

THE CHARACTERISTICS OF THE EGYPTIAN MASTABA

by

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B. S., Kansas State Agricultural College, 1927

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A THESIS

submitted in partial fulfillment of the requirements

for the degree of

MASTER OF SCIENCE

(Architecture)

KANSAS STATE AGRICULTURAL COLLEGE

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## THE CHARACTERISTICS OF THE EGYPTIAN MASTABA

### INTRODUCTION

The purpose of this thesis is to bring together into compact form enough information about the design, construction, and ornamentation of the Egyptian mastaba to give the reader a complete picture of the architectural character of these little known structures. The search for material was started while designing a mastaba as a project in archaeology issued by the Beaux-Arts Institute of Design. The difficulty encountered in uncovering the required information and the great interest attached to the information brought to light led me to continue the research and to present the results in this form.

Most of the writers on the history of architecture or the art of Egypt pass over the mastaba with scarcely a gesture. Sir J. Gardner Wilkinson in Volume I of his great work, "The Ancient Egyptians," says: ". . . it appears that Suphis and his brother Sensuphis built them (the pyramids) about the year 2120 B.C. and the tombs (mastabas) in their vicinity may have been built - - shortly after their completion."

Thus he dismisses the mastaba. Sir Bannister Fletcher in his "History of Architecture" illustrates only the mastaba of Ti and a restored group at Gizeh. Sir Gaston Maspero in his two books "Manual of Egyptian Archaeology" and "Art in Egypt" treats the mastaba at some length but omits much information that is required to produce an ideal restoration such as is required by a project in archaeology.

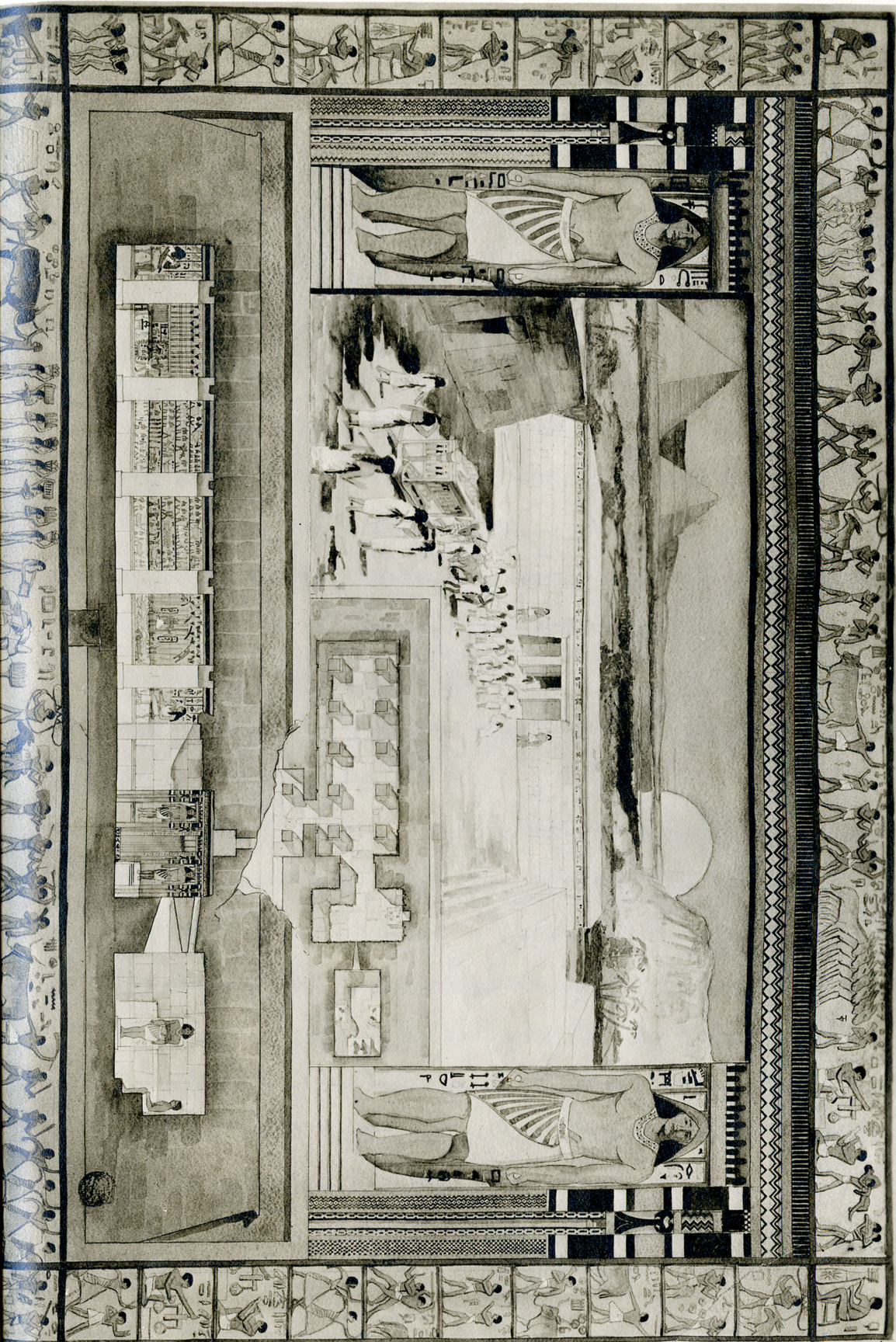
Fortunately most of this needed information was found in quotations from the French archaeologist Mariette's "Les Mastabas" translated by Walter Armstrong and included in Volume I of the "History of Ancient Egyptian Art" by Perrot and Chipiez. Much other material was found scattered through Volumes I and II of this same great work. Many drawings, polychrome plates, and photographs from various sources were also studied.

