It is roughly built of limestone blocks which are left in their graduated courses. The base is about 60 feet square.

CHAPTER VII
THE MIDDLE KINGDOM. BUILDINGS AND ROCK-HEWN TOMBS

With the XIIth dynasty, Theban supremacy, and what is known as the Middle Kingdom, were firmly established under powerful kings bearing for the most part the names Amenemhat and Senusert. They developed the district known as the Fayum, making canals and constructing irrigation works by which the lake Moeris became a reservoir for the water accumulated during the inundation of the Nile. Senusert II built for himself the pyramid at Illahun which has been mentioned (p. 50). At Hawara, a few miles to the north-west of Illahun, are the remains of a pyramid of sun-dried bricks
which was over 190 feet high and 334 feet square at the base, with which was associated the enormous funerary temple called by Greek writers the Labyrinth, probably on account of a general resemblance to the Cretan

![Diagram of the Sepulchre, Hawara Pyramid](image)

**SECTION OF THE SEPULCHRE, HAWARA PYRAMID**

From "Kurum, Garob, and Hawara," by W. M. Flinders Petrie.

Labyrinth which has been identified with the palace excavated at Knossos.¹ The Egyptian building measured about 1150 feet from east to west, and, including the pyramid which lies on its north side, about 850 feet from north to south. According to the description of

¹ See on this subject K. and H., p. 125, also Hall, J. H. S., vol. xxv.
Herodotus, who saw it,\(^1\) it contained twelve covered courts and 3000 chambers, 1500 above ground and the same number below. Only a few broken columns and capitals now remain visible. Though the pyramid is mainly built of brick originally cased with limestone, the remarkable sepulchral chamber in the interior, which is about twenty-two feet long by ten wide, is hollowed out of a single block of yellow quartzite rock. The access to it was constructed in a most complicated and ingenious fashion. The entrance was on the south, but the gallery which descended from it turned four times till it reached the chamber from above on the north side, and was provided at intervals with several ponderous stone plugs intended to prevent any approach. The roof of the central cavity consisted of straight stone blocks weighing many tons sloped against each other to a ridge, and the pressure on it was relieved by an elliptical or rather parabolic arch constructed in the substance of the brickwork above, an indication of an advance in the science of building. The whole building is ascribed to Amenemhat III or his son, the fourth of that name. This was the last of the great pyramids, and though there are the ruins of a smaller one at El-Kûla (p. 57), about ten miles above Esna, which is ascribed to the XII\(^{th}\) dynasty, from this time the royal tombs began to assume a different form.

The kings of the XII\(^{th}\) dynasty were great temple builders, and it seems probable, from such evidence as remains, that they built in a style which was naturally developed from the plain stone constructions of the earlier dynasties. Pillars, square, octagonal, or sixteen-sided, were used for external effect, whilst slenderer columns with plant-like shafts and capitals simply conventionalized

\(^1\) See Herod., ii, 148.
such as are known to have been used as early as the Vth dynasty, were no doubt employed chiefly in internal work. Architectural quality must have been attained in precision of work, in excellence of material, and in a careful setting out of the colonnades and their architraves, rather than in an excess of superficial and adventitious decoration. But with few exceptions these temples and their ancient art have been superseded by the reconstructions of later dynasties.

The great temple at Karnak, the foundation of which possibly dates from still earlier times, was first built on a large scale by Senusert I in honour of the local god Amen, who from this time becomes prominent in the Egyptian hagiology. Of this temple only a few fragments of polygonal columns and their architraves are to be seen amongst the later constructions. The temple of Hathor at Dendera on the west bank of the Nile, between Thebes and Abydos, which was founded in the IVth dynasty, contains some stones with the name of
THE CITY OF EL-KAB, THE ANCIENT NEKHEB. From the North.
Amenemhat I. At Heliopolis and Bubastis in the Delta, at Crocodilopolis, Heracleopolis, Koptos, Amada near Korosko, and as far up the Nile as Buhen (Halfa), and Semna in Nubia, are traces of the temples of the XIIth dynasty.¹ Senusert III made Semna, which is a short distance above the second cataract, the southern frontier of Egypt, and there, and at Kümma on the opposite (east) bank of the Nile, he erected two strong forts, the ruins of which still exist, and show the same heavily buttressed walls which characterized the earliest fortifications (p. 60).

