THE ARCHITECTURE OF ANCIENT EGYPT

A HISTORICAL OUTLINE

BY

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WITH ILLUSTRATIONS

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"The Egyptians are averse to adopt Greek customs, or, in a word, those of any other nation."

HERODOTUS, ii, 96.
(*tr.* Rawlinson.)

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PREFACE

THIS volume was begun as the first instalment of an attempt to trace, for the information of unlearned or general readers, the architectural tradition from its remoter origins to the time when it became generally recognized as part of Roman civilization. The rapid advances which archaeology has made in the few years of the present century may, perhaps, excuse an effort, however imperfect, to bring together in a connected and historical form a certain amount of recent information which is at present dispersed in special books and papers.

In giving precedence to Egypt, I am only following the plan of every book that treats historically of architecture in general, and though I appreciate the motives which have led Mr. H. R. Hall, in his learned and now indispensable work on the ancient history of the Near East to deal first with the Aegean civilization, I do not find in them any reason to displace Egypt from the position hitherto assigned to it in this particular branch of art.

It may be thought that recent works dealing comprehensively with the subject of architecture, such as Professor Simpson's on "The History of Architectural Development," or Mr. Statham's interesting and original

volume, "A Critical History of Architecture," or Mr. Lethaby's suggestive little book on the subject, render any similar attempt superfluous, but in all these works, except perhaps the last, the proportion of space which could be allotted to the early stages of so vast a subject is necessarily very limited. The reader, consequently, fails to realize that the various phases presented to him are sometimes separated by thousands of years and existed in very different social circumstances; and in regard to Egypt particularly is apt to derive the impression that the so-called "orders" were throughout contemporaneous, or as nearly so as those of the comparatively short classic epoch. There seems, therefore, to be room for a book, which, though little more than an outline, and pretending to no technical treatment, aims at giving a historical view of the subject, and notes the changes in aesthetic ideals which, notwithstanding the innate conservatism of the Egyptian race, took place at one or two periods of their history.

Though the art of Egypt as a whole, especially from the decorative side, has been elaborately and in some cases magnificently treated in works by Champollion, Lepsius, Prisse d'Avennes, Maspero, and Perrot and Chipiez, I am not aware that the special subject of architecture has been separately dealt with in the manner and on the moderate scale here attempted, and certainly not since the archaeological work of the last few years has thrown additional light upon it. The discovery and excavation by Professor Naville and

Mr. Hall of the remarkable XIth dynasty temple at Dēr-el-Bahri is an event of the greatest architectural interest, and the still more recent excavation by Professor Naville of the supposed Osireion at Abydos is no less important historically.

I have thought that any interest the book may have would be increased by adding as an appendix a paper by Lepsius dealing with some features of Egyptian art, which, I believe, has not been translated before. He visited Egypt in 1842 as leader of a scientific expedition sent by King Frederick William IV of Prussia. No one who reads his letters from Egypt and Sinai can fail to perceive that he was a man of exceptional powers, both mental and physical, and will recognize the acuteness of his observations and deductions. This paper was published in 1872, and therefore represents his mature views. That it is necessarily out of date in some particulars, when phases of civilization in the Mediterranean and Western Asia, unsuspected by him, have been brought to light, will be obvious to every reader, but it contains so much that is suggestive in relation to Egyptian conventional art and the evolution of its architecture with its influence on that of Greece that I hope no one will think its inclusion superfluous.

Though the architecture of Egypt ceases after the XXth dynasty to have any special importance in the general development of the art, I have been tempted to go beyond my original purpose by describing and illustrating later monuments, partly with a view to giving the

book an independent status, and partly in the hope that it may be of some use as a companion so far as it goes to the handbooks of Murray and Baedeker. To these excellent guides, edited respectively by Mr. Hall and Professor Steindorff, I am mainly indebted for historical and topographical details, and for more recent information I owe no less to Messrs. King and Hall's "Egypt and Western Asia in the Light of Recent Discoveries," and to Mr. Hall's volume on the Near East already mentioned. I am also much indebted to Dr. Wallis Budge's "Guide to the Egyptian Collections in the British Museum," and to the trustees for permission to copy some of the illustrations contained therein.

No architectural work can be of much general interest without the aid of illustrations, and I have availed myself of as many as could be conveniently obtained and used. I have to thank the representative of the late Mr. John Ward, F.S.A., for enabling me to use a large number of those, including some sketches by himself, which appeared in his volume of Egyptian travel, entitled "Pyramids and Progress." I must also express my thanks to Professor W. M. Flinders Petrie for allowing me to copy or borrow a number of illustrations from his works, and for other obligations; to Mr. R. Phené Spiers for his kind permission to use two of his published drawings made in 1866, which form only a small proportion of a collection of highly interesting water-colours; to Miss E. L. Lister for the use of two of her own drawings; to the committee of the Egypt

Exploration Fund for permission to copy several illustrations from their invaluable publications; to Messrs. Macmillan for a similar permission to use two which appear in Chapter I; to Mr. J. Williamson for several accurate drawings in line; and to Mr. James Kennedy for the loan of various books and papers not in all cases easily accessible.

E. B.

August, 1915.

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ABBREVIATED REFERENCES

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THE GREAT PYRAMID AND THE SPHINX FROM THE SOUTH-EAST

GREAT DOLMEN AT BAGNEUX NEAR SAUMUR

EGYPTIAN ARCHITECTURE

CHAPTER I

PRIMITIVE BUILDING

IN attempting to give an outline of the early history of Architecture it may be well to define the sense in which the term is used. It is derived from the Greek word ἀρχιτέκτων, a chief-builder, and may be assumed to signify the art of designing a building and superintending its construction. Since only a building of some importance would require such care and supervision, Architecture may be defined as the art of building in an ornate, stately or otherwise excellent manner, as distinguished from any of the purely utilitarian modes of construction which have been used at various times to

satisfy the simplest requirements of man. A mud hut or a plain wall can hardly be said to be a work of architecture; but nevertheless, if their construction is such as to connect them with the evolution of more elaborate buildings, such works may have their place in a history of the art.

The word is also commonly employed in a more restricted sense to particularize various modes of construction or styles of ornamentation prevailing at different times or places; and inasmuch as the population of the world is divided into distinct races, which have no apparent common ancestry, it is obvious that there must or may be distinct processes of evolution in their work: but when there is no such sharp distinction, this use of the word has sometimes led to a disconnected and therefore misleading treatment of the subject, to fruitless speculations as to the "invention" of this or that style or detail, ignoring the fact that in any form of traditional civilization there are no distinct lines of demarcation, and that Architecture is a gradual and continuous process of evolution in which every so-called style has its links with something that precedes it.

It may be taken for granted that the impulse to build has found expression in every race that is not persistently nomadic, and that every existing building meant for habitation, defence or worship, has a germ or prototype in some primitive structure, whether earthwork, mud hut, lake-dwelling, dolmen or stone circle of prehistoric man: and though it is as impossible to specify the beginning of art of any kind as it is to trace back the human race to its origin, yet it is obvious that structures required for protection must have preceded what we call architecture, and that every civilized nation must at some re-

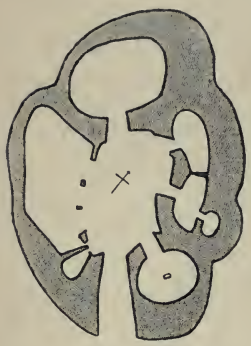
mote period of its history have found its way from such rude contrivances to buildings of a more elaborate kind, which in their use and form reflect the character, ideals and habits of their builders, and by the method of construction measure the degree of civilization or artistic perception to which they have attained.

Hence it is that in countries both geographically and historically remote from each other, there are found remains, few and scattered, of stone structures which have resisted the destroying action of time or of later generations, and which show with more or less similarity the earliest attempts of man to construct durable buildings. In Greece, Italy, and Western Asia are found remains of masonry which from their massive nature are called Cyclopean, or from their mode of structure Polygonal, and which are often attributed rather indiscriminately to an early race called Pelasgi. In Western Europe and Britain there remain megalithic monuments which similarly illustrate the laborious achievements of aboriginal inhabitants or early immigrants still ignorant of all but the simplest tools. Remarkable examples of dolmens or primitive stone structures exist in England and France, which probably served some religious or monumental purpose, and though the prehistoric antiquity of Stonehenge is doubtful,[1] in any case it throws light on the efforts of an earlier generation to give perpetuity to a religious structure.

The aboriginal inhabitants of Britain when they began to forsake their cave-dwellings, made circular huts of wattle and mud partly buried in the ground, and it is

[1] In "Stonehenge and its Earthworks," 1895, the late Mr. Edgar Barclay gives reasons for supposing that this work by British builders was subsequent to the Roman occupation.

probable that a circular form was generally adopted for the first dwellings made by hand, as may be inferred from undated remains still existing in some parts of England.[1] That this round building is in accordance with an elementary instinct is shown by its wide prevalence, and by its existence to this day in the shape of Kaffir kraals, or the Red Indian's skin-covered wigwam. Two curious relics from the Cyclades, which have been frequently represented in works on Aegean art, consist of boxes carved in stone, which though decorated externally with a spiral pattern much used in the Bronze Age, are obviously modelled from early dwellings, one being apparently a house of some size raised on piers. A



PLAN OF A PREHISTORIC STONE DWELLING AT CHYSOISTER. The extreme length is about 86 feet.

STONE BOXES FOUND IN MELOS AND AMORGOS

From Tsountas and Manatt's "The Mycenaean Age" (Macmillan and Co.)

[1] As at Grimspound on Dartmoor, or Chysoister near Penzance. See "Prehistoric Stone Monuments: Cornwall," W. C. Lukis.

model of an Egyptian hut made of mud probably on a core of vegetable stalks or fibre, shows the same use of curved surfaces. At Orchomenos in Boeotia there are a number of round and oval houses, the walls being of stone with domical roofs of clay.[1] All such examples of elementary or early efforts at building, disconnected as they are in time and place, are but scanty survivals of

British Museum]

EARLY DYNASTIC MODEL OF AN EGYPTIAN HUT

what must have been a multitude of primitive works which time has obliterated. They take us back perhaps as far as we can get to the remote origins of architecture and have no necessary connexion with one another. They originate in spontaneous efforts which may in any land precede a methodical system of construction. But

[1] See Schuckhardt's "West-Europa als alter Kultur-Kreis," in the Transactions of the Royal Prussian Academy, 1913, for a recent treatment of this subject.

as men advanced in the knowledge of metals and in the use of tools it is obvious that their attempts at building would assume a more regular and systematic form. The use of squared and jointed timber would entail rectangular plans which would dictate the forms of later constructions in brick and hewn stone. Different races would each establish a tradition, and the elements of style in building would take shape, especially in the more important structures which are associated with the conceptions of divinity and supernatural powers innate in almost every race, or with the semi-divine character often attributed to kingship. Style would be further defined by the application of ornament to constructive forms. It may also be assumed that where timber was easily procurable it would be used for all ordinary purposes; and in spite of its perishable nature there are still visible examples of its use by prehistoric man in the lake-dwellings found in Switzerland and elsewhere. Moreover, it is evident that in many cases the form and decoration of stone structures have been influenced by a previous use of wood.

There are three materials, and in a general sense only three, which any primitive race could use in building, viz., stone, wood, and dried clay or mud, such as is found near the outfall of great rivers. Clay with a mixture of straw formed the sun-dried bricks of Lower Egypt. Bricks, sometimes set in bitumen, were used in Mesopotamia. Later, in combination with sand and lime, it went to form a harder cement. The origins of architecture may therefore be classified under the heads of stone, timber and plastic matter, and according to the prevalence of these materials the earliest methods of building would be influenced, and a traditional style would take shape. But at the same time it must be observed that

the migrations of races, and, after the establishment of nations, the intercourse that took place between them would necessarily affect their traditions, and modify both their ideas of art, and their methods of work; but primitive ideas would still linger, and produce combinations in structure and ornament which would give rise to fresh styles and traditions. As in organic nature the influence of environment and the combination of diverse types have caused the development of new species, so in the art of architecture the multiplicity and variety of styles at different times and in different regions, has mainly resulted from a continuous and unpremeditated process of selection and evolution.

LIST OF THE PRINCIPAL DYNASTIC KINGS OF EGYPT AND THEIR CHIEF CITIES

Dynasty I — OLD KINGDOM — This

Mena, Aha, Narmer, Den-Semti — Contemporary or identical

Manetho names 10 kings

Dynasty II — This

Betju (?)
Perabsen

9 kings

Dynasty III — Memphis

Khasekhemui
Tjeser
Senefru

10 kings

Dynasty IV — Memphis

Khufu
Khaf-Ra
Menkau-Ra

8 kings

Dynasty V — Memphis

Sahu-Ra
Neferarika-Ra
Ne-user-Ra
Unas

9 kings

Dynasty VI — Memphis

Teta
Pepi I
Pepi II

6 kings

Dynasties VII, VIII — Memphis

Dynasties IX, X — Herakleopolis

History obscure and lists apocryphal

Dynasty XI — Thebes

Antef I
Mentuhetep I-VII

From 7 to 10 kings

MIDDLE KINGDOM

Dynasty XII — Thebes*

Amenemhat I
Senusert (Usertsen) I
Amenemhat II
Senusert II and III
Amenemhat III and IV

8 kings

* The kings resided at Medum lower down the Nile.

Dynasties XIII, XIV — History confused

Dynasties XV, XVI, XVII — Semitic invaders (Hyksos). Chief city **Avaris** (Delta)

NEW EMPIRE

(*c.* 1580 B.C.)

Dynasty XVIII — Thebes

Aahmes (Amasis)
Amenhetep I
Thothmes I
Thothmes II
Hatshepsut
Thothmes III
Amenhetep II
Thothmes IV
Amenhetep III
Amenhetep IV (Akhenaten)
Tutankhamen
Ai
Horemheb

Dynasty XIX — Thebes

(*c.* 1350 B.C.)

Rameses I
Seti I
Rameses II
Merenptah
Seti II

8 kings

Dynasty XX — Thebes

(*c.* 1200 B.C.)

Setnekht
Rameses III-XII

Dynasty XXI — Tanis

(*c.* 1100 B.C.)

Nesbanebtet

5 kings

Thebes

Herihor
Painetchem I

And 3 other priest-kings

Dynasty XXII — Bubastis

(966 B.C.)

Sheshenk (Shishak) I
Uasarken (Osorkon) I
Uasarken II

11 kings

Dynasty XXIII — Tanis

(750 B.C.)

Petabast
Uasarken III

Dynasty XXIV — Sais

2 kings

Dynasty XXV — From Nubia

(700 B.C.)

Piankhi
Shabaka
Taharka
Tanuathamen

Dynasty XXVI — Sais

(666 B.C.)

Psamtek
Necho
Hofra (Apries)
Aahmes (Amasis) II

6 kings

Dynasty XXVII — From Persia

(527 B.C.)

Cambyses
Darius I (Hystaspes)
Xerxes I
Artaxerxes
Darius II

Dynasties XXVIII, XXIX — Sais, Mendes — *c.* 400 B.C. — *4 kings*

Dynasty XXX — Sebennytos (Delta)

(378 B.C.)

Nectanebo I and II

Dynasty XXXI — Persian

(336 B.C.)

Darius III

Alexander the Great and the Ptolemies

(332 B.C.—30 B.C.)

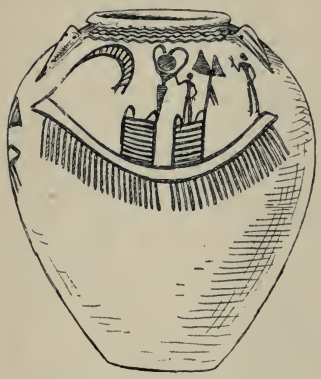
CHAPTER II

EARLY EGYPT—PREHISTORIC AND DYNASTIC

IT is not possible to trace step by step the process by which any style of architecture first arose, partly because the earlier and imperfect structures of perishable materials have generally been replaced by more perfect and durable ones, and partly because, when they have survived, historical records and inscriptions which would enable us to assign dates to them only occur after a considerable degree of mechanical or artistic skill has been attained. The one art which affords material help to the archaeologist is that of ceramics, for there occasionally occur remains of earthenware extending from neolithic times, to those which may be called historical, the progressive character of which enables us to assign, with more or less certainty, at least comparative dates to the successive strata in which they are found. The main fact which has become obvious is that long before historical data are available, a well developed and widely spread civilization prevailed round the eastern coasts in the islands of the Mediterranean, and in the fluvial region of Mesopotamia, traditions of which—long familiar from Greek mythology and Biblical history—have been to a large extent corroborated by excavations during the past and present centuries.

Of the foci of this ancient civilization, Egypt is that which has left at once the most imposing remains and

the oldest decipherable inscriptions: facts which are due to the existence in the regions south of the Nile-delta of extensive beds of limestone, sandstone and granite, and to the predilection of the inhabitants or their rulers for monumental building and permanent records.[1]



PREDYNASTIC VASE. (B.M.)

The pattern, which is common on such vases, appears to represent a palisade and a primitive kind of pylon. Sometimes it seems to be meant for a boat.

There are, at the same time, abundant traces of a more primitive human life in Egypt. Prehistoric cemeteries have been explored, in which bodies, unlike those of historic times, were buried in a contracted position;[2] and manufactories of palaeolithic stone implements have been found on the desert border of the Nile-valley. Of a later date, when metal had already come into use, occur specimens of remarkable stone knives and of pottery decorated with designs of human, animal, and structural forms.

[1] The remarkable preservation of many of the monuments of ancient Egypt is due partly to the dryness of the climate and partly to the isolation of the inhabited tract by the desert, which kept it for some thousands of years almost entirely free from barbarian invasion.

[2] A specimen of this contracted form of burial may be seen in the British Museum. There is evidence that the custom was not absolutely abandoned in the IVth dynasty. The inference is that it is due to a more primitive race which had not been completely amalgamated. The whole subject is treated in detail by Messrs. King and Hall, "Egypt and Western Asia," ch. i and p. 83.

Whatever may have been the aboriginal race in the Nile-valley, the distribution of the primitive cemeteries, and a comparison of the earlier and later neolithic remains together with evidence of mingled elements both in the language and religion of the later Egyptians, tend to show that before the end of the neolithic period Egypt was divided into two kingdoms,[1] and was invaded more than once by an Asiatic and probably proto-Semitic race,[2] who introduced a higher civilization, including a system of writing, and superior skill in mechanical crafts and the arts of life. But at a time when it is possible to assign something like definite dates and names to the kings, when what is known as dynastic history begins, probably about the middle of the 4th millenium B.C. the Egyptian people must already have attained to a considerable degree of civilization, and practised the art of building on a large scale.[3]

INSCRIBED SLAB

Probably of the first dynasty. It is apparently a list of seven towns, their names being indicated by pictographs and their size or tributary value by the enclosed squares. (Cairo Museum.)

The dynastic history of Egypt appears to fall into

[1] Breasted, p. 14. [2] K. and H., p. 34.

[3] Slate slabs of this date, like the one illustrated above, show on plan fortified enclosures surrounded by buttresses or towers, not unlike buildings of which remains exist in Mesopotamia.

three main epochs which are generally divided as follows.[1]

(1) The Old Kingdom comprising the first eleven dynasties extending from some time in the 4th millenium to the beginning of the 2nd millenium B.C.[2]

(2) The Middle Kingdom comprising dynasties XII to XVII, and extending approximately from 2000 to 1600 B.C.

(3) The New Empire, comprising the succeeding dynasties to the end of the twenty-sixth (525 B.C.), at which date Egypt fell for a time under Persian domination. A few more native dynasties are registered, interrupted by internal wars and foreign invasions until 332 B.C., when Egypt, then a Persian satrapy, was conquered or reinstated as a kingdom by Alexander the Great. After his death it was ruled by the descendants of his representative, Ptolemy, until 30 B.C., when it became a Roman province.

The first king of the first dynasty is generally said, in accordance with Manetho's list, to be Menes or Mena. It is more than probable that he is identical with Ahamen, who with his contemporary or successor Narmer

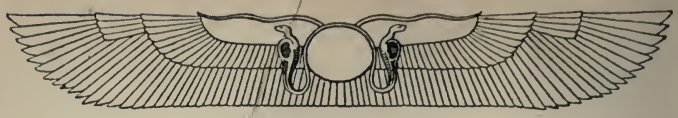
[1] See page 10. The list of so-called dynasties is due to Manetho, a priest, who wrote a history of Egypt in the time of Ptolemy I, about 300 B.C. Though it is known that some of his dynasties are wrongly indicated, his classification is universally accepted as a convenient formula for the grouping of the royal houses.

[2] The actual chronology of the first eleven dynasties is a subject of much doubt, the various systems which have been proposed differing by as much as 2,500 years. In these pages the system which gives the shortest dates has been in the main followed. In the XIIth dynasty the dates are said to be capable of verification by astromical calculation, but it is only in the XXth dynasty that the several systems practically coincide. See Breasted, pp. 597-8.

came from the south, and by conquest added the Delta, the chief city of which was Buto, not far from the Mediterranean coast, to the extensive kingdom already established in the upper valley of the Nile. The southern capital was probably originally at Nekhen, afterwards called Hierakonpolis, nearly 400 miles south of the Delta, but later at Teni or This near Abydos, 150 miles lower down the Nile. Mena is said to have built Memphis, and transferred the capital to the north; but whatever the earlier history of this town may have been, it is probable that it did not supersede Buto as the royal city until the IIIrd dynasty, to which the earliest royal tombs in that neighbourhood are assigned. Before that the kings seem to have been buried at Abydos, near the ancient capital This. The remains of two brick-built fortresses of the Ist or IInd dynasty, one of which is called by the Arabs Shunet-ez-Zebib, show that the early kings had residences at Abydos. The heavily buttressed walls illustrate the plans of northern fortresses shown on the sculptured slate slabs which commemorate the conquests of Mena or Aha and Narmer.[1] Timber was also used more than some writers have supposed, and was probably more plentiful during the earliest dynasties than afterwards. There is evidence that tombs of the Ist dynasty were both floored and roofed with boards, but it was superseded for such purposes in the IIIrd dynasty by stone.[2]

[1] K. and H., pp. 50 and 89, and Murray's Handbook, p. 362.

[2] An interesting paper on "The Sources and Growth of Architecture in Egypt," by Prof. Flinders Petrie, is printed in the Jl. R. I. B. A., viii, 341.



WINGED SOLAR DISK, AN EMBLEM OF HORUS

Frequently found as an ornament on cornices.

CHAPTER III

THE RELIGION OF EGYPT

IT is chiefly in sepulchral and religious monuments that the architectural history of Egypt can be traced. There is no nation whose development has been more influenced by supernatural conceptions. Belief in a continued existence after death is common in the most primitive races, but with the Egyptians it led to an elaboration of funerary customs and monumental building unrivalled in any other ancient nation. Of the Egyptian mythology it is impossible to give a connected account, because it took peculiar forms in different localities, and was never reduced by any conspicuous literary effort to a coherent tradition. But it is necessary to say a few words about it in order to account for the various attributions of the temples.[1] Towns remote from one another in the long and narrow valley of the Nile, which to the dwellers in it seemed to be the whole habitable world, had special presiding deities in addition to others of minor importance. From the confused mass of legend and superstition which attached religious significance and symbolism to the phenomena and processes of nature and animal life, and inferred the existence of good and evil spirits in almost

[1] A general sketch of the religion of Egypt will be found in Breasted, pp. 54-61, and details as to numerous gods in Dr. Budge's "Guide to the Egyptian Collections in the B.M.," ch. vii.

every living thing, the fact emerges that the sun was regarded as the great source, or at least symbol of power, and of the continual renewal of life after death. But even before Ra, the sun-god, came Thoth, the creator of the world, and Ptah, who assisted in the creation, and was regarded as the god who presided over all mechanical work. The chief seat of the worship of Ra was Annu or On, the Greek Heliopolis, in the Delta; but under other names he was worshipped almost universally. Keb, the Earth, and Nut, the Heavens, were his children, and they in turn, according to some legends, gave birth to Osiris and Isis. The slaying and dismemberment of Osiris by Set, another son of Keb and Nut, the sorrows of his sister-wife Isis, and his resuscitation by her efforts in the form of a god, who presided over the destinies of mortals both as a mediator and a judge form the subject of an epic legend. The cult of Osiris became widely recognized, and had its centre at Abydos, where his head was said to have been buried. One of the most important recent discoveries there is his sanctuary, supposed to be coeval with the pyramids, consisting of a hall about 100 by 66 feet in area, divided longitudinally by two rows of massive rectangular piers, with smaller chambers and a sepulchral cavity at the end.[1]

Horus, the son of Osiris and Isis, appears as a god in various forms, and is sometimes identified as the sun-god. In many religious centres a triad consisting of a god, goddess, and their son was worshipped. When, under the XIth dynasty, Thebes became a centre of government, the local god Amen was identified with

[1] The date of this remarkable building is still doubtful. See Appendix II.

the sun-god under the name Amen-Ra, and with his female counterpart Mut and their son Khonsu had temples at Karnak and Luxor.

Nut, the sky-goddess, became differentiated, like Horus, in various characters at different places. At Sais she was probably represented by the local goddess Neit,[1] whom the Greeks seem to have identified with Pallas.[2] In the more primitive mythology the sky was symbolized both as a woman and as a cow, typical of the nourishing qualities of nature, and at an early period Dendera became the centre of the worship of another form of this goddess under the name Hathor, with whom the cow was especially associated. At Bubastis she appears as Bast in the form of a cat. The continued tendency to associate animals with special characteristics of supernatural beings, is a marked feature of the polytheism of the Egyptians. The Bull under the name Apis at Memphis or Mnevis at Heliopolis was probably at first a form of Ptah;[3] the hawk was associated with Ra, and the jackal with Anubis, a god of the lower world who presided over sepulchral rites. Many birds and beasts in this way acquired a sacred character, but it was only at a late date, and towards the decline of the nation that the worship of animals as such became a recognized cult.[4] The number of gods mentioned in various inscriptions and texts is said to amount to more than 2,000 and though there are some indications of a tendency to regard them all as attributive to the sun-god Ra, the only real attempt to restore simplicity to the religious system was made by the philosophic king Amenhetep IVth, who

[1] Breasted, p. 59.
[2] See Rawlinson's "Herodotus," ii, p. 102 *n*.
[3] Breasted, pp. 46, 575.
[4] *Ibid*., p. 60.

changed his name to Akhenaten,[1] and tried, in opposition to the priesthood, to establish a monotheistic worship of a God adored through the medium of the sun's disk. In this he signally failed, and the old superstitions survived in forms continuously exaggerated down to the Roman period.

[1] The name is also transliterated as Ikhnaten and Khuenaten. It means Spirit of the Sun-god. See Breasted, pp. 360-364.

THE PYRAMID OF MEDUM

A MASTABA NEAR THE GREAT PYRAMID
From Prisse d'Avennes

CHAPTER IV

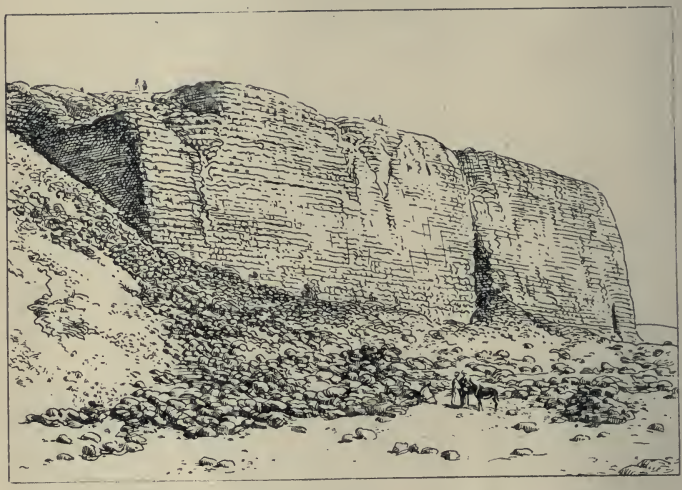
EARLY FORMS OF TOMBS

IT is supposed that the earliest religion of the Egyptians, before the development of their complicated mythology, was based on the worship of ancestors and the divine character of kings[1]—ideas to which modern parallels are found in China and Japan. To some such primitive system may be ascribed the importance persistently given to sepulchral rites and monuments.

The earliest tombs erected for kings and nobles rectangular structures at first of brick, but afterw stone, the courses being sloped on the outer slighty rebated so as to give the appearance

[1] Budge, B.M. Guide, pp. 116, 119. On the belief, see Breasted, pp. 122, 123.

sides.[1] They generally have on one side an architectural panel imitating a door with an inscription in hieroglyphics. In the interior there is nearly always a small chamber, or more than one, and through or beneath the substance of the mastaba there is a deep rectangular shaft or pit leading to a cavity in the earth below in



BRICK MASTABA BUILT BY TJESER AT BET KHALLĀF, NEAR ABYDOS

which the mummified body was deposited, after which
shaft was filled
ere is a l ick-built mastaba at Nakada, a
a little ydos on the left bank of the Nile,
he t na or Aha, and is the only royal

1 as (so called from the Arab word for
n to thirty feet in height, though some

tomb of the Ist dynasty known. Its sides have projecting buttresses suggesting a similarity to the early fortifications attributed to the same period.

Another immense brick-built mastaba, forty feet in height and about 280 by 150 in area, also in the neighbourhood of Abydos, is the tomb of King Tjeser of the IIIrd dynasty. Through one end there is a stairway leading to a descending passage which terminates in a series of mortuary chambers. The passage is intercepted in several places by heavy stones which were let down through shafts from the top of the building with the object of securing the inviolability of the tomb.

Hitherto sun-dried bricks had formed the material for building, though stone was sometimes employed in details as in Tjeser's mastaba, or for the granite flooring found in the tomb of Den-Semti a king of the Ist dynasty.[1] But it seems to have occurred to Tjeser to substitute stone for brick, for another monument built by him consists entirely of limestone. It was by no means unusual for kings to have a second tomb, a custom originating possibly in the desire that the so-called *ka*, or "double," should find a temporal retreat both at Abydos, where it was supposed that Osiris was buried, and at some other site associated with the life or death of the deceased ruler; though it is not always clear which is the actual sepulchre and which the secondary one.[2] Tjeser accordingly built a stone mastaba at Sakkara, near Memphis, on which, it is assumed, he afterwards imposed another of smaller area, and repeated the process as time went on, until he had produced what is known as the Step-pyramid. It has altogether six

[1] K. and H., p. 65.

[2] See "The Pyramid of Moeris," by H. R. Hall, J. H. S., xxvi.

British Museum Guide]

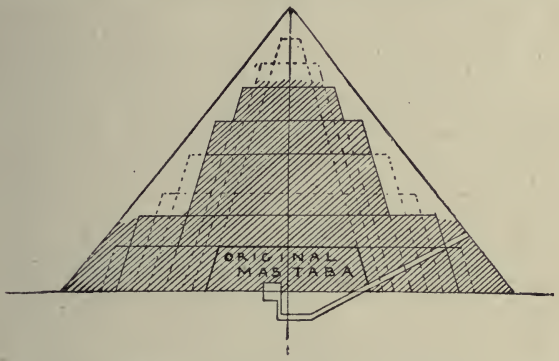
PYRAMID OF TJESER, SAKKARA

PYRAMIDS AT DASHUR

Probably of the IIIrd dynasty. The one with the double slope retains most of its limestone casing.

stages of a total height of 195 feet, and the area of its base is 390 from N. to S. and 347 from E. to W.[1]

The fashion thus set was followed by Senefru, the last king of the IIIrd dynasty, who built himself an imposing



SUPPOSED FORMATION OF THE PYRAMID OF MEDUM. (Petrie.)

The original mastaba was surrounded by a stone casing, and another smaller mastaba was erected on the top, leaving a ledge all round. The process was then repeated till the topmost addition was quite small when the ledged surfaces were filled up to form planes. (Compare illustration, p. 20.)

tomb at Medūm, between the Nile and the district known as the Fayum, in which he was afterwards buried. It was constructed, like the Sakkara step-pyramid, of a series of

[1] It has a complicated system of internal passages, which are all below the level of the soil, with four entrances which are outside the base of the structure. Its inception as a mastaba accounts for its oblong plan and for the fact that the principal cavity is a vertical shaft 80 feet deep and 20 feet square below the central point. The absence of any special tomb-chamber seems to indicate that the monument was not completed in the lifetime of Tjeser who was probably buried in the mastaba near Abydos. (Cf. Perrot and Chipiez, i, 205.)

mastabas, but the sides were filled out so as to form a continuous slope, and thus the first real pyramid was produced. It was afterwards partially destroyed by Rameses the Great, who used the fine stone of the casing for buildings of his own, and the existing structure is only the core of the original monument. In front of the east side is a small chapel which is the oldest known temple in Egypt. Senefru is also supposed to have built another pyramid at Dāshūr, nearer to Memphis. It is possible that it is the one the sides of which have two planes of inclination (p. 24), and which, as it is almost unique,[1] may be assumed to be an experimental form of the type which attained such perfection under the next dynasty.

The pyramid, evolved in this manner, became the type for royal monuments during the early Memphite dynasties, but for less exalted persons of distinction the mastaba continued in use, preserving generally its outward form though internally it often received a good deal of architectural decoration.[2] Hundreds of such tombs, as well as many pyramids in various states of preservation, fill the western side of the the Nile Valley above Memphis, and form probably the largest necropolis in the world.[3] It extends from Abu Roash on the north to Dashur on the south, including the plains of Giza, Abusir and Sakkara, a length of fifteen miles with a width of from two to two and a half miles. At Giza the mastabas

[1] Perrot and Chipiez (i, 210) mention another pyramid with a double slope at Metarieh between Sakkara and Medūm, and there are a few smaller ones of later date near Napata in Ethiopia (Murray, p. 553).