The method used in the gathering of this material was to make myself as well acquainted as possible with the individual examples by a study of drawings and photographs and by reading every important work on the subject that could be found. The information so gained was used to describe and illustrate the typical mastaba, that is, the ideal restoration. By this method I can give a brief but comprehensive account of all the architectural features of

Plate I.

An Ideal Restoration of an Egyptian Mastaba

(By the Author)



the mastaba under the following headings:

1. The Egyptian's ideas of eternal life and their effect.
2. The general aspect.
3. The decoration.

Each assertion will be as far as possible justified by references to a named characteristic example either in the text or in the illustrations. In a few things of minor importance the findings of the authorities on Egyptology have been found to differ rather widely. In such cases the statement that seemed to me most reasonable is included in the text and its source together with other views are given in the footnotes.

The illustrations, except for the drawing of the ideal restoration, are drawn from photographs or copied from authentic sources which I have been careful to acknowledge in every case. Egyptologists may, perhaps, find mistakes in the hieroglyphs which occur in the illustrations. These have been transcribed exactly in most cases but they have been included merely to give the objects illustrated their true appearance, so the object of this thesis is not affected by a mistake or two in such matters.

## THE EGYPTIAN'S IDEAS OF ETERNAL LIFE AND THEIR EFFECT

The mastaba was the eternal house of the noble during the Memphite period of Egyptian history \* and was one of the chief architectural features of this early period. The architects, masons, and painters who had worked for the Thinite court followed it in its migration toward the North and there the mastaba was developed. Rude and clumsy at first, it gradually improved under the third dynasty, reached its highest perfection under the fourth, after which it merely became more refined in detail. Under the sixth the decadence had begun and very few examples have come down to us from following dynasties. It was at all times, however, fully expressive of the taste and religious beliefs of a people who, inspired by an intense desire for duration bent their greatest efforts in this direction.

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\* According to Maspero the Memphite period extended from the third dynasty through the sixth. Before this was the Thinite period which according to Brugsch began with King Mena at about 4400 B.C. (Other estimates are Lepsius, 3892 B.C. and Mariette, 5004 B.C.) Using this initial date and computing by means of the king lists of Mantheo as quoted by Julius Africanus we can place the beginning of the Memphite period at about 3845 B.C. and its end at about 2906 B.C.



The form, disposition of parts and embellishment of these tombs were not fixed by the whims of their designers or by aesthetic considerations, but by the utilitarian purpose of assuring the continuity of the existence of their proprietors. It will be necessary, therefore, to make a brief study of early Egyptian beliefs concerning eternal life before we can understand fully the fabric of these structures.

In this discussion it must be remembered that the art and religion of Egypt did not, as has been erroneously supposed, present a perfect uniformity from beginning to end, and that the period under consideration was an early one. Mummification was being but imperfectly practiced, few enduring temples or palaces were being built, and even the pyramids were just beginning to take form.

The Egyptians regarded man as constituted of various entities, each possessed with its own functions and life. There was the visible form to which the "ka" or "double" was attached during lifetime. This ka was an exact duplicate of the body as regards form and color but was composed of some ethereal substance which was not nearly so dense. Then there was the "ba" or soul and the "khu" or "luminous" and perhaps a few more of lesser importance. After death

these entities became detached from the body. The ka seldom strayed far from the mummy, however, while the ba and khu strayed far and returned but seldom.

The Egyptian's life after death was according to his belief essentially the same as his existence before death. His station acquired during his lifetime could be retained, he would still need food and drink, would still require servants, cattle, and lands, and would still desire entertainment and the companionship of his wife and family. One essential difference, however, in the two existences was that the deceased could not provide these things for himself after death. He was forced either to provide them for himself while living or to trust his family and friends to provide them for him, lest he die the second and final death for want of them. This was to him a very grave concern; one he was not likely to leave to chance. It is not surprising, therefore, to find that he made every possible preparation as early in his lifetime as he could so as to forestall any surprise by death.

One essential condition was that the body be preserved, for it was believed that the ka and ba could not long exist without a body to return to. This condition later on caused the adoption of elaborate processes of mummification, but

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at this time it found expression in other means for preventing the body from being destroyed by accident or intention. These means consisted of placing the body far underground in a sealed sarcophagus and protected by powerful charms.

In common with most primitive peoples the Egyptian believed that he who invents or reproduces a figure creates a being. If he afterwards gives it the name of a person, animal, or object, it becomes endowed with a portion of the soul of its namesake. This soul it retains as long as its prototype lives but it may be made to retain it longer by means of certain incantations.