To Senusert’s successor, Amenemhat III, are ascribed the massive brick-walls of the ancient town of Nekheb, now El-Kab, which is on the east bank of the Nile, opposite Nekhen or Hieraconpolis. They are still in a good state of preservation and form a square, the sides of which are each about 700 yards long. The walls, which are composed of sun-dried bricks, are about thirty-seven feet thick and nearly thirty feet high. They are ascended inside by ramps as well as several staircases (p. 61).

¹ Foucart (p. 170) gives a list of Middle Kingdom temples.
The temple at Heliopolis, dedicated to the bull Mnevis as the incarnation of the Sun-god, which was enlarged by Senusert I, is now represented by some ruined brick walls, and one survivor of a pair of obelisks, the oldest example existing. It is a granite monolith sixty-six and a half feet high with an inscription, similar on its four sides, recording its erection by Senusert I. It formerly had a metal casing on the pyramidion at the top.

Small obelisks about three feet high are said to have been found in tombs of the IVth dynasty, placed one on each side of the false door.\(^1\) Their origin is uncertain, but whatever may have been their primitive significance, it is evident that they became associated with sun-worship, and may have been intended to show by the illumination of the polished apex the first rays of the rising sun.\(^2\) They show in their slenderer form and great height an advance both in refinement of architectural ideals, and in mechanical skill

\(^1\) Maspero, "Eg. Archaeol.," p. 101. See Appendix III below.
\(^2\) This seems to be implied in an inscription of Queen Hatshepsut regarding her obelisks at Karnak, where she refers to their summits as "being of electrum [a mixture of gold and silver] the best of
needful in the erection of such ponderous monoliths. An earlier so-called obelisk erected by Senusert I lies in a broken condition at a village called Begig in the Fayum. It is not of the usual form, and is probably a

every country, which are seen on both sides of the river. Their rays flood the two lands when the sun rises between them, as he dawns in the horizon of heaven.” Breasted, p. 281, quoting his “Ancient Records,” ii, 315.
stele or landmark associated with the engineering works in that district.

A pair of obelisks became a usual feature at the front of temples that were in any way associated with the worship of the sun-god Ra, and it is probable that the "pylon" which formed the actual façade and entrance to nearly all the later temple-courts, came into use about the same time. It consists of two narrow oblong towers with sloping sides ranged side by side on their longer axis, with a small interval in which was placed the doorway with its architrave at half the height, or more, of the towers. The latter were surrounded at the top by a cavetto cornice often enriched with flutings or other formal surface ornament, and their corners were finished with a torus or tube-like moulding. In some cases the front of each tower had several vertical grooves for the purpose of holding wooden staves which carried coloured pennons at their tops. A smaller form of pylon, consisting of a single tower pierced through its centre in a doorway with an architrave and cornice, was also used, and sometimes it took the form of a simple "trilithon."

There is no actual pylon remaining at the XIth dynasty temple at Dēr-el-Bahri; but several small gold breast-ornaments or pectorals of the XIIth dynasty found at Dashūr are apparently modelled from some such structure.

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In its general form the pylon exhibits the same simple constructive principles as the mastaba. The exterior surfaces were covered with figures incised in low relief.\footnote{The pylon tower is assumed by some writers to be a survival in stone of a primitive hut-building of wattle-and-daub, the torus at the angles representing the frame on which the walls were constructed, and the cavetto cornice the out-spreading tops of the reeds of which they were partly composed. The objection to this theory is that the mastabas, which were more probably imitations of early dwellings, have no cornice round the top, and when this feature first appears, it is as a moulding or dripstone above the false doors. 
This question of survivals in stone of constructions in more perishable materials occurs at various periods and places—in Greek, Asiatic, Romanesque, and Gothic architecture, and will not always stand examination. It is sometimes safer to assume that the artist exercised his imagination, and for purely decorative reasons invented details or pretended a construction for which he had no actual authority. The point becomes more important in dealing with the development of the classic orders.}