[2] There is a small mastaba, partly reconstructed, in the Assyrian Basement at the British Museum.

[3] See map at end of book.

are methodically arranged in regular ranks with their longer axes due north and south, but at Sakkara the

From the MASTABA OF THETHA, a royal kinsman, IVth dynasty. (B. M.)

arrangement is less regular and they sometimes encroach on one another. Within each is generally found a comparatively small interior chamber serving as a shrine or

chapel, and annexed to this is a walled-up cell,[1] or more than one, in which a statue of the deceased was deposited, not as a visible memorial but rather as a guarantee that the *ka* or double might find its mortal counterpart still whole and undecayed. This faith in the prolongation of the conditions of earthly life which so strongly charac-

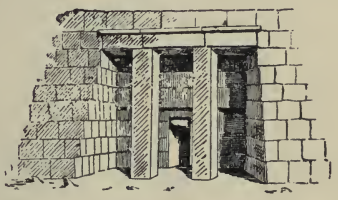
PILLARS IN THE TOMB OF THI. (Vth dynasty.)

terizes the Egyptian race is further illustrated by the custom of depositing, within or outside the tomb, food and drink and models of objects associated with the former existence of the dead.

It is probable that the earliest tombs of this class

[1] Usually called a *serdab*, the Arabic term for a subterranean shelter from the heat.

were solid except for the shaft which led from the top to the grave below the surface of the earth, the so-called "false door" being simply a panel commemorating the deceased. Its form suggests its derivation from a wooden framed doorway, such as must have been used in the more important dwelling-houses of which no vestiges remain. When the tomb was solid this panel or stele was in a recess on the east side towards the south end,[1] and on the floor of the recess was a carved slab of stone for the reception of the offerings to the dead. When there is a flat unrecessed door, an interior chamber which served as a shrine or chapel for ritual observances is found. Sometimes the two plans are combined by the enlargement of the recess into a hall with an open front or porch with square pillars. In any case the shaft which led to the actual grave was, with rare exceptions, unconnected with the chamber, and concealed from view. In the latter form of mastaba the "false door" is found on the back or inner wall of the chamber. Other chambers were soon added and the interior walls were decorated with reliefs or paintings showing the slaves of the deceased at their daily tasks. Such are the tombs at Sakkara of Thi and Ptahhotep, officials of the Vth dynasty, which have coloured wall-reliefs of extraordinary beauty and interest, illustrating the mundane life of the deceased; those of the former have been frequently illustrated.[2] By the time

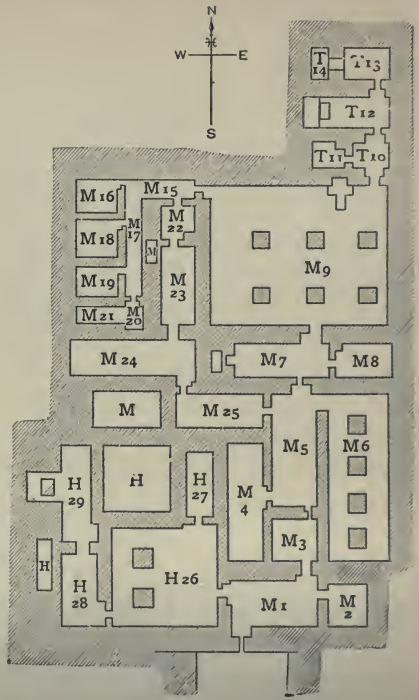


MASTABA WITH PORTICO. (Maspero.)

[1] P. and C., i, 172.

[2] See P. and C. *passim*, and Baedeker's Handbook, pp. 155-158.

STATUE OF MERERUKA IN HIS TOMB AT SAKKARA



PLAN OF THE TOMB OF MERERUKA. (From Maspero.) Room 9 is that in which the statue is placed.

of the VIth dynasty the mastaba became still more complicated; that of Mereruka, a vizier of King Pepi I, and his wife and son contained no less than thirty chambers. These more advanced types were imitated in the rock-cut tombs which became usual in Upper Egypt.

WALL-RELIEF FROM THE TOMB OF THI

Hunting amongst the water-reeds. The plant represented is probably the species of papyrus which suggested the shafts and capitals of some of the columnar forms which were commonly used in the later architecture. (See page 38 below.)

Menkau-ra Khaf-ra Khufu

THE PYRAMIDS OF GIZA FROM THE SOUTH-SOUTH-WEST

CHAPTER V

THE PYRAMIDS OF GIZA

THE pyramidal development of the mastaba by Senefru led to the adoption of this form by the kings, and culminated in the three great pyramids of Giza, the tombs of Khufu (Cheops) Khaf-Ra (Chephren) and Menkau-Ra (Mykerinos) of the IVth dynasty. These magnificent monuments exhibit grand architecture in its plainest form; yet simple as is their design it is by no means wanting in interest or variety, for their quadrangular plan, whilst ensuring perfect symmetry, gives the intersections of their sides a constantly varying angle as the point of view is changed. Moreover, their impressiveness is increased by their situation on a rocky plateau which is some 150 feet above the level of the Nile and the cultivated area. The largest and oldest, that of Khufu, is about 775 feet on each side, and when it was intact was about 480 feet in vertical height. That of Menkau-Ra, the smallest and latest in date, is about 346 feet square and 215 feet high. The intermediate one, of Khaf-Ra, is only a few feet less in height than Khufu's and from some points of view looks the highest. Except for the small internal chambers and the galleries which led to them, they are solid structures, chiefly of limestone brought from the quarries on the east bank of the Nile. When perfect they had smooth external surfaces, the remains of which are only visible on some of

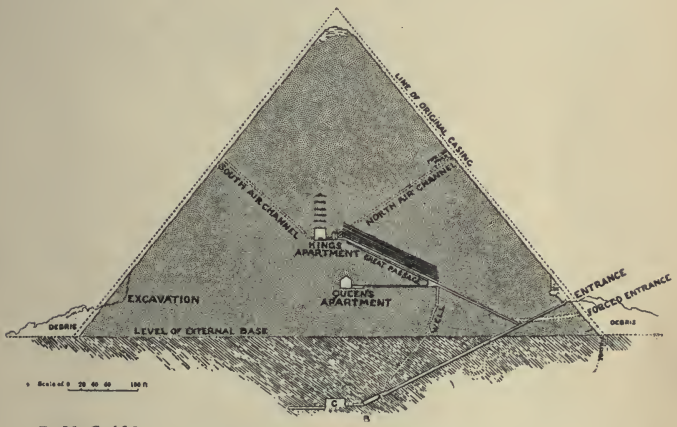
the upper courses of that of Khaf-Ra, the rest having been removed for use as building material in the modern Cairo. There was an entire absence of minor architectural features, and the entrance in each case was carefully concealed by the casing, which consisted of blocks of stone, fitted on the stepped courses which are now visible, with the outer surfaces carefully chamfered to the required angle.[1] So far as workmanship is concerned they show a complete command of method and material, for in the geometrical exactitude of their laying out and in the fineness of their jointing they are not surpassed or even equalled by the work of any later period.

The internal arrangement of the galleries and the position of the sepulchral chambers varies in each pyramid. In that of Menkau-Ra, which is built over a depression in the bed-rock,[2] the tomb-chamber is below the level of the soil, but in the case of Khufu's it is in the centre of the mass, and there is another which is known as the Queen's Chamber (though it has no sarcophagus within it) at a somewhat lower level in the pyramid. There is a still lower chamber, below the level of the soil, approached by an absolutely straight passage sloping down from the entrance, the use of which is not apparent. About sixty-three feet from the entrance of this descending passage another gallery branches upwards to a point at which a level passage leads to the "Queen's Chamber," and from the same point a great gallery 28 feet high and 151 feet long ascends to the King's Chamber. The smaller galleries are roofed by inclined stones which meet in an internal ridge so as to diminish the vertical pressure, but the great gallery is covered by corbelled courses of

[1] There are a few small samples of these blocks in the British Museum.

[2] P. and C., i, 205.

stone which gradually approach and meet above. The stones of the side walls are admirably fitted together so that the joints are scarcely visible. The King's Chamber, which is 34 feet 6 inches long by about 17 feet wide and 19 high is covered by flat slabs of granite, and the walls, are of the same material, very finely jointed. It contains an empty lidless sarcophagus massively hewn out of a



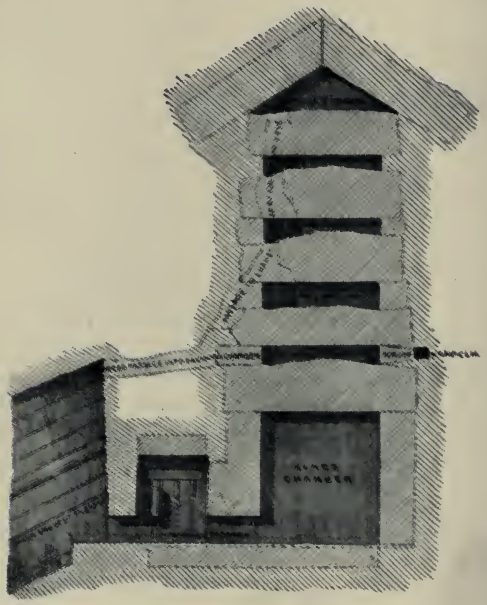
B. M. Guide]

SECTION OF THE GREAT PYRAMID

block of red granite without ornament or inscription. Above the King's Chamber is a peculiar arrangement of five cavities separated by horizontal blocks, the uppermost being covered by two inclined rows of stone rafters, with the object of diverting the pressure from the ceiling of the chamber.[1] The galleries are all constructed

[1] Such expedients show that the principle of the radiating arch was not commonly recognized at that period. The earliest arch hitherto found is, however, assigned to the IIIrd dynasty and is of somewhat rude construction. See Breasted, pp. 100, 101, and Murray's Handbook, p. 355.

and concealed with a view to secure the tomb from violation, and at certain points are intercepted by huge plugs of granite which were inserted from above in order to place what seemed to be insuperable obstacles in the way of any depredators. In some cases it was

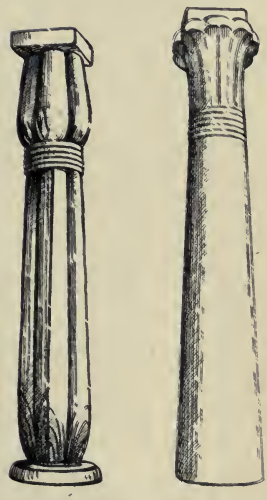


RELIEVING SYSTEM ABOVE THE KING'S CHAMBER. GREAT PYRAMID
From Vyse and Perring.

only by excavating new approaches that these obstacles were circumvented.

It is evident from the care and labour which were expended on these vast monuments, that they must have been erected during the lifetime of the kings whom they

commemorate, and the Prussian egyptologist Lepsius, who conducted an archaeological expedition to Egypt in the middle of the last century, promulgated the theory that they were enlarged at successive periods in accordance with the length of the reigns of their builders, as was almost certainly the case with those which originated in mastabas. Without accepting this theory as literally as some more recent German writers, Dr. Borchardt came to the conclusion that the Great Pyramid actually received additions to the dimensions originally planned, and this fact may explain the existence of the lower untenanted chambers which were superseded as the structure was enlarged.[1]



PAPYRUS COLUMN Early type, Vth dynasty. PALM COLUMN From pyramid of Unas. (B. M.)

The pyramid of Khufu has on its east side three smaller pyramids, which were the tombs of members of his family, and is surrounded by many mastabas. There are also three small pyramids on the south side of that of Menkau-Ra. The height of these smaller monuments varies from fifty to seventy feet. It was usual to surround large pyramids with a paved enclosure, and in some cases a causeway leading from the Nile to the enclosure was constructed apparently before the building was

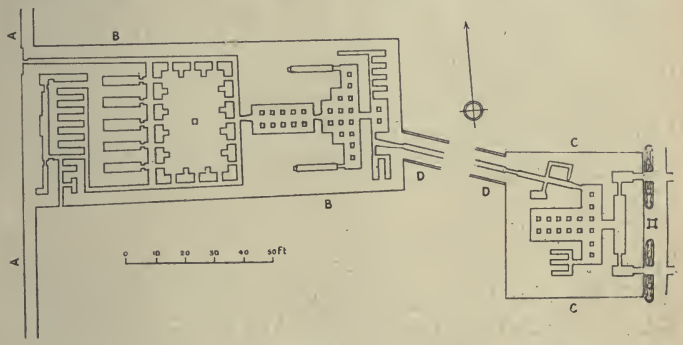
[1] See K. and H., p. 110, and also the discussion in P. and C., i, 208ff., which, however, leaves the matter in some confusion.

begun. The shrine or chapel which is found in the more important mastabas, was replaced in the case of pyramids by a temple built at a small distance from the east side, and remains of those attached to the pyramids of Khaf-Ra and Menkau-Ra still exist. Others have been found in connexion with pyramids of the Vth dynasty at Abusir, and in one of these, that of Ne-user-Ra, occur the most ancient specimens known of the clustered columns with bud-like capitals.[1] A simple palm-like capital was also used at this early date. A specimen from the temple attached to the pyramid of Unas at Sakkara may be seen in the British Museum. (See p. 37.)

There is a building at the east end of the causeway which formerly led up to the second pyramid, the object and date of which have been much discussed. Though partly covered with sand it appears from recent excava-

[1] K. and H., p. 98. The supposition that these columns and other conventional imitations of nature were suggested by a primitive use of the actual objects represented, seems unnecessary when it is recalled how frequently vegetable and even animal motives are adapted to architectural decoration. See Lepsius' remarks on the subject, Appendix I. It is not easy to say what plant or plants actually suggested the adaptations. When the reed-like components of the shaft have sharp edges, there is little doubt that the papyrus-stalk which has a triangular section was the motive: but in many cases the columns are described indiscrimately as "papyrus" or "lotus." In the illustration from Thi's tomb, p. 31, a water plant is represented which obviously suggests the reeded columns and the bell-shaped capitals. It is clearly not a lotus or lily, which had no such rigid stems, and may be a variety of the papyrus though the flowers are unlike its filamentary blossom. The subject is investigated without a very definite result by L. Borchardt in "Die aegyptische Pflanzensäule," and by G. Foucart in his "Histoire de l'ordre lotiforme," as to which see Note at end of Appendix I.

tions[1] to have externally the shape of a large mastaba with two doors; about 150 feet square on plan, with sloping sides originally about forty-two feet high. Internally it consists of a hall fifty-five feet long by thirty-five wide, with a double range of rectangular monolithic pillars sixteen feet high, six in each row, at the east end of which is a transept with a central line of six pillars, which includes two of the others. Further to the



GROUND PLANS OF KHAF-RA'S TEMPLES. From Hölscher.

A A Enclosure wall of pyramid. B B Pyramid-temple. C C Propylaeum or entrance temple. D D Extremities of the covered passage between the two, about 540 yards long. The smaller temple has marks on the pavement in front indicating the bases of sphinxes or other figures, and a small shrine in the centre.

east is a smaller transept without columns, in the floor of which is a vertical shaft or well, probably of later date. There are several other small chambers and passages. The pillars and walls consist of immense blocks of red granite without the least ornamental detail. The floor is mostly of alabaster. From the

[1] See "Das Grabdenkmal des Königs Chefren, von Uvo Hölsher." Leipzig, 1912.

south-west corner of the large transept a short passage leads to a double row of three deep niches, and at the other end of the transept there is a narrow passage, seven feet wide, which formerly led to a covered way connecting it with the mortuary temple in front of the pyramid of Khaf-ra.[1]

As it lies about fifty yards to the south-east of the great figure of the Sphinx, Mariette, who excavated it in 1853, regarded it at the "Temple of the Sphinx" as representing the god of the rising sun, and it has retained this name, though there is no evidence that it had anything to do with it. Dr. Hölsher's investigations leave no doubt that it was a kind of propylaeum or ante-temple to the larger mortuary temple and pyramid of Khaf-ra: an arrangement which is found elsewhere.

The gigantic figure of the Sphinx, which is 140 feet in length and 66 feet high, when not partly covered by sand, lies about 540 yards to the east of the pyramid Khaf-Ra with whom a late tradition associates it. It was carved in situ from a natural mass of rock, the apparent height of which is increased by the surface of the surrounding ground having been removed; the body is a good deal weathered, and has the appearance of having been patched up with pieces of sandstone. The human head was formerly painted red, and had the conventional beard common in royal portraits, but is now much mutilated; on the breast between the forepaws there is a small open shrine with an enclosed space and an altar in front. A paved court farther in front with steps leading down to it is said to date from the Roman period. The figure was an object of veneration for centuries, and there is a record of its repair by Thothmes IV

[1] P. and C., i, 324 ff.

LOWER TEMPLE OF KHAF-RA

GRANITE PILLARS IN THE TEMPLE

THE SPHINX FROM THE SOUTH

THE SPHINX FROM THE EAST

of the XVIIIth dynasty, but the date of its first carving is doubtful. Mr. H. R. Hall assigns it to the XIIth dynasty,[1] but it seems unlikely that the block was left untouched by the pyramid builders of the IVth dynasty, and it is probable that the tradition connecting it with Khaf-Ra has some foundation. That the art of monumental sculpture had reached great perfection in his day is shown by the fine diorite statue of him which is one of the treasures of the Cairo Museum. It was found with eight other smaller figures, showing him at different ages in the temple near the Sphinx described above.

KHAF-RA'S LOWER TEMPLE. THE TRANSVERSE GALLERY

The body of the Sphinx is perforated by a shaft from the centre of the back indicating an earlier grave below it, and as there are no tombs in the immediate neighbourhood older than Khaf-Ra's reign, it may be taken for granted that the Sphinx is not of earlier date.[2]

[1] J. H. S., xxv.

[2] See Petrie, Hist., i, 52.

DIORITE STATUE OF KHAF-RA

J. Ward, del.]
THE PLATEAU OF GIZA FROM THE SOUTH-EAST, SHOWING THE PYRAMID MASTABA

GREAT PYRAMID OF NEFERARIKA-RA AT ABUSIR
(Vth dynasty)
Originally about 360 feet square

CHAPTER VI

BUILDINGS OF THE OLD KINGDOM. MENTUHETEP'S TEMPLE

THE kings of the Vth dynasty erected their pyramids at Abusir between Giza and Sakkara. The funerary temple attached to that of Ne-user (Useren) Ra already mentioned (p. 38) is of much interest. Parts of the paving and walls are of polished black marble; the columns of the lotus-bud form are of granite. There is also a sacrificial basin with a drain in the form of a lion's head, and sculptures in relief on both inner and outer walls.

The temples attached to the pyramids of Sahu-Ra and Neferarika-Ra of the same dynasty have also been excavated. These three temples are the earliest in which mural reliefs have been found.[1]

[1] Hall, Near East, p. 131. See also K. and H., p. 99.

Somewhat to the north of Abusir, at a place called Er-Righa, are the remains of a temple of the Sun built by the same king Ne-user-Ra. The ritual portion was raised on an artificial platform, towards the west end of which was a pyramidal structure, usually represented as a massive but stunted obelisk upon a podium with battering sides, apparently a link between the combination of a pyramid and mastaba and the more familiar form of obelisk.[1] In the centre of the court is a circular altar

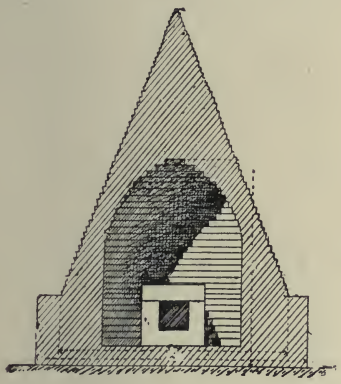
MASTABAT-EL-FARAUN. From Maspero.

of alabaster, and at the east end nine basins of the same material, over which the victims were slaughtered.

South of Sakkara towards Dashur is the Mastabat-el-Faraun (Pharaoh's Bench) an immense monument of large stone blocks. It is 66 feet high and 340 by 240 feet in area, with sloping sides. It is evidently a royal tomb, and its interior arrangement with a sloping passage, a horizontal passage with slides for stone plugs and chambers resembles that of a pyramid. From its shape it might be dated before the IVth dynasty, but Messrs. King and Hall

[1] This seems to be the building described by Col. Vyse as the Pyramid of Reegah. He gives the measurement of the base as 123 feet 4 inches square Vyse, iii, 10.

consider it to be later than the Vth to which it has been assigned.[1] There is some indication of an additional structure on the top, and it is possible that this was a small pyramid, or obelisk, and that a form combining the two may have been occasionally adopted. At Giza there is a large tomb south-east of the pyramid of Khaf-Ra[2] which seems originally to have had some such form. The annexed diagram derived from pictographic inscriptions at Sakkara[3] appears to represent a monument of that kind. But the simple pyramid continued in use, and at a much later date became common for small brick tombs, of which there are many remains at Abydos. In these more ordinary sepulchral monuments the mortuary chamber and the shrine were both within the structure.[4]



SECTION OF SMALL PYRAMIDAL TOMB, ABYDOS. From Maspero.

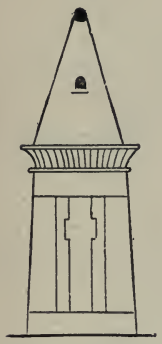
Little is known of the kings of the VIIth to the Xth dynasties, under whom the centre of government was removed from Memphis to a more southern region of the Nile valley. The pyramid, however, continued to be

[1] K. and H., p. 107. [2] See illustration, p. 46.

[3] P. and C., vol. i, p. 216.

[4] P. and C., vol. i, p. 244. The pyramidal form of tomb was imitated at later dates in other lands. There are a number of such monuments

used as a royal monument, though it was less solidly constructed than under the early Memphite kings, until after the complete extinction of the old kingdom. In the XIIth dynasty a reversion was made to the ancient use of brick, and there are remains at Dashūr of brick pyramids one of which is the secondary tomb of Amenemhat III, and another the actual sepulchre of a somewhat obscure king, Hor, who may have been his son and associate. Further south at Illahun is a similar one of Senusert II.[1] It is probable that these brick cores were originally cased with stone.



TOMB COMBINING MASTABA AND PYRAMID

Probably XIIth dynasty.

The most interesting monument of the period when the sovereignty passed away from the representatives of the old Memphite dynasties and fell into the hands of Theban princes, is the memorial of Mentuhetep[2] of the XIth dynasty which was discovered in 1903. It is mentioned in an inscription by the name of Akh-aset and is adjacent to the south-west side of a larger temple of the XVIIIth dynasty at Dēr-el-Bahri on the left bank of the Nile in the Thebaid. It lies at the foot of the high cliff

in the Sudan of dates not long before the Christian era. They are the tombs of native kings: and some of them are 50 or 60 feet high, but their slope is much steeper than in the ancient pyramids. P. and C., i, 217-219.

[1] In this case the core was a framework of intersecting brick walls filled in with stone.

[2] Neb-hapet-Ra Mentuhetep. There were several rulers of this dynasty with the throne-name of Mentuhetep. This one was the greatest, but it is doubtful whether he is to be reckoned as the second or third king of that name. See Hall, N. E., p. 142 note.

REMAINS OF NORTH BRICK PYRAMID. DASHUR

Probably intended for Senusert III. (XIIth dynasty.)

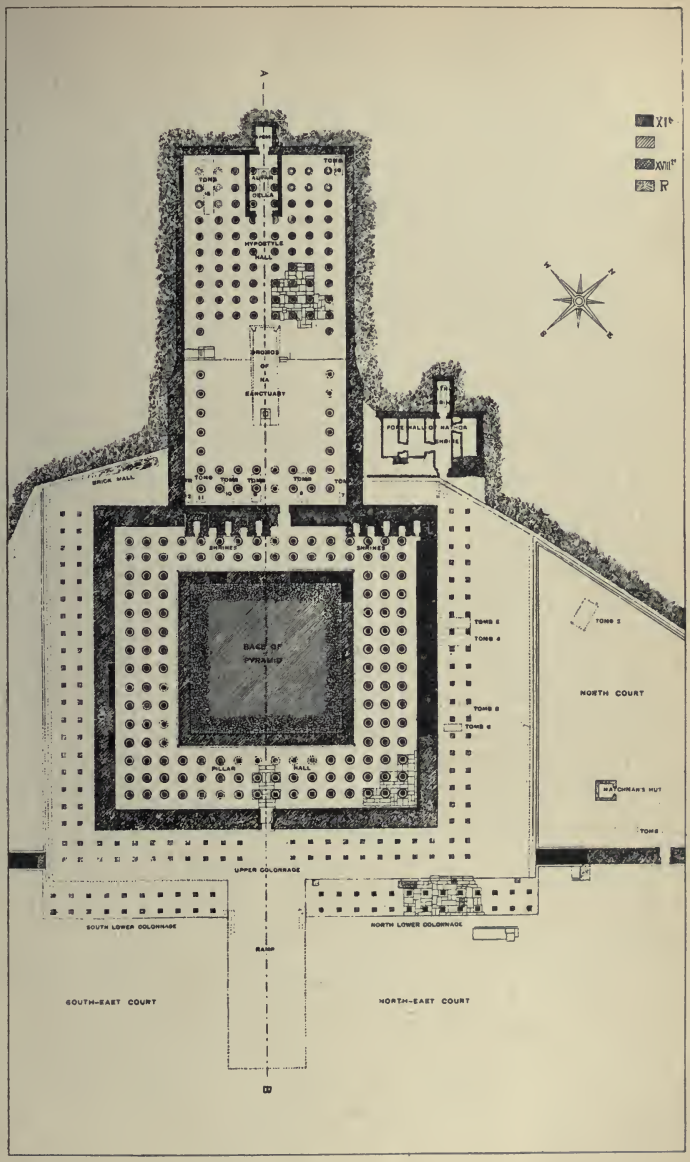
BRICK PYRAMID OF SENUSERT II. ILLAHUN

which overlooks the Nile-valley facing towards the south-east. A rectangular platform is levelled on the slope at the base of the cliff on which are the remains of a base or podium 70 feet square, composed of rubble and flint, which formerly supported a pyramid. The latter seems

THE TEMPLES AT DĒR-EL-BAHRI

The pyramid-platform of Mentuhetep's is seen lying beyond Hatshepsut's XVIIIth dynasty terraces.

from some fragments to have been built of brick faced with fine white marble-like limestone. The whole structure was solid and contained no tomb, being merely an architectural feature. The base had sloping sides finished with a cavetto cornice, and roundels at the angles such as



PLAN OF THE XITH DYNASTY TEMPLE AT DĒR-EL-BAHRI

(By permission of the Egypt Exploration Fund.)

were universal in the later pylons. Round the base was a covered ambulatory composed of a triple row (except on the side near the cliff, where there were only two rows) of octagonal sandstone pillars on circular bases. The enclosing wall of this colonnade was decorated both on the outer and inner sides with shallow coloured reliefs depicting scenes of civil, military and religious life, and there was another colonnade of rectangular pillars outside the front and side walls of the enclosure. The back portion of the platform consisted of a court, 65 feet wide with a double row of octagonal pillars, from which descended into the earth a corridor 500 feet long ending in a chamber lined with large granite blocks similar to those in the pyramids. It contains an alabaster shrine which was probably the sanctuary of the *Ka* or disembodied double of the king. Behind the entrance of this gallery the court above was continued at the same width through the sloping base of the cliff till it reached its actual face, in the form of a low hypostyle hall 60 feet long with ten rows of eight octagonal columns, at the west end of which was a niche or shrine with an alabaster altar in front of it.

The main platform was approached on the front by an inclined plane or ramp, which was flanked on both sides by a lower colonnade along the front wall of the platform. Behind the base of the pyramid are six mortuary shrines or chapels of ladies of the harem, designated as priestesses of Hathor, whose tombs are in the adjacent court at the back.[1]

There was an interesting shrine of the Cow-goddess

[1] This temple was excavated in 1903-7, by Professor Naville and Mr. H. R. Hall. See their account with numerous illustrations published by the Egypt Exploration Fund, by whose permission the above plan and illustration are inserted.

Hathor adjoining the west court of the temple on the north side, which was found with a remarkable image of the Cow intact, but it is of much later date than Mentuhetep's temple and belongs chronologically to the XVIIIth dynasty.

3 4 5

ROCK-HEWN TOMBS AT BENI-HASAN

3 Khnemuhetep II. 4 Khnemuhetep IV. 5 Unfinished.

The numbers are those assigned to them in the guide books.

J. Ward, F.S.A., del.

PYRAMID AT EL-KULA

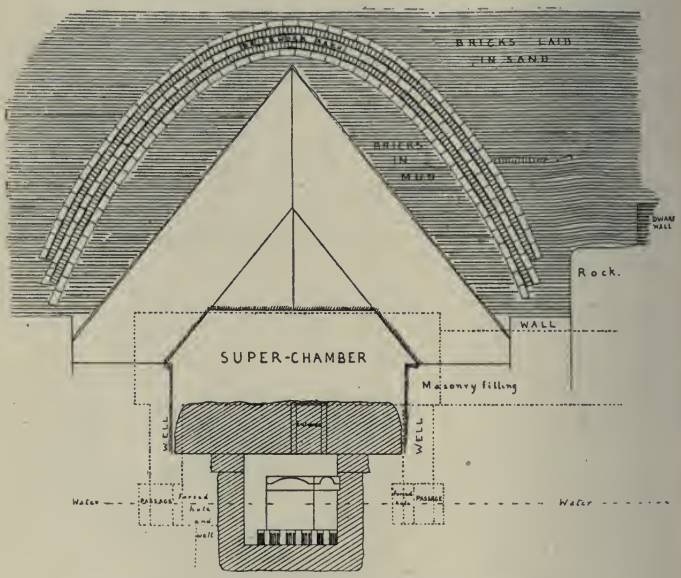
It is roughly built of limestone blocks which are left in their graduated courses. The base is about 60 feet square.

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



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

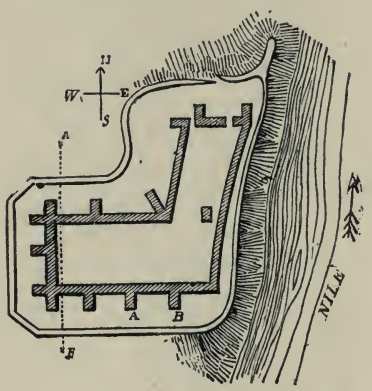
[1] See on this subject K. and H., p. 125, also Hall, J. H. S., vol. xxv.

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-Kūla (p. 57), about ten miles above Esna, which is ascribed to the XIIIth dynasty, from this time the royal tombs began to assume a different form.

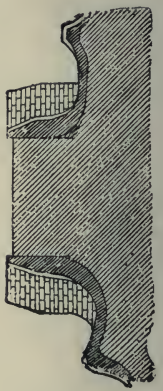
The kings of the XIIth dynasty were great temple builders, and it seems probable, from such evidence as remains, that they built in a style which was naturally developed from the plain stone constructions of the earlier dynasties. Pillars, square, octagonal, or sixteen-sided, were used for external effect, 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.



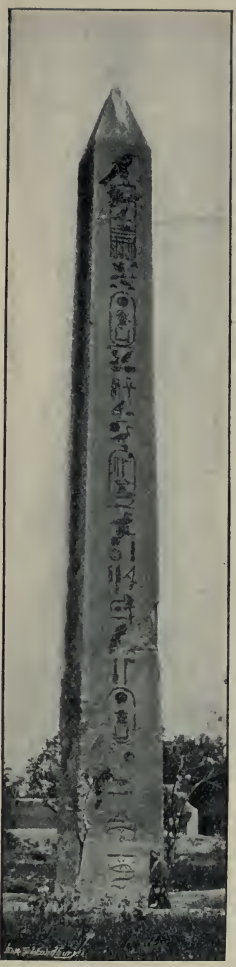
FORT OF SEMNA



Section on A B

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.



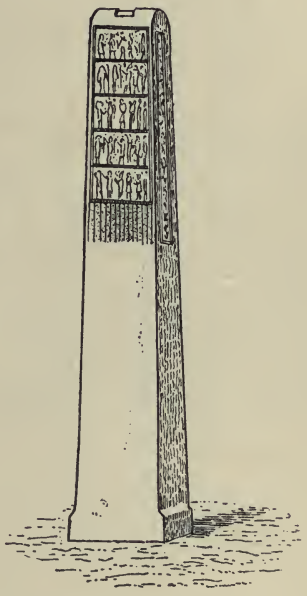
THE OLDEST LARGE OBELISK ERECTED BY SENUSERT I AT HELIOPOLIS

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 Kūmma 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.



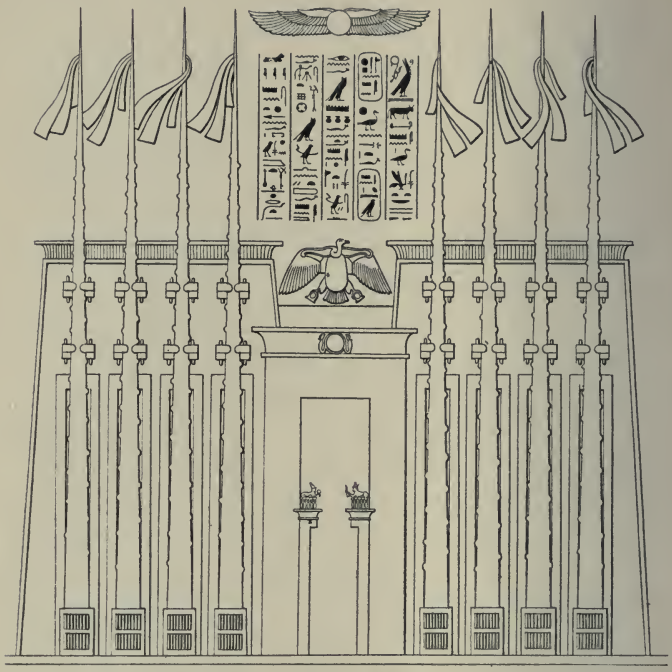
LANDMARK OF SENUSERT I AT BEGIG, RESTORED

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



A PYLON

As depicted in a wall-relief in the temple of Khonsu at Karnak, showing the mode of attaching the masts and pennons. From Prisse d'Avennes' "Monuments."

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.[1]

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."

PECTORAL OF SENUSERT II

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.

[1] Hall, "Near East," p. 153, calls it a boundary stone.

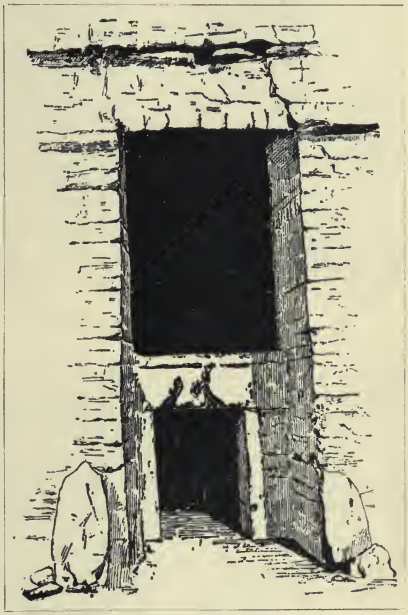
In its general form the pylon exhibits the same simple constructive principles as the mastaba. The exterior surfaces were covered with figures incised in low relief.[1]

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 transome so as to leave an aperture above the door. Inside are two halls, one of which

[1] 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.

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



ROCK TOMB OF MEKHU, ASSUAN
(Maspero.)

TOMB OF AMENI

TOMB OF KHNEMUHETEP

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

CLUSTERED COLUMN, BENI-HASAN

[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

INTERIOR OF THE TOMB OF AMENI

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

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.

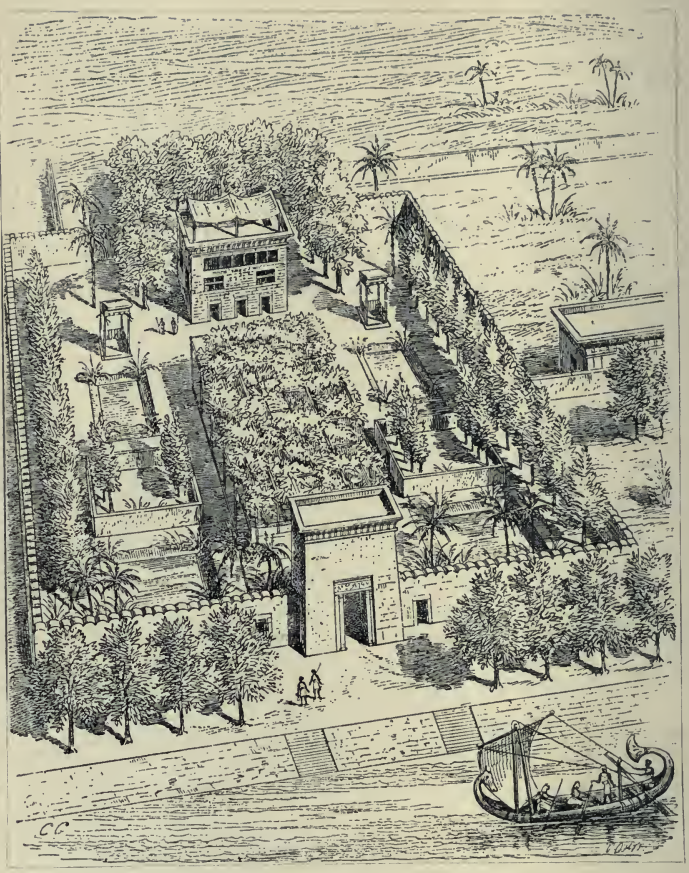
of Senusert II is that of Khnemuhetep II, a member of a family of high position under the early kings of the XIIth dynasty (see p. 68).

The architectural interest of these tombs consists

UNFINISHED COLUMN. TOMB OF KHNEMUHETEP IV

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 XVIIITH DYNASTY

Reconstructed by Ch. Chipiez. P. and C., ii, 31.

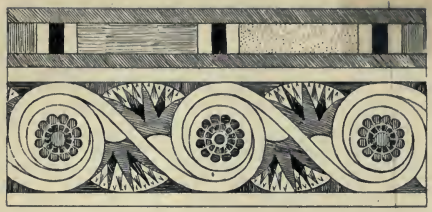
CHAPTER VIII

THE NEW EMPIRE. DOMESTIC LIFE AND ART

THE history of the Middle Kingdom after the XIIIth dynasty is very confused and uncertain. The names of many kings are recorded, but it is probable that several were reigning simultaneously, the kingdom being broken up into independent principalities of which the Theban was the most important. The XVth, XVIth, and XVIIth dynasties are assigned by Manetho to the Hyksos[1] or "Shepherd Kings," a Semitic race who invaded the Delta from Syria and gradually dominated more or less the whole country. Whilst barbarous as conquerors, they were not without some degree of civilization: to them is due the introduction of the horse, previously unknown to Egypt, and the use of the chariot as an engine of warfare. But they were not extensive builders, though they left their mark on many of the existing temples, and a record survives of the building of one in their stronghold of Avaris in the Delta, the site of which is now unmarked.[2]

[1] The word Hyk means "prince," but whether the second syllable is rightly interpreted by Manetho to mean "Shepherd" is doubtful. It is probably a popular or derogatory translation of a word equivalent to Bedawin, implying a person of nomadic or desert race. (See Hall, "Near East," p. 212.)

[2] Breasted, p. 216. What remains of Hyksos sculpture is mostly found in the Delta. It is always executed in black or grey granite, which may have come from Sinai or the quarries at Hammamet. The absence of red granite indicates that they had not command of the quarries at Assuan. See Petrie's "Tanis" (E. E. F.).



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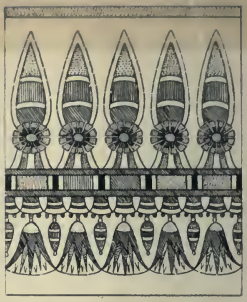

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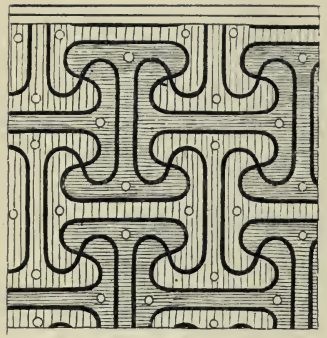

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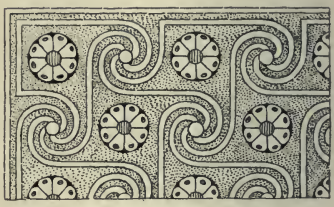

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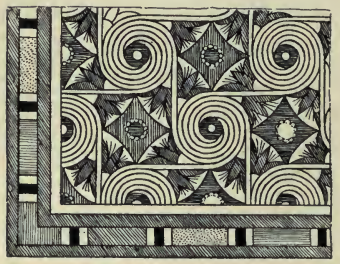


V

VI

WALL AND CEILING DECORATIONS

Found in Theban tombs of the XVIIIth to XXth dynasties. (P. d'A. Hist.)

I Double spiral border with lotus flowers.
II A form of the *Kheker* ornament with lotus.
III Four lines "nebulé" reversed and crossed.
IV A quadruple spiral with rosettes.
V A similar spiral with lotus.
VI Fret with rosettes. From a tomb of XXVIth dynasty, copied from an XVIIIth dynasty pattern.

The quadruple spiral and fret reappear frequently in other countries.

But though they adopted the language of the country, and their kings assumed the titles and customs of the Pharaohs, their rule remained odious to the native princes whom they had made tributary, and in course of time those at Thebes rebelled. After a war which is computed to have lasted nearly fifty years,[1] Aahmes (Amasis), a prince of this family, succeeded in expelling them, and became the first king of the XVIIIth dynasty.

From this time the New Empire was established under the firm rule of a Theban house. Not only were Upper and Lower Egypt reunited in one government, but conquests also were made in the Sudan and Syria which increased trade and wealth, and led to an extraordinary development in building and architecture. From this time also the records are sufficiently explicit to place the chronology on a firm basis. The XVIIIth, XIXth, and XXth dynasties, comprising the five centuries from about 1600 B.C. to 1100 B.C., was the age of the great Pharaohs, the Amenheteps, Thothmes and Rameses, under whom Egypt reached its highest point of power, prosperity and internal development, and to whom the greater part of the existing remains in the neighbourhood of Thebes is due.

That the upper classes in Egypt lived in luxurious and tasteful surroundings is evident from the numerous objects and paintings which have been found in their tombs. Brilliantly coloured frescoes or low reliefs decorated their walls illustrating religious observances, agricultural and industrial operations, and scenes from the chase or daily life. Many of their decorative patterns obviously influenced the later art of other countries. Tables and chairs handsomely inlaid or otherwise ornamented,

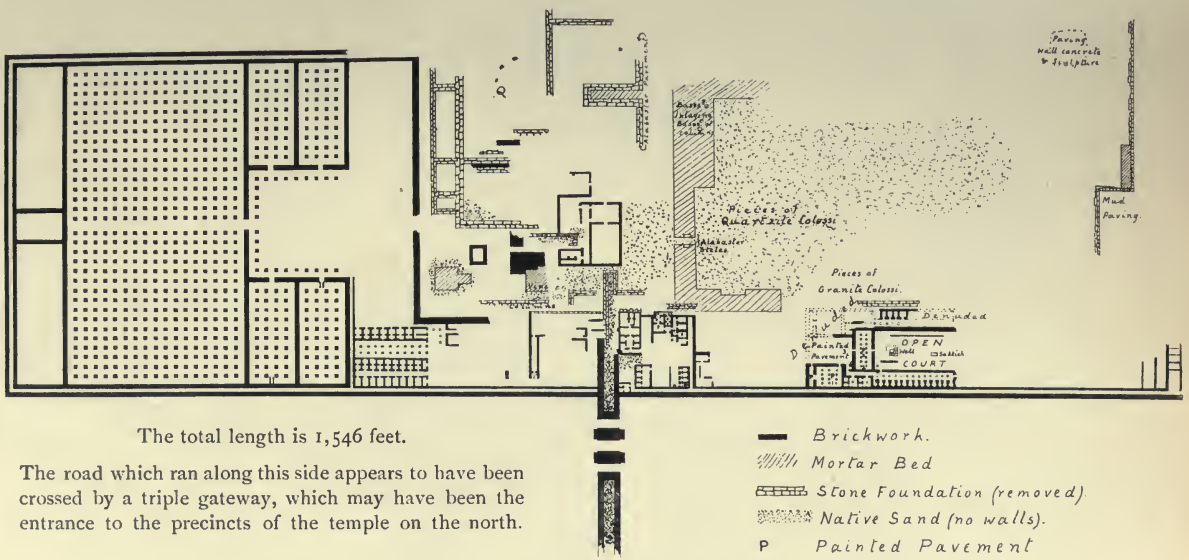
[1] See Hall, "Near East," p. 227.

though deficient in mechanical contrivances, are not inferior in taste and workmanship to modern specimens. Wooden models of ships, houses, soldiers, and artisans show a similar ingenuity in handicrafts, and jewelry in gold, enamel, and precious stones testifies to taste no less than wealth. A light kind of timber-construction was used for pavilions and garden-houses in which the lotus-flower motive was often gracefully adapted. This kind of architecture is only known through representations in wall pictures.[1]

The scanty remains of a palace of Amenhetep III on the western plain of Thebes, indicate that the royal dwellings, though not substantially built, were situated in large and agreeable demesnes containing lakes and water-channels for irrigation. From the lower wall-courses which remain, it appears that the building itself was constructed largely of sun-dried bricks, and consisted of a complicated assemblage of rooms and courts, some of which had pillars of wood on circular stone bases to support their ceilings. The walls and floors were coated with white plaster, and beautified with naturalistic paintings of bulls, birds, and sedge-bordered lakes in a style which is more fully illustrated in the palace of his son at Tel-el-Amarna. For Amenhetep IV (Akhenaten),[2] the religious reformer, repudiated the name of his forefathers on account of its association with Amen, and forsaking the idolatrous Thebes built a new capital for himself.

Its site is a sandy plain on the right bank of the Nile about 200 miles below Thebes. It comprised a temple dedicated to the deity he worshipped through the medium of the Sun-disk (Aten), some idea of which may be formed from a design found in a tomb; and an immense

[1] See Appendix I, p. 231. [2] See above, p. 18.



The total length is 1,546 feet.

The road which ran along this side appears to have been crossed by a triple gateway, which may have been the entrance to the precincts of the temple on the north.

GROUND PLAN OF AKHENATEN'S PALACE

From Petrie's "Tell-el-Amarna."

palace, one side of which was 500 yards long, to the adornment of which he seems to have applied all that was finest and most modern in the art of his day. It included at the south end a vast hall 423 feet long by 234 wide, the roof of which was supported by 544 square brick piers,[1] and four smaller halls each containing forty similar piers. These halls were arranged round three sides of a square courtyard which was surrounded by a pillared portico. At the northern end of the palace, which was probably the women's quarter, are several smaller halls or rooms, the floors of which are of stucco beautifully painted with naturalistic representations of vegetation and animal life. The style of this work, compared with the more conventional art which is found in temples and tombs appears altogether exotic, and it is possible that it was

DETAILS FROM THE PAVEMENT
(Petrie.)

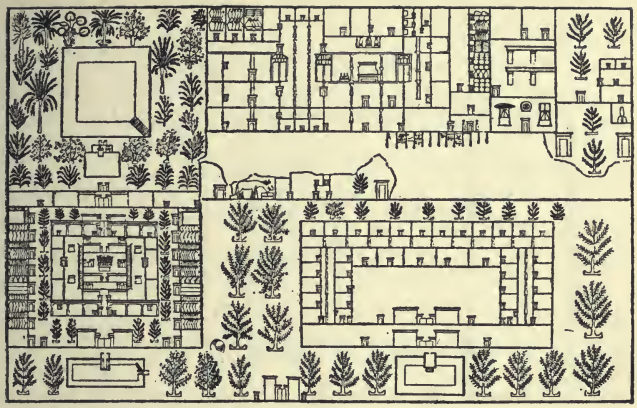
[1] These piers seem to have been coated with stucco and worked with a torus at the quoins. Perrot and Chipiez suggest that they may have formed an undercroft to rooms of lighter construction above. P. and C., "Egypt," ii, 29.

influenced by the contemporary art of Crete to which it has some resemblance. At the same time there are details which seem to have emanated from a single mind with an original though not a very correct or cultivated taste. Fragments of cylindrical columns show palm-leaved capitals similar to those used in the early Memphite dynasties, but decorated with a glazed inlay in gold and colours like cloisonné work on a large scale. Other fragments seem to have been parts of pillars imitating the irregular forms of tree trunks, with convolvulus-like creepers carved in naturalistic style up their whole length. It is said that the spiral was first used as an architectural ornament in this building.

After Akhenaten's death, which occurred when he was still young, his religious ideas were soon rejected by his successors, and his city was deserted. The more substantial parts of the buildings were broken up and removed for other uses, and the site, though temporarily occupied in Roman times, remained unbuilt on. Such vestiges as were left were protected by the deposits of ages until again brought to light in modern times, and more completely excavated and described by Dr. Flinders Petrie.[1]

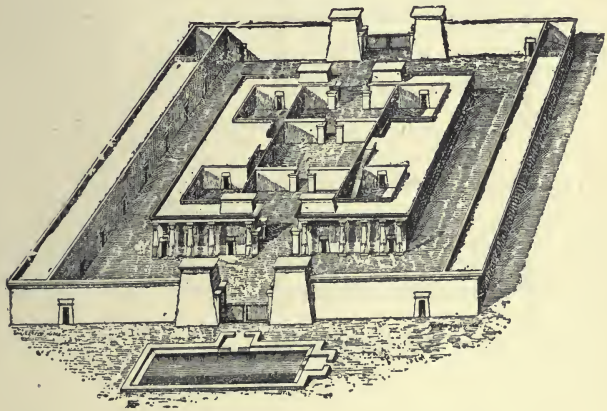
Apart from the remains at Tel-el-Amarna, where a broad street alongside of the palace with others leading from it, and the foundations of a number of houses, some of which seem singularly [illegible] in their planning, can still be traced, the plan and arrangement of Egyptian cities and towns under the Empire is largely a matter of conjecture. Memphis, which before the rise of Babylon must have been the largest city of the world known to history, is now

[1] See his "Tell-el-Amarna," from which the accompanying plans and illustrations are copied by his permission.



PLAN OF A PALACE

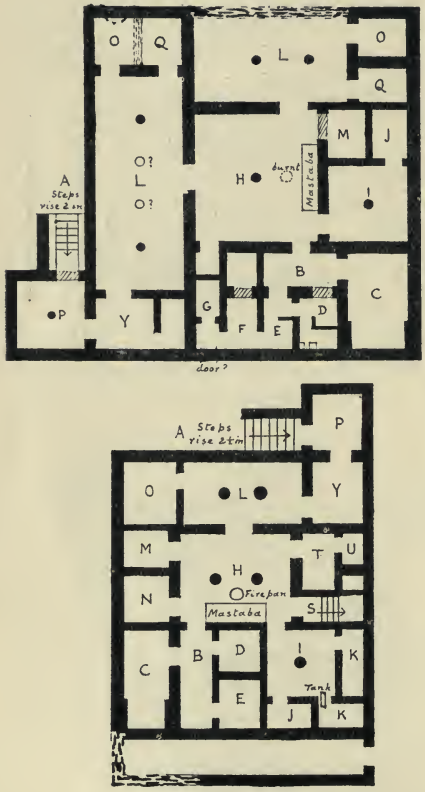
With accessory buildings, from the tomb of Meri-Ra, a high priest of the Aten, Tel-el-Amarna. (The palace is on the left-hand side.)



RECONSTRUCTION OF THE PALACE FROM THE ABOVE PLAN.
(Maspero.)

represented by shapeless mounds and the remains of a few broken statues.

At Thebes there is little to throw light on the character

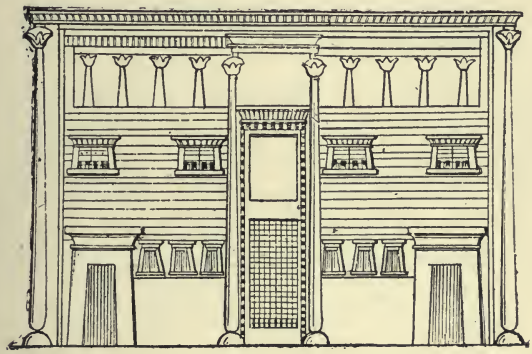


A. Shallow steps to door.
P. Porch.
Y. Lobby.
L. Loggia or summer room, probably open on the south side.
H. Central Hall, often with a bench (mastaba), in front of which was a hearth.
B-G. The master's room and women's quarters.
I-K. Men's quarters.
M, N. Store-rooms.
S. Stairs to roof.
T, U. Cupboards.

GROUND PLANS OF PRIVATE HOUSES
From Petrie's "Tell-el-Amarna."

and disposition of its secular buildings, though a good deal of it still awaits exploration. On the east side of the river the ceremonial approaches to the temples were grand avenues lined with ram-headed sphinxes or re-

cumbent rams, which probably formed a frontage for large buildings; and on the western bank there are the remains of a colony of priests and other persons connected with the service of the mortuary temples and tombs. But the dwellings of the middle and higher classes have disappeared owing to the general use of crude bricks which have long ago been reduced to dust; and it is chiefly from representations in the decoration of tombs and sarcophagi that we can form some idea



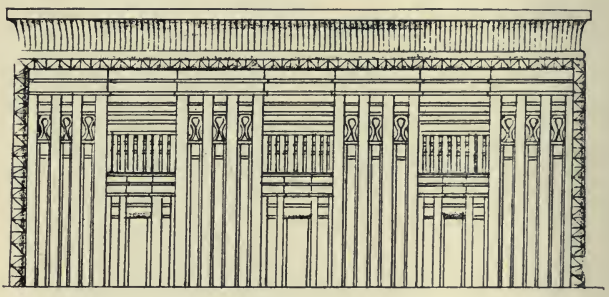
FRONTAGE OF A TWO-STORIED HOUSE WITH AN OPEN GALLERY ABOVE. (Maspero.)

of the appearance of ordinary houses. The great extent of Thebes warrants the supposition that it contained many houses which stood in enclosed gardens with trees, ponds and other agreeable surroundings. The drawing on page 74, by C. Chipiez, reconstructed from a plan in a tomb at Thebes, gives a representation of such a villa on the river-bank. Another more important group of buildings is shown on a plan from Tel-el-Amarna. It depicts, by a convention which is common in old

plans, the enclosure with its divisions in plan, but the objects situated within it in elevation (p. 83).

From various representations it is evident that the Egyptian dwelling-house of the better sort had two or three stories with a flat roof which could be used for repose either by day or night. Sometimes it appears as a covered verandah, and in any case probably had an awning.

Notwithstanding the general scarcity of timber there

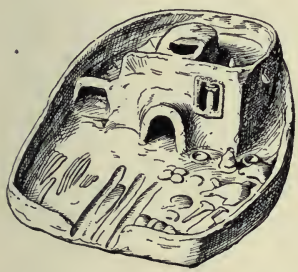


SIDE OF THE SARCOPHAGUS OF MENKAU-RA
From Vyse and Perring.

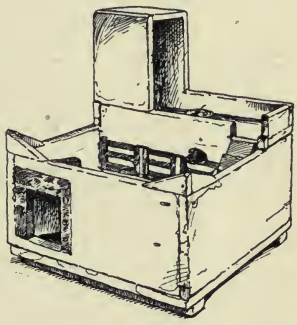
can be no doubt that it was frequently used at an early period. The fronts of the mastabas are evidently imitations in stone of dwelling houses in which the framework and architraves were made of wood. The details of the sarcophagus of Menkau-Ra, of which a drawing was made before it was lost at sea on its way to England, are obviously suggested by an architectural design in which wooden planks were, at least, partly employed.[1]

[1] The design of this sarcophagus has led to the supposition that it may have been renovated at a later date. The hollow cornice and roundels at the angles are said to have come into use in the Vth dynasty (Hölscher, p. 16). See illustration, p. 237, and cf. *note* p. 66 above.

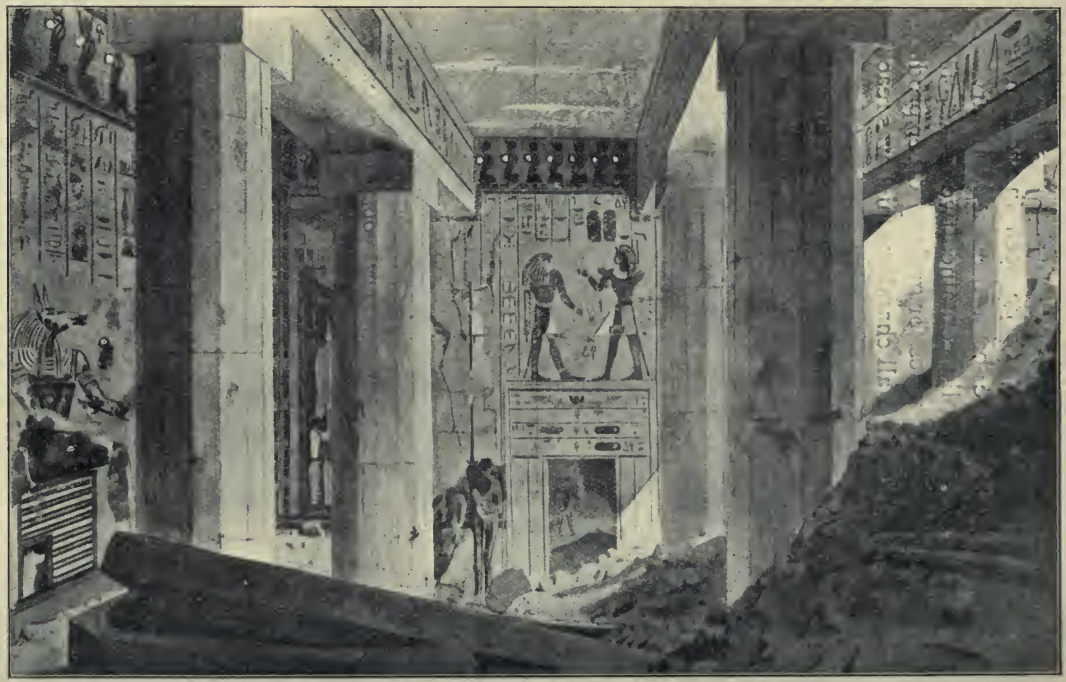
The arrangement of the humbler dwellings of country folk and small farmers may be seen in wooden and clay models which have been used as funerary appurtenances. They usually contained two rooms on the ground floor, and receptacles for grain or other produce. On the flat roof was a small chamber which was reached by an external staircase. A courtyard in front was enclosed by a high wall of mud or crude brick. The British Museum has a number of such models, two of which are here depicted.



CLAY MODEL OF A TWO-STORIED HOUSE. (Brit. Museum.)



WOODEN MODEL OF A GRANARY. (Brit. Museum.)



VESTIBULE TO THE SHRINE OF ANUBIS, DĒR-EL-BAHRI

From a drawing by R. Phené Spiers, F.S.A. (1866).

CHAPTER IX

TOMBS AND TEMPLES—DĒR-EL-BAHRI

WITH regard to more monumental buildings during the obscure centuries which followed the XIIth dynasty and included the domination of the Hyksos, it appears that a change had taken place in the architectural ideals of the rulers of Egypt. It was no longer their ambition to commemorate themselves by massive pyramids with mortuary temples contiguous and subservient to them. Possibly the removal of the political centre to Thebes, when the habitable area was shut in on the west by rocky heights which would tend to dwarf even the Great Pyramid, may have contributed to this result. The combination of a temple with a pyramid within it as shown in that of Mentuhetep at Dēr-el-Bahri, which has been described, remains a solitary experiment. It is still more probable that the desecration of the older tombs of the kings, which took place during the long periods of disorder, induced their successors to abandon the practice of marking them by conspicuous monuments. Aahmes, the liberator of Egypt and the founder of the XVIIIth dynasty, was buried in a tomb of masonry at the north end of the western plain of Thebes.[1] It has long since disappeared, but his embalmed body had been removed and is preserved at Cairo. His son and successor Amenhetep I, made his tomb at the extremity of a long gallery excavated in the side of the cliff overlooking the plain, and

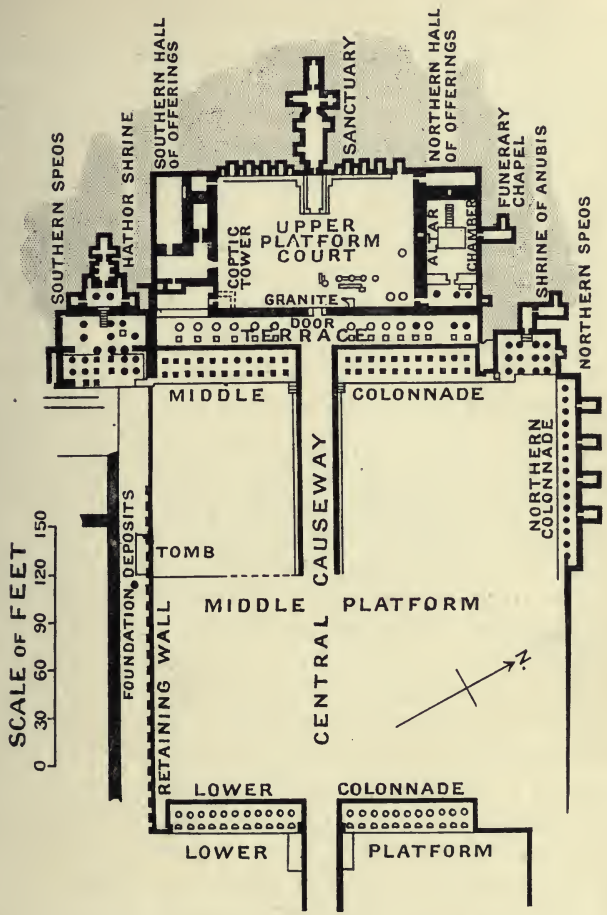
[1] Breasted, p. 252.

was the last king to mark its site by a small chapel with a pyramidal roof.[1] His successor, Thothmes I, determined to secure immunity from disturbance after death by concealing his sepulchre. He dispensed with even the simple façade which distinguishes the rock-hewn tombs of the feudal nobles of the XIth dynasty at Elephantine and Beni-Hasan, and excavated his sepulchre in a wild and desolate valley behind the western hills of Thebes with nothing to mark its entrance, intending to erect the necessary mortuary chapel in the form of a temple on the eastern side of the cliff which fronts the Nile. This became the usual practice, and for 500 years the kings of Egypt continued to prepare their burial places secretly in what is now known as "the valley of the tombs of the kings" or in an adjacent valley further west, and to perpetuate their memory by the erection of a temple which has no close association with the tomb.[2]

The temple which is sometimes supposed to have been intended for the funerary monument of Thothmes I, is situated at Dēr-el-Bahri, and adjoins on its north side the XIth dynasty temple of Mentuhetep. (See frontispiece and illustration, p. 52.) But it was actually the work of Queen Hatshepsut, the daughter of Thothmes and wife of her half-brother Thothmes II; and is in effect a monument of her own reign. Its design was obviously influenced

[1] Breasted, p. 278. On p. 525 he mentions another unused tomb of Ahmenhetep I, near Dēr-el-Bahri, being in fact that to which some of the bodies of the kings were transferred for safety in the XXIst dynasty.

[2] The precautions against desecration were in most cases unavailing; many of the tombs were known in the time of Diodorus and Strabo shortly before the Christian era. About fifty-five tombs and mummy pits have been opened, of which seventeen are those of kings.



QUEEN HATSHEPSUT'S TEMPLE. Plan of the two upper courts.

by that of the adjoining temple, with the omission of the pyramid; whilst it differs materially both in plan and architectural detail from all of later date. Like Mentu-

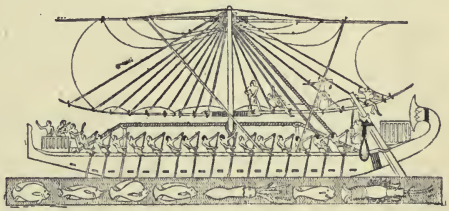
hetep's in its sloping site it was necessarily built in terraces; but it exceeds it considerably in area, and comprises three courts at ascending levels. The first court was approached by a straight causeway which started at its eastern[1] end from a propylon or trilithon gateway, of which only the foundations remain, and ran for 1600 feet between two rows of sandstone sphinxes. At the entrance of a large open court were two obelisks, and at a distance of about 200 feet within it, an inclined ascent along the central axis led to the second or middle court at a higher level. Along the front of the retaining wall, at each side of the ramp, was a colonnade or portico, the roof of which was supported by 22 pillars in two rows. These pillars, which taper slightly upwards, are rectangular in front, but the backs of the front row are polygonal in plan in order to harmonize with the rear row which are symmetrically chamfered in sixteen sides. The back walls of the porticoes are decorated with designs in low relief depicting the transportation of two obelisks by water with religious and military processions.

In the middle court, as in the first, are the remains of a central ramp leading to the uppermost terrace, and in front of the retaining wall are also two colonnades, the piers of which are all rectangular. Here the wall decorations are of special interest. Those in the northern portico illustrate the divine origin, nurture, and coronation of Hatshepsut, whilst the southern series commemorates the celebrated expedition of five ships which she sent to the land of Punt,[2] and their return laden with gold,

[1] The temple actually faces about S.E., but for the sake of simplicity the orientation is assumed to be cardinal.

[2] The land of Punt, which there is reason to suppose that the Egyptians regarded as the prehistoric home of their race, was

silver, ivory, ebony, spices, apes, and other strange and valuable merchandise. The art of these reliefs is of a high order. In firm and clear-cut outline they express, in the conventional style of Egyptian sculpture, all essential detail with extraordinary vivacity and obvious truth; but their beauty was seriously impaired by Hatshepsut's nephew and successor Thothmes III. In consequence of domestic animosities he obliterated nearly all representations of, or allusions to, the masterful queen, who throughout her reign chose to be represented as a man, and in these pictorial legends of her infancy appears as a boy. They were further damaged at a later date by the religious reformer Akhenaten, to whom the representation of most of the Egyptian deities was an abomination. They were afterwards inadequately restored by Rameses II.



ONE OF HATSHEPSUT'S SHIPS

At the north end of this middle colonnade is a well-preserved pillared hall, the roof of which, level with the upper terrace, is supported by twelve sixteen-sided columns in three rows. The entablature is continuous

in Somaliland. Hatshepsut's expedition was far from being the first of its kind, though it has become the most celebrated. Breasted supposes that the ships may have sailed down the Nile and through a canal (Wadi Tumilat), to Lake Timsah and the Red Sea. Mr. Hall ("Near East," p. 147) assumes that they started from Kuseir at the end of Wadi Hammamat, the nearest point to Thebes on the coast of the Red Sea.

with that of the colonnade, and consists of the curved cornice usual in Egyptian work, surmounted by a plain vertical parapet. At the back of the hall is a shrine of Anubis, the walls of which are decorated with symbolic paintings which retain much of their original brilliance. (See page 88.) At the southern end of the corresponding colonnade, but outside the wall of the court, is a somewhat larger shrine of Hathor, which had a separate inclined approach unconnected with the temple. The shrine itself was approached through two porticoes, each of which had a double row of pillars, two of the rows being sixteen-sided and the other two circular and square in section. The latter had capitals showing the Hathor head, an early use of a type of pillar which became common in the latest dynasties.[1]

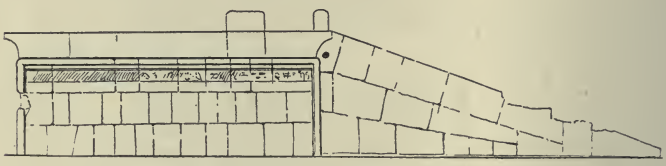
The middle court seems to have been the latest part of the original building, and was not completed. On the north wall, for about half its length, was a covered colonnade 117 feet long, consisting of a single row of fifteen square pillars with four niches in the back wall. This is partly constructed of sandstone, unlike the rest of the building, for most of which a fine white limestone was used. There is no corresponding feature on the south side.

The third or upper platform is entered by a fine granite trilithon gateway still standing, but in advance of this another double colonnade open to the east extended to the right and left of the approach. The pillars of this were again diversified, the outer range being square and

[1] The heads are surmounted by a small shrine, and in this respect differ from a form used at Bubastis dating from the XIIth dynasty. See Prof. Naville's Account of the Temple, E. E. F., vol. iii, pl. lxviii.

FACADE OF THE SHRINE OF ANUBIS, DĒR-EL-BAHRI

the inner polygonal in section. The inner court, which was much smaller than the others, was surrounded by a covered portico with a double row of polygonal columns of which little but the bases remain. The eastern wall has reliefs representing a procession of boats transporting the statue of Hatshepsut with attendants, which are no less expressive in execution than the other mural designs. In the back or western wall of the court is the *speos* or excavated sanctuary. It had a barrel vault constructed in horizontal courses, with an outer roof of inclined slabs to protect it from the detritus of the cliff. In this part of the temple some of the original work has been obliterated



SIDE OF ALTAR AT DĒR-EL-BAHRI

by Ptolemaic additions. North and south of the court are two separate enclosures: that on the north has a façade supported by three pillars which are unevenly spaced, and within it is a large altar of limestone for sacrificial purposes, the platform of which is reached by a flight of ten steps at the back. The southern enclosure contains two small open yards and a chamber, the walls of which are covered with reliefs representing offerings of varied produce made by Hatshepsut to Amen. It may have been used for the slaughter of sacrificial beasts.

The architect of this remarkable building was Senmut, the queen's steward, and the estimation in which he was

held is shown by the fact that he is represented and named in one of the reliefs. His tomb exists, though in a ruinous condition, near Dēr-el-Bahri,[1] and two statues of him, one of which was found in the temple of Mut at Karnak, are known. The effective use of the site and the intuitive sense of proportion evident in the disposition and details of the colonnades, as well as the quality of the mural decoration, show that he was an artist of a very high order.

It is, of course, obvious that the disposition and main features of his work were suggested by the adjoining temple of the XIth dynasty, which was at least 600 years older. In that and in Ameni's tomb of the XIIth, to say nothing of less striking relics of the Middle Kingdom, we can trace the formation of an architectural tradition which retained its vitality during the XVIIIth dynasty. A small but interesting example of it is found at the temple of Amada in Nubia which was built under Thothmes III, Amenhetep II, and Thothmes IV.[2] It is situated on the left bank of the Nile about 125 miles above Philae. It is barely 79 feet long by 34 feet wide, and comprises

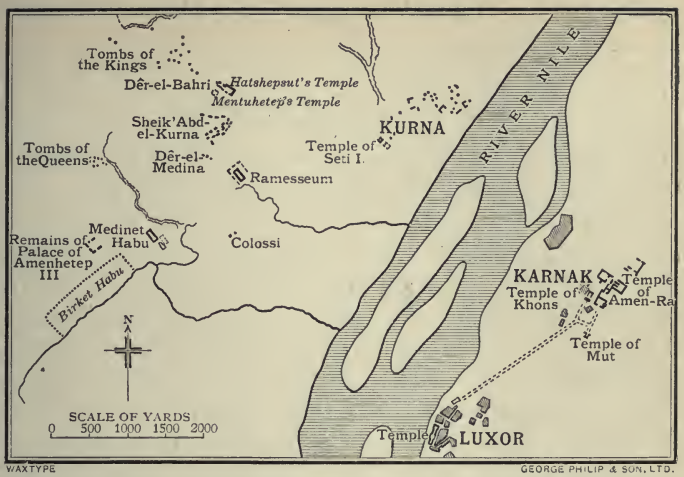
[1] It is the most northerly of a number of rock-tombs on the side of a hill known as Shekh-abd-el-Kurna, between the Ramesseum and Dēr-el-Bahri, where many notables of the XVIIIth dynasty were buried. These tombs are of the same type as those at Beni-Hasan, some of them having a forecourt with a pillared portico or vestibule. The mural paintings depicting the social life of Egypt are of the highest historical interest. This is especially the case with the tomb of Rekhmara, a chief minister of Thothmes III, in which, as also in that of Senmut, are seen envoys bringing presents from foreign states, including Kheftiu or men of Crete. The importance of this in relation to the synchronism of Aegean civilization is obvious.

[2] See "Le Temple d'Amada," par H. Gauthier, 1913. (Service des Antiquités de l'Egypte.)

a porch and a small pillared hall at the back of which is a portico leading into a sanctuary with a vestibule and 4 lateral chambers. The roof of the hypostyle hall is supported by six rectangular pillars which, as well as the walls, are covered with well executed reliefs. The portico at the back of the hall consists of a single row of four polygonal columns of twenty-four sides. They appear to be the earliest specimens in which the number of faces exceeded sixteen. They have low circular bases and no capitals distinct from the plain abacus which resembles those at Dēr-el-Bahri.

It is difficult to disassociate this form of art from that which arose one thousand years later in Greece. The disconcerting fact about it is that after attaining such a degree of development it should have remained unproductive, and without more definite influence on the future art of Egypt. For the designs of nearly all the great temples founded, rebuilt, or enlarged under the Empire after the XVIIIth dynasty, depart from the severe simplicity of earlier days and adopt, with a certain uniformity, a new exuberance of style which henceforth permeates Egyptian art, whilst it remains for the most part peculiar to it.

STATUE OF RAMESES II AND ENTRANCE TO THE TEMPLE OF RAMESES III AT KARNAK



SKETCH PLAN OF THE CHIEF THEBAN MONUMENTS

CHAPTER X

THE TYPICAL TEMPLE OF THE EMPIRE—KARNAK

THE Egyptian temple was a gradual growth originating in the primitive ancestral worship when a shrine was an adjunct to a tomb, the tomb itself being a more permanent or dignified form of a secular dwelling. The temple may thus be regarded as the final evolution of a mastaba horizontally as a pyramid was in vertical height. The larger temples share in common with subterranean tombs a tendency to indefinite longitudinal extension, with little regard to external architectural effect except in front. On the other hand, there is an excess of internal elaboration, an accumulation of columns, a complexity of plan, and an abundance

of surface decoration characteristic of frequent ritual observances by a numerous and aristocratic priesthood permanently attached to the temple, in which the people, the *profanum vulgus*, had only an occasional and passive share.

The main features of the typical temple, from the time when it ceased to be merely an adjunct to a tomb, are a forecourt open to the sky, at the further side of which was a colonnaded hall, beyond which lay chambers more or less numerous devoted to the service of the god or gods, and its varied furniture and appurtenances. The central chamber was the sanctuary containing a shrine, or more than one, in which was placed an image, generally carved in wood, of the deity to which it was dedicated.[1] Sometimes there was also a sacred ship, the means of celestial migration, in which the image was on occasions borne in procession.

Subject to these main conditions the plans of the temple vary indefinitely in size, length, and complexity, save only that additions made from time to time were almost always along the major axis of the building.

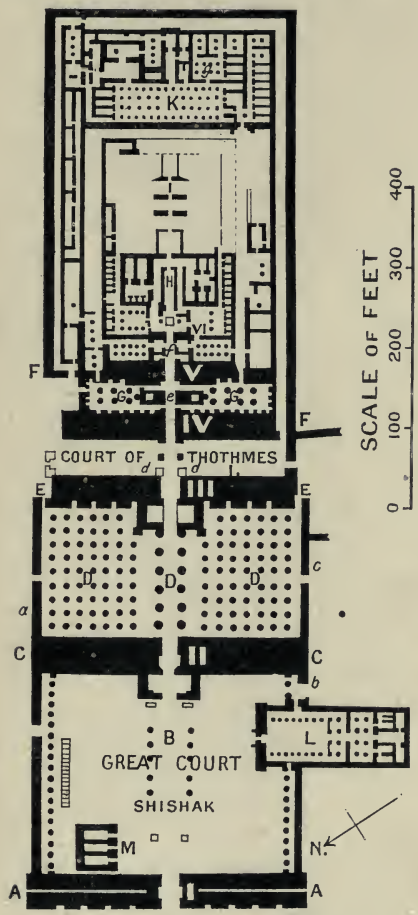
The great temple of Amen-Ra at Karnak, on the east side of the Nile opposite Dēr-el-Bahri, on account both of its magnitude and its political importance, must be regarded as the metropolitan fane of ancient Egypt. Its construction, extending at the lowest computation over more than 1,000 years, during which Egypt attained its highest degree of power and civilization, illustrates more completely than any other building all that is peculiarly Egyptian in architectural art. Its original foundation and dedication to Amen as a purely local deity, may date from a very early dynasty, but under

[1] Breasted, p. 61.

the Theban kings Amen came to be the principal god of Egypt, and was identified with Ra, the Sun-god of the Old Kingdom. His temple then assumed a more important form, being rebuilt by Amenemhat I and his son Senusert I of the XIIth dynasty. It preserved its importance during the obscure and troubled centuries, which included the Hyksos domination, when Thebes remained a focus of the national spirit; and after the establishment of the XVIIIth dynasty it was gradually reconstructed by Thothmes I, Queen Hatshepsut, and Thothmes III.

The XIIth dynasty temple must have occupied only a small portion of the eastern half of the present ruins. From a few broken polygonal columns and other fragments which lie in the space beyond the sanctuary (see Plan, p. 104, I), it seems probable that it agreed in style with the temple of Mentuhetep at Dēr-el-Bahri. When the empire was firmly established it became a special object of interest to the kings of the XVIIIth dynasty, and Thothmes I enlarged the building by surrounding it with lateral colonnades and a narrow pillared fore-hall (*f*), of which the present 5th pylon formed the façade. The hall and pylon are all that distinctly remain of this alteration, for the surrounding colonnade was superseded by the operations of Thothmes' successors, and the fore-hall itself was to some extent altered. From the fact that the remaining columns are polygonal with sixteen sides, it seems that he still adhered to the style of the older building. The work of Thothmes I, however, did not end here, for some years later he built another enveloping wall with a larger fore-hall (G) and pylon (now the 4th) to the west of his previous frontage. He completed his work by erecting two obelisks before the entrance; another pair (*dd*) was afterwards erected

in front of these by Thothmes III, but only one of the four, that on the south-east, still remains *in situ*. It is



A A. Pylon I (Ptolomaic).
B. Taharka's colonnade.
C. Pylon II (Rameses I).
D D. Hypostyle Hall of Seti and Rameses II.
E E. Pylon III (Amenhetep III).
F F. Circuit Wall (Rameses II).
G G. Osiride Hall (Thothmes I).
H. Sanctuary and Hatshepsut's chambers.
I. Space with remains of XIIth dynasty.
K. Building of Thothmes III.
L. Temple of Rameses III.
M. ,, Seti II.

a. Wall reliefs of Seti I.
b. Porch and reliefs of XXIInd dynasty.
c. Reliefs of Rameses II.
d d. Obelisks of Thothmes III.
e. Obelisks of Hatshepsut.
f. Hall of Records, constructed in the earlier fore-hall.
g. Hall with polygonal columns.

PLAN OF THE GREAT TEMPLE OF AMEN

noticeable that the columns in this later hall are no longer of the polygonal type, but circular in section,

with the campaniform capitals, but they may have been substituted later. Round the walls were niches with colossal statues of Osiris.

When Thothmes' daughter Hatshepsut came to the throne as wife of Thothmes II, and after his death as sole

FALLEN OBELISK OF QUEEN HATSHEPSUT AND ONE OF THOTHMES I

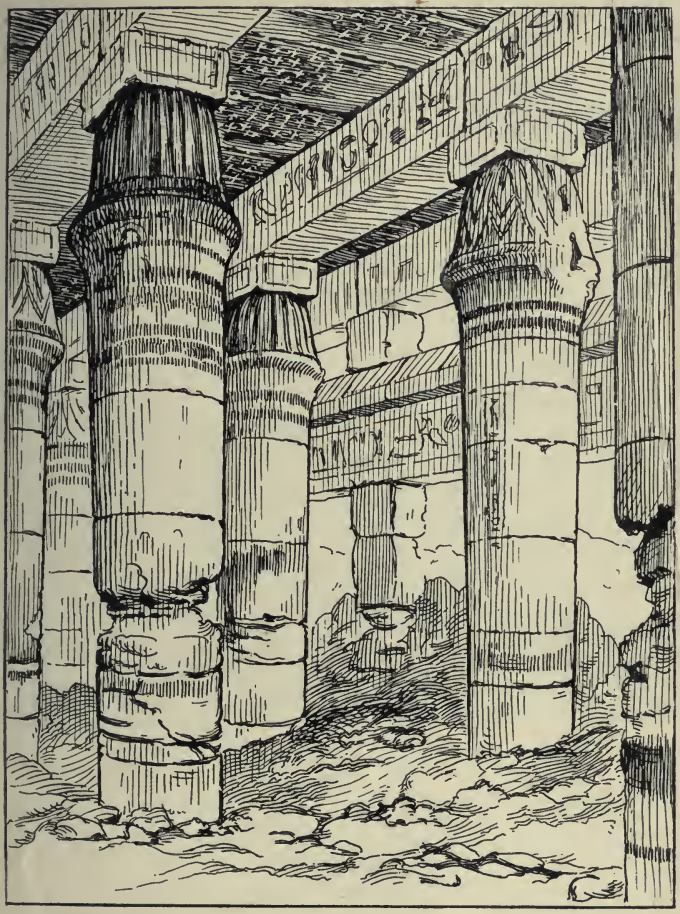
ruler and guardian of her nephew Thothmes III, she took the temple in hand and made considerable alterations in its innermost portions. She built a sanctuary in the smaller hall and two series of chambers with black granite portals to the north and south of the central chapel (H). Their walls were decorated with fine reliefs, but they

are now in a ruinous condition. She also erected two immense obelisks of red granite in the larger hall (G G), which necessitated the reconstruction of part of the colonnade and the alteration of the roof, which must at one time have covered the whole of this court. One of the obelisks, which is 97 feet high, is still standing.

PAPYRUS AND LOTUS PILLARS OF THOTHMES III

Further alterations were made by Hatshepsut's successor, Thothmes III. On the north and south sides he demolished the colonnades which had been built by Thothmes I and substituted a number of small chapels. He also built a small pylon (No. 6) and an inner pillared court across the front of Hatshepsut's chambers which flanked the sanctuary; but twenty years later he altered this court by constructing in its central part a hall inscribed with records (*f*), and two antechambers on the outer side of the pylon. In the Hall of Records stand two quadrangular pillars of red granite which once supported the roof, and are finely carved in high relief, one with the lotus and the other with the papyrus, the symbols of Upper and Lower Egypt.

The most important addition to the temple-building



J. Williamson, del.]

INVERTED COLUMNS IN THE HALL OF THOTHMES III

After a drawing by Miss E. L. Lister.

by Thothmes III was what is called the Great Festal Temple at the eastern end of the rectangular space enclosed by the wall of Thothmes I. It had no pylon or imposing front, but was entered by a portal at the south end of the west wall from which a turning to the left through a small vestibule led to a colonnaded hall (K), the outer wall of which is now broken down. It

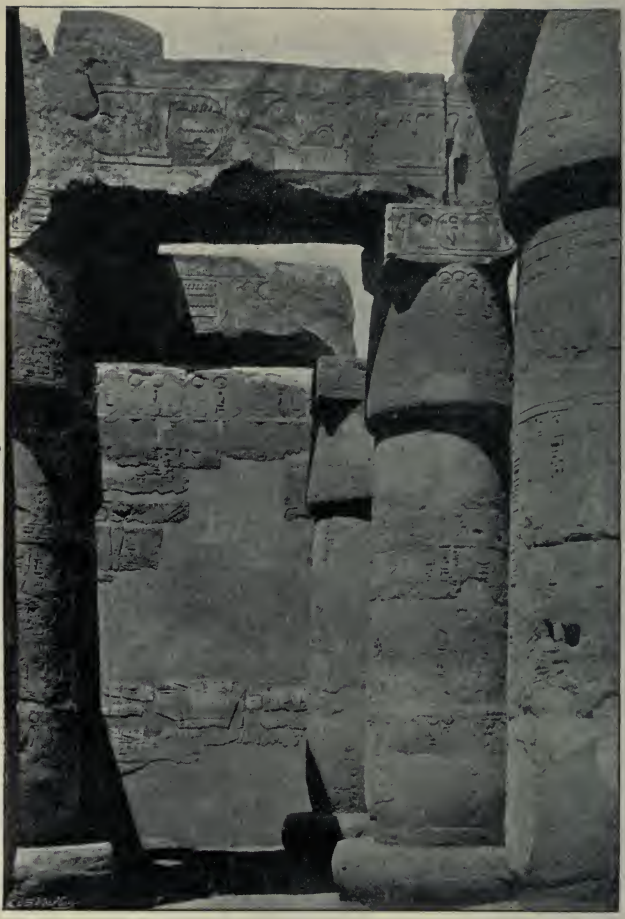
THE EASTERN ADDITION OF THOTHMES III AT KARNAK FROM THE NORTH

In the foreground are the four lotus-columns of the small room adjoining the sanctuary on the north. Between the columns are seen the polygonal pillars of the hall on the south. At the extreme right are the remains of the Festal Hall.

had an internal peristyle of 32 rectangular piers and down the centre were two rows of ten round columns which do not range with the piers. They are of singular shape, for the diameter of their shafts increases upwards, whilst the bell-shaped capital has its larger

diameter below. They are, in fact, columns of the campaniform pattern in which both shaft and capital have been inverted—apparently a capricious attempt at originality which is not imitated elsewhere. The rectangular piers were of the same height as the walls and supported flat roofs of pentagonal stone slabs. But as the circular columns were higher the piers were prolonged by stone struts which supported a higher central roof, and probably admitted light through the intervening spaces. Round the north-east and south sides of the hall was a complexity of corridors and smaller chambers, some of which had columns, with a long and narrow sanctuary on the central axis. A small hall adjoining the sanctuary on the north side had a single row of four columns of the clustered "bud" pattern, richly ornamented with horizontal bands which are still in good preservation; whilst on the south side was a larger hall (*g*) with eight columns (seven of which are still erect) of the simple sixteen-sided type in singular contrast to the more ornate style of the others. It seems possible that these are some of the earlier work from the destroyed peristyle of Thothmes I, used again by his grandson.

The last addition to the plan and fabric of the temple during the XVIIIth dynasty was a large pylon (No. 3) built by Amenhetep III, so close to the front of Thothmes I that it encroached on the bases of two of the four obelisks which stood before the entrance. The reason for this addition by the most powerful of the Pharaohs is not obvious unless it were to aggrandize himself at the expense of the greatest of his predecessors. The pylon appears to have been covered with inscriptions and reliefs recording his deeds and gifts to Amen, but it is now in a ruinous state.



LATERAL COLUMNS OF THE HYPOSTYLE HALL., KARNAK

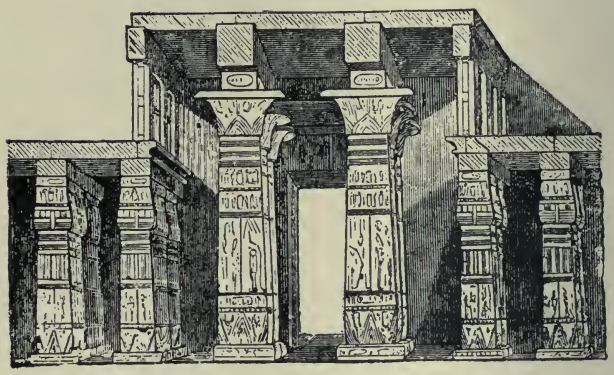
KARNAK FROM THE SACRED LAKE

CHAPTER XI

KARNAK AFTER THE XVIIITH DYNASTY

WITH the advent of the XIXth dynasty an extraordinary amplification of the temple took place by the addition of the Hypostyle Hall (D) which after the great pyramids is regarded as the chief marvel of Egyptian architectural art. Planned by Rameses I who erected the enormous pylon which forms its west front, it was mainly built and completed by his son and grandson Seti I and Rameses II. Its colossal scale is characteristic of the megalomania which had already made itself evident at the close of the preceeding dynasty. The lintel stones of its entrance were more than forty feet in length. The

area of the hall was 329 feet by 170, and its stone roof was supported by 134 columns. Of these 122, ranged in six rows on either side of the central avenue, are 43 feet in height and 29 in circumference, whilst the 12 which line the avenue are over 70 feet high. The roof above them was further raised in the centre by square blocks and stone struts on the four central rows of columns so that light was admitted through the apertures which



SECTION OF THE HYPOSTYLE HALL, KARNAK

Showing the lighting of the central avenue. (Maspero.)

were subdivided by stone posts and rails. The central columns had capitals of the expanded flower pattern; the others were colossal simplifications of the so-called lotus-bud kind. Both walls and pillars were covered with incised and coloured designs and hieroglyphics, and it is largely from such mural documents that the history of ancient Egypt has been reconstructed. The exterior of the north wall gives an illustrated record of the wars of Seti I in Syria and Palestine; the designs

on the south wall refer to those of Rameses II in western Asia, with others added by later kings.

Rameses II also surrounded the eastern part of the temple with another enveloping wall (plan, p. 104, F F) which was similarly made a field for reliefs, mostly of a religious character.

That the addition of the Hypostyle Hall was regarded by the kings of the XIXth and XXth dynasties as a completion of the temple seems probable from the fact that both Seti II and Rameses III built small temples (M. L.), dedicated to the Theban triad, Amen, Mut and Khonsu, in the open space before its west front. Moreover, there exists on the northern side a collection of sculptured figures of couchant rams, which are supposed to have originally formed part of an avenue of approach from the Nile to the west portal, and to have been set aside when they were in the way of later buildings.

The want of a closed forecourt, such as was usual, must have seemed an imperfection to the priests of Amen, who in the period of political decay which followed the reign of Rameses III became all-powerful at Thebes. Lower Egypt had in the meantime become an independent government under Libyan rulers at Bubastis. It was only when one of these rulers, Sheshenk (Shishak) I, had resuscitated the foreign influence of Egypt by a successful campaign in Palestine, and reunited the two kingdoms under the XXIInd dynasty, that this final enlargement of the temple of Amen was carried out. A large forecourt (B), 338 feet in width and 276 feet from east to west was laid out, the north and south sides being lined by colonnades. It included in its area the temple of Seti II, and part of that of Rameses III, for the south wall impinged on the side walls of the latter, which had

its front within the court facing north. The work probably remained unfinished for some centuries, for the immense pylon (A) which forms its west side dates from Ptolemaic period and was never quite completed. The pylon marks the greatest width of the temple as 370 feet; its total length was 1,180 feet. Meanwhile, Taharka, an Ethiopian king of the XXVth dynasty, had erected in the centre of the court a rectangular portico with an entrance on each side. Its roof, if it had one, was supported by ten colossal columns of which only one remains standing. Outside the west pylon is an avenue of ram-headed sphinxes leading from a quay on the former bank of the Nile, which has receded considerably to the west. It was part of the improvements of Rameses II, but appropriated afterwards by Seti II, who set up two obelisks at the western end.

TAHARKA'S COLUMN IN THE FORECOURT, KARNAK

From Petrie's "Hist. of Egypt."

The temple continued in use and in good condition during the period of Greek domination, in the course of which several alterations in detail took place. The shrine was rebuilt by Ptolemy Soter in the name of Philip Arrhidaeus, and the entrance to the Hypostyle Hall was altered by one of the Ptolemies. These rulers not only adapted themselves to the native religion, but they also adhered closely to the ancient ideals in architecture, and their numerous buildings show little of the influence of Greek art.

The precincts of this vast temple were delimited by a girdle-wall of brick, which included a sacred lake on the south side, and several other temples of comparatively small size (p. 117). That of Rameses III, which abuts on the forecourt, though small—for its length is only 170 feet—is interesting as a fairly well-preserved and unaltered example. It has the forecourt with Osiride colonnades (see p. 101, and plan, p. 104), the pillared

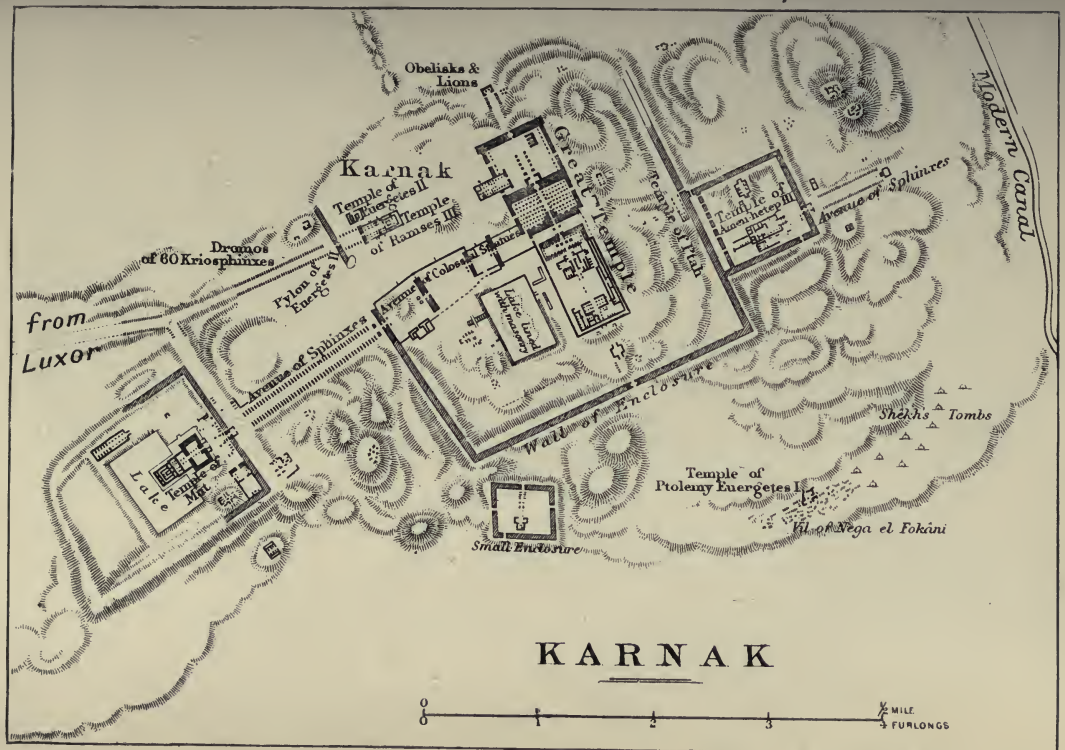
RAM-HEADED SPHINXES – THE DROMOS, KARNAK
Looking towards the Nile. (Ward.)

hall, and a triple cella at the end. Further to the south is the somewhat larger temple of Khonsu, founded by Rameses III (see p. 160), which whilst it follows the general type has, like every other temple, an arrangement of its inner chambers peculiar to itself. On the north side of the precincts are the scanty remains of a temple built by Amenhetep III to the war god Mentu.

Near to the central court of the great temple on the south side is a pylon built by Thothmes III at right angles to the axis of the temple, and further south is a

similar one erected by Hatshepsut. Both these were additions to a temple facing south-west, previously built by Amenhetep I, which was afterwards almost entirely demolished. Further on were two more pylons built by Horemheb, the last king of the XVIIIth dynasty, between which on the east side are the remains of a small temple which had been previously built by Amenhetep II. The pylons were apparently intended to adorn the approach to the great temple, for the southernmost one marks the entrance on that side to the precincts. From this gate southwards an avenue of sculptured rams, about 330 yards long, led to a temple dedicated to the goddess Mut, generally said to have been founded by Amenhetep III, though it has indications of an earlier date,[1] and additions by later kings. A similar avenue of ram-headed sphinxes led from the temple of Khonsu to that which Amenhetep III built at Luxor.

[1] It is in this temple that the statue of Senmut referred to on p. 97 was found.



Stanford's Geog! Estabt, London.

THE TEMPLE AT LUXOR

THE CENTRAL COLONNADE, LUXOR

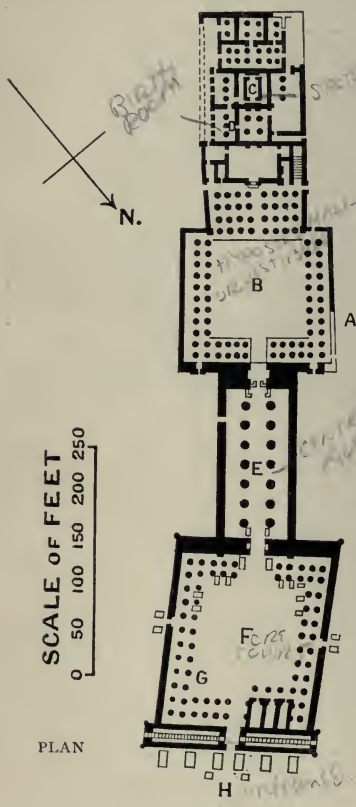
CHAPTER XII

LUXOR

THE later history of Karnak has interrupted the account of the work of the XVIIIth dynasty, to which it is necessary to revert. Amenhetep III was not content with appendages to the work of others. He determined to emulate the work of Hatshepsut, and to build a temple to Amen which should at the same time glorify himself. It lies about a mile and a quarter south of that at Karnak, close to and parallel with the Nile. Its position on the bank of the river may account for its orientation, for it faces north-east.[1] The plan of this temple illustrates,

[1] The various temples on the east side of the Nile show no method in their orientation. The great temple at Karnak faces

like that at Karnak, the tendency to longitudinal accretion. The original building followed the usual type, and consisted of the sanctuary (C in plan) with its dependent chambers, a hypostyle hall or vestibule, and an open colonnaded court (B) with an entrance pylon, the remains of which are in the centre of the present ground plan. The total length was then 208 yards, and the courtyard is 56 yards broad by 49 in depth. The colonnade which lines its north, east, and west sides has a double row of clustered columns with bud-shaped capitals, much of which is well preserved, and is architecturally a fine feature. The vestibule has thirty-two similar columns in four rows of eight, and in the centre of the back wall is a door leading to a smaller hall which had eight columns. Behind it lay the sanctuary,



PLAN

north-west. The small ones of Seti II and Rameses III, though dedicated to the same Theban triad, face respectively south-west and north-east. That of Khonsu faces south-west and that of Mut north-north-east.

AMENHETEP'S COLONNADES AT LUXOR, FROM THE SOUTH

which was rebuilt under Alexander the Great. On the east side of the small hall is a chamber (D) called the Birthroom, from the mural reliefs which depict the divine origin of Amenhetep—obviously inspired by the similar reliefs executed for Hatshepsut at Dēr-el-Bahri.

OBELISK OF RAMESES II AT LUXOR

It appears to have been the intention or an afterthought of Amenhetep to add a large hypostyle hall in front of the pylon, on a plan which was only realized afterwards by Seti I at Karnak. But at Luxor only the central avenue (E) of fourteen columns was built. They are over fifty feet in height, with cylindrical shafts and the expanded calyx-capitals, above which square blocks support the plain architrave. They are well preserved, and still form an imposing architectural feature. It is doubtful whether he finally enclosed them by lateral walls. The mural reliefs on the portions which still remain were made for Tut-ankh-Amen, who succeeded Amenhetep's son, the religious reformer Akhenaten, and reverted to the old religion. The forecourt (F) at the north end of the gallery was finally added by Rameses II, who seldom failed to leave his mark upon any important work of his predecessors. It

had a colonnade consisting of a double row of the papyrus-bud type of columns along each of the four sides of the court, which measures 187 feet by 167, but the ground plan of the court is slightly skewed, *i.e.*, its angles are not right angles. Moreover, the large pylons at the north and south sides are not exactly parallel with the older front. This deviation of the axis was apparently necessitated by a bend in the river, which must formerly have almost washed the walls, and the arrangement was obviously a compromise adopted to preserve the equality of the opposite sides of the court. The exterior walls of the court and the pylons are covered with reliefs illustrating the foreign wars of Rameses II, and in front of the entrance were six colossal statues of the king, four standing and two sitting. The latter two, 45 feet high, with one standing figure, still remain, and in front of them were two obelisks of red granite, one of which, 84 feet high, is still *in situ*. The other adorns the Place de la Concorde at Paris. A large number of recumbent rams on their pedestals, which formerly lined the whole of the paved road leading northward to the temple of Khonsu, may be seen near the latter temple.

Amenhetep also built a very similar temple at Soleb in Nubia, and it is possible that the two fine red granite lions now in the British Museum, which show Egyptian conventional art at its best, were taken from there by Tut-ankh-Amen to Napata, whence they were brought to England.

SMALL PERIPTERAL TEMPLE AT ELEPHANTINE, NOW DESTROYED
From "Description de l'Egypte."

THE SMALLER TEMPLE AT MEDINET HABU (XVIIIth dynasty)
From a drawing by Miss E. L. Lister.

CHAPTER XIII

PERIPTERAL BUILDINGS

THAT the architectural effect of an external peristyle was appreciated by builders of the XVIIIth dynasty, is shown by several smaller structures. A little temple built by Amenhetep III on the island of Elephantine, which was destroyed in 1822 by the Turkish governor, was a pleasing example of this type. It is carefully delineated in the official French description of Egypt ordered by Napoleon I, from which it appears to have consisted of a simple rectangular cella surrounded by eighteen pillars, the whole being raised on a plain podium and approached by a narrow stairway at one of the smaller ends.[1] The area of the platform was 40 feet by 31, and at the top of the podium was a cornice-like parapet which formed a base for seven square pillars at each side, whilst the two central pillars at the front and back ends were of a circular reeded form.

Ruins of an earlier and more elaborate building of the same type exist as part of the smaller temple at Medinet Habu, at the south side of the western plain at Thebes.[2] It is supposed to have been founded by Amenhetep I, but was not completed until the reign of Thothmes III. The cella (6), which had an entrance at

[1] "Description de l'Egypte. Antiquités," p. 1, pl. 38, etc.

[2] See plan of Medinet Habu, p. 155, below.

QUADRANGULAR PIER FROM THE TEMPLE OF AMENHETEP II AT KARNAK (Prisse d'Avennes).

each end, was surrounded by a colonnade of sixteen-sided pillars; and this was further enclosed on three sides by a stylobate, on which stood a range of square pillars supporting the roof cornice, the further end being filled in by six chambers (5), in two rows of three, for purposes connected with the temple service. An outer court (8) with two rows of nine columns down the centre and a pylon (10) were added at the south-west end, and further extensions westward (11-15) were made in later dynasties, and even in Roman times, as is shown by an inscription of Antoninus Pius on a gateway (14) in the entrance court.

The remains of a small temple built by Amenhetep II on the south side of the great temple at Karnak, which has an internal peristyle of square pillars adorned with reliefs showing the king adoring various deities, and the sanctuary of a temple at Buhen,

opposite Wadi Halfa,[1] begun by Hatshepsut and finished by Thothmes III, indicate that this peristylar type was favoured by Hatshepsut and her more immediate successors: and it is noteworthy that it continued to be employed for subsidiary buildings such as the pavilion of Taharka (XXVth dynasty) in the centre of the forecourt at Karnak. Its use in the Ptolemaic *mammisi*, or Birth-houses, which are found adjacent to the larger Ptolemaic temples,[2] and still later in the well-known pavilion at Philae, must therefore be regarded as traditional rather than as a result of Greek influence.

[1] This is what is known as the Southern Temple at Buhen. The columns are of the polygonal form. The other temple on the north was a foundation of Senusert I, but was rebuilt by Amenhetep II.

[2] These *mammisi* are chapels or shrines designed to commemorate the birth of Horus, the presumed progenitor of the king. The idea probably originated in the Birth-chamber at Luxor (see p. 122). They are found at Dendera, Edfu, Kom Ombo, and elsewhere.

COLOSSAL STATUES OF AMENHETEP III, KNOWN AS THE COLOSSI OF MEMNON

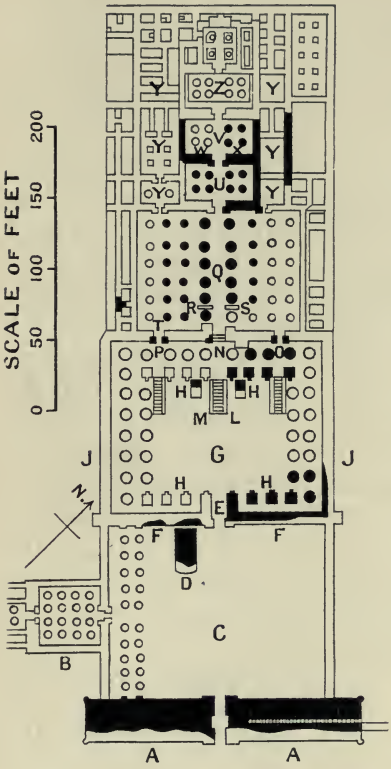
CHAPTER XIV

THE XIXTH DYNASTY. THEBES AND ABYDOS

THE Egyptian rulers had an innate tendency, from the earliesty dynasties, to manifest their power by the vast scale of their buildings, and towards the end of the XVIIIth dynasty this tendency had begun to assume a form in which size and mass were attained at the expense of finer qualities. The foreign conquests of Thothmes III and Amenhetep III in western Asia had raised Egypt to the highest pitch of material prosperity, and brought an access of wealth to its rulers, much of which was expended on vast buildings and gigantic sculpture. The two colossal portrait-statues of Amenhetep III, which overlook the Nile from the western plain of Thebes, are the most familiar examples of this. Originally monoliths of hard sandstone conglomerate, about sixty-five feet high,[1] they formed with others a frontal guard to a large temple, which has now been so completely demolished that its plan and aspect are irrecoverable. What this

[1] Both have suffered severely from time and earthquakes. The more northern, which was supposed to emit a musical sound at sunrise, having been reconstructed in parts under Septimius Severus, is no longer a monolith. The association of the name Memnon with them by Pliny, Juvenal, and other Roman writers, probably arose from a confusion of the name of Amenhetep with that of the Ethiopian hero. Some Greek writers apply the word Memnonium to the Ramesseum, and to the temple of Seti I at Abydos. See Murray's Handbook, p. 410, also p. 412.

building consisted of may be surmised from the remains of the mortuary temple built about 150 years later by Rameses II, who probably used the material of Amenhetep's,[1] as well as some from the XIth dynasty temple at Dēr-el-Bahri.



PLAN OF THE RAMESSEUM

This Ramesseum, as it is called, lies somewhat less than half a mile north of the Colossi,[2] and though it is in a very ruinous condition, enough remains to show that it was a magnificent representation of the architectural ideals of its day.[3] A large pylon covered with incised pictures of Rameses' Asiatic wars led into the usual forecourt, which appears from its scanty remains to have had a double colonnade on each side. On the south side are the

[1] Hall, "Near East," p. 317.

[2] See plan, p. 101.

[3] Petrie supposes that the building was actually laid out by Seti I, but finished and appropriated after his death by Rameses II (Hist., iii, p. 43).

remains of an unexplained building. Near a second pylon, at the further side lie fragments of a colossal statue (D) of the king seated, which must have been about fifty-seven feet high, and was originally a monolith of carefully polished syenite. Beyond this was a second open court with a colonnade on each side, the most striking feature of which is that on the east and

THE RAMESSEUM. OSIRIDE FIGURES IN THE SECOND COURT

(Petrie's "Hist. of Egypt.")

west sides,[1] the massive square pillars (H H) are fronted with colossal figures of Osiris. On the west side these stand on a raised platform, approached by three sets of steps corresponding to three doors in the back wall which lead into the hypostyle hall beyond. Where there are no steps the intercolumnar spaces are said to have been filled in by a dwarf-wall, such as was common in the

[1] The axis is here assumed to lie due east and west, though the actual orientation is south-east and north-west.

Ptolemaic temples.[1] The hypostyle hall (Q) is arranged on a plan similar, but on a smaller scale, to that at Karnak; the central walk being flanked by two rows of six massive columns, whilst the triple aisles on each side are divided by somewhat smaller columns. About thirty-four of the original forty-eight columns remain. Beyond this hall is a smaller one (U) with eight columns, which is in fairly good preservation, leading into another of similar

STORE CELLARS, RAMESSEUM

size and plan, and still further there are ruins (Y Z) which seem to indicate a third small hall with a sanctuary beyond it.

Behind the actual temple there are considerable remains of brick buildings, including a row of semi-circular vaults, the arches of which are constructed of three or four courses of roughly-fashioned voussoirs.

[1] See P. and C., ii, p. 149, and "Description de l'Egypte," ii, pl. 29.

THE RAMESSEUM. THE HYPOSTYLE COURT ON THE RIGHT

From the remains of wine-jars found in them, they seem to have been magazines for storage. An altar and the ruins of a large hall indicate that the whole area was the site of an extensive colony of officers and servants connected with the service of the temple, and the reception of tribute paid in kind to the king.

TEMPLE OF SETI I, KURNA

If the Ramesseum followed, so far as the temple is concerned, what had become the more usual arrangement in its ground plan, there are two rather earlier temples founded by Rameses' father Seti I, which show some peculiarities both in plan and style. One is the temple at Kurna, the most northern of the ruins on the west bank of the Nile at Thebes, dedicated by Seti to

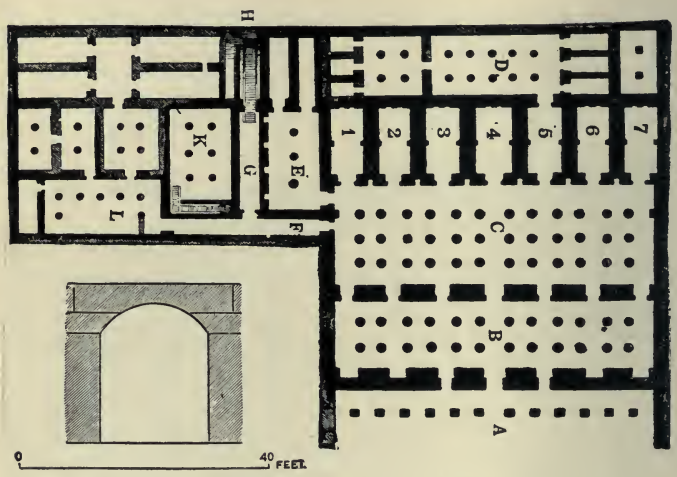
his father Rameses I, and finished by his son Rameses II. Its chief feature now remaining is a portico of clustered papyrus bud columns, originally ten in number, with heavy square abaci supporting an entablature which differs in its rectangular profile from the more usual cavetto cornice. This formed the façade of the *naos*

EXTERIOR COLONNADE OF THE TEMPLE OF SETI I, AT ABYDOS

proper or inner chambers of the temple. Vestiges of two pylons show that there were two open forecourts as in the Ramesseum, and some mutilated remains of sphinxes indicate that a central pathway or *dromos*, leading from the first pylon through the second was lined by these figures. Whether the courts had other architectural features seems doubtful.

The other temple specially associated with Seti I is

that at Abydos.[1] Here the first court has practically disappeared, but portions of the second pylon and of another open court exhibit surface sculptures by Rameses II, some of which are in the peculiar style of sunk relief which became common in the Ptolemaic period. They are better than those of the temples at Thebes and



PLAN OF THE COVERED PORTION OF SETI'S TEMPLE
With a section showing the construction of the cellae.

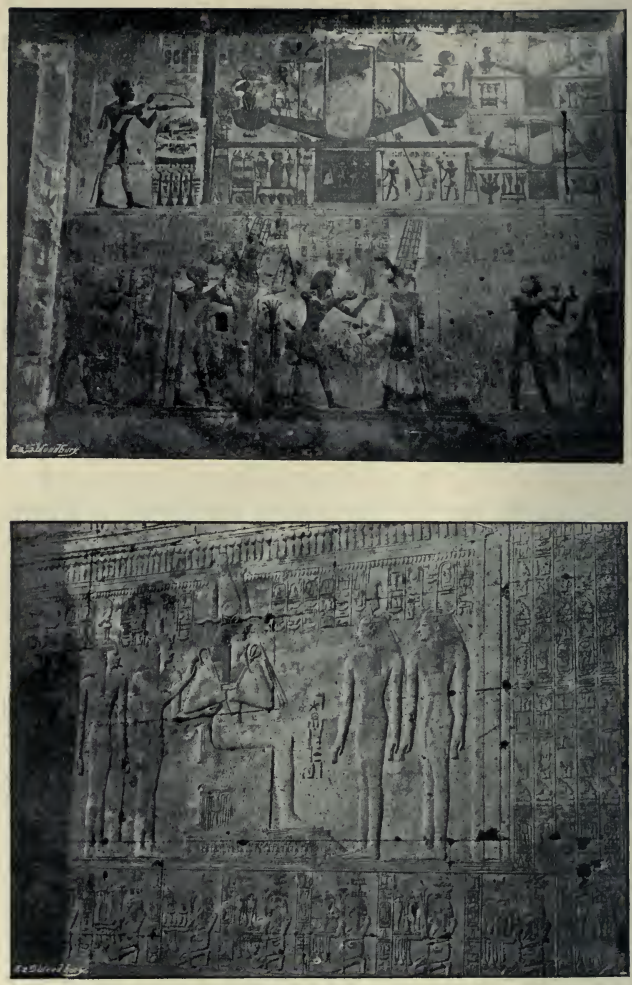
Kurna, and are described as the finest known of the age.[2] At the farther side on a slight elevation was a colonnade consisting of a single row of twelve square piers (A), behind which were originally seven doors leading into the first hypostyle hall, a narrow transverse space the roof of

[1] This temple is called by Strabo the Memnonium. The name should properly belong to the destroyed temple of Amenhetep III. See note, p. 129.

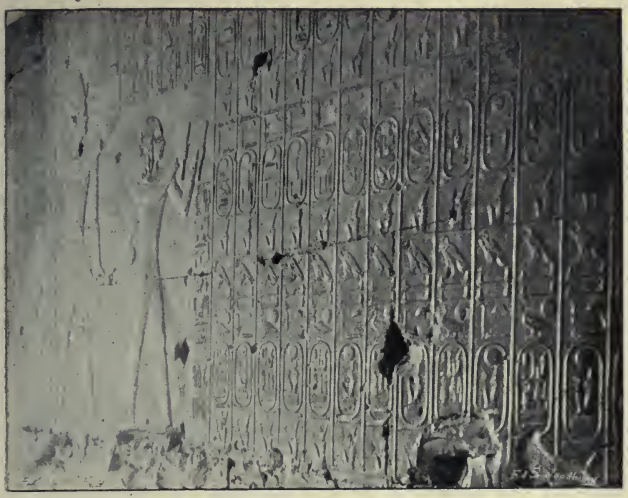
[2] Petrie, Hist., iii, p. 19.

which was supported by two rows of twelve circular or rather roughly hewn polygonal columns (B). In the further wall were doors opposite to those in front, leading into a second larger hypostyle hall with three rows of twelve columns, and from this opened seven cellae with arched roofs separately dedicated to Seti himself and the six deities, Ptah, Harmachis, Amen, Osiris, Isis, and Horus (1-7). The entrances of the cellae were opposite to the doors of the hypostyle hall, with clear approaches between every double rank of columns. Apart from this unusual sevenfold dedication, the chief peculiarity in the plan of this temple is the rectangular wing on the south side of the *naos* or temple proper, giving it an L shape and so contravening the general rule that extensions were made on the main axis and at the outer end of the precincts. The lateral position of the addition is accounted for by the fact that a subterranean building, which has been identified with a well or pool mentioned by Strabo,[1] lay immediately behind the temple: its purpose is probably to be explained by the requirements of the simultaneous cult of seven different deities. One of the larger pillared halls (L) in the addition is provided on three sides with a stone wall-bench, and appears from the mural reliefs to have been used like one of the lateral halls at Dēr-el-Bahri (see p. 96) for the slaughter of sacrificial victims. A slightly ascending passage (F) which gives access to this chamber from the hypostyle hall is covered with reliefs on both walls and ceiling. Those on the right hand or western wall represent Seti and his son doing homage to their ancestors and predecessors represented by seventy-six cartouches. This is the celebrated tablet of Abydos, which, inasmuch as it has

[1] See Appendix II.

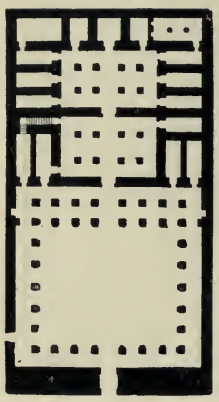


WALL PAINTING AND RELIEF IN SETI'S TEMPLE



FROM THE "TABLET" OF ANCESTORS

helped to elucidate the succession of the kings of Egypt, is a historical document of high importance.



TEMPLE OF RAMESES II, ABYDOS

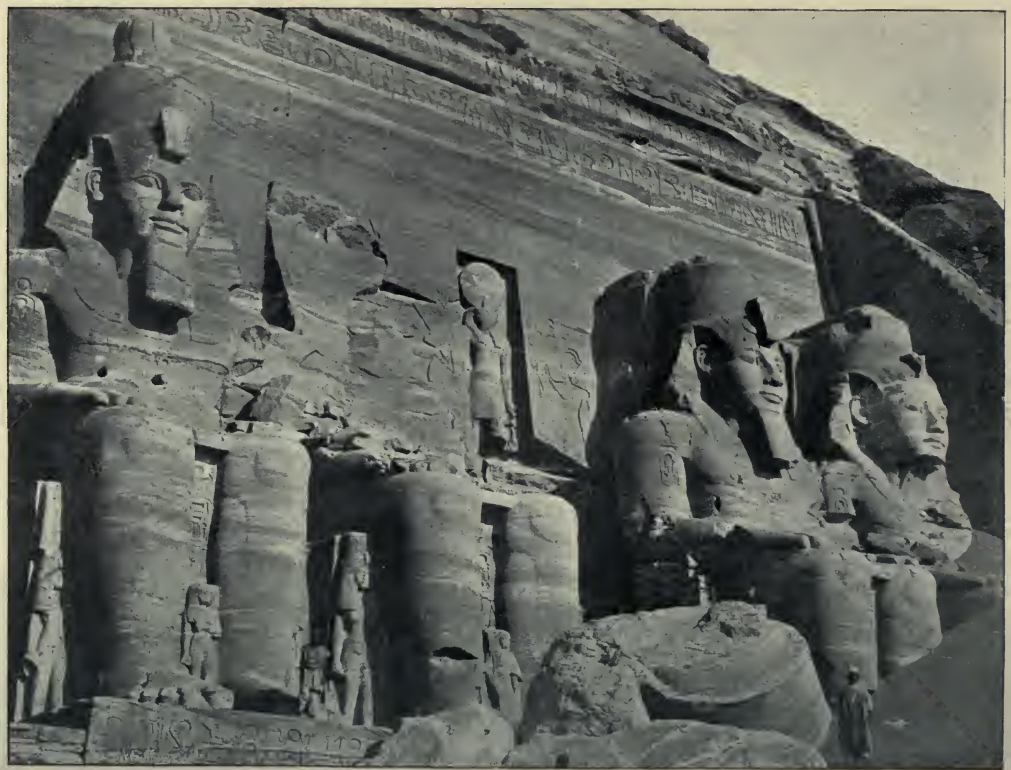
A much simpler ground plan is shown by the temple erected by Rameses II, a short distance to the north of Seti's. It is now in a very ruinous condition, but enough remains to show that it was one of his best works. The forecourt was surrounded by pillars fronted with Osiride figures, such as are seen in the Ramesseum. These are of hard sandstone, but much of the building is of fine limestone, and the doorway to the pillared halls was framed with red and black granite, whilst the sanctuary was lined with alabaster.

PLAN OF SETI'S TOMB

In all that denotes prosperity, wealth, and magnificence as distinct from the more intellectual attributes of art, Egypt reached its culmination in the XIXth dynasty. The sepulchre of Seti in the valley of the tombs of the kings is the largest, and the most justly celebrated for the fineness and completeness of its work, in this royal

necropolis.[1] Steeply inclined galleries alternated with staircases lead downward to several pillared chambers in the depth of the mountain-side, the whole being richly decorated with mural paintings representing the past and future life of the great king. The tomb when discovered by Belzoni in 1817 had already been ransacked, but the embalmed body was afterwards found in the pit near Dēr-el-Bahri, to which it had been removed with others for safety.[2] It is now at Cairo, and the fine alabaster sarcophagus which had remained in the tomb is in the Soane Museum in London.

[1] Petrie, Hist., iii, p. 22. [2] See p. 90 *note*.



ABU SIMBEL, THE GREAT TEMPLE, FROM THE SOUTH-EAST

THE SMALLER TEMPLE, ABU SIMBEL
Front view, from a drawing

CHAPTER XV

ROCK-HEWN TEMPLES

THE Syrian expeditions of Seti and Rameses had led to the seat of government being removed from Upper Egypt to the eastern part of the Delta, in order that it might be near the frontier. The ancient town of Zoan, known afterwards as Tanis, became an important and splendid city. Its great temple, the foundation of which probably dated from the VIth dynasty, was rebuilt on a grand scale: its scanty remains show that the *temenos* or surrounding wall was a parallelogram of 1000 feet by 700. There Rameses erected a gigantic statue of himself ninety-two feet high,[1] and ten or twelve

[1] Destroyed in the XXIInd dynasty. See below, Ch. xvii.

obelisks. The city retained its importance until, under the XXVIth dynasty, Saïs became the capital of the Delta. It is now a heap of ruins, with the remains of a single gateway and fragments of many obelisks.

The treasure-city or "store city" of Pithom, which according to Hebrew tradition was built by the labour of the captive Israelites, is represented by a few substructures.[1]

RUINS OF PITHOM

This gravitation northward, however, did not hinder Rameses, during his long reign of sixty-six years, from affirming his imperial power and indulging his taste in monumental building in the remotest southern portions of his possessions. There is scarcely a temple of any importance throughout the length of the land which was not enlarged or rebuilt by him, or perhaps merely usurped by the imposition of his reliefs or inscriptions. In some

[1] Exodus I, 11. The site is now called Tel-el-Maskhuta, near Kassassin.

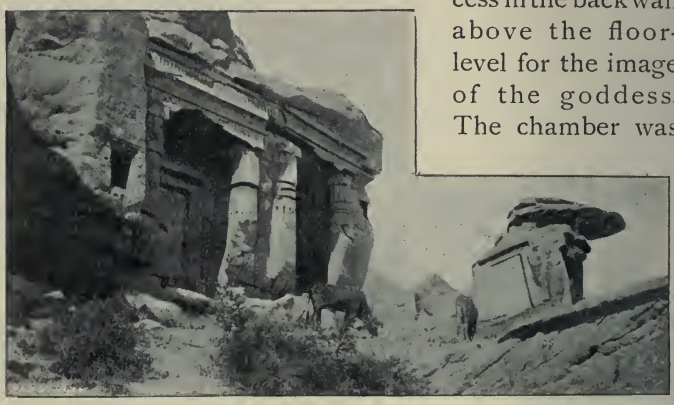
cases he destroyed the work of his predecessors simply for the sake of the material, but much of the sandstone used by him as well as by other kings was quarried at Silsila, between Assuan and Edfu, where, it is said, during the building of the Ramesseum he employed 3,000 workmen.

In the XIIth dynasty the southern boundary of Egypt was at Semna near the second cataract. There, and at Kumma on the opposite bank of the Nile, Senusert III built two fortifications against the border tribes of Nubia (Sudan).[1] The country, however, was subdued by the later kings of the dynasty up to the third cataract; and in the XVIIIth dynasty, under Amenhetep III, Egyptian rule was carried as far as Napata. Amenhetep II founded a temple at Kalabsha, about thirty-five miles above Assuan, which was superseded by one of the Roman period, though a few remains of the old building still exist; and at Soleb Amenhetep III built one, the ruins of which are the finest in the Sudan.[2] The colonnades that remain show that it was similar in style to his temple at Luxor, and may well be attributed to the same architect. Rameses carried his operations still higher up the Nile, and built a temple at Gebel Barkal near Napata, which is described as small and ruinous.

By far the most remarkable monument of Rameses II in Nubia is the larger rock-hewn temple at Abu Simnel on the left bank of the Nile about forty miles below Halfa. It is the most imposing example of a peculiar form of architectural art which is not confined to Egypt. It is probable that the elaborate decoration which had been given to some of the XIth and XIIth dynasty tombs at Beni Hasan, suggested the use of the same method for shrines and purely religious foundations.

[1] See above, pp. 60, 62. [2] See above, p. 123.

The practice seems to have been promoted by Queen Hatshepsut, in whose temple at Dēr-el-Bahri there is a good deal of rock-hewn work. About three miles south of the tombs at Beni Hasan, she began the excavation of a small sanctuary to the goddess Pekhet, identified with Artemis, which is known as the *Speos Artemidos*. It is very simple in plan, the sanctuary itself consisting of a chamber about twenty feet by twenty-two, with a recess in the back wall above the floor-level for the image of the goddess. The chamber was



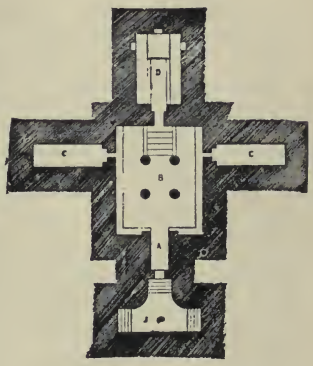
XIXTH DYNASTY SHRINE, SILSILA

entered from the outside by a passage, in front of which was a portico with eight square pillars in two rows of four, all hewn in the rock. Only three are still standing, and though there are reliefs and incised decoration in the portico, some added by Seti I, the interior seems to have remained unfinished.

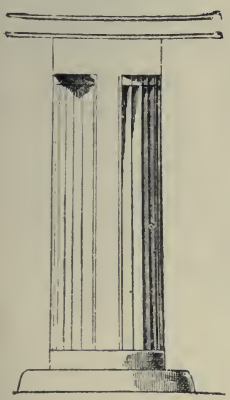
At Silsila, about forty miles below Assuan, there is a similar small rock-cut chapel with an exterior colonnade of four square pillars begun by Horemheb, the last king of the XVIIIth dynasty; and there are others

of the XIXth dynasty, with the lotus-bud form of column.

To Horemheb is attributed a more elaborate shrine at Gebel Adda, a little above Abu Simbel. It consists of a central hall twenty-five feet square, containing four bud-headed columns, with a narrow chamber projecting at each side. A sanctuary at the end opposite to the entrance passage gives the ground plan the form of a cross. At Beit-el-Wali, near Kalabsha, and at Gerf Husein, twenty miles higher, there are small rock temples, both of which date from the reign of Rameses II. The former has some very interesting coloured reliefs illustrating his wars with the Nubians, copies of which are exhibited in the British Museum. It has a small hall, the roof of which is supported by two columns of twenty-four sides, in which the cardinal surfaces are broader and have inscriptions running down them.



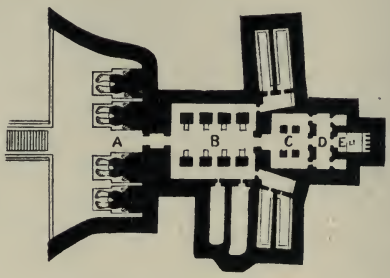
PLAN OF ROCK TEMPLE AT GEBEL ADDA



LATE FORM OF POLYGONAL COLUMN, BEIT-EL-WALI

But these comparatively small shrines sink into insignificance beside the work of Rameses at Abu Simbel. There are two temples;

THE FAÇADE FROM THE NORTH-EAST



PLAN OF THE TEMPLE

THE GREAT TEMPLE, ABU SIMBEL

the larger one, dedicated to Ra, Amen, Ptah, and Rameses himself, is the one towards the south, and is the grandest piece of rock-work in Egypt.[1] In front of it is a forecourt

DETAIL FROM ABU SIMBEL

A daughter of Rameses III standing in front of his throne, on the side of which are represented two men binding the river Nile.

reached by a flight of steps from the level of the Nile bank, and enclosed at each end by a brick wall of the

[1] Petrie, Hist., vol. iii, p. 79.

same date as the temple. From this court a few steps with an inclined plane in the middle lead to the main platform, the rock being cut back so as to leave a terrace in front of the temple. The vertical face of this platform is ornamented with carvings and a curved cornice, above which is a balustrade with small figures behind it. The natural face of the rock slopes at an

INTERIOR OF THE GREAT TEMPLE. THE FIRST HALL

angle of about sixty degrees, and in cutting it away from the floor-level upwards, material has been left so as to provide for four gigantic sitting statues of Rameses, sixty-five feet high, which project from the slightly sloping plane of the façade (p. 142). Much smaller statues of various members of his family are placed near to or between the legs of the colossi. This front, which is 119 feet wide and over 100 high, is finished in the form of a pylon-tower with a torus at the angles, and a curved

cornice upon which twenty-two small dog-headed figures are carved. A doorway between the two central figures leads through a short passage to a spacious chamber (B) fifty-eight feet long by fifty-four wide, the roof of which it supported by a row of four square pillars on each side, with Osiride figures attached to the faces towards the

THE SMALLER TEMPLE AT ABU SIMBEL
(Petrie's "Hist. of Egypt.") See also p. 143.

central walk. This appears to correspond with the outer colonnaded court in temples of the ordinary type. Beyond this is a small hypostyle hall (C) with four square pillars, and still further a narrow transverse chamber (D), in the back wall of which is the central sanctuary with a small room on either side of it. Six other long and narrow apartments, four on the north side and two on the south, extend laterally from passages or doorways communicating with

the large hall, and appear to correspond in purpose with the various store rooms found in other temples. The reliefs on the walls of the large hall are of much interest, especially those which illustrate the Hittite campaign, which forms the subject of some of the designs at the Ramesseum. The length of the excavation from front to back is 180 feet.

On another cliff on the north side of the great temple, but separated from it by an intervening cleft, is a smaller rock-hewn temple dedicated by Rameses to the goddess Hathor and his favourite wife Nefertari. The façade of this is 92 feet long, and has six statues 33 feet high, in this case standing, showing Nefertari between two figures of Rameses on each side of the central door (p. 143). The elevation of this front differs somewhat from that of the larger temple, inasmuch as the general plane of the surface follows the slope of the rock, and the statues are in recesses which are separated by the dividing buttress-like strips of rock. The cornice which originally crowned the front is now gone. The plan of the interior is very simple: there is one pillared hall with three square pillars on either side, each bearing a head of Hathor. There is also a high relief of Hathor in the form of a cow in a recess at the back of the sanctuary

MEDINET HABU. SOUTHERN COLONNADE OF THE FIRST COURT OF RAMESES III

CHAPTER XVI

RAMESES III. MEDINET HABU

WHEN Rameses II died at the age, as some say, of 100 years,[1] his son Merenptah who succeeded him was already advanced in years. The beginning of his reign was occupied with successful wars against the Libyans on the west, and tribes of Palestine on the east, and when he had succeeded in establishing peace, he apparently lacked both energy and the needful time to undertake extensive building operations, such as his father and grandfather had delighted in. Like his father, however, he did not hesitate to appropriate many of the

[1] Prof. Petrie puts his age at 85 (Hist., vol. iii, p. 72). Prof. Breasted (p. 462) says he was over 90.

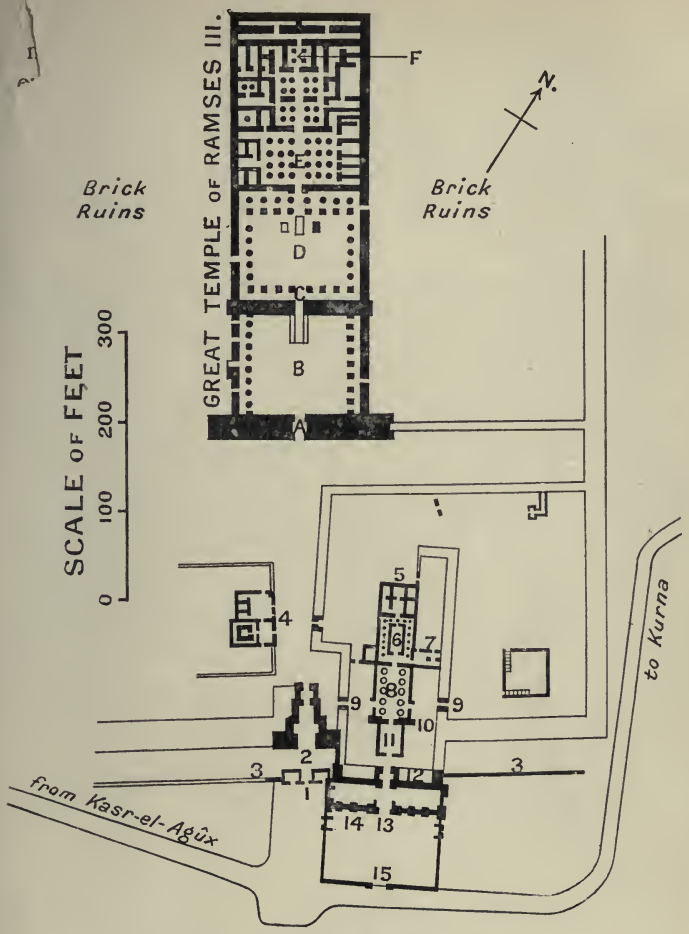
buildings of his predecessors, and he is supposed to have completed the destruction of the magnificent temple of Amenhetep III, in order to use the material for his own mortuary temple,[1] which in its turn has almost disappeared. After the death of Merenptah the succession was disputed, and Egypt fell into a state of internal discord until a viceroy of Nubia secured the throne as Seti II. He built a small temple in front of the hypostyle hall at Karnak, and is the only king of any note before the end of the XIXth dynasty, until a certain Setnekt, "probably a descendant of the old line of Seti I and Rameses II,"[2] succeeded in founding a stable dynasty. He was succeeded by his son Rameses, the third of the name, which henceforth became titular, and was borne by the nine remaining kings of the XXth dynasty.

The chief monument of Rameses III is the great temple of Medinet Habu, which is the best preserved of the older temples of Egypt.[3] It lies to the west (or strictly speaking to the north-west) of the temple of the XVIIIth dynasty already mentioned (p. 125), but though the two face in the same direction there is a slight divergence in their axes. The plan is very similar to that of the Ramesseum, there is a forecourt about 110 feet by 135, fronted by a large pylon, with a portico of seven square Osiride pillars on the north side, whilst that on the south has eight circular columns with calyx

[1] It stood south-west of the Ramesseum and north-west of the Colossi. Only foundations remain, and some of the stones bear the name of Amenhetep III.

[2] Breasted, p. 475.

[3] That it is well preserved is probably due, as Prof. Petrie remarks, to the fact that it was the last of the great temples at Thebes, and that no later builder had occasion to make use of its material.



THE TWO TEMPLES OF MEDINET HABU

TEMPLE OF RAMESES III. A. Pylon. B. Forecourt. C. Pylon. D. Second court. E. Hypostyle hall. F. Sanctuary. 1. Entrance. 2. Pavilion. 3. Wall of Rameses. 4. Small temple of XXIst dynasty.

SMALLER TEMPLE. 5, 6. Old building of XVIIIth dynasty. 7. Addition, XXIXth dynasty. 8. Colonnade of XXVIth dynasty. 9-13. Ptolemaic and Roman additions.

capitals. The latter is supposed to have formed the façade of a royal palace, which adjoined the temple on this side and communicated with it by three doors and a large balcony window. A second pylon, with a red granite doorway approached by a short ramp led to another open court. The surfaces of the pylons are

SCULPTURES IN CAVO-RELIEVO ON THE SECOND PYLON OF MEDINET HABU. PHILISTINE CAPTIVES

covered with hieroglyphic inscriptions and representations of Rameses' victorious campaigns, similar in style but not equal in merit to those of Seti at Karnak. The second court, which is 125 feet by 138 in area, is entirely surrounded by a colonnade. The pillars on the east and west sides are of the Osiride type, those on the north and south are of the lotus-bud pattern. The court is

almost a reproduction of the second court of the Rameseum, but is in a much better state of preservation, and is generally regarded as one of the finest examples of this form of Egyptian art. The hypostyle hall was comparatively small. It had four rows of six pillars, the eight lining the central avenue being more massive than the rest. This portion of the building, and several smaller pillared halls beyond, surrounded by the chambers connected with the service of the temple, are in a very dilapidated condition.

The most noteworthy feature about the temple is the detached gateway to its precincts, sometimes called the Pavilion (2 in plan), which in plan and architectural detail is unlike any other existing building in Egypt. It stands about 100 yards from the first pylon, and on the central axis of the temple. At each side of the entrance is a three-storied tower with very slightly battering sides and a crenellated parapet. Within this entrance is an elongated courtyard in three sections, which narrow successively by the side-walls being set forward. At the west end is a door of exit which led into a large open space, across which a dromos 265 feet long ran in a straight line to the doorway in the first pylon.

Amongst the peculiar architectural features of the entrance-building are three ornamental consoles on each side of the court. They consist of an upper and lower slab, between which are sculptured busts of captive enemies. Professor Petrie seems to suggest that they supported timber galleries or bridges accessible by doors in the walls.[1] The outside of the towers and the walls of the court are covered with incised sculptures. Like those in the temple, they are weak imitations of the work of the

[1] Hist., vol. iii, p. 162.

ENTRANCE. (Petrie's "Hist. of Egypt.")

SOUTH SIDE

MEDINET HABU. THE PROLYLAEUM OR PAVILION

XIXth dynasty, but have considerable historical value as evidence of the king's victory over the Libyans, and his wars with various tribes inhabiting Syria, Asia Minor, and the Mediterranean coasts. The building was originally isolated with a space between it and the older XVIIIth dynasty temple on its northern side, but Ptolemaic additions to the latter and the construction of later boundary walls have obscured its relation to the large temple, and led to its being regarded as a small palace. That it was not a purely religious building is evident from the fact that some of the upper rooms, which are reached by a staircase in the southern tower, are lighted by windows of some size, and contain reliefs illustrating scenes of the harem and domestic life; and it seems probable that it may have served as an occasional royal lodging as well as a state entrance to an assemblage of buildings which included both a palace and a temple.

FROM RELIEFS IN THE UPPER ROOMS OF THE PAVILION

Its architectural features no less than the reliefs on its walls testify to the effect of foreign influences; and the towers with their almost vertical sides, rectangular cornices, and leaf-like crenellation, differing altogether from the conventional pylon, suggest a derivation from a western Asiatic type which is more fully developed in Assyrian art.

Rameses III also built the small temple at the west end of the great temple at Karnak dedicated to the same

Theban triad, and began that of Khonsu about 200 yards to the south of it. It is remarkable that whilst the former faces north-north-east, the other is turned in the exactly opposite direction. The plans of both, though differing in details, follow the usual general arrangement, having an entrance pylon, an open forecourt, a hypostyle

TEMPLE OF KHONSU AT KARNAK. THE HYPOSTYLE HALL
Showing the latticed openings for lighting.
From a drawing by R. Phené Spiers, F.S.A. (1866).

hall, and the usual assemblage of smaller chambers surrounding the sanctuary. They are both built apparently on a preconceived complete plan, though in the case of the temple of Khonsu the building extended over many years. The hypostyle hall, which is a small one with only eight columns, was completed by Rameses XII, the forecourt was added by Herihor the priest king of

the XXIst dynasty, and the pylon was only completed under Plolemy I. Part of the material used by Rameses III seems to have come from other buildings, for the walls of the sanctuary include blocks bearing the cartouche of Thothmes III, and the small pillared hall behind it has four polygonal columns of sixteen sides, and may possibly be some of those originally in the great temple which had been displaced by the alterations of the XIXth dynasty.

CHAPTER XVII

THE TANITES, BUBASTIDES AND NUBIANS

AFTER the death of Rameses III the prosperity of Egypt together with its art rapidly declined. He and his successors were all dominated by a religious obsession which resulted in placing enormous wealth and power in the hands of the priests of Amen, and the secular interests of the country suffered accordingly. Under Rameses IV to XII (some of whom were brothers and succeeded at short intervals), Thebes fell politically from its high estate; the poverty of the people led to the pillage of many of the tombs of the kings. A local noble at Tanis, Nesbanebtet (called Smendes by Greek writers) became dominant in Lower Egypt, and is regarded by Manetho as the founder of the XXIst dynasty. At the same time Herihor, the high priest of Amen, who had been the virtual ruler under the last of the Ramessides, proclaimed himself Lord of the two Lands and founded a concurrent priestly dynasty at Thebes. The result of this divided government was that all the foreign power of Egypt was lost, and gave way in Syria to the rising influence of the Assyrians. Beyond the completion of the temple of Khonsu no important architectural work was undertaken.

A new dynasty, the XXIInd, was founded by Sheshenk, an Egyptianized Libyan who had risen to great influence in Herakleopolis and married a daughter of one of the Tanite kings. Under him the government was once more

consolidated, and Egypt regained considerable internal prosperity. It is he who is recorded, under the name Shishak, to have invaded Palestine in the days of Rehoboam and despoiled Solomon's temple. His capital city was Bubastis, near the modern Zagazig in the Delta, where two of his successors, Osorkon I and II, carried on extensive building operations. The great temple of the local goddess, Bast, excited the admiration of Herodotus when he visited it nearly five centuries later. The site, known now as Tel Bast, is a mass of ruins, but excavations have revealed the plan of the temple and shown that it was built entirely of red granite, which must have been brought from Upper Egypt. There is a fine Hathor-head from one of the pillars in the British Museum.

British Museum]
HATHOR-HEADED CAPITAL
From Bubastis, XXIInd dynasty.

The art of portrait sculpture seems to have been revived under Osorkon II [1] of whom a good statue in gray granite exists, but many fragments of statues found at Bubastis evidently date from the days of the Middle Kingdom. The chief architectural work of Sheshenk was the forecourt of the great temple at Karnak, the western pylon of which was never quite completed. Another successor, Sheshenk III, built chiefly at Tanis and destroyed the colossal statue of Rameses II (*see* p. 143) in order to

[1] See Breasted, p. 548. Petrie, Hist., iii, 249.

build a pylon, the ruins of which still exist, with the fragments.

During the remainder of the XXIInd dynasty and the two short ones which followed it, Egypt again fell into a state of internal confusion, and was resolved into local and hostile political units which left the kingdom open to external attack. The first aggression came from the south, for the neglect of the Nubian conquests had given opportunity for the establishment of an independent Ethiopian kingdom which emerges on the scene of history in the eighth century B.C. Nubia had long been a stronghold of the cult of Amen, and many of the Theban priests had migrated to Napata when Thebes had lost its predominant position. Meanwhile Kashta, a Nubian king, and his son Pianki had extended their power to Thebes, and gradually made further encroachments. By repeated raids Pianki succeeded in subjugating all the chief towns of Lower Egypt, and some years later his brother Shabaka once more consolidated the government under what is reckoned as the XXVth or Nubian dynasty.

The most enlightened king of this line was probably Taharka, son of Pianki, but during his reign, which lasted twenty-five years, Esarhaddon king of Assyria invaded the Delta and reduced it to a state of vassalage. Taharka, however, retained a nominal suzerainty over Upper Egypt, and a monument of his reign exists in some remains of a pavilion which he built in the forecourt of the great temple at Karnak (see p. 114). The columns, though apparently imitated from those in the Hypostyle Hall, are inferior in construction, being built up in small sections. His most extensive work consisted of two temples at Napata which he built or enlarged. The larger temple, the sanctuary of which is excavated

in the isolated rock called Gebel Barkal, has an open court succeeded by a portico and a small hypostyle hall. The caryatid figures of Bes, as represented in a drawing given by Cailland,[1] who described it in 1822, show a decided Ethiopian taste.

Under Taharka's successor Tanuath-Amen (Tentamon) Egypt was again invaded by the Assyrians under

TAHARKA'S LARGER TEMPLE AT NAPATA
From Petrie's "Hist. of Egypt," after Cailland.

Assurbanipal. Thebes was attacked and ruined and the Ethiopian king was driven back to Napata. His dynasty in Egypt came to an end, and the country was divided into petty principalities subservient to Assyria.

But Assyria itself was unconsciously nearing its downfall, and while its main forces were occupied with wars against Babylon and Elam, Psamtek (Psammeticus) son

[1] "Meroe au Fleuve Blanc."

of Necho, who governed in the Delta as a vassal of Assyria, seized the opportunity, and with the aid of Greek mercenaries succeeded in throwing off the yoke. By degrees he secured the supremacy over the various local governments, and Egypt was once more united under a native king.

CHAPTER XVIII

THE SAÏTE DYNASTY. THE SUBJUGATION OF EGYPT

THE XXVIth or Saïte dynasty was thus inaugurated, and under it Egypt enjoyed a more settled government, with some prosperity, for about 150 years. But it was an Egypt changed in character rather than rejuvenated. Under the dominion of foreign rulers, the continuous tradition inherited from the XVIIIth dynasty had been broken, and the cultured class had learnt to look upon the past with critical and eclectic eyes. In some respects art had made progress under the Bubastides. Mural decoration and portrait sculpture had gained in refinement if not in vigour,[1] but no important architectural work had been accomplished since the days of Rameses III, and a tendency to supersede and even to destroy the works of preceding generations, which generally marks a period of growth in art, gave place to the practice of preserving them. The great pyramids were repaired, old temples were restored, and wealthy men prepared tombs imitated from the elaborate subterranean sepulchres of 700 years earlier. A large temple to the local goddess Neit was built at Saïs, of which nothing remains but unintelligible ruins. What it was like may perhaps be inferred from the later Ptolemaic temples, in which the ponderous art of Karnak or the Ramesseum acquires some relief in fanciful detail, which, however

[1] See Breasted, p. 548.

tasteless it may sometimes seem to eyes that have been educated by the restrained and precise forms of Greek architecture, have a kind of grace which distinguishes it from the work of greater days.

During this dynasty great changes took place in the relations of Egypt with the outer world. Immigrants in great numbers, especially Greeks and Jews, came from the coasts and islands of the Mediterranean for purposes of trade. Ionian and Carian mercenaries from Asia Minor formed a large proportion of the army. A Greek colony, which was established at Cyrene on the Libyan coast in the reign of Psamtek I (*c.* 630 B.C.), soon came under Egyptian influence, and Greek military towns or cantonments arose at Daphnae on the isthmus of Suez and elsewhere.

Psamtek's long reign of fifty-four years contributed to the prosperity of the country, which continued under his successors. His son Necho and his great-grandson Hofra (Apries) were tempted to assert influence in Syria where the power of Babylon had superseded that of the fallen empire of Assyria, but they were both defeated by Nebuchadnezzer II, who, however, seems to have left Egypt unmolested. A military disturbance between Greeks and natives led to the deposition of Hofra, and the usurpation of the throne by one of his chief ministers, who, as Aahmes (Amasis) II reigned with great ability for forty-four years. He did not neglect architectural works; many old temples were restored or improved, and he built splendid additions to those at Saïs and Memphis. By the aid of a strong navy he annexed Cyprus and maintained friendly relations with foreign cities, especially with Greek communities. Greek traders enjoyed especial favour, and they had already

under Hofra been allowed to found a commercial settlement at Naucratis in the western Delta. A large temple called the Hellenion was built there at the expense of a number of Ionian cities, and four or five of the Grecian states provided special temples for their own colonists. All this architectural work has vanished.

The conquest of Babylón by the Persians took place in 529 B.C., when Aahmes had been thirty years on the throne, and on the subjugation of Egypt by Cambyses, which occurred soon after the death of Aahmes, the cities in the Delta declined. Naucratis remained for some time the chief centre of trade, until the foundation of Alexandria hastened its downfall; and in succeeding ages it was gradually reduced to a mere group of mounds, in which the explorations of Messrs. Petrie and Hogarth have disinterred little but foundations of walls and broken stones.

Cambyses made Egypt a satrapy of Persia, and though his successor Darius Hystaspes cultivated the goodwill of the inhabitants, and showed sympathy with their religion by building a temple to Amen-Ra in the oasis of El-Kharga, the next king, Xerxes, suppressed an attempt to regain independence with great harshness, and reduced the country to a condition of slavery, which continued under his successors for seventy years longer. Later revolts were more successful; during three short dynasties Egypt regained a transitory independence, and under Nectanebo (Nekht-Hor-Heb), who founded the XXXth dynasty, even enjoyed some prosperity. Many relics of his reign, which lasted eighteen years, have come to light. His sarcophagus, elaborately decorated and inscribed, and two small obelisks may be seen in the British Museum. He built additions to the temple of Isis

on the island of Philae, which is supposed to have been possibly founded by Aahmes II and rebuilt later. Two long colonnades and a smaller temple, which formed an entrance to the precincts, are the oldest buildings there, and may still be seen when not submerged by the Nile barrage at Assuan.

He was succeeded by his son and grandson, but under the latter the Persians again obtained possession of the country for a few years, until Alexander the Great defeated Darius III at the battle of Issus (332 B.C.), and having overthrown the Persian empire was welcomed by the Egyptians as a deliverer. He conciliated them by adopting their religion, and obtaining a divine ratification of his title from the priests of Amen; but his greatest work for Egypt was the foundation of the city of Alexandria. At his death one of his generals, Ptolemy Soter, assumed the administration of the country as the representative of Alexander's half-brother Philip Arrhidaeus, and of his son Alexander II, and there are works at Karnak and Luxor and elsewhere which were executed in their names. But on the murder of Alexander at the age of 13, Ptolemy assumed the crown, and founded a dynasty which lasted from 270 B.C. till 30 B.C. when Egypt became a Roman province.

THE TEMPLE AT EDFU

LIST OF THE PTOLEMIES

	B.C.		B.C.
Ptolemy I Soter	305	Ptolemy XI Alexander I . .	108
,, II Philadelphos .	285	Soter II again .	88
,, III Euergetes . .	247	,, XII Alexander II .	81
,, IV Philopator . .	222	,, XIII Auletes . . .	81
,, V Epiphanes . .	205	,, XIV (With Cleopatra)	51
,, VI Eupator. . . .	182	,, XV (With Cleopatra)	47
,, VII Philometor . .	181	,, XVI Cesarion (Cleopatra's son) .	45
,, VIII Philopator Neos .	146	Battle of Actium and end of dynasty . . .	30
,, IX Euergetes II (Physkon) . .	146		
,, X Soter II (Lathyrus) . .	116		

In some lists the numbers and names differ slightly, owing to a few of the reigns being quite transitory. The above follows Mahaffy's "History of the Ptolemaic Dynasty" (Methuen and Co.).

CHAPTER XIX

THE PTOLEMAIC DYNASTY

UNDER the earlier Ptolemies Egypt attained great eminence in science, letters, and commerce, and became the richest country in the world.

Ptolemy I founded the celebrated library and museum at Alexandria, and following the example of Alexander the Great he adopted the religion of the country, which was developed about this time by an amalgamation of two of the prevalent cults. The worship of Serapis (Osiris-Apis) was widely accepted, and ultimately became popular, with other oriental religious innovations, in the Roman world.

This religious expediency, which was accompanied by general toleration and a patronage of the Jews, was pursued by his successors. They restored and built many temples, the remains of which form a large proportion of the architectural monuments that still exist in Egypt.

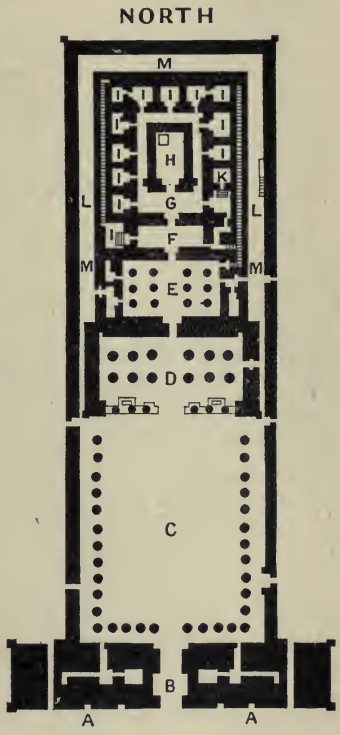
In these they adhered closely to the later traditional methods of structure and decoration, slightly influenced by Greek and Roman work, and recorded their names and titles in the hieroglyphic writing consecrated by immemorial usage.

The principal buildings due to the Ptolemies of which remains still exist, are the temples at Edfu, Esna,

PYLON: EDFU, *c.* 57 B.C. (Note the grooves for flag-poles.)

Dendera, and Philae. Edfu, called by the Greeks Apollinopolis, lies on the left side of the Nile, about sixty miles south of Luxor. The temple, dedicated to Horus who was identified with Apollo, is an elaborated reconstruction of an XVIIIth dynasty building. It has a special interest because it is structurally almost perfect, and shows that its designers, whilst following the main features of older temples in plan and style, were not incapable of

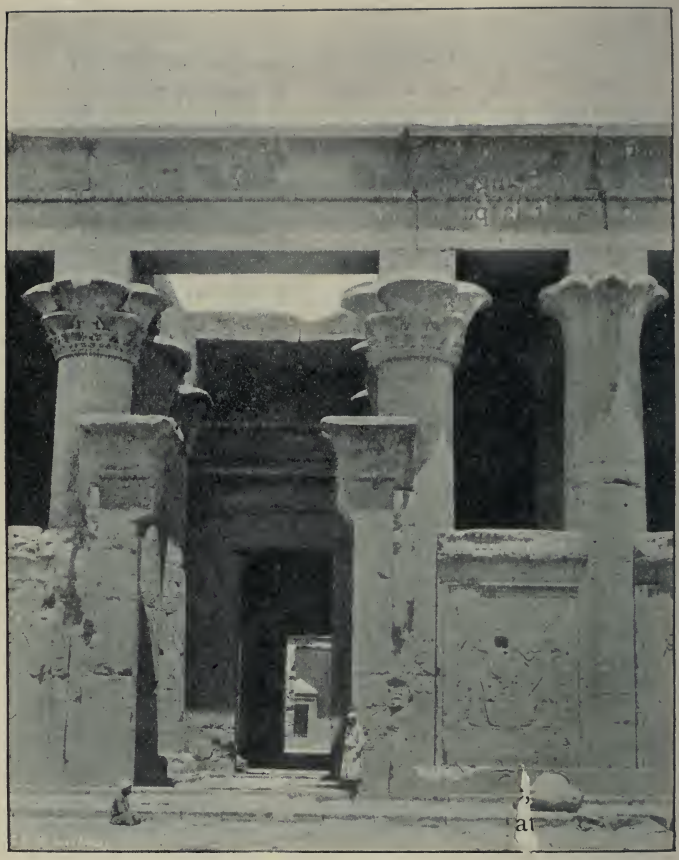
improving on them.[1] Its construction extended over a long period, for though the sanctuary and hypostyle hall (E-H) were finished by Ptolemy IV in 212 B.C., the vestibule (D) was only completed by Ptolemy Euergetes II in 122 B.C. Instead of being open to the court, it is partly enclosed by dwarf walls between the columns of the front row.[2] The capitals are alternately of a palm-frond pattern, and one in which a corolla-like arrangement of petals is obviously influenced by the Greek or Roman Corinthian capital. Its elevation with slightly battering ends and framed with a torus moulding, gives the impression that it was intended as a frontispiece to the whole; but a forecourt was added by Ptolemy Lathyrus a few years later, with a well-proportioned colonnade round three sides, which



PLAN OF THE TEMPLE AT EDFU

[1] Its preservation is mainly due to the fact that it has deep foundations. This was an improvement of the Ptolemaic builders, for the older temples had shallow and often make-shift footings.

[2] This arrangement, common in Ptolemaic temples, is said to have occurred exceptionally in the Ramesseum (see p. 131).



EDFU, INNER PORCH

apart from its details is almost Greek in effect. The fine pylon, 250 feet broad and 115 high, and the massive brick girdle-wall that surrounds the whole

MONOLITHIC GRANITE SHRINE, EDFU

were finally completed in 57 B.C. But the tendency to exaggerated size and height has vanished, and the comparatively small hypostyle hall (E) is lighted, not by

apertures in the side walls of a raised central avenue, but by a rectangular opening in the stone roof. Staircases in the thickness of the wall lead to various parts of the roof. In the sanctuary (H) is a magnificent shrine carved from a single block of gray granite. It was dedicated to Horus by Nectanebo of the XXXth dynasty, and is a relic of the earlier temple.

The temple at Esna, in the same region, is only partially visible. The pronaos, the floor of which is considerably below the level of the ground outside, is the only part cleared; it has twenty-four columns arranged like those at Dendera (see p. 180). It was a reconstruction begun by Ptolemy VII (*c.* 150 B.C.) of an earlier temple, but was finished under the Roman emperors. The capitals show deviations from the old types similar to those at Edfu, being evidently influenced by classical art. The columns stand on heavy cylindrical bases.

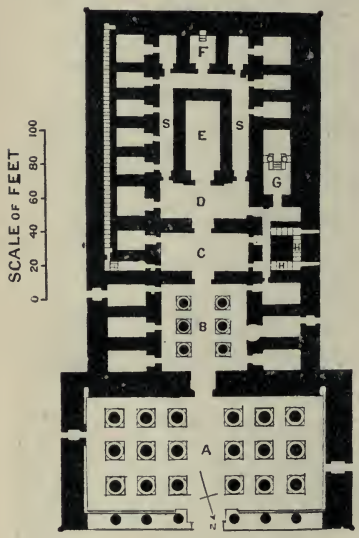
The temple at Dendera, about thirty miles below Thebes on the west side of the Nile, is dedicated to Hathor, whom the Greeks identified with Aphrodite. It is about 310 feet long, and was traditionally said to have been founded by Khufu,[1] though the existing building is of late Ptolemaic date, and was completed by the Romans. There are, however, stones bearing the names of kings of the XVIIIth to the XXXth dynasties, showing that it has a long continuous history. If, as is supposed, it was rebuilt on old foundations, these must be of great age, and it is probable that the original temple was partly underground. In this instance the subterranean walls are from fifteen to seventeen feet thick, and contain in their thickness many long and narrow galleries about four feet wide, in some cases in two or three tiers. The

[1] Breasted, p. 119.

ESNA. CAPITALS IN THE PRONAOS

(This portion of the temple was probably built under the early Roman Emperors from Tiberius to Vespasian, 14 B.C.—A.D. 69.)

interior surfaces of these galleries are decorated with coloured reliefs of the time of Ptolemy XIII, though one of them depicts King Pepi of the VIth dynasty.[1] These galleries may have been the store-chambers of the original temple. The edifice above has a deep portico or pillared hall, with twenty-four Hathor-headed columns in four rows—twelve on each side of the central walk. This hall is only partially closed in front by the usual half-wall built between the columns, except at the central entrance. At the back is a small hypostyle hall (B) with side chambers, and beyond this two antechambers (C-D) leading to the sanctuary (E) with surrounding corridor and cells. At the extreme end is a room (F) containing a shrine and image of Hathor. On the west side of the first antechamber is a staircase (H) leading to the roofs, and on the same side is a small open court (G) with a pavilion approached by steps.



PLAN OF THE HATHOR TEMPLE, DENDERA

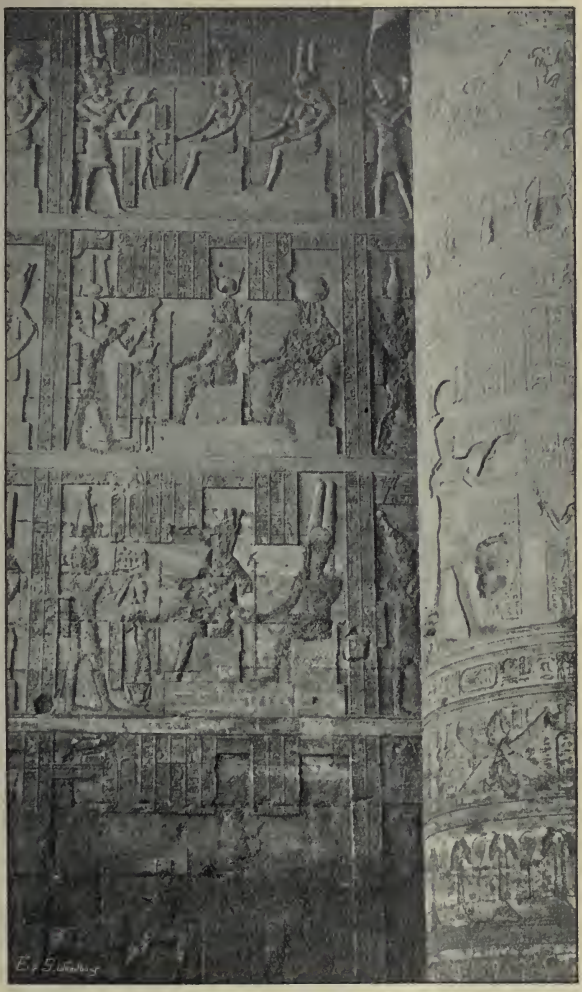
The pillars of the outer portico have nothing in common with contemporary classical art. Their capitals consist of Hathor-heads on each of the four sides displayed on a

[1] Murray's Handbook, p. 371.

UPPER PART OF THE FAÇADE, DENDERA

INTERIOR OF THE PRONAOS, DENDERA

HYPOSTYLE HALL, DENDERA



BAS-RELIEF OF AUGUSTUS. HYPOSTYLE HALL, DENDERA

stone imitation of drapery, above which is a cubical die connected with the entablature by a shallow square abacus of smaller area than the capital. Notwithstanding

CHAPEL OF OSIRIS ON THE ROOF, DENDERA

the abnormal and almost grotesque character of this design, the colonnade is well proportioned, and the effect of the whole, with an elegant entablature consisting of an architrave and hollow cornice, finely decorated with

emblems and figures in low relief, is not without dignity. It is to be noted that this elevation, like that at Edfu, is built with a slightly battering ends and forms a complete composition apparently intended as a façade to the entire building. An isolated pylon some distance in front was a later addition under the Flavian emperors. In the interior hall the columns have spreading capitals of a more familiar frondiform type and their shafts, like the walls, are richly decorated with reliefs.

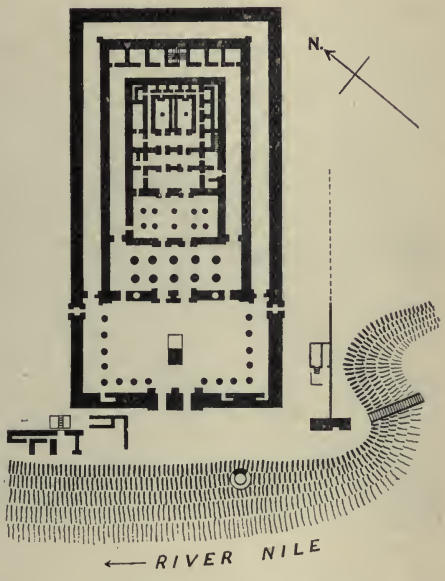
The temple, like that at Edfu, has the advantage of having its stone roofs in good condition, and a peculiar feature of this building is that it has a temple or chapel of Osiris on the roof above the hypostyle hall, in which smaller Hathor columns support the roof. Its axis is at right angles to that of the larger temple and faces eastward across the roof. A curious window with Hathor-headed mullions, said to have come from the "clerestory" of the temple, may be seen in the British Museum.

British Museum]
LIMESTONE WINDOW, DENDERA

There is a somewhat peculiar late temple at Kom Ombo, higher up the Nile. It stands on an isolated height on the right bank, which in the Ptolemaic era was the site of a considerable town. It is dedicated to two deities, Haroēris (a form of Horus) and Sobek, who represented respectively Light and Darkness. It has therefore two cellae side by side, and though the whole temple is a single structure so far as the entrance court and the enclosing walls are concerned, each sanctuary has separate entrances and approaches through the hypostyle hall, after the same fashion as the sevenfold temple of Seti at

KOM OMBO

Abydos. Like that at Dendera it is a reconstruction of an older temple, but unlike it the details of the order show a definite influence of classic architecture, the capitals having corinthianesque corollae, whilst the usual Egyptian cornice is modified into one almost wholly vertical in section.



PLAN OF THE TEMPLE KOM OMBO

Amongst the latest well-known monuments of ancient Egypt are the buildings on the small and picturesque island of Philae above the first cataract, about ten miles beyond Assuan. During the Ptolemaic dynasty it became a favoured spot for the cult of Osiris, Isis and Hathor, and was crowded with buildings, but does not seem to have been built upon until the XXVIth dynasty, traces of whose kings are found on stones of the principal temple of Isis. The whole island is only 400 yards long by about 140 broad, and the confined nature of the site of this temple has given to the forecourt, which lies between two pylons, an irregular shape in which no attempt at parallelism, such as is seen at Luxor, has been

made.[1] Outside the court two long colonnades, which are neither parallel nor of equal length, lead to the first pylon from the south-western angle of the island, where there was a small subservient temple of Isis as a sort of propylaeum (15 on plan, p. 191). This was partially destroyed by a Nile flood soon after its completion, and the colonnades were never finished. Both these works

THE WESTERN COLONNADE: TEMPLE OF ISIS

are attributed to Nectanebo of the XXXth dynasty and are older than the actual remains of the larger temple; for this was rebuilt by the second and third Ptolemies, and its decoration was continued throughout the dynasty. In the forecourt is a small temple or Birth-house commemorating the birth of Horus, which had become an almost universal adjunct to the larger temples (7).

[1] See plan, p. 191, and illustrations, pp. 193-196.

There are several other small temples on the island. That of Hathor (8), which faced the eastern boundary wall of the temple of Isis, was built by Ptolemies VII and IX. It is in a ruinous condition, but some of the columns of the inner court are standing and show the influence of the romano-greek corinthian capital in a marked degree,

THE TEMPLE OF HATHOR: THE INTERIOR FROM THE WEST

whilst with their stiff stalks they are strangely suggestive of mediaeval work.[1] Those in the outer court, which was added by Augustus, have fanciful representations of a baboon and of the Ethiopian god Bes, grotesque figures dancing and playing musical instruments.

[1] The large temple at Kalabsha in Nubia, which is said to have been rebuilt by Augustus, has precisely similar capitals in its portico.

The most familiar feature of Philae, the so-called Kiosk, or "Pharaoh's bed" (16), is one of the latest of the ancient buildings.[1] It appears from reliefs on the walls of about A.D. 100, to be an unfinished shrine dedicated to Augustus and Trajan, the form of which was probably

PAVILION, PHILAE

suggested by the propylaeum of the temple of Isis at the south-west corner of the island. It was never roofed, and the dies above the capitals, which would have represented Hathor-heads, are still uncarved. Its peripteral form,

[1] Its date seems a little uncertain. Murray (p. [95]) puts it in the reign of Ptolemy IX, *c.* 146 B.C.; Baedeker in Roman imperial times.

Stanford's Geog! Estabt, London.

with dwarf walls between the columns, combines architectural features of much earlier buildings.

It is unfortunate that the construction of the Nile-dam at Assuan, which is destined to advance so materially the prosperity of Egypt, periodically submerges and must eventually destroy many of these latest monuments of its ancient civilization.

PHILAE FROM THE SOUTH-EAST

The Pylon of the Temple of Isis on the left, and the back of the Temple of Hathor on the right of the Kiosk.

TEMPLE OF ISIS, PHILAE. HYPOSTYLE HALL

THE TEMPLE OF ISIS: DOORWAY OF THE INNER PYLON

THE ISLAND OF PHILAE FROM THE SOUTH

CHAPTER XX

SUMMARY

THOUGH in the foregoing sketch of the art of architecture in Egypt some changes in ideals and methods have been recorded, it still remains a remarkable circumstance, striking even a superficial observer, that it shows as a whole so little tendency to develop; and that having attained, at what we regard as an early period of its history, so high a degree of technical excellence, it should have made in the course of three or four thousand years so little actual progress, failing even to obtain in its own peculiar path any definite period of culmination.

That the radiating arch, the principle of which was known at least as early as the IIIrd dynasty, should have remained a mere occasional constructive expedient is not a matter for surprise, for where there is an abundance of stone of large size there is no inducement to abandon a trabeated system of building for another which is no sounder in principle and less trustworthy in practice. What does cause surprise is that, in comparison with the history of any more modern art, there should be so little change to record, that details not essentially constructive should have been persistently adhered to for many centuries, and that in spite of Greek or Roman art the battering walls of the early mastabas and the hollow cornice of the Vth dynasty should dictate the form of the latest pylon of Edfu or Philae. Even when a new

decorative motive appears in Upper Egypt, as in the Hathor-headed columns of the shrine at Dēr-el-Bahri, the same type is followed for 1500 years and re-appears with little alteration at Dendera.

Besides this negative characteristic, the typical architecture of the Empire has to a modern eye, as it probably had to a Greek, some positive faults. Such are:

(1) The want of logic which gives the column a spreading capital, designed, it might be supposed, to distribute its support, but interposes a smaller cubical impost block between it and the beam, whereby the bulk of the column is largely wasted.[1]

(2) The similar fault which often makes the column bulbous, so that its base is much smaller than its largest section, and the excessive bulk does not proportionately add to its stability.

(3) The ungainly crowding of enormous columns, and the excessive relation of solid to void.

(4) The ineptitude with which incongruous elements are mixed, as in the Festal Hall at Karnak, where an internal peristyle of rectangular piers is used with inner rows of inverted and unsymmetrically placed columns.

All these faults are patent at Karnak, though perhaps obscured or condoned by the impressive effect of the whole; but in a less degree they occur constantly elsewhere, and lead to the conclusion, parodoxical as it may seem to some, that the Egyptians of the Empire, or their rulers, were deficient in architectural genius. Moreover, there is something in their accessory religious art which is ungraceful and repugnant to modern or classic taste. The original conception of the Sphinx [illegible] a human-

[1] It should be noted, however, that these capit[illegible]vere at first used only internally where the fault would not be [illegible]ous.

headed lion, symbolizes not ignobly a union of great mental and physical qualities; but to an unaccustomed eye, uninitiated in Egyptian occultism and its methods of expression, the representation of a divinity by a human body with the head of a bird or beast, whether hawk, jackal, or hippopotamus, has an aspect which is not far short of repulsive.

On the other hand, how are we to account for the accurate and finished work of the great pyramids, the skill combined with intuitive perception of artistic limitations shown in the portrait statues of the Old Kingdom, or the fine architectural qualities of Hatshepsut's temple?

That the Egyptians had amongst them many skilful and inventive craftsmen with a sense of beauty in all the minor arts, is obvious from the numerous objects of domestic use and ornament which have been recovered from their tombs. The mural paintings also show, in representations of their occupations and amusements, that they were fond of physical recreation, and enjoyed to the full the pleasures of life. The very elaboration of their tombs and sepulchral customs, and of the funerary temples associated with them, testifies not to a gloomy character and a serious cast of mind, but rather to a dread of death, and to the intensity of their desire to mitigate their departure from the world of the living by prolonging its conditions in a future existence.

It is difficult to reconcile what seem to be inconsistencies in character and genius otherwise than by regarding the Egyptians as a mixed race. Whatever may be the facts as to the origin of the proto-Egyptian, it seems allowable to assume that in the Neolithic era Lower Egypt was populated by that same Mediterranean race to whom are attributed the artistic qualities which

are characteristic of the nations of Southern Europe. These people would gradually make their way up the Nile valley until they came in contact, as they inevitably would, with some other more distinctly African race, which would result in a mingling of the two in a hybrid race in Upper Egypt, probably still further complicated, in the course of time, by Semitic immigration from the opposite coast of the Red Sea.

British Museum]
COLOSSAL HEAD OF THOTHMES III

That the predynastic people of Upper Egypt, who invaded the Delta and established an undivided kingdom under the first dynasty, had a strain of pure African blood, seems likely from several circumstances in the later history of the nation. These are (1) the common tradition that the land of Punt (Somaliland) was the ancient home of the race; (2) the fact that the religion of Egypt is strongly impregnated with fetishism;[1] (3) the peculiar character of its most developed architecture, which has a kind of barbaric luxuriance, and an individuality incapable of assimilation with or by any other style;[2] (4) the actual

[1] See ch. vii in the B. M. Guide, p. 122.

[2] Mr. Statham speaks of the "characteristics which compel us to class Egyptian architecture, in spite of the greatness of its scale, and the impressiveness of its interior effects, as essentially a barbaric art." Hist., p. 37.

features shown in some of the portrait statues, which by their thick lips, smooth faces, and broad cheek bones, are differentiated from any European or western Asian type.[1]

If these considerations[2] are allowed any weight, it may be supposed that the conquerors from the south found in the Delta a population of a higher mental type and artistic capacity, by whom, under royal encouragement, the art of the Old Kingdom was developed. It is represented in architecture chiefly by the pyramids and other tombs with some fine statuary, and the remains of a few mortuary temples. Limited as it is in range, it is enough

[1] The fine colossal head of Thothmes III in the British Museum is distinctiy negroid, though of a handsome type. It represents him in the prime of life, but the coarseness of the lips is confirmed by his head in the Cairo Museum. It is true that there is another portrait of him, which gives a very different impression (see Hall, "Near East," p. 250), but however irreconcilable the two may be, the argument that two types existed is not affected, and the fact remains that some of the rulers of Egypt must have had negroid traits. Col. Howard Vyse, describing the colossal figures of Rameses II at Abu Simbel, says that the features are those of negroes ("Pyramids," i, 47). This is not borne out by other representations of him, *e.g.*, the black granite statue in the Turin Museum; nor does the head of his father at Cairo suggest any such family origin, but here again the sculptor must have had some source of inspiration for the Abu Simbel type.

[2] They do not seem inconsistent with the facts summarized by Prof. Elliot Smith ("The Ancient Egyptians"), though he draws somewhat different conclusions. His theory seems to be that the so-called "Mediterranean" race was the indigenous basis of the whole Egyptian population, and that the intrusive element in the north was Asiatic, whilst there was some negroid infiltration from the south. The difficulty about this is that it does not sufficiently account for the singularity and exclusiveness of Egyptian culture, especially in the matter of religion.

to show that a simple but dignified style was in process of development, based on a plain stone construction, but not without details, such as mouldings and internal supports, apparently suggested by a more primitive use of palm trunks and smaller vegetable growths. The process must have continued, though there is no evidence left, until the XIth dynasty, when in the remains (unfortunately very imperfect) of Mentuhetep's temple, a fine example of pure architecture can be discerned. The few fragments of many temples which were built about this time, but rebuilt later, indicate that the same simple style was generally adopted. The tradition, though interrupted by some centuries of civil discord and foreign invasion, survived until the XVIIIth dynasty, when Hatshepsut's architect, Senmut, raised on an adjacent site at Dēr-el-Bahri what must, from an external point of view, have been the most beautiful work of architecture in Egypt (see frontispiece). Internally also it was brilliant with historical wall-reliefs, which in the simplicity and sureness of their technique, and in the vivacity with which they tell their story were at the time the best work of their kind.

But a change now came over Egypt. Though the peace-ensuing Hatshepsut was an enlightened patron of art, her warlike nephew Thothmes III did not share her ideals or taste, and in fact after her death tampered with a good deal of her work. The vast extension of the empire by foreign conquests brought wealth to the country, and encouraged grandiose ideas which sometimes took the form of a mania for the gigantesque. At the same time the change in royal burial customs led to a multiplication of funerary temples in which, for the aggrandizement of their founders, carved decoration

and pictorial reliefs were lavished without restraint on columns and walls.

In the smaller temple at Medinet Habu, which was begun by Amenhetep I or Thothmes I, the column of sixteen sides was still used, as it was in the internal peristyle which the latter added to the temple at Karnak, most of which was removed by his successors. Even as late as the reign of Amenhetep III, there is evidence in the temple at Amada, and if we may trust the French engraving, in the small peripteral temple at Elephantine, now destroyed, that simplicity of design was not yet sacrificed to luxuriance in carved ornamentation. But when Amenhetep founded a temple for himself at Luxor, his colonnades, though finely designed, were all constructed with the clustered type of column, which in a simpler form had been used for internal work from the earliest times, but which now altogether superseded the monolith-polygons. So far the work was not distinctly retrograde; but for the avenue in front of the court, he made use of the tall cylindrical column with the campaniform capital and small impost block, which are far less satisfactory to a critical eye. But the triumph of grandiosity, the subordination of elegance to bulk and density, was signalized at Karnak under the next dynasty, when Seti and his son added the stupendous hypostyle hall to Amenhetep's western pylon. Here the central avenue copied but exaggerated that of Luxor, whilst in the side aisles the slender clustered column of early days had become strangely transformed in the crowded ranks of immense cylinders, with a hoodlike enlargement of the uppermost quarter by way of capital.[1]

[1] The beginning of this transformation may be detected in some of the rock tombs of Tel-el-Amarna, late in the XVIIIth dynasty.

Though nothing so gigantic in columnar architecture was again attempted, Karnak became a type for many details of later works. The earlier style thus became practically extinct. The rulers of Egypt or their architects rejected the tradition which had formed itself in the use of their native rocks, and preferred to develop, in stone, forms suggested by vegetable growths, which may possibly have had their origin in an occasional use of timber. The peculiar and characteristic style thus evolved lasted for fourteen centuries, and was hardly touched by outside influences. Something of this persistence must be attributed to the conservative character of the Egyptian race, noted by Herodotus, due largely to the isolated position of the country. Such changes in art and religion as actually occurred, are attributable rather to indigenous elements of character than to external influences.

The personal vanity of the rulers had much to do with the perversion of architectural ideals. They dedicated temples to themselves, and adorned them profusely with their own statues, and with pictorial records of their own exploits. The colossi of Amenhetep were imitated, and even surpassed by those of Rameses II, who delighted in imposing representations of himself on the colonnades and forecourts of his chosen temples. Sculpture in these circumstances declined in quality, and though Rameses' gigantic effigies at Abu Simbel prove the survival of some skill in modelling, the limbs and bodies are clumsy and ill-proportioned, and whilst losing the quality of the older conventional art have gained nothing in naturalism.

It is hardly doubtful that the changes which were taking place in the XVIIIth and XIXth dynasties were influenced by the priesthood, whose growing wealth and

power gave them every reason to encourage, if not instigate, the building of temples and the maintenance in full vigour of the religious system. The facts that it became more superstitious, and that the veneration of animals was continually extended, seem to show that the priests were recruited from a stock in which the negroid racial element was still effective. The readiness with which the priests of Amen established themselves at Napata after the fall of Thebes, and the facility with which a Nubian dynasty was accepted in Upper Egypt, point to the same conclusion. Thus only it seems possible to explain the fact that a style of art which is to a large extent barbaric and unintelligent, should have prevailed in a country which had at various epochs down to the Christian era a leading position amongst the civilizations of the ancient world, and not the least when its rulers were foreigners, and its independence more nominal than real. That the permanence and unchanging character of its art was due to the conservative influence of the priesthood is a commonly recognized fact; and nothing speaks more plainly of the exceptional extent of this influence, than the readiness with which foreign conquerors bowed to the native superstitions, and officially adopted the established religion. Even under the Greek Ptolemies classical art seems to have had only a superficial effect. The architecture of the Egyptian Empire remained exotic to the end, and however astonishing and impressive it may be to the uncritical observer, however interesting and significant to the student of the race, it became after its early days an anomaly in the general history of the art, compelling the inquirer to look elsewhere for a further evolution.

APPENDIX

The following paper though referred to by Perrot and Chipiez does not appear to have been translated before. In reproducing it in English it has not been thought necessary to call attention to the few passages which in consequence of more recent discoveries are obviously out of date. They do not invalidate the main purport of the paper. The only omissions are a few sentences on page 214, in which reference is made to contemporaries of the author.

APPENDIX

I. ON SOME FORMS OF EGYPTIAN ART AND THEIR EVOLUTION[1]

By Karl Richard Lepsius

THE Art of the Greeks, which must for ever be the centre and standard for art-history and criticism, was, when its time came, no more a sudden and perfected outgrowth of a predisposed national genius than their science or any other part of their intellectual culture. Its evolution would never have attained its culmination at so rapid a rate, had not other races for thousands of years been paving the way, and thereby saved it the preliminary stages. The great advance in our knowledge of ancient history has in recent times given even the Greeks a revised co-ordination in the wider history of the world. We can now look far beyond them, and appreciate more clearly their relations with the earlier and contemporary influences in the onward course of human civilization. The ancient world, in its early foci of culture in Asia and on the coasts of the Mediterranean, is seen to be ultimately a whole whose several components were closely bound together: they were fully aware of each other's existence, and could therefore not avoid reciprocal influences in so far as each race, according to its own standpoint, its historical conditions and its inherited individuality, was susceptible to them. The Greeks more particularly—an energetic, seafaring and inquisitive race—long before the

[1] [This paper was read before the Berlin Royal Academy of Sciences in 1868, and published in their transactions in 1872.]

efflorescence of their several stems had sailed to the southern coast lands, and sent their harbingers to the interiors of those highly civilized states. Herodotus found, not only in the Delta, but even in Upper Egypt and in the Oases, Greek settlements already established; and on the ancient monuments of the great Theban dynasties, the Ionians, *i.e.* the Greeks, are named often enough as a people well known, if not very clearly discriminated from their neighbours.

How can it be supposed, then, that the Greeks should not have known and wondered at the primeval art-creations of the Egyptians; and if this is the case, how can their early experiments in art have been kept free from the influence of these imposing spectacles? This influence can in fact be recognized and indicated on all sides. It is only necessary to acquire a more accurate knowledge than heretofore of those original sources, and of their peculiar organization. And if it is of interest to find in Egyptian art an early stage of Greek art, the former has a still stronger claim for investigation on its own account and for its individual value. For in it we possess a singularly sharp impression of the artistic development of a race which stood for some thousands of years at the head of the civilized world, or shared this position with only a few Asiatic races whose culture we can in some measure recognize as first mirrored in Egyptian history.

It is true that in the ancient centres of culture, in Babylon as in Nineveh, an art had taken shape which was familiar to the Greeks and was not without influence upon them. But what little of this art is left to us manifests itself on an essentially lower level than that of Egypt, although, in the comparatively late but brilliant period to which the existing remains take us back, it had undoubtedly attained its highest stage.

For this is another inestimable advantage of Egyptian art, that we can trace back its evolution far beyond the earliest indications of other civilizations, with complete historical certainty for more than 3,000 years B.C., and to a period when the

Egyptian race seems to be, in time as in space, a solitary oasis in the history of the world, without rivals or neighbours of whom any knowledge would have come down to us had it not come through the Egyptians themselves.

And in truth the flood of instructive evidence of the artistic activity of this people from the very outset, is as copious and manifold as if we stood not at the beginning, but at the end of a long period of evolution which must have preceded the existing conditions. And such, indeed, was the fact. An immeasurably long time of intensive race-culture must undoubtedly have preceded that stage to which we can first assign a definite historical place in their monuments. We have many a landmark from perhaps still earlier days, which may yet become determinable for us. But the present limits of our knowledge puts it beyond doubt that the art of Egypt will ever remain by far the oldest accessible to our investigation. This is not to say that Egypt of all countries must have been the cradle of higher civilization. Rather does a consideration of the Egyptian language make it certain that the Egyptian people belonged to one of the three nearly allied language-spheres whose common origin is referable to Asia; and it is therefore to be assumed that the Nile-folk brought its original inheritance of primitive culture ready made from Asia. But whether this inheritance included some sort of organized practice of art remains uncertain; nay, it is very unlikely. The pervading individuality of Egyptian art, which in all its branches is most closely interwoven with the peculiar nature of land and river, would in any case point to a complete transformation of those elements of art which came into the valley of the Nile with the race itself. This question, too, can never be actually solved, for even if such a primitive Asiatic civilization had expressed itself in forms of art, all relics of it are for ever obliterated, and in consequence of climatic and other local conditions in Asia must have perished.

It is only in Egypt that were found at the same time all the

external and intrinsic conditions which were most suitable, not only for the early inception and favourable development of art, but also for an almost interminable conservation of its creations. These were, on the one hand, an abundance of the most diverse and most suitable materials for monuments of every kind in stone, clay, wood, and papyrus; on the other hand, the most favourable climate for preservation that a fertile and populous land anywhere on earth can possess; the climate, that is to say, of an entirely rainless zone with a perfectly dry atmosphere, and, except where the waters of the Nile are artificially distributed, an equally dry soil by which all materials, even those of a vegetable nature, to say nothing of mineral matter, are preserved unaltered. For it is a matter of common knowledge that it is the moisture of atmosphere and soil which in the long run no material object can withstand. To these conditions were added an original constitutional aptitude for art on the part of the Egyptian people, which cannot be derived from any external circumstances, but was innate in the race from the beginning.

Of the three great stems predominant in the history of the human race—the Semitic, Hamitic and Indo-germanic, which, before the separation of each as a new germ—a new creation as it were—emerged from the oldest widespread but prehistoric human stratum, and, elevated by a higher self-consciousness, spun the first threads of human history which they afterwards handled in turns;—of these three stems we find the Semitic the least inclined and adapted to higher artistic activity; it rather devotes itself partly to practical pursuits, partly to abstract thought. The Hamitic stem, which attained its highest development in the valley of the Nile, shows, however, even at the earliest period, a continuous striving to express and to unite its thoughts and feelings in a corresponding outward form, thus leading it by inward necessity to an early development of art. Meanwhile, it was only the third stem—our own—that was able to combine the two and by the most intimate reciprocal

interpenetration of Idea and Form, by the complete materialization of thought and idealization of Form, to carry art to its highest florescence.

At the same time it cannot be ignored that in comparison with Greek art, that of Egypt was very limited. It was limited in technique in spite of the high degree of mastery attained in that very point: limited by the demands of a tradition from which the individual could not depart: limited by the subordination of the several arts to one another which allowed no single one to develop itself in complete independence; but, above all, limited by the very outlook of the race which had not yet become fully conscious of the dignity of art nor made as yet any definite distinction in value between art and handicraft, between the imitation and the idealization of Nature; and could sacrifice the more essential claims of a higher artistic feeling in favour of subordinate principles in the method of representation; as, for example, the sacrifice of harmony in the several parts to intelligibility; of the truth of nature to symbolism. This manner of representation lasted without essential alteration even after art had long passed the first stages of evolution to which it had been appropriate and necessary.

We must allow for all these limitations, these primitive survivals which still continued to cling to Egyptian art from its birth, if we wish to appreciate correctly the artistic level to which Egypt, in spite of them, attained. Just as when in a foreign country we first hear its language spoken around us, certain unaccustomed tones and like-sounding word-endings immediately arrest the ear so as to obscure the much more essential differences of the word-stems, so to the inexperienced eye which for the first time meets with Egyptian representations, all the human forms of Egyptian art seem equally strange and uncouth. It is not to be wondered at if our ordinary public, by no means artistic, or at the best educated on modern lines, on beholding an Egyptian statue, sees in the stiff attitude, the closely-lying arms and the parallel feet nothing but childish

imperfections, or turns away from a bas-relief or a drawing in which the long eye, and the broad shoulders between which the head is placed rectangularly in strict profile, repels him. It is worse when writers on art who feel called upon to guide and teach the public can only express pity for the Egyptian artist who is incapable of seeing better and reproducing more correctly the proportions of nature, and pass over in silence the most important part of the matter because they see nothing of it themselves. . . . Even writers more highly educated in the classics do not speak much more judiciously. They set themselves on the standpoint of Greek Art, and attempt to determine the culmination of the early stage not by reference to its actual scope but by what was not within its scope. . . .

Those who authorize this uncultured method of observation which sees in Egyptian art only what falls short of our own artistic habit of mind, and then estimates it as a whole, may perhaps be usefully reminded that even in our own day we find the Unnatural in representation in some circumstances permitted and even demanded. For how does it happen that no one regards the heraldic artist as an ignorant barbarian when he gives his eagle a head, tail and wings such as no mortal ever saw in life, or, against all nature, lets his lion ramp along on two legs? The most simple-minded person is not surprised at it, and the connoisseur would, on the contrary, be justly offended if the artist, instead of this, had put on the shield an eagle out of the Zoological Gardens or one of Canova's lions. He would imagine that he was looking at a clumsy kind of picture-puzzle, and not a heraldic emblem, if these monsters, inherited from olden days, were not adhered to. For even the "heraldic style" has still its recognized place, and is a conventional but not an ignorant or barbarous conception such as any individual may at his pleasure repudiate. Even the real artist would not disdain this style in its proper place, but rather would impress it with his own mark which the real connoisseur would recognize.

Convention, if not always so comprehensible as in this case, was at all periods, as it is still, an important, nay an indispensable element in art. For the most part quite unrecognized in the present, emerging more distinctly the more distant it is, yet it is still so far from incompatible with genuine art that it has become, not infrequently, an essential stimulus or a favourite background for it. How little, in many cases, the artistic eye wants a faithful imitation of nature, and how, even in the departures from nature in representation, law and rules can establish themselves, we may learn not only on the boards of the theatre, but also by that genuine branch of art the bas-relief, which though it projects bodily from the flat, in no respect corresponds with the natural moulding of the solid bodies, nor need do so, so far as our artistic sentiment is concerned.

The same is the case, but with the difference of greater continuity in the general development of art, with regard to the conventionally fixed deviations from nature seen in the drawing of the Egyptians. They have been handed down out of the infancy of art, where they had their complete and direct justification, into the later phases of a continually higher evolution, without retarding the actual process of evolution.

When the beginner in drawing who has learnt to guide his pencil, and copy lines which have already been drawn for him, is set for the first time before living nature and endeavours to copy it on the flat, he is at once confused with the multitude and complexity of the contours. In order to simplify and master them for reproduction he applies himself to the separation of details, and tries to see and reproduce each object in as recognizable and characteristic a form as possible. Most of the subjects, especially the beasts, he will take in profile. In the human figure he discriminates between the various members. The head is of course taken in profile, likewise the legs and feet; but the characteristic form of the eye is that seen from the front, just as the chest presents itself first in its full breadth

front-wise; and similarly the hand, in such a way as to make all the five fingers visible. That is why the Egyptians set the chest and shoulders full face on the legs in profile, and on the body the head again in profile, but the eye within it in its full form. This method of representation, the most natural for the separate parts, but unnatural in their combination—a method which especially in regard to the eye re-appears in the coins, vases, and bas-reliefs of the earliest art of the Greeks, as in all other primitive arts—ought, in Egyptian art, the first-born of all those of antiquity, to excite our surprise only in as much as it was maintained with unfailing tenacity even up to the highest stages of its development, and was welded with the most perfect forms of true art into a strictly regularized whole which gradually became indissoluble.

But it is precisely in this tenacious adherence to primitive imperfections which never occurs to such an extent either in Greek or in any other later art, that we find the strongest evidence that Egyptian art, unlike all others, grew up from its own roots alone. For it is only because this child-like perception which accompanied the first awakening of the art-impulse had only itself, so to speak, to co-operate with, that it remained for all time ineradicable. The Greeks were the first who were able to shake it off when, overleaping the first stages of development, they established a new principle in place of the old Egyptian.

The Egyptian artist began by superimposing a net-work of squares over every object which he wished to appropriate for representation. The points at which the principal contours were intersected by these lines, were marked upon a similar net drawn upon the panel in front of him, and thus by a free-hand connexion of these points he got a sectional outline, which relieved him at once from the endless work of detail, and gave him the simplest and at the same time most characteristic copy of the subject. Every pose of the human form and its parts, every living creature down to insects and creeping things, every

plant or other object had in this way its separate *Canon of proportions* designated in these squares by the best artists of their day. In exactly the same way all carving in the round, statues, figures of animals, even the capitals of pillars, were worked out with squares, of which we still have many unfinished samples. We find this canon of proportions for the human figure, putting aside minor deviations, considerably altered twice in the course of Egyptian art-history,[1] in accordance with the altered views of those authorities in art who gave the law to their contemporaries—once at the beginning of its second

SKETCH FOR PAINTING OR RELIEF ON SQUARED GROUND

efflorescence, and again at the beginning of the fourth. This canon, from which only the first masters in their art could allow themselves—and portrait-sculptors, as necessitated by their task—to deviate, served for the remaining exceedingly numerous crowd of artists, who scarcely rose above handicraftsmen, as a rule and stand-by. Hence the fairly general correctness of the drawing even in subordinate and perfunctory productions. Portraiture, which was formerly held to be an invention of the Greeks, is found amongst the Egyptians, as a consequence of their predilection and keen perceptive gift for all that is

[1] [The XIth and XXVIth dynasties appear to be the two referred to.]

characteristic in nature, in astonishing perfection even from the earliest periods of their history.

This early and much practised branch of art, whether in drawing, bas-relief or in sculpture, is by itself a complete proof that the Egyptians strove for and actually attained a higher, more ideal end than the mere practice of technical and conventional art. Look at the portraits of King Chephren, who about 3000 B.C. built the second pyramid for his tomb; and the whole series of Pharaohs of the powerful Theban dynasties; the Amenheteps, Thothmes, Horemhebs, Setis, Rameses, etc., and apart from the wonderful technique, we must acknowledge that they are works of a genuine highly developed art. The features, so individual and lifelike, are carried out beyond a mere naturalistic treatment, and with all their personal distinctiveness have in common only an expression of beneficent majesty and mildness. Even when participating in divine honours, and enthroned architectonically in or in front of temples, or emerging from pillars, whether these be actual piers or only free-standing back-supports—in such cases generally of superhuman proportions—their facial aspect bears, with correct intuition, the same character of monumental repose as the actual deities amongst whom they dwell; without, however, any possibility of their human personality being exchanged for the typical traits that are universal in representations of divinity.

AMENHETEP IV
From his statuette in the Louvre.
(Petrie, Hist.)

In how genuinely artistic a style the Egyptians were able to combine individual truth to nature with the correct measure of idealization, is strikingly shown in a small sitting statue of

masterly execution representing King Amenhetep IV, that priest of the Sun, who, on being called to the throne, wished to reduce the whole Egyptian religion to the Solar cult, and changed his name to Khu-en-aten, worshipper of the Sun's disk. The figure, now in the Louvre, is of Egyptian alabaster, and had originally, carved from the same block, his wife by his

AMENHETEP IV AND HIS FAMILY ADORING THE SOLAR DISK
From a tomb at Tel-el-Amarna

side, of whom, however, only the arm that embraces the king is left. The statue is without an inscription; but it is needless, for if one compares, in our collection of casts, the head which has been preserved intact with the casts of the various relief-portraits of the king from the rock tombs of Tel-el-Amarna, one at once recognizes the same king, although in the portraits from the private graves he has generally a repulsively ugly type of head and face, apparently imitated too realistically

from nature by inferior artists: whilst in the statue he presents soft and pleasing features, even ennobled by intelligence, which were nevertheless unmistakeably taken from the same living person.

But it is not merely in this one field of portraiture that the side comes out which makes it true art, viz. the keen grasp of the characteristic in real nature, and its rendering in ideal form. It should rather be said that the Egyptians first amongst nations, in all branches of the various arts, developed *style* in the more limited and higher sense, that surest token of real artistic development in a race, at any one or more periods of its history. In their practise of art, they recognized, and paid attention to the peculiarities and requirements of the materials which they employed: they remained more faithful than perhaps any other race to the historically prescribed path of their development in art; and at the culmination of their artistic career they were able to attain a degree of objectiveness, a grandeur and dignity in the conception and execution of great creations, which justify us in ascribing to them an especially *stylistic* art in the best sense of the word.

But the higher the genius of true art in Egypt strove to soar the heavier it found the fetters forged by itself and imposed, at first compulsorily, and then conventionally, on Nature; bonds which were never relaxed, and ended by being fetters for itself. It was reserved for the Greeks to burst them, and thereby to gain a new beginning. What the Egyptians by their strict laws of art had gradually and toilsomely won in thousands of years, the Greeks, as soon as they felt themselves fit and disposed to emerge from mechanical work, took from them, directly and without trouble, by means of a vivid insight into their artistic mentality. The rhythmic posing, the clarified style gained with them immediate life even without the cramping aid of the quadratic canon. With sure unconfused eye they could turn afresh to Nature in her most intimate details, and could undertake, instead of fettering her, to meet her half-way,

and bear her aloft to a higher order of things, and into the realm of the Ideal. Thus arose with the indispensable help of, and yet in contrast with the art of the Egyptians, limited as it still was in spite of all its development, the really free art of the Greeks.

Of the various arts, Architecture is the most independent, the primordial art as it were, on which the rest are founded, to which they are subordinate, and from which in Egypt they never set themselves entirely free. Sculpture especially was originally to some extent only a department of architecture, and found its special place only in combination with it. On that account it assumed from the first a certain architectonic form, which, whenever or wherever it appeared separate from it, was never quite banished. In the same way, and in still closer relation, stood the mural designs towards architecture.

In this art, therefore, the Egyptians were not only masters and teachers for all the races who came into contact with them, but we might even more definitely call them its inventors. Not only is this sufficiently proclaimed by the actual fact that we find in Egypt mighty works of architecture, and nearly every essential accessory fully formed at a period which antedates the oldest remains of all other nations by nearly two thousand years, but moreover the mode itself in which Egyptian architecture was developed is a pre-eminent proof of it.

For whilst in all other architectures we can either recognize the foreign origin of the whole, or at least detect in many details external influences and imported elements, in the Egyptian nothing leads us to look abroad; and whilst in all others distinct and special beginnings are wanting, and we see, by the transformation and combination of indigenous and introduced types, a new whole gradually come into existence, which only after a complete assimilation of what is foreign, attains, in virtue of a new principle of its own, all the unity and completion of which it is capable; in Egypt from the first we see a thoroughly unified national development which in per-

ceptibility down to its lowest roots leaves nothing to be desired.

We will try to make this clear by reciting the genetic evolution of some of the most important members and forms of Egyptian architecture in its main lines.

The differences of style in this architecture, as in the Grecian, find their most complete expression in the form of the column.

If we stop a while, in the first place, at this, in many respects the most important architectural member, we find in Egypt two orders of columns sharply discriminated. These differ in their employment not topographically, in the sense that one had the earlier prevalence say in Upper Egypt, the other in Lower Egypt. For both were employed simultaneously in the whole of Egypt, and indeed appear not infrequently in the same temple. Their distinction, at all times constantly maintained, rests rather on their different genesis. They belong to two structural methods diverse from the first, and subsisting side by side: the one being rock-hewn, the other built in blocks. The first has a channelled shaft without any swelling, with no capital and no bands, and stands on no base, or on a very shallow one. The other is never channelled, but on the contrary is compounded out of convex shafts bound together into a single stem (which may also be quite smooth), swelling at the lower part, and spreading at the top into a floriated capital below which five bands surround the stem. It stands upon a contracted but thick base, and the whole represents a bundle of papyrus stalks bound together below the head.

We see how this radical difference is explained by the two structural methods to which these columnar orders respectively belonged.

Rock-architecture is in Egypt almost synonymous with tomb-architecture. The important exceptions are five imposing rock-temples hewn in the sandstone rock of Lower Nubia, all by Rameses II. To these may be added a few other smaller exceptions which I need not mention here. All the other rock-

hewn work in Upper and Lower Egypt, of the Old Kingdom as well as the New, from the simple and small chamber to the huge subterranean mortuary palaces of the Theban kings or of the millionaires of the Saïte period, and the imposing catacombs of the Serapaeum near Memphis, belonged to the sepulchral class. Its simplest forms are found in the Old Kingdom, and its most instructive examples in the series of tombs of the XIIth dynasty at Benihasan. The tomb-chambers of the Pyramids were as a rule, with some well-known exceptions, hewn in the rock, above which were reared the artificial mountains of masonry. In the same way almost every private tomb in the vast metropolis of Memphis had its rock-hewn chamber for the sarcophagus. But very often chambers destined for the funeral observances of the surviving family, which were hewn in the rock separately from the tomb-chamber, were not, like the latter, closed in perpetuity, but remained accessible. They are therefore generally decorated with mural pictures and inscriptions which the owner, to whose mundane circumstances they have reference, caused to be executed during his life. It was these chambers for which, by degrees, the need of greater extension, on the part of more wealthy people, with a correspondingly fuller development of architecture, was experienced. We can follow it in them step by step; and in a large number of examples, from the earliest forms to the latest, or contemporaneously from the simplest and poorest to the most elaborate, we can observe most instructively the development of a peculiar architectural style.

The beginning consists of a small square chamber which opens in an outstanding rock-wall with a narrow entrance, the door of which shut from inside against the round lintel forming the top of the opening. On the west wall of the chamber there is a false door, which represents symbolically the door of the tomb, and in front of which, towards the west, the quarter of the Egyptian underworld, the offerings to the dead were presented. The chamber is often so small that hardly more

than two persons could move within it. But it becomes larger, more especially when several false doors are found in it, a sign that honours have to be paid in it to several defunct persons. When one chamber seemed too small a second, connected with it by a doorway, was added behind, and even a third, or more. The extension in area of the single chambers, which now became higher also, was limited in part by the danger that, in case the rock was not sound and homogeneous in quality, too widely extended ceilings might the more easily break down or partially crumble and fall. For the same reason even in quarries walls or pillars are left standing at intervals. But it was only the first chamber that had the advantage of daylight admitted through the door, of which only a small amount could penetrate to the succeeding chamber. To meet this disadvantage as far as possible the plan was soon adopted of breaking through the back-wall in several places, and so at last converting the wall into a row of pillars. These still kept the chamber separate when it was required for religious or other purposes, but also served to extend it and impart some of its lighting without diminishing the support of the roof: whilst to the eye the whole must have seemed all the richer and more satisfying by the addition of the new features instead of one large uniform hall. The wall-surface between the top of the door and the roof, which repeated itself at each fresh opening, remained *in situ* and, by its continuity, at once became an architrave which extended under the ceiling at an even height above the pillars, retaining the thickness of the original wall, thus fully satisfying the accustomed eye, notwithstanding the innovation. At the same time the continuous stone beam increased the support of the roof, and formed finally, for the symmetrical requirement of the beholder, the most natural transition from the rectangular upstanding pier to the roof spread out in two directions, one of which corresponded with the line of the architrave. That this is the origin of the architrave in this rock-hewn architecture is apparently confirmed by the fact that the pillars pass directly

and evenly into the architrave without any extension or contraction, so that the whole can still be regarded as a wall which has been partially cut away.

The need for as much light as possible in the space behind the pillars led, moreover, to the chamfering of the four corners of the pillars. This gave the octagonal columns which are seen in the first tomb at Benihasan [see p. 68]. Here also the same principle was followed as in the penetration of the wall. The four additional sides of the altered pillar were not carried up as far as the architrave, but its original character was maintained by the reservation of a small piece of the four-sided pillar at the top. In this way again was obtained, over and above the indication of its origin, the advantage of a thoroughly appropriate, significant and well-shaped connecting member, which added richness to the whole system, to wit the *abacus*. This has the same relation to the architrave as the rectangular pier previously had: the front sides merge smoothly into it. On the other hand, the newly formed column is more distinctly separated from the abacus by the fact that beneath the latter the whole polygonal surface can be gradually contracted or sloped upwards, as indeed occasionally happens in the case of rectangular piers.

The next step was a still further cutting-off of the eight edges, whereby resulted a sixteen-sided column as shown in the second tomb at Benihasan.

The technical difficulty of joining together sixteen sides sharply and evenly with such obtuse angles, but still more the wish to bring out more clearly to the eye the delicate polygonal moulding of the shaft and lend a more lively play of light and shade to this architectural member, which was becoming more and more important, led to a slight hollowing out of the several sides, channelling them so as to make the blunt angles into sharp edges. The similarity which the shaft thus acquired to the Doric column led Champollion when he first came across this form to call it proto-doric.

But the derivation from the rectangular pillar still remained,

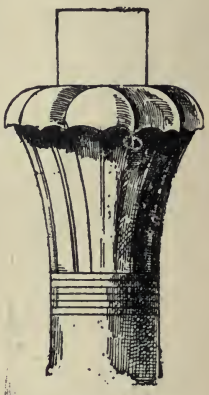
indicated, obviously with intention, by the fact that four of the sixteen plane or channelled sides still ran parallel to the four sides of the abacus, so that the edges never impinged on the middle point of the abacus, and, farther, by the fact that all four parallel strips, or the two at the front and the back, or at the very least the one in front, were not hollowed, but were left as plane surfaces, which were still, as it were, unaltered portions of the original pillars. These flat strips offered, at the same time, an acceptable space for vertical lines of hieroglyphics, which with their variegated colour and significant characters became a new decoration for the columns; after which they were not infrequently extended beyond the original breadth to the rest of the channelling.

With the evolution of the column out of the pillar there finally appears also, in correctly appraised method, the round base which serves as a transition to the floor. The four-sided pillar required, no more than the wall, an intermediary with the rectangular floor of one chamber. But the round columns standing alone with their more refined membering seemed too bare at the foot and too much exposed to unforseen settlement with no protection for their delicate and easily injured edges if they rose immediately from the floor. The fairly wide but shallow circular base chamfered at the edge at once protected them and connected them with the floor surface.[1] The significance of the base as a connecting member between the two parts was expressed in its form. Its more essential relation was with the column from which it took the circular periphery. But the motive for its slight elevation above the floor was derived from this latter side; for it was made equal to the height of the ground-sills which separated the several chambers for the doors to shut against. For in the same manner as the shallow mural bas-reliefs always gained their relief by the expedient of cutting away the original plane surface of the wall to the whole extent

[1] [It is strange that Lepsius ignores the fact that this rather fanciful reasoning is stultified by the absence of a base in the Greek Doric.]

to which it was to serve as background and to a depth corresponding with the projection of the most prominent parts of the figures, thus changing it into a lower surface, so was the original floor level lowered just sufficiently to gain the required height for the door-sills and bases. From this architectonic point of view not only the door-sills, but the bases also were portions of the original floor, as it is seen in the greater number of the simple rock-hewn chambers which have no ground-sills.

This exhausts all the separate motives which come under consideration in the Egyptian rock-hewn column.[1] Its evolution is so clear and unmistakeable, and can at every step be so completely verified by the existing examples, that we can at once make it a fixed starting point for further comparisons, and can, for instance, easily recognize occasional intermixture of foreign elements, and separate these from one another.



PALM-FROND CAPITAL

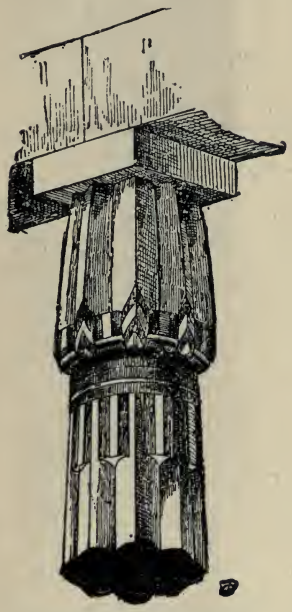
We pass on to the second more complicated columnar order which we have assigned to square-stone construction as distinguished from rock-hewn work.

Whilst in this rock or tomb work the simplest mathematical lines almost alone dominate, and their simple severity is only relieved by the inadequate compensations of a highly cultivated sense of symmetry in the disposition of the parts, in the squared stone construction—free-standing as it is above the soil and devoted to the purposes of life—we meet with a columnar order which derives its more animated lines, traced less by the measuring

[1] [As Lepsius is speaking of the column only, he makes no reference to the reminiscences of timber work shown in the cornices of some of the tombs, though he appears to refer to this later (see p. 236). The bases described above might be attributed to a similar use of wood for columns.]

rod than by the free determination of the eye, from the growth and organization of living plants.

If we put aside the symbolical forms of columns in which plant-like stems have the heads of deities instead of calices for capitals, and also the great multiplicity of plant-like capitals which appear in the Ptolemaic period, there remain during the whole of the New Kingdom only two plants whose forms were imitated in the columns. These are the *Palm*, the stem of which breaks out above into a regularly arranged crown of leaves with five bands below it, from which sometimes, in addition to the leaves, flatly-carved bunches of dates sprout out; and the *Papyrus plant* which is represented as a stiff bundle of stalks, whose upper part is tied together by five bands, above which the hair-like heads composing the flower spread out as capitals. The latter, consisting of numberless fine filaments, then appear bound together again in a peculiar manner in the form of large buds, or folded back separately as if they consisted of one large calyx.[1] The closed and the open forms are not placed in immediate combination, but

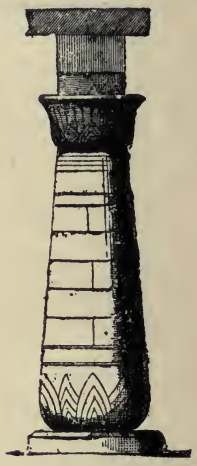


CLUSTERED PAPYRUS STALK COLUMN.

Late form. For the earliest form, see p. 37.

[1] [The papyrus stem has a triangular section, and this is represented in some of these clustered columns by a sharp edge. It seems possible that those in which this edge does not occur were derived from some other kind of straight-stemmed water-plant.]

yet are used simultaneously in different halls of one and the same temple, the former preferably in the more secluded spaces and the latter in the more open. On the shafts either the single stalks, generally eight in number, stand out from the curved surface, and then imitate also the peculiar form of the three-edged papyrus stem, or they are all conceived as combined in a single smooth column of which the five bands alone betray the combination: for the upper surfaces of the round columns are usually provided with painted figures which the absence of even painted stems admits of: whilst in cases where the stems bodily project only inscribed tablets of less length decorate the rounded surfaces. The lower part of the shaft, immediately above the base, is sharply contracted so that its lower quarter has a pronounced swelling after which it gradually diminishes up to the bands. On the widening curved surface of the lower part are represented large pointed leaves, a motive taken directly from the living plant.



BULBOUS COLUMN WITH CAMPANIFORM CAPITAL

The developed form of the papyrus-column.

From the Old Kingdom exceedingly few remains of free-standing columns have come down to us, because no single temple, even in only fairly sightly fragments, has survived the Hyksos' invasion. All the more carefully have I searched for and procured drawings of certain pieces of colossal columns which lay dispersed in the debris before the Labyrinth-pyramid of King Amenemhat III. Their reconstruction exhibited the undoubted form of a closed papyrus-column with outstanding stems, exactly as it appears in the New Kingdom. I can also at least indicate the open papyrus-form in a mural relief from the

rock-tomb of Berscheh,[1] a paper "squeeze" of which I brought home.[2] In the same way I have a representation of the palm-capital.

On the other hand there is found in the Old Kingdom a form which, so far as I know, was no longer extant in the New, namely the Lotus-column. It appears in a slender and exceedingly graceful shape with the bud-capital in one of the rock-hewn tombs at Beni-hasan.[3] Beneath the capital are the five painted bands. The shaft is composed of four clustered cylindrical stems, which by their definitely rounded form differ unmistakeably from the papyrus stalks which project with an edge which is merely blunted. They rise out of the low base, described above, in the form of lotus-stalks cut off to the required length without any swelling, but gradually diminishing upwards. Above the truncated bud-capital is the slightly projecting abacus. The architrave, which extends above this and two other similar columns now broken away, is horizontal on its under side, but on the upper side it follows the ceiling which, roof-like, rises a little in the middle, so that the architrave itself has the form of a slightly elevated gable.

LOTUS COLUMN From Beni-hasan.

With these columns must be associated other mural specimens of what is more probably Garden architecture in timber. These show the lotus-capital, in some cases of the bud-like form as at Benihasan, which also have smaller buds bound in with them; in others with developed lotus-flowers spreading into a number of petals in the centre of which is set the abacus. In this case also the bands are not wanting, and

[1] [This is the tomb of Tehuti-netep, a noble of the XIIth dynasty at Dēr-el-Bersha, about fourteen miles higher up the Nile than Benihasan.]

[2] See Lepsius' Denkmäler, II, 127.

[3] *Ibid.*, I, 60.

DECORATIVE FORMS AS SHOWN IN RELIEFS, ETC.[1]
From Perrot and Chipiez, after Prisse d'Avennes.

the clustered stems are still four in number, of which however only two are shown.

[1] [It is obvious that these fantastic representations are elaborated for decorative effect, though probably suggested by light work in carpentry. Their value as evidence is discussed by M. Foucart on pp. 26-33 and 67 of his "Histoire de l'Ordre lotiforme."]

Without saying more, it is clear that the lotus-column of Benihasan does not belong organically to the rock-architecture with which it is there incorporated: it is simply taken over from the squared-stone architecture:[1] in this particular, the tomb is treated as if it were a chamber in an open-air temple. A similar combination of the two styles is also to be seen and, as is quite comprehensible, more easily, in the equally extensive squared-stone architecture of graves which from one point of view can be classed with the rock construction peculiar to tombs, and on the other with the stone building of temples. But we also find, in the same manner, the channelled column of the rock-architecture employed not infrequently in temples, the reason for which might be simply the satisfaction felt in a form which when acquired developed itself into completeness.

On the other hand, there is never found a mixture of those individual features of the two orders which are found to have diverged in the necessary process of evolution. The feeling for the significance and the origin of what appertained to each was never lost.

It was otherwise in Greece, where we find once more the whole of the single elements of the Egyptian column, base, shaft, capital and abacus: the shaft eight-sided and also sixteen-sided; with sixteen channellings and also twenty—this number occurs in Egypt too—or ultimately quite round: moreover the swelling[2] of certain Doric columns, and what is especially significant, even the bands under the capital recur, sometimes as *annuli* at the beginning of the expansion, at other times as incisions at the top of the shaft to the number of three, or as in Egypt, five. Thus it cannot be doubted that we have here the same elements as in Egypt and that there can be no

[1] [On the supposed origin of the lotus-column, see *note* on p. 239 below.]

[2] [This apparently refers to the marked entasis of some Doric columns, though it is evident from the reference to the base, that Lepsius is speaking of the Greek orders generally.]

question of a new second creation, but of a recognition of the forms already existing in Egypt and an appropriation of them on the part of the Greeks: though it must not be forgotten that the channelled columns of Benihasan date from the third millenium B.C.

But in what combination do we meet with certain of these elements in the Greek column? It is precisely the channelled Doric column, which not only shows at times the swelling, but also has a necking with bands and an expansion which represents the capital. In Egypt this was an impossible combination. The channellings belong exclusively to the rock-architecture of excavation and abscission; the topmost member, upon which the abacus lies, belongs exclusively to the plant-column; as still more decidedly do the neck-bands, whose motive lies only in the bunch of stalks tied together beneath the calyx, of which the Greek column never has any suggestion. It is the same with the swelling, which can only be derived from the plant and not from the square pillar.

Just as little do the other Greek columnar orders show a disposition of the elements which might be expected from their origin in Egypt (which is to be ascribed also to the Ionic volutes) and to their genetic significance which is there clearly apparent. The Greek column has, in fact, become an altogether new form, inspired by a new principle of its own, which has completely overcome and combined in a new unity the heterogeneous mixture of elements derived from an external source.

But if we turn again to the order of plant columns, upon its native Egyptian soil, to see if we can trace this form also, like the rock-columns, back to its origin, we are at once confronted with the scarcity of remaining examples such as were so plentiful in the rock-architecture. Yet this want is to some extent supplied by the wall pictures from which only, especially in the New Kingdom, we can acquire a knowledge of one whole side of Egyptian architecture, namely the Secular.

With the exception of a few foundations and house-plans, we

have no remains from ancient Egypt of secular architecture; not even of the royal palaces, if I put on one side the frontal building of the temple of Medinet Habu at Thebes, which, though certainly against all usage elsewhere, was arranged as a private lodging for the king. It is [not] inaccurate to say, as is so often done, of the temples and the palaces of the Egyptian kings, "All the large and massive buildings that remain were intended for habitations of the gods and not of men."

And yet, no doubt, the kings required palaces just as every private man his house. But it seems to have been a general custom that only temples were constructed massively with stone blocks. The dwellings of men were essentially brick and timber structures, and their walls, when luxury was to be displayed, were lined with stone slabs, and provided with richly executed designs, as we are expressly told, for instance, in reference to the palace of the Labyrinth.[1] Hence the complete disappearance of this secular architecture. Of the old *βασιλεία* at Memphis, of the Palace of the Dodekarchs, of the doubtless sumptuous palaces of the Theban kings and their aristocracy, nothing but rubbish-heaps of Nile-bricks remain. The easily removed stone slabs were taken away and used elsewhere or destroyed. We find now only their refuse recognizable by the diversity and the costliness of the sorts of stone: the woodwork is burnt and decayed.

With the great extent and completeness which secular architecture without doubt attained in Egypt along with that of temples, it is natural to assume that their mutual influence was great and penetrating: indeed, they must evidently have had—again in contrast to the rock architecture—a common origin. The different objects of the dwellings for gods and those for men separated the two architectures from the first, and demanded, for instance, different arrangements of the chambers. But this had little influence on the architectural forms themselves. More distinctive, at any given period of the development, must

[1] [Herodotus, ii.]

have been the difference in material which entailed a different technique. But here, too, in an undisturbed evolution from special elements, the very natural tendency towards historical continuity in the development of the separate architectural features must have had its weight.

As a matter of fact, almost all individual architectural forms and a great deal in their combination give evidence of their derivation from timber construction, which must, in point of time, have preceded stone construction One must first have a considerable knowledge of this timber architecture, before one can judge correctly the members of stone architecture in regard to the significance and motives of their forms. But this knowledge we can gain very completely, partly from individual and direct examples, partly and chiefly through deductions from the imitative stone architecture.

The timber-work of the private houses must, from the first, have been combined with brickwork. The country was too poor in wood to allow of houses constructed in any case wholly of beams and boards. Moreover, this would have been altogether unsuitable in that torrid land. The changes in the general circumstances of any country, in relation to climate, soil, building material, etc., are *nil* or unessential. The same conditions to which the fellah of to-day conforms, when he builds his hovel or even a larger house of dried Nile-bricks bonded in mud, and adds door and windows and roof in wood, had similarly made themselves felt in all that was essential 5,000 years earlier, and had called for the same kind of building. Before the regular manufacture of bricks, there is no doubt that the walls were built with the damp tenacious Nile-mud, mixed perhaps with straw, as is the case with our clay huts.

From this primeval time comes, it seems, the custom, firmly maintained through all periods, as is well known from the necropoles and temple-pylons, of setting up the outer walls of the houses not vertically, but sloping inwards in order to give them greater stability.

The four battering walls of the simplest dwelling-place were interrupted in front by the door, the flap of which stood flush with the inner vertical wall. Its uppermost stop was formed by a palm-trunk bedded in the side walls, the top side of which was at the height of the walls. By this means the upper circuit of the walls was again made complete, so that the roof made of palm-stems, and laid from back to front across the narrower width of the chamber, could lie over the whole just as we see the roofs imitated in some of the rock-hewn graves. The roof was then covered with sand and earth, and the front of the beam-ends protected from the weather. In this way the projecting roof looked from the front like a cornice running all round; it might, however, rest upon a beam which crowned the wall. But the uncovered round beam-ends also are occasionally found as ornaments.

But if it were desired to have a higher ceiling inside, without increasing the height of the door disproportionately and unnecessarily, the lintel had to be made separate from the wall-plate, and the walls taken up higher.

If the beam were elevated still more, it was possible to obtain a low window above the door between the lintel and wall-plate, to the improvement of the lighting of the interior; this we sometimes find indicated in the false doors of the tomb-chambers. Otherwise, and this corresponds more closely with the usual form of the false door, the old doorhead was retained: *i.e.* the old filling of the wall by a beam, above the round lintel-block, which beam indicates the original level of the ceiling, and then the ceiling was raised to the extent of a whole roofing-strut, by which means a wide space, between the level of the original ceiling and that of the actual raised one, was gained for a window, which corresponds with the uppermost panel of the false door.

Such was the type of the framed building in brick and timber.

But besides this there was developed a pure timber con-

struction, quite independent, and uncombined with brickwork, used in country houses and gardens where only airy, but at the same time shady rooms, arbours and verandahs were required. We can study this kind of structure also in numerous drawings.

British Museum]

FALSE DOOR FROM A MASTABA OF THE VTH DYNASTY

Showing the round lintel, the original beam and the upper beam. Note the early form of cavetto cornice.

To this class belong, especially, light canopies which are supported on slender columns and under which their owners take their rest on chairs. The columns, in the picture, for instance, from a grave at Kafr-el-Batran[1] have open lotus-flowers as capitals, and the thin shafts, single or clustered four together, rest on feet. Under the calyx is a single band: on the points of the petals rests a shallow abacus: this directly supports the canopy in the form of a level beam which one must imagine as extended over the surface. In the whole picture four columns, doubled however in imagination, form a sort of garden-house.

The last division on the right, in which its owner sits holding a lotus flower in his hand, contains an indication of

[1] [Near Giza. The picture referred to is given in Lepsius' Denkmäler, II, pl. 52. The columns consist of two very slender shafts with an open lotus flower for capital, and a small abacus similar to that shown in the illustration from Perrot and Chipiez on p. 231 above.]

three walls (the fourth is removed for the spectator in front) and of the flat ceiling resting on them. Two lotus-columns with abacus and enlarged foot additionally support the ceiling. Two windows in the rear wall seem to be filled in with lattice-work.

From the house-architecture on the one side, and the garden-architecture on the other, thus depicted in some of its chief features, was, no doubt, evolved the continually progressive architecture of palace and temple, and also that of the tomb so far as it did not follow in stone the style of rock-hewn work. All the important motives of stone architecture find their explanation here. The form of the plant columns especially is obviously borrowed from the light and cheerful timber architecture of the country and garden houses, which allies itself to rustic nature, and to which their symbolism directly points.

But it would, no doubt, be going too far to assume therefore that in those primitive constructions papyrus stalks combined in bundles had ever been actually used anywhere as supports which had afterwards been imitated in wood and stone. In opposition to this one would adduce, if it were necessary, the oldest form of this clustered column, that of four combined lotus-stalks; since it is obvious that not the slightest weight could be supported on flower stems. It is much more likely that the flower-column, in this respect in direct contrast to the channelled columns, was included not gradually but at once, and as a whole, in the symbolism that enlivens and gives significance to architectural form. Only the base and abacus are in this case pure and undisguised architectural members between which the peculiar shaft, analogous with the pillars only in its elongation, was inserted as a pleasing natural form. This, moreover, was determined only by the sense of symmetry. For this reason, the flower stem, since its actual proportions could not be directly adhered to, was made fourfold or eight-fold in order to obtain a correct relation between thickness and

height. Thus, too, the bulk of the bands that held them together determined itself.

The articulation of the plant-columns depends essentially upon the feeling for the correlation of architectonic details in general which was elevated by the Greeks to the principle which is peculiar to their artistic work, but which was highly developed by the Egyptians. But to examine this more minutely would lead us into another wide field in the general aspect of Egyptian art which we do not propose to enter upon at present.

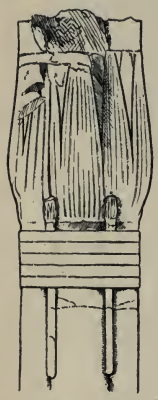
[NOTE.—M. Foucart in his interesting "Histoire de l'Ordre lotiforme," comes to the conclusion that all columns of the Old Kingdom which show a clustered shaft with a bud-like capital are based on an imitation of either the blue or white lotus and not of the papyrus plant. One of his chief reasons is that during the period referred to the shafts always have a smooth cylindrical surface [1] without any vertical angle or edge such as would indicate an imitation of the papyrus stalk. He gives as illustration a photograph of part of a column of this type from the tomb of Ptah-Shepses, a royal kinsman in the reign of Sahu-Ra early in the Vth dynasty. The tomb was discovered at Abusir by the *Service des Antiquités* in 1893.

It is a somewhat peculiar and exceptionally elegant specimen of this kind of column, and an additional proof, if such were needed, of the superiority of the art of the pyramid-period to most of the work of a later date.

It is peculiar in as much as the shaft is composed of six colonnettes which are not all equal in bulk; two which are at the opposite ends of a diameter being flanked on each side by two smaller colonnettes, so that the general outline of the section is slightly elliptical.[2] Its exceptional elegance consists in the graceful treatment of the lobes slightly incised on the

[1] See Foucart, p. 81. [2] *Ibid.*, p. 96.

surface of the capital. These, however, seem to be as much like the sepals of the papyrus-bloom as of the lotus, and can hardly be said to settle the matter conclusively. The columns certainly appear to have a perfectly smooth surface, but it is doubtful whether this is the case in all early examples. A Vth dynasty column in the Berlin Museum, of which Breasted gives a photograph, appears to show, although somewhat bluntly, an arris down its length, which leaves the matter in doubt.



CAPITAL FROM THE TOMB OF PTAH-SHEPSES
Vth dynasty.

It seems advisable not to theorize too closely on the matter, and to assume that the Egyptian artist had sufficient imagination to select and combine decorative motives from surrounding nature, without copying more literally than when he first designed the figure of a sphinx.[1] Proof in such a matter is impossible; for whatever the first decorated column may have been, the craftsmen of the Vth dynasty had evidently long passed the primitive stage of art, as M. Foucart himself remarks (p. 111), and embodied in their work the successive efforts of many previous generations which have now totally disappeared.]

[1] See above, p. 66 *note*.

II. THE SUPPOSED OSIREION AT ABYDOS

AT the back of Seti's temple Professor Naville in 1913-14 discovered and excavated a subterranean building of very remarkable construction. It is reached by a passage which had been cleared ten years earlier by Professor Flinders Petrie and Miss Murray. A doorway in the side of this passage, which was left uninvestigated until 1913, leads to a narrow transverse chamber, beyond which is a large rectangular hall about 100 feet by 60 in area, with a double row of massive piers $8\frac{1}{2}$ feet square—five on each side—which divide the whole space into a nave with lateral aisles. The most extraordinary feature of the building is the fact that the aisles and the cross-passages which connect them at the ends, appear as deep cavities which contain water, and have apparently always been intended to do so. The central platform on which the two rows of piers stand is therefore an island, and is approached from the water level by a flight of steps at each end, which are sunk in the rectangular mass of the platform. The walls which surround the hall are 20 feet thick, and consist externally of limestone, with an interior casing of hard red sandstone. But the piers and their architraves, and the roofs of the aisles, are massive blocks of granite. It appears to be uncertain whether the central nave was roofed or open to the sky.

In the thickness of the walls are small square cells, six on each side, opposite to the spaces between the piers, and two at each end facing the aisles, making sixteen in all. The centre of each end is a passage, that at the west end being the entrance. That at the opposite end, which was originally a cell, has an

opening at the back which leads to another transverse chamber similar to that at the entrance. It is suggested that this is the mortuary chamber of the legendary Osiris, or the place in which his head was said to be preserved.

Another peculiarity of the construction is that the floor slabs of the cells project beyond their frontage, so as to form a continuous ledge round the outer margin of the water-channel, except where it is interrupted by the projecting responds of the pier-ranges. The roofs of the aisles and the south wall are very dilapidated, the whole having been used as a quarry, and many of the blocks have been cut up into mill-stones.

It seems tolerably certain that the building is the well mentioned by Strabo (xvii, 42), but the actual dates of its various parts are still unsettled. It has been suggested that at the date to which the main hall is assigned by its discoverer—viz. the IVth dynasty—the level of the Nile bed was lower than at present, and could not have supplied water continuously to the channels; but the whole construction—the projecting ledge, and the steps to the platform suggest that it must have been a well or bath. It has also been objected that the use of sandstone for the inner casing of the walls is inconsistent with any date earlier than the XIth dynasty, but as it is a peculiarly hard rock, which according to the geologist, Dr. Hume, is found near Assuan, its early use with granite may be accounted for. The fact that the first transverse chamber has Silsila sandstone in the upper portions of its masonry, is evidence that it is not earlier than the XVIIIth dynasty, and the reliefs which commemorate Merenptah point to the same date. Similarly the other transverse chamber has the cartouche and reliefs of Seti I. But this does not necessarily preclude an earlier date for the large hall, which Professor Naville compares with the temple of Khaf-Ra, near the Sphinx. There is obviously a striking similarity between the structural features of the two, though the scale of the newly excavated building is much greater and may well be called cyclopean. Further discoveries

which may elucidate the question will be awaited with much interest.

(The above account is derived from the "Journal of Egyptian Archaeology" for July 1914, and is printed by permission of the Egypt Exploration Fund. A full description of the building with illustrations will appear in Prof. Naville's forthcoming work on the subject, to be published by the Fund.)

III. ON THE EGYPTIAN OBELISKS

THE obelisk—one of the most graceful features of early Egyptian architecture, and one which survived through its later and often less graceful phases—has always been an object of admiration to other nations. A few words on its history and that of the more important examples which remain, many of which have been transported to other countries, may not be superfluous.

The actual origin of the obelisk does not seem ascertainable, but it appears from inscriptions to have existed, in an early form, as an object of veneration in the IVth dynasty. The son-in-law of Menkau-Ra, amongst other high offices, held that of priest of the obelisks of Ra. In the reign of Userkef of the Vth dynasty, it is indicated by a symbol like that figured on page 49, sometimes with a circle on the apex apparently representing the sun's disc, and designated under the name Ra-sep. Both priests and prophets were assigned to it.[1]

Lepsius, in his "Letters from Egypt" (Letter vi), mentions having found a small obelisk, a few feet high, standing in good condition in a tomb at Giza, dating from the beginning of the VIIth dynasty. This seems to be the earliest evidence of its use in the developed form as an architectural feature.

The oldest specimen of considerable size is that still standing at Heliopolis (see p. 62), from which it may be inferred that Senusert was the first king to realize it in colossal proportions. Its height is 68 feet 2 inches. Abd-el-Latif, an Arab traveller who visited Egypt in 1190 A.D., saw it with its copper-gilt cap on the apex

[1] See Sir Erasmus Wilson's "Egypt of the Past," pp. 83, 95, and 98. Petrie, "Hist.," i, pp. 65, 70.

or pyramidion. Its companion was then lying in two pieces on the ground, and around them stood many others of one half or one third the height.[1]

The next in point of date is the pair set up at Karnak[2] by Thothmes I, one of which, 90 feet 6 inches in height, is still erect. The other lies in fragments. The pyramidion, which is more acute than usual, has on it a votive panel and was therefore not cased with metal.

Thothmes' daughter Hatshepsut also set up two at Karnak, one of which, 97 feet 6 inches in height, is still standing. The other is broken; some reliefs from it are in the British Museum. She also erected two at her temple of Dēr-el-Bahri, only the bases of which remain. It seems possible that these were the two which are said to have been carried off to Nineveh by Assurbanipal. Breasted (p. 282) supposes on the authority of an inscription in his "Ancient Records" (ii, 304-336) that she also erected another pair at Karnak.

RECORD OF THE ERECTION OF AN OBELISK

From the tomb of the superintendent at Thebes.

[1] See "A Short History of the Egyptian Obelisk," by W. R. Cooper, F.R.A.S., pp. 23 and 24. Petrie ("Hist.," i, p. 157), referring to Makrizi, says that the companion obelisk was overthrown in A.D. 1258.

[2] See above, p. 103.

If this is the case all traces of them have disappeared, unless they happen to be the pair which are ascribed to Thothmes III.[1] These apparently stood in the same space as those of Thothmes I. One of them has disappeared. The other was taken away by Constantine, and still stands, in a shortened form, in the Hippodrome at Constantinople.

CLEOPATRA'S NEEDLE, LONDON

Thothmes III also erected the pair of obelisks (known as Cleopatra's Needles) in front of the Temple of the Sun at Heliopolis. In 34 B.C. they were removed by Augustus, or possibly by the orders of Cleopatra, to Alexandria to adorn the imperial palace there, but were not set up till the 8th year of Augustus.[2] One of them eventually fell and remained lying, much to the detriment of its inscriptions, until it was removed to London by Sir Erasmus Wilson in 1877. The other was given to America and now stands in the central Park of New York.

To Thothmes III is also due the tallest obelisk known. The original length of the shaft was about 108 feet. The inscription was completed by Thothmes IV. It was removed by Constantine from Heliopolis to Alexandria, and thence by his son Constantius to Rome where it was set up in the Circus Maximus. It was afterwards overthrown and broken into several pieces, but was

[1] See above, p. 104. [2] See Wilson, p. 227, and Cooper, p. 48.

restored by Pope Sixtus V, and re-erected on the north side of the church of S. John Lateran. It was slightly shortened at the base and now measures 105 feet 7 inches. The pyramidion is carved and the shaft has the peculiarity which is found in some others, of having one of its faces slightly convex between the sides.

Amenhetep II, who succeeded Thothmes III, is credited with a small obelisk less than 8 feet high, which is now at Sion House, Isleworth. Wilson (p. 320) refers to four others of about the same date, but nothing is known of them.

In the next dynasty Seti I erected two obelisks over 87 feet high in front of the Temple of the Sun at Heliopolis. One is lost: the other was removed by Augustus to the Circus Maximus at Rome. It was afterwards broken into several pieces, but was repaired and re-erected in 1589 by Sixtus V at the Porta del Popolo (Porta Flaminia), whence it is called the Flaminian Obelisk.

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Rameses II is known to have erected fourteen obelisks, of which the most noted are the pair at Luxor. One of these remains *in situ*; the other was removed by Champollion to Paris, where it stands in the Place de la Concorde. The obelisk opposite the Pantheon at Rome and one in the grounds of the Villa Mattei, formed another pair which were discovered on the site of a temple of Isis at

Rome.[1] The latter is said to have been lengthened by adding below a block of paler granite. In addition to these there are fragments of ten obelisks lying amongst the ruins of Tanis in the Delta, all of which are ascribed to Rameses II.

OBELISK OF RAMESES II
From Luxor: now at Paris.

Seti II erected the two small obelisks at the river end of the dromos at Karnak.

No more are recorded until the XXVIth dynasty, when Psamtek I is known to have erected some at Heliopolis. One of these was removed by Augustus to the Campus Martius at Rome, and its fragments were found under the church of Sta. Lucia in Lucina. It was restored, and now stands on the neighbouring Monte Citorio.

Psamtek II is named on the small obelisk which is now seen, strangely mounted on the back of a marble elephant, in the Piazza di Minerva, Rome.

Nectanebo made the small black granite obelisks which are now in the British Museum.

There is an obelisk at Kingston Lacy, Dorset, which was brought from Philae by Mr. Bankes in 1815. It appears to date from the reign of Ptolemy IX (Euergetes II), *c.* 140 B.C., is of some special interest in having an inscription both in hieroglyphic and Greek.

In addition to the above-mentioned monuments, which are all inscribed on their faces, there are in Rome several which have

[1] Murray's "Rome," p. 129.

no inscriptions, and the date of which is therefore uncertain. The most important of these is that which stands in front of St. Peter's. Its actual origin is unknown, but it was brought from Heliopolis by Caligula and erected in the Circus of Nero, the site of St. Peter's crucifixion and of many other martyrdoms. It was never overthrown, but was removed, under Pope Sixtus V, to its present position. Though the distance was very short, the difficulties of the operation were great, and the account of how they were overcome is interesting. It is given in Murray's "Handbook to Rome." The length of the shaft alone is 82 feet 6 inches, but the top of the bronze cross which it now bears is 132 feet above the pavement.

There are two uninscribed obelisks which were brought to Rome by Claudius A.D. 57, and placed in front of the Mausoleum of Augustus. One of these, with a shaft of 45 feet, is now on Monte Cavallo, and the other, of 48 feet, is on the Esquiline at the back of the church of Sta. Maria Maggiore.

Domitian's obelisk in the Piazza Navona, which was found in the Circus of Maxentius, near the Via Appia, may be regarded as a Roman imitation of Egyptian work; and it is said that the obelisk in front of the church of Trinita de' Monti is a bad Roman copy of Seti's obelisk which now stands near the Porta del Popolo. It came from the Gardens of Sallust.

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