Thus statues and effigies become alive and guarantee the perpetuity of existence as long as they last even though the real body or object be destroyed. This applies not only to carvings of the master himself but also to representations of his servants, family, and goods. All these things, therefore, were carved somewhere in the tomb. Real food and drink were placed in the tomb at burial and at intervals afterward, but these served to satisfy only the immediate needs of the double, until he could adjust himself to his new circumstances. After that the pictures sufficed and it came to be believed that they were of even greater efficacy than the real objects themselves. Thus should his

## Plate II.

- Fig. 1.— Milking a cow. From the tomb of  
Menofre at Sakkarah  
(After Champollion)
- Fig. 2.— Women carrying food for the deceased.  
From the tomb of Ti at Sakkarah  
(After Chipiez)
- Fig. 3.— Bakers. (After Bourgoïn)

< PLATE II >



Fig. 1.

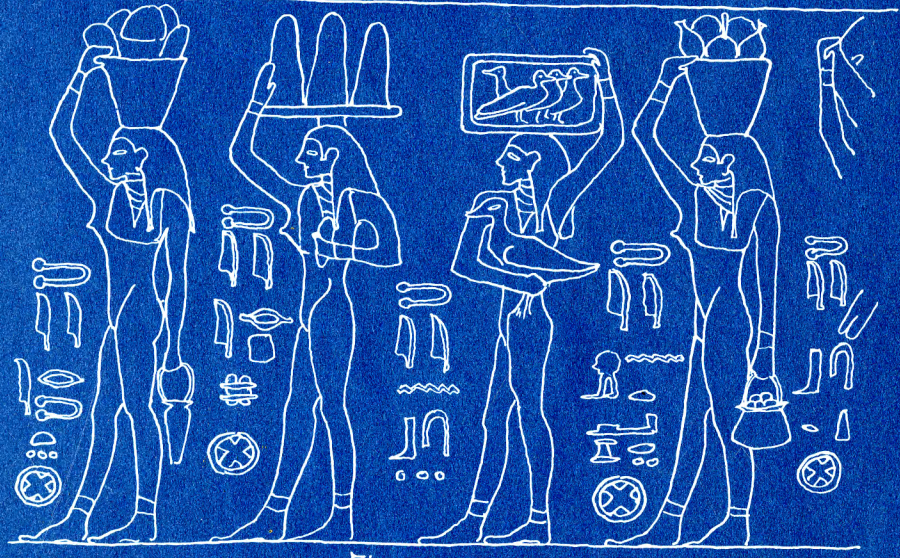


Fig. 2.

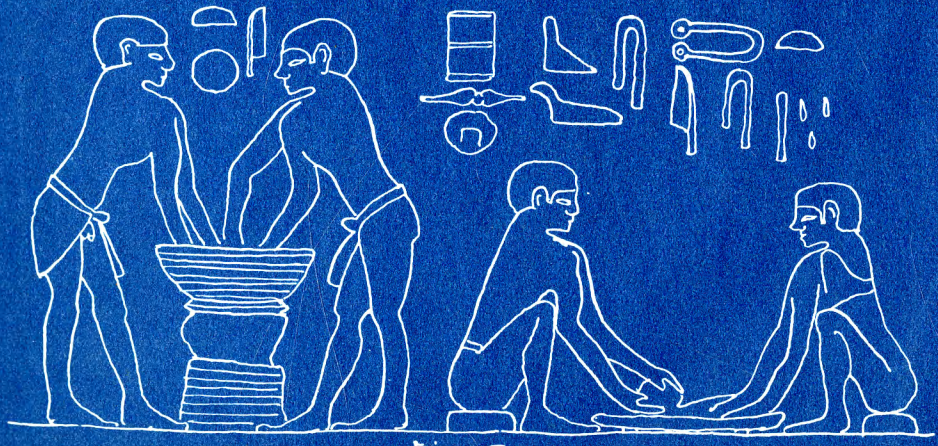


Fig. 3.

double need food, a half-wild bull is lassoed, slain, and prepared before his eyes; should he desire service, his vassals stand ready to minister to his every want in their accustomed attitudes. His tenants diligently till his lands and bring him his tribute. Fair maidens dance before him. His wife stands at his side. He is happy.

It can be readily seen that such beliefs would give a special character to sepulchral architecture and the allied arts. Thus the external forms were always pyramidoid — the most stable form known. The selection of materials was limited to the hardest and most durable that could be obtained with the funds at hand. The workmanship was always such that would produce structures not easily destroyed and decorations not easily effaced.

#### THE GENERAL ASPECT

Mastabas are to be found in the cities of the dead throughout lower Egypt.\* The kings of the period often rested under pyramids. Each king would during his lifetime

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\* The north country near the present site of the city of Cairo.

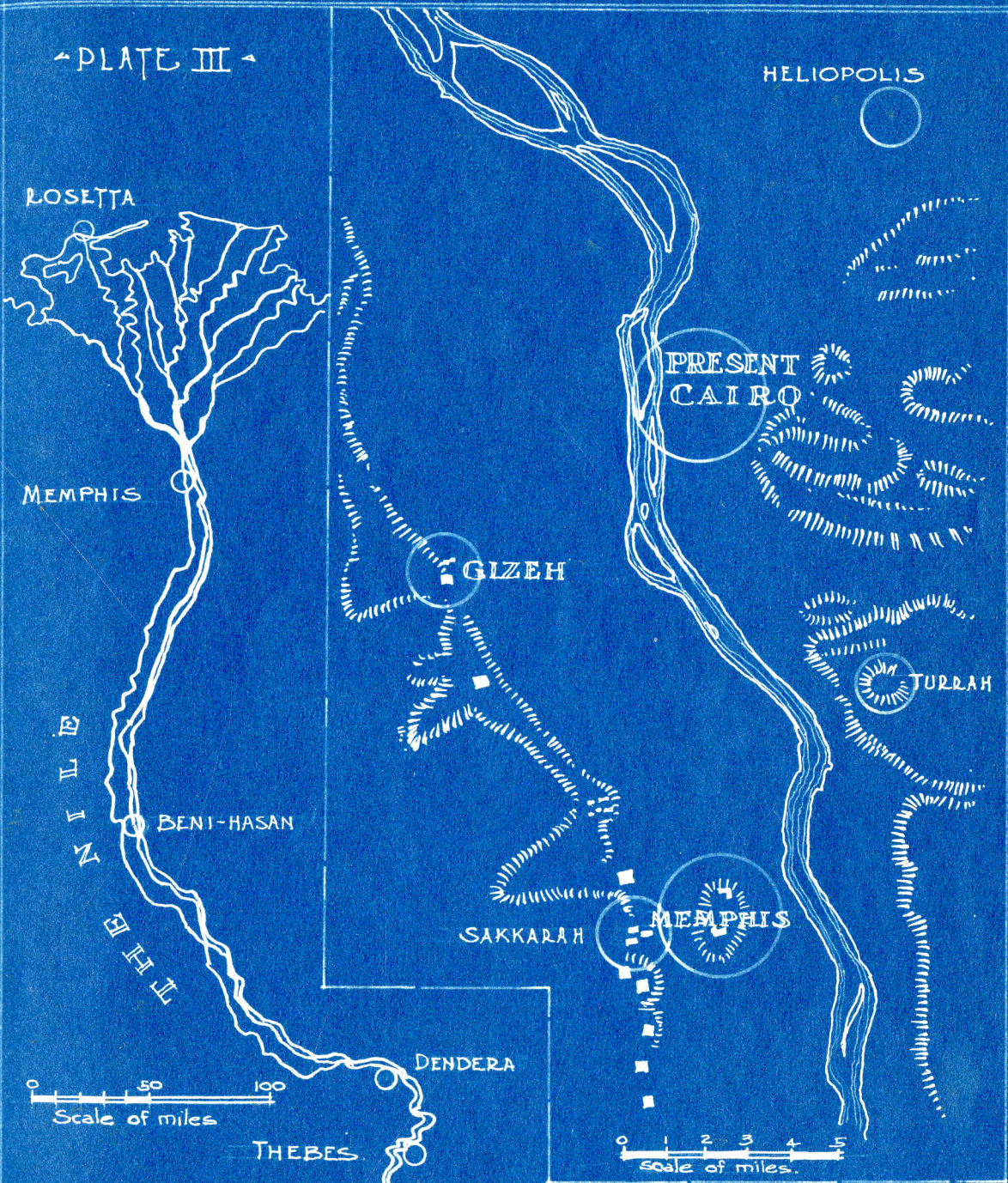
parcel out the land immediately surrounding his tomb to those who by royal birth, especial service, or caprice had gained his favor, so that they might build their mastabas there and continue in the after life to enjoy the fruits of this favor and to do him homage in return. In some cases the land was divided into squares and every other square was built upon, this method giving these cemeteries much the appearance of a checkerboard. In this way most of the mastabas at Gizeh are arranged. Others as at Sakkarah are scattered rather heedlessly about, crowding each other and sometimes even partially attached or superimposed. In such cases narrow labyrinth-like streets give partial access to them.

If we examine any one of these mastabas -- they are all very much alike -- we find it to be a massive structure formed of four faces of plain walling, each inclined at a slight angle with the vertical, and surmounted by a flat platform or roof of the same material as the walls.\* They are rectangular in plan and in their present state they much resemble mounds of earth, from which indeed they take their form, the slight inclination of the walls indicating

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\* Mastabas have been found with wooden roofs also.

PLATE III



MAP SHOWING A PORTION OF THE VALLEY OF THE NILE.

THE INSERT AT LARGER SCALE SHOWS THE ENVIRONS OF THE ANCIENT CITY OF MEMPHIS WHERE



the angle of repose of the earth that formed their prototypes. The Egyptians knew how to build a vertical wall but deliberately chose to retain the splayed form because of its greater stability. These walls are sometimes terminated by a cavetto and entablature but more often they end without transition at the roof line. The roof is covered with earth in which many earthenware jars are embedded to the neck. These jars are fairly evenly distributed but are perhaps more thickly strewn over the hollow portions of the tomb. This circumstance guided Mariette in his excavations.

In size the mastabas vary considerably. The sizes of some of them are given here for comparison.\*\*

Sabou . . . .	84 x 172 feet
Ha- ar . . . .	74 x 149 feet
Ra- en- ma . .	81 x 169 feet
Hapi . . . .	19 feet 6 inches x 25 feet 6 inches

The highest are between 26 and 30 feet high and the smallest about 12 feet high.

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\*\* According to Mariette. Maspero finds mastabas only 15 feet long and barely 10 feet high.

For materials the Egyptian used sun dried brick or stone. The earliest examples were of brick and this material was used throughout the period although stone was for obvious reasons used whenever possible.

The brick used were of two kinds, yellow and black. The yellow brick are composed of sand and gravel with a small quantity of clay. They measure  $2 \frac{7}{8}$  inches by  $4 \frac{3}{8}$  inches by  $8 \frac{7}{8}$  inches and had been manufactured since earliest predynastic times. The black bricks were not introduced until the fourth dynasty. They were made from earth and straw and measure  $5 \frac{5}{8}$  inches by  $7 \frac{3}{16}$  inches by  $15 \frac{3}{16}$  inches. The black bricks are the finer of the two and were used for the more expensive structures.

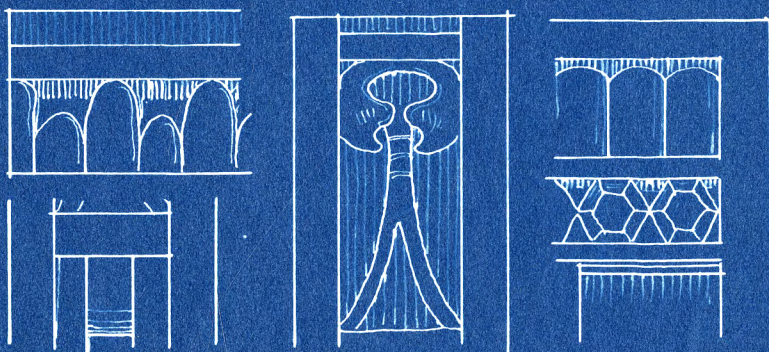
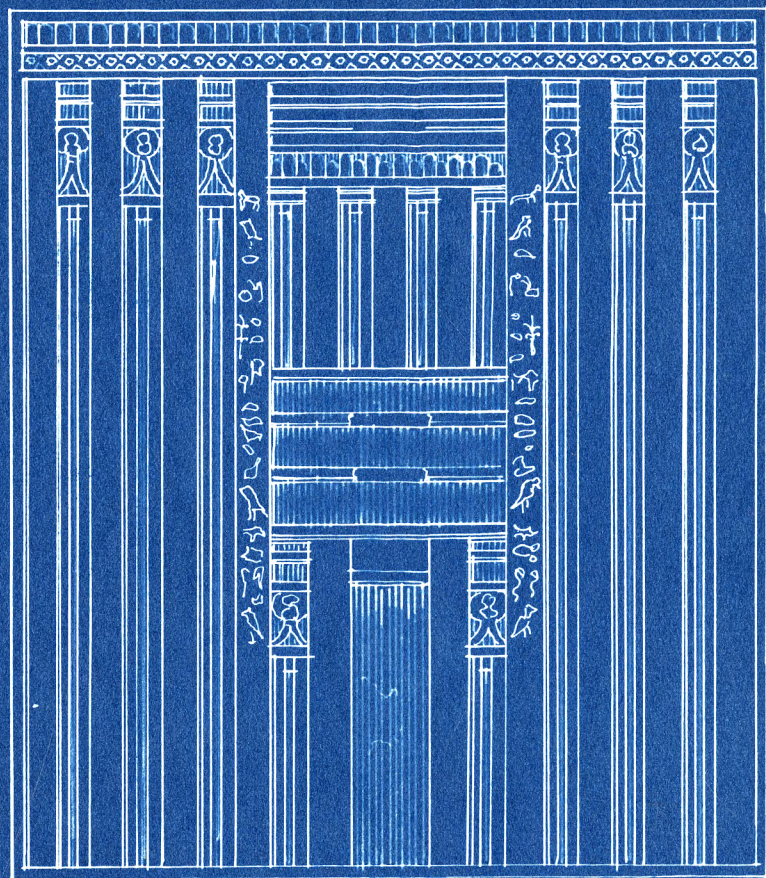
The stone mastabas were always built of limestone worked in blocks about 20 inches high by 32 inches long by 24 inches deep. Some stones such as ceiling slabs, architraves, monolithic piers and the like are larger but for the most part stones are of the modest size given. Three kinds of limestone are used; for the best worked tombs the fine white stone from Turah or the compact blue silicious stone of Sakkarah, and for ordinary tombs the marly limestone of the Libyan mountains. This last contains thin layers of salt, is veined with gypsum, exceedingly friable

and unsuited for carving. The walls are laid similar to coursed ashlar with stones at intervals rising high enough or sinking low enough to break the regularity of the horizontal coursing and with some of the vertical joints splayed. At Gizeh the walls form a smooth gently inclined plane but at Sakkarah they are not smooth but each successive course is set back from the one below it. This gives a "stepped" effect.

In most cases these structures show to an extreme degree the carelessness of construction that was typical of all Egyptian work. The outer and inner walls were fairly well built but the space between the two was jammed with sand, blocks of stone and rubbish of all kinds, in most cases without cement. There are some at Gizeh that are homogeneous but all the rest, including those at Sakkarah and elsewhere, are confused heaps of ill assorted materials which but for their solid facings would have long since crumbled.

All the mastabas were intended to be strictly oriented, the major axis running north and south. Whenever they are not so the error may always be attributed to the carelessness of the builders and not to intention. The principal face was turned toward the east and four cases out of five the entrance, if there is one, is on this face.

◁ PLATE IV ▷



ELEVATION AND DETAILS OF A STELA FROM  
THE FOURTH DYNASTY. (AFTER BOURGOIN)

Upon inspecting this eastern face we may expect to find one of three arrangements.

1. We may find a high narrow quadrangular niche near the northern angle which will usually show the vertical grooving of the decorated false door or "stela" of the period although a plain stela is sometimes found.

2. We may find a larger deeper and more carefully built recess near the southern angle in which will be found a monolithic stela of white limestone covered with hieroglyph.

3. We may find a regular facade with a door in the center.

When we encounter a niche near the southern angle usually no internal chamber will be found in the tomb, but when we find a door instead of a niche we know that we have come upon a fully developed mastaba. The lintel over the door is usually of a peculiar shape and bears the name of the proprietor. The shape seems to have been derived to represent a sort of curtain roller much on the idea of our window shades.

Sometimes the entrance is found on the north face. When so located it is found at the back of a sort of recessed vestibule having two monolithic quadrangular piers

## Plate V.

- Fig. 4.— Forecourt of the mastaba of  
Nefer-Hetep  
(After Mariette)
- Fig. 5.— Plan of the mastaba of Khabeuptah  
(After Mariette)
- Fig. 6.— Plan of the mastaba of Zozamenekh  
(After Mariette)
- Fig. 7.— Plan of the facade of the mastaba  
of Menefer  
(After Mariette)
- Fig. 8.— Plan of the mastaba of Kaapiru  
showing cell and forecourt  
(After Mariette)
- Fig. 9.— Plan of chapel in the mastaba at  
the Red scribe, Sakkarah, fourth  
dynasty  
(After Maspero)
- Fig. 10.— Plan of the mastaba of Ti showing  
chapel with interior supports  
and sloping well  
(After Mariette)

PLATE V

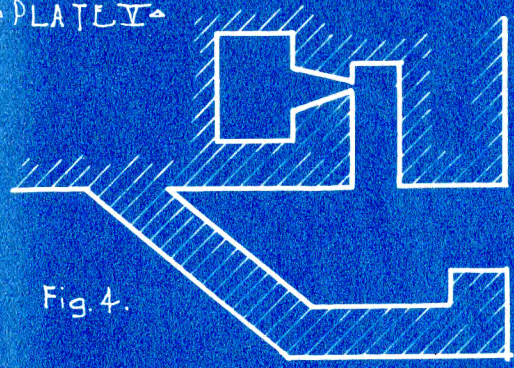


Fig. 4.

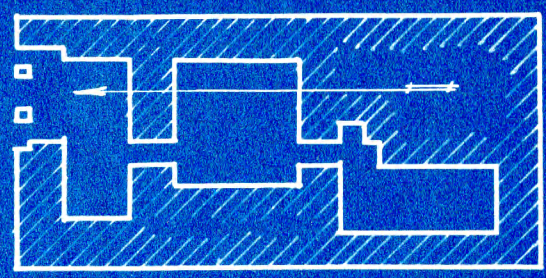


Fig. 5.

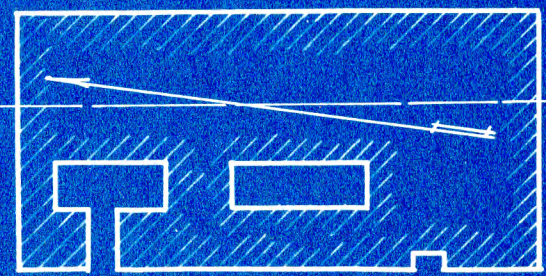


Fig. 6.

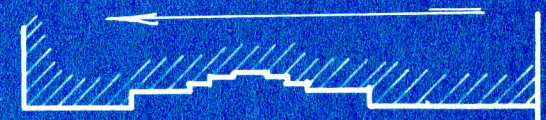


Fig. 7.

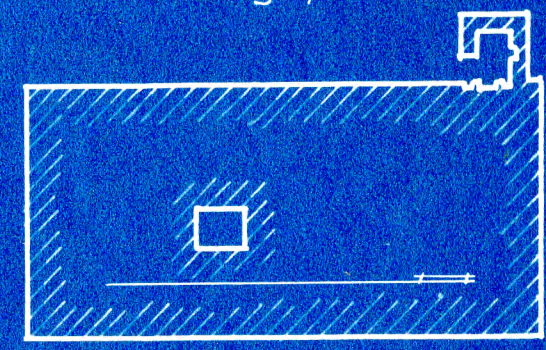


Fig. 8.

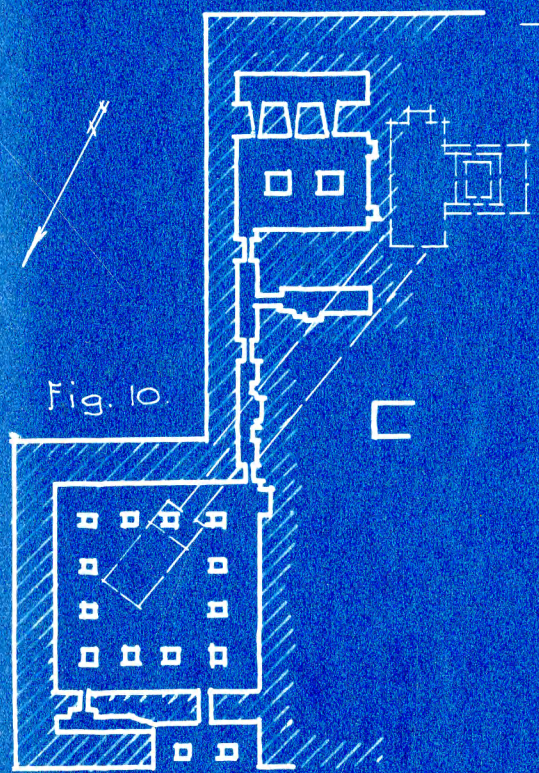


Fig. 10.

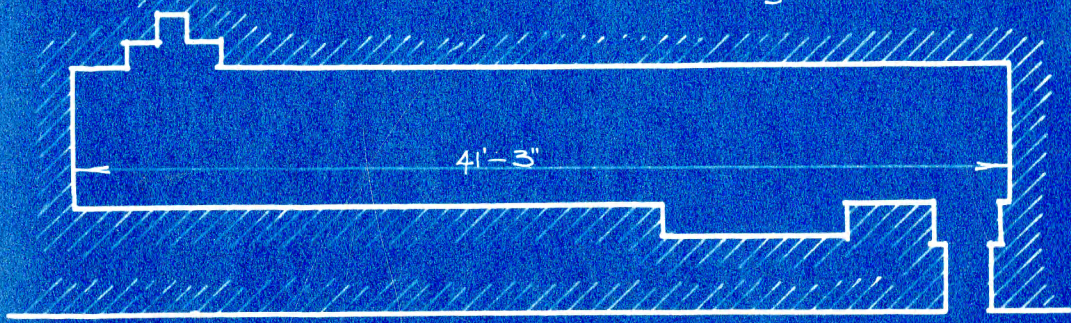


Fig. 9.

at the front forming a sort of portico. A notable example of this facing is found in the tomb of Ti, famous architect and royal companion of the fifth dynasty, from whose mastaba many of the illustrations for this article are taken.

Very seldom is the entrance found on the southern face. It was placed there only when circumstances, which usually can be readily perceived, made it absolutely necessary. The western face is always found to be without openings and entirely unadorned.

If we enter the door of a fully developed example we will find that the internal compartments occupy only a very small portion of the total volume of the tomb. By far the greater volume is masonry. These internal compartments may be described as (1) the chapel, (2) the serdab, and (3) the well. There are many mastabas that do not have all these divisions and some that have many more. Only the well is found to exist in all.

The chapel is built for the shelter of the priests and others who officiate at or attend the offering services, for the reception and storage of offerings to the deceased, and also it might be supposed that it was intended to serve as a living room for the double of the deceased. In the earlier examples the chapel is merely a niche sometimes quite exposed



and at others enclosed on three sides by a wall forming a sort of forecourt. In the later and more complete examples the chapel is an interior room and indeed sometimes is multiplied into several, each serving a part of the combined function mentioned above. Usually, however, only one is found.

In some examples the chapel is found to be quite bare, but in most cases it is decorated with bands of low relief sculpture. At the furthest end and always facing east stands the stela. This stela, which is found in all examples whether the chapel is internal or external, was always engraved; for in addition to its service as a door through which the double could come and go, the deceased depended upon the mystical words written there to insure his safe keeping in eternal life. This stela then is seen to be indispensable.

At the foot of the stela will be found a small stone table for the reception of offerings, and sometimes two small obelisks flank the stela. No other furniture will be found. The chapel was left open to every comer.

The chapel depended upon the door for light except in a few examples, notably that of the tomb of Ti which has been mentioned before, where skylights are found.

Not far from the chapel, more often to the south than north and more often to the north than west, a high narrow passage is found. There are sometimes more than one of these — they are the "serdabs" or compartments wherein are kept the statues of the deceased which may serve as bodies for his double in the event of the destruction of the real body. In some cases the serdab is completely walled in and concealed with no communication with other parts of the tomb, but in other cases there is a narrow communicating passage, so small that the hand can be thrust in only with difficulty. Through this opening the words of the priests and the aroma of incense and offering could reach the double. It must not be supposed that the only images of the proprietor are to be found in the serdabs. Others are found, sometimes in high relief, on the walls or on the stela or flanking the entrance. Those placed in the serdabs were so placed merely to provide a few that could never be destroyed either by time or the hands of vandals. The effectiveness of this precautionary measure is proven by the fact that statues placed in these serdabs about 5000 years ago are today in perfect condition. No inscriptions will be found in the serdabs except those found on the statues.

The well is a square or rectangular (never circular) artificial excavation extending from the roof \* through the core of the mastaba and into the rock beneath. At the bottom of the excavation is a chamber in which the mummy was deposited. On the day or morrow of the interment it was always filled with earth and debris and carefully closed with a large flat stone.

It is usually situated on the major axis of the mastaba and nearer the north than the south. The depth varies between wide limits. The deepest are about eighty feet\*\* and the shallowest ten feet with an average of forty feet. The built portion of the well is composed of large perfect stones — a distinguishing characteristic of the tombs of the Ancient Empire.\*\*\* At the bottom of the well there is

\* An exception is the tomb of Ti where the well is inclined and opens into the large public chapel.

\*\* According to Mariette. Maspero gives 100 feet as the maximum depth.

\*\*\* First ten dynasties.

## Plate VI.

- Fig. 11.-- Plan of the mastaba of Khabiusokari,  
fourth dynasty.  
(After Maspero)
- Fig. 12.-- Transverse section through double  
mastaba at Gizeh showing typical  
arrangement of well and mummy  
chamber  
(After Lepsius)
- Fig. 13.-- Plan of a mastaba with four serdabs  
(After Lepsius)
- Fig. 14.-- Longitudinal section through the  
mastaba with four serdabs  
(After Lepsius)

« PLATE VI »

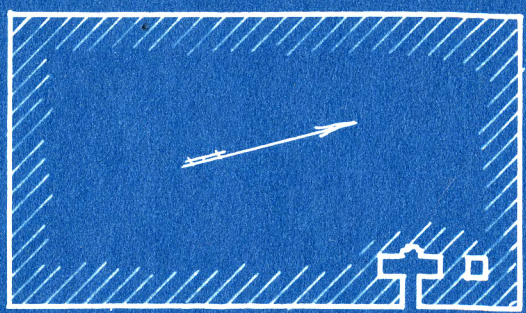


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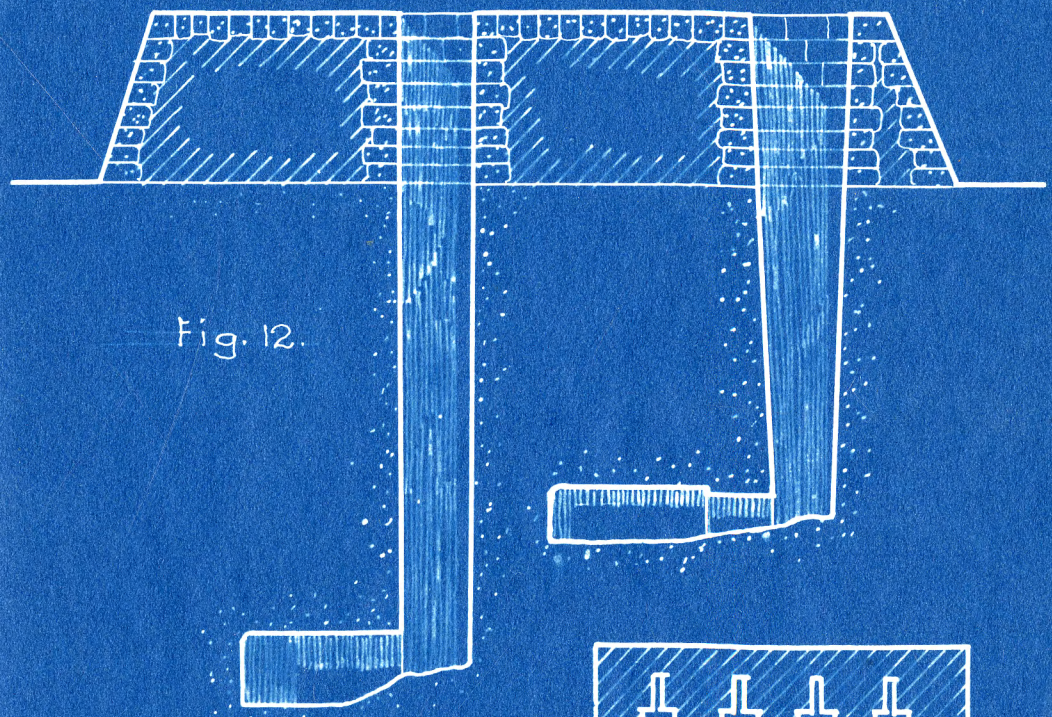


Fig. 12.

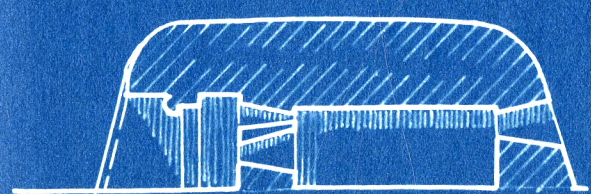


Fig. 13.

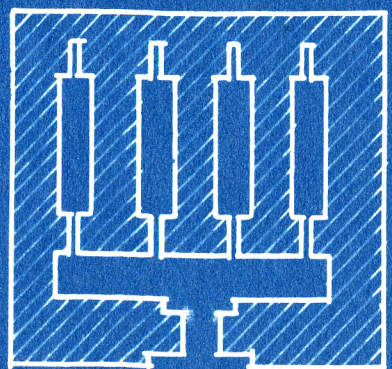


Fig. 14.

a passage, not high enough for a man to walk upright, and so directed that the mortuary chamber into which it opens will be directly beneath the chapel above. The mortuary chamber was left quite plain until a late period when it began to receive its share of the decoration.

The sarcophagus, which was placed in one corner of the mortuary chamber, was carved from fine limestone, red granite, or occasionally black basalt. They are of a peculiar shape, being rectangular in plan with a round topped lid squared at the angles. The lid is rebated into the body of the sarcophagus and cemented with very hard cement. As if this were not sufficient, wooden bolts were fixed to the under side of the lid and let into slots in the coffin. The art of embalming had not been perfected -- hence these elaborate precautions. Two or three vases which once contained water and a few ox bones scattered on the floor complete the furnishings of the compartment.

In most mastabas no interior free standing supports are found in any of the internal compartments, and this with the trabeated form of construction used, limited their width. In a few examples, however, when the tomb is highly developed, we find a sort of public chapel which is approximately square in plan and quite large, the roof being supported by

two rows of quadrangular piers.

### THE DECORATION

Today we usually think of decoration as something apart from the useful fabric of a structure, something added merely to delight the eye of the beholder. In this sense the term decoration as applied to the carvings in a mastaba is largely a misnomer. As has