The removal of the centre of government higher up the Nile, where the cultivated area contracts and the river is approached by rocky heights, led to an extension of the custom of excavating tombs in the sides of the hills. Already under the VIth and VIIth dynasties the nobles and governors at Elephantine (Assuan) had made their tombs in the higher levels of the cliffs on the west side of the Nile. They were approached by a staircase cut in the slope of the cliff, down the middle of which a smooth inclined plane was made to facilitate the raising of the sarcophagi. From a platform levelled out at the top of the steps the sepulchres were hewn in the face of the cliff. One of the VIth dynasty is a double tomb of a certain Mekhu and his son. The entrance is unusual, being divided by a transom so as to leave an aperture above the door. Inside are two halls, one of which
contains eighteen roughly worked square columns, and a "false door" carved in the rock at the back. A closed shaft led downwards to a sepulchral chamber in the same manner as in the mastaba tombs of the Delta. The other hall had two rows of seven similar columns, and the walls of both tombs were decorated with crude paintings of agricultural work, hunting or fowling, and scenes of domestic life. There are also more elaborate tombs of the XIIth dynasty. In one there is a forecourt containing the remains of six square pillars which supported either a roof or a surrounding portico. Passages led to inner chambers; in the innermost was found a black granite statue of the deceased. In another tomb the corridor has three niches on each side, in which were placed statues of the person commemorated, in the form of a mummy. The walls of these are decorated with paintings, sometimes beautifully executed, which throw an interesting light on the personality and private life of Egyptian nobles, and lengthy memorial inscriptions have contributed largely
to a knowledge of the history of Egypt at one of its greatest periods.

A still more remarkable assemblage of rock tombs of the XIth and XIIth dynasties exists at Beni-Hasan, a village on the right bank of the Nile about 100 miles above the Fayum (see p. 56). It was apparently the necropolis of notables of Khemannu (Hermopolis) on the opposite bank. Though carved entirely from the solid limestone rock, they illustrate an advance in architectural ideas and structural expedients, inasmuch as the columns, though in a few cases rectangular, generally have the angles chamfered off in eight or sixteen sides with a plain square abacus at the top and a low circular plate-like base at the foot. Above is a simple entablature of architrave and projecting square cornice, and in some cases there are rafter-like projections carved on the under surface of the cornice, whilst the columns are a natural development from the quadrangular pillars of the early mastabas and funerary temples.1 The cornice is obviously an imitation of a construction derived from an earlier use of timber. Internally these sepulchres have one or more chambers, with concave ceilings imitating a low segmental vault, supported by pillars which are sometimes polygonal and sometimes of the clustered lotus-stem type. The stone of the door-posts and lintels is sometimes painted to represent granite, and the interior walls are decorated with elaborate and interesting paintings representing scenes from the life of the deceased nobleman. One of the most impressive of

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1 See the Essay by Lepsius, Appendix I.
these tombs is that of Amenemhat or Ameni, a high civil and religious official under Senusert I. It has a small open court in front approached by a steep pathway from the plain below. The façade cut in the rock consists of two octagonal columns, slightly diminishing upwards with a
shallow pilaster on each side-wall of the opening. This portico is separated from the inner chamber by a thick wall in which is a doorway which once had a door turning on pivots. The roof of the chamber is supported by four columns over sixteen and a half feet high with sixteen sides or shallow flutings, one side only, facing the central space, being left flat for an inscription. The area of the chamber is thirty-eight feet square, and in its back wall is excavated a deep rectangular recess or shrine which

![Wrestlers, from Wall Paintings, Beni-Hasan](image)

probably contained the small statuette of Ameni now in the British Museum. The tomb is especially rich in wall-paintings. "Nothing so fine," says Mr. H. R. Hall, "as the perfectly proportioned tomb-hall of Ameni, with its beautiful pillars, was ever excavated in an Egyptian cliff in later days. And the naturalism of the multitudinous groups of wrestling men which are painted on the walls round the entrance to the inner chamber, is paralleled only by that of the Greek vase paintings of the best period." 1 Another tomb dating from the time

1 "Near East," p. 163.
of Senusert II is that of Khnemuhetep II, a member of a family of high position under the early kings of the XIIth dynasty (see p. 68).

The architectural interest of these tombs consists

in their approximation to the Greek Doric, of which they have been considered a primitive form. They are obviously derived from earlier work, for the polygonal piers are found in Mentuhetep's temple at Akhaset, and the lotus pillars occur in a Vth dynasty temple; but the
proportions of the sixteen-sided pillars, which even have a slight concavity in their chamfered faces, and the profile of the entablature, which discards the cavetto cornice so general in later Egyptian work, give them an appearance not unlike that of the scanty remains of the early temples at Olympia and Corinth, notwithstanding the absence of the echinus moulding of the capital, and the superfluity of the base. Though the term proto-Doric, which was at first applied to them, may imply too much, it can, at least, be said that they throw light on the process by which some 1,600 years later columnar architecture attained its perfected form in the Parthenon.
A THEBAN VILLA OF THE XVIIIITH DYNASTY