⁶¹ This of course would be external measure. We have noticed the Chronicler's propensity to exaggeration, which generally takes the form of doubling and quadrupling. Here one-half the given height would be most fitting, giving 60 cubits, which is approximately the length of the house. This is meagre data but there is possible reinforcement to be found in two other places. Ezra⁶² and Esdras⁶³ inferentially state the propylon to have been 60×60 cubits. These dimensions were in the rescript of Cyrus, which the Jews seem to have brought with them on their return from exile. It is most improbable, when permission to rebuild was given and measurements were specified, that these dimensions should not correspond to the old Temple. When Jerusalem was captured, the Assyrians quite probably noted the details of the Temple as being the most sacred possession of the Jews, and so these records were put in the record-chamber at Babylon or Ecbatana, where Cyrus unearthed them.

But, even accepting these dimensions, the form of the porch is still vague and indeterminate. Conjecture is legitimate. Some

⁵⁷ 1 Kings vi. 3. 2 Chron. iii. 4.

⁵⁸ 1 Kings vi. 3.

⁵⁹ Ezek. xl. 49.

⁶⁰ 2 Chron. iii. 4.

⁶¹ Perrot & Chipiez, *Hist. of Art in Sardinia, Judea, Syria and Asia Minor*, Chap. IV, pp. 201 ff.

⁶² Ezra vi. 1 ff.

⁶³ 1 Esdras vi. 22 ff.

modification of the Egyptian pylon⁶⁴ is most naturally to be supplied. As we look at the Paphos coins we see a rudimentary pylon facing us. The flanking masses, as compared with the Egyptian originals, are shrunken in width almost to the appearance of pillars. The doorway, in proportion, has enlarged. How shall we interpret these "pictures"? In the first place, the narrowing of the pylons may be arbitrary, to show the side wings, which in reality are behind them, just as the "ashera pillars" are in reality in front of them. The raising of the doorway may be for the sake of giving the representation of the sacred cone more room. The coins give us an abstraction of an architectural form which in itself was likewise an abstraction of Egyptian forms. The gateway, it is clear, was to the Phœnician the most impressive adjunct of the temple; and the mention of the porch in all three Biblical accounts with such emphasis gives a slight degree of probability to the same deduction in Jerusalem, which is further increased by reassertion of Phœnician authorship. If this is true, Egypt need not supply all the material for reconstruction. Assyria may largely be drawn upon for ornamentation and subsidiary forms.

I do not believe the gateway of the Temple to have been a single (sloping-sided) plinth, as some reconstructions have suggested. The three parts to a gateway of any importance are to be found both in Egypt, Phœnicia and Assyria, (though in the last the sloping walls are absent). A doorway, flanked by buttress-masses rising above its crown on either side, seems obvious. Whether the doorway was recessed or salient between them is debatable, but I have chosen the recessed doorway (as against Egyptian precedent) because the Paphos coins seem slightly to favor such a decision, and because in Ezekiel's measurements of the porch we are told that the breadth of the door(gate) was "three cubits on this side and three cubits on that"⁶⁵ which I take to mean the breadth of the doorposts on their outside face, showing some kind of demarcation from the surface beyond. This is well within the realm of probability, especially since it follows the Assyrian type of gateway (Fig. 12) to some degree, and we know the Phœnicians used the Assyrian stepped ornament wherever they found a possible chance.

The predominant effect, however, must have been more Egyptian than Assyrian, since the sloping lines of the buttresses are the dominant features. I have crowned the buttresses and the doorway

⁶⁴ Cf. Fig. 6, p. 626.

⁶⁵ Ezekiel xl. 45.

with the Egyptian gorge (Fig. 13), in turn surmounted by the Assyrian stepped ornament, a favorite Phœnician trick.

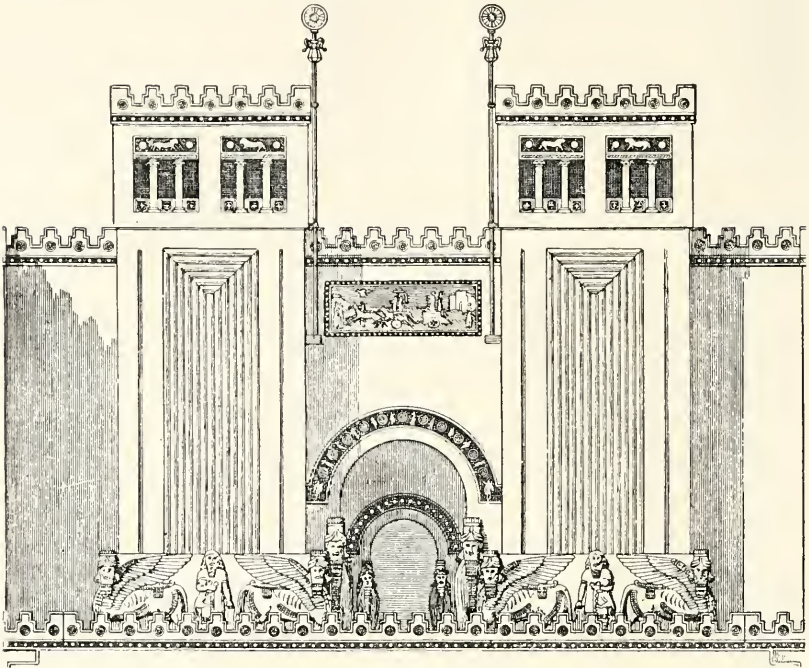


Fig. 12. ASSYRIAN GATEWAY.

Southeastern gateway of Sargon's Palace at Khorsabad. (Compiled from Thomas by Perrot & Chipiez, *Chaldea and Assyria*, Vol. II, p. 17, pl. 5.)

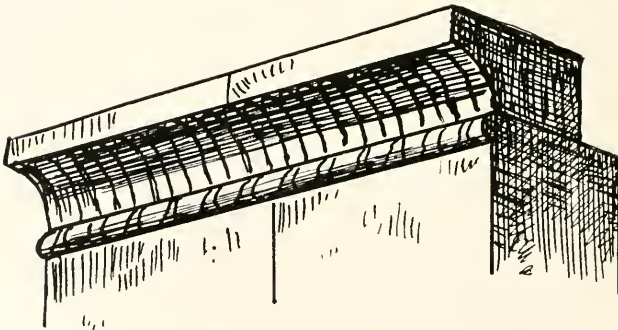


Fig. 13. THE EGYPTIAN GORGE OR CORNICE.

Perrot & Chipiez, *Egypt*, Vol. I, p. 102, fig. 67.

The doorway may have been almost any height. Many have put Jachin and Boaz under its architrave as supporting pillars, making

its height equal to their twenty-three cubits. But in my idea of the Temple, Jachin and Boaz are most assuredly the porch (cf. § XIV below). The portal must be impressive, but its inner wall cannot go above the insert of the roof of the peristyle within, if that is to surround the Hekal on all four sides. I have therefore made the outer opening twenty-three cubits high, and the inner one, in which were placed the great doors of olive wood, comes down to twelve.

The porch as viewed from the front (east) is shown in the elevation given in Fig. 14.

(3) *The Hekal*. There is little to be said about this when it is once decided what its fate shall be. The only questions to be

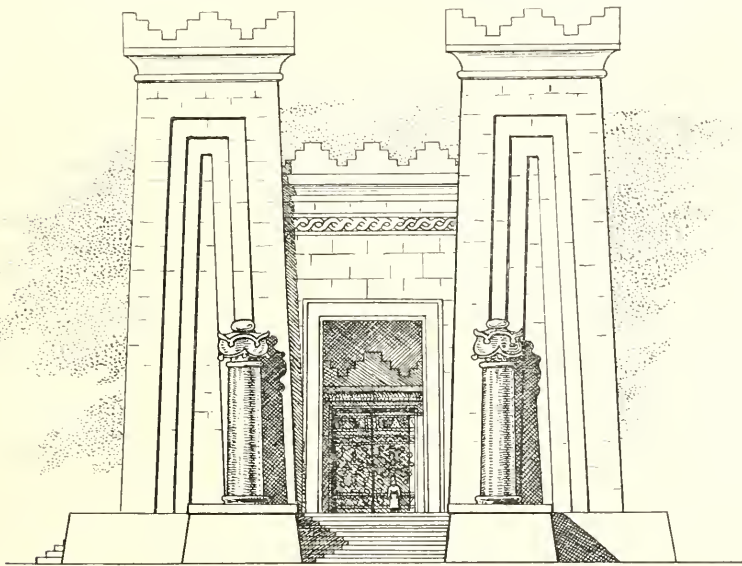


Fig. 14. SOLOMON'S TEMPLE. FRONT ELEVATION.

settled are the height of the peristyle and the crowning wall, if any, above the Debir. I have set the height of the peristyle at twelve cubits, above which the facing carries the apparent height another three. I have made the colonnade of a single row of pillars which carry the architrave five cubits out from the wall (i. e., counting from the base. The slant of the walls would add about half a cubit at the indicated height).⁶⁶ Since the pillars were of wood I have used the simplest form of wooden pillar Egypt knew, as more easily sheathed in case such sheathing should be necessary to sup-

⁶⁶ Does not this slant of the walls explain that phrase of Ezekiel's which has given such trouble: "The breadth of the house was still upward"? Ezekiel xli. 7b.

pose. The windows which are several times mentioned in the description of the "House" I take to be those of the peripheral rooms and merely for the sake of ventilation; and these would probably pierce the wall of the house only at a place where they would not be visible from the floor; i. e., only those of the top tier of rooms can have been let into the Hekal, which would come so low down above the peristyle roof and behind its facing that they would be totally hidden from below. These were probably latticed and smaller at the outside than within the rooms. The *Debir*, being ten cubits below the cornice of the House-wall, would look queer unless its front edge were marked somehow. This is easily done by a rather tall cornice, surmounted by the useful and ubiquitous stepped ornament, whose top level easily would reach the base of the House-wall's gorge.

(4) *The Debir*. As has been said, this was a cube of twenty cubits inside measurement. It was absolutely dark, there being no windows opening into it. "Yahveh loveth darkness" seems to have been a common conception of the time.⁶⁷ There is some doubt, nevertheless, of the doors being kept closed. The staves of the Ark seem to have been visible from the outer Hekal.⁶⁸ These doors folded vertically.⁶⁹ The doorway appears to have been pentagonal,⁷⁰ an additional distinction, marking the dignity of the entrance. It was six cubits broad.⁷¹ The height is not given; probably it would come to about ten cubits. The four necessary posts of the sanctuary would be about five cubits from the walls, in order to have the central space clear for the Ark and its guarding cherubim.

(5) *The Chambers*. These are a fairly unique phenomenon; yet they cannot be doubted, because of the unusual and accurate agreement of the accounts. Also such chambers have been discovered at Birs Nimrud (Egypt),⁷² and the British Museum Gem (Fig. 5), though later, shows that the Phœnicians knew how to combine such a feature with their temple-type.

The chambers were in three stories, extending on all sides of the "House" except the east, where the porch took up all the space.

⁶⁷ 1 Kings viii. 12; 2 Chron. vi. 1.

⁶⁸ 1 Kings viii. 8. The verse is not altogether clear but seems to warrant this much.

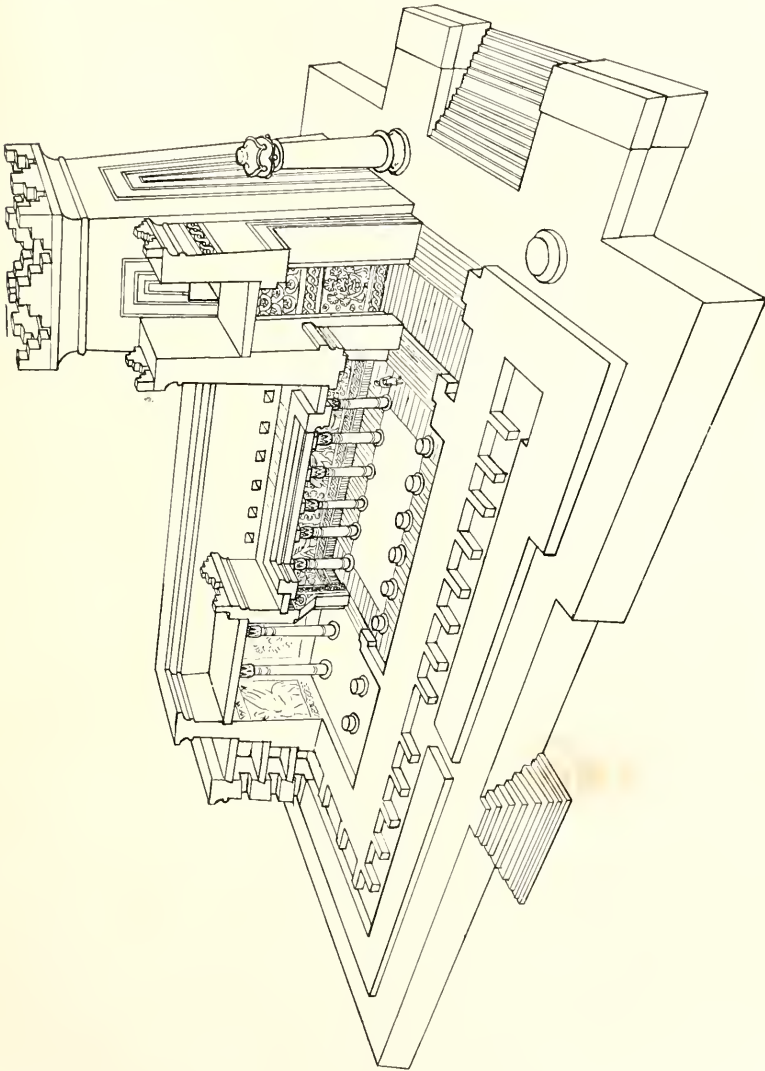
⁶⁹ The veil which Chronicles describes is later. Neither Ezekiel nor Kings mention it.

⁷⁰ 1 Kings vi. 31b = "five-square."

⁷¹ Ezekiel xli. 3.

⁷² cf. Fergusson. *Hist. of Architecture*, ad loc.

The method of their superposition is most ingenious, yet simple. Owing to the veneration for the "House" it was deemed sacrilegious to insert timbers in its walls. So rebatements of one cubit per story gave resting-ledges for the cedar (?) timbers upon which the floors



A PERSPECTIVE VIEW OF THE TEMPLE.

were laid. This of course necessitated an enlarging of the rooms; so that, the rooms on the first story being five cubits wide, the second story rooms were six and the top one seven. The height of all seems

to have been the same, i. e., five cubits.⁷³ Their outer wall, according to Ezekiel was five cubits thick. Whether the rebatement was shared by both House and chamber wall is uncertain, but from the repeated statement of the narrowed rests in the "wall of the House" and the lack of a single word about a like lessening in the chamber-wall, it seems likeliest that the whole rebatement of one cubit a story took place in the "House" wall. The exterior slant of the wall of the chambers keeps parallel to the successive lessening of the main wall, which continued to slant inward above the top chamber.

Connection was made from one room to another without the mediacy of a corridor. I have placed the doors next the outer wall, as being simpler to construct and as providing more storage space in the rooms. There was a door-way in the bottom tier of rooms on the south side of the building. Ezekiel's addition of one on the north seems to be a gratuitous personal gift to the ideal he had. Although there were winding stairways in Egyptian pylons, it is doubtful if such skill was yet attained elsewhere. Ladders are a more imaginable means of ascent, though stairs may have been built in by the time of the exile. To put these ladders only on the south side at the doorway room is to leave communication highly difficult. Therefore, as is the natural historical impulse, I have run the rooms well into the buttress-masses of the pylon (which *must* have been built partially hollow) and provided a doorway opening out across the porch's roof. Probably ladders were also to be found in these pylon rooms, which may possibly have been larger by a little than the others.

The number of these rooms is doubtful. Ezekiel is the only one who mentions their number, and he does it in such a way as to defy the best Chinese puzzle-solver. Whether there were thirty in all, thirty-three in all, thirty in each story or thirty-three in each story is an apparently insoluble question. I have chosen thirty-three to a story as working out the best in my plan, but there is no guide to such a choice except convenience.⁷⁴

The windows of these rooms were also latticed, to keep out birds, rain, etc. There must have been a slight slant to the roof of the top story and a perforation through the outer wall to let rain run off. Probably the roof of the Debir drained backward likewise onto the chamber-roof, through small spouts in the "House"-wall.

⁷³ I Kings vi. 10.

⁷⁴ To be sure, this makes pretty small rooms, but they were for storage-closets etc., not for living-rooms. Storage-closets need not have been large, since all the priestly paraphernalia and treasures seem to have been portably small.

(6) *Material.* Jerusalem and its vicinity provides excellent building stone, the *maleki*, a hard style of chalk or white, hard limestone, still appreciated at the present day. It can be polished like marble. It was cut in the quarry to the desired shape and size and brought to its place in the temple, so that no sound of iron was heard in the whole process of building.⁷⁵ Doubtless this was in deference to a popular superstition which forbade the use of iron on any sacred house, as shown in the oldest legislation of the Hebrews by the prohibition of altars of *heaven* stone, because the lifting of a tool upon it would defile it.⁷⁶

Timber was and is of inferior quality and meagre quantity. Hence a treaty with Hiram was necessary to obtain sufficient cedar and cypress for the prodigal sheathing and colonnades (in the courtyards and Solomon's palaces especially) the plans called for. The forests of Lebanon and of Cyprus are evidenced even now. Hiram had his timber next door.

The gold seems to have been later imagination. But gilding and charging with bronze (brass) is a characteristic Phœnician trick and we need not leave this out of the ornamental possibilities of the Temple.

This finishes the bare reconstruction of the building Solomon dedicated to Yahveh as the permanent abiding-place of His Ark. Yet the ornamentation and symbolic or semi-symbolic details contain so much more of the live interest of the times that, at the great risk of tediousness, I must say a few words on three of the more noticeable birth-marks of the Temple: (1) Jachin and Boaz, (2) the sacred trees, and (3) the Cherubim.

[TO BE CONCLUDED.]

⁷⁵ Although the authenticity of the verse (I Kings vi. 7) has been doubted owing to its queer position, historic likelihood renews the idea.

⁷⁶ Ex. xx. 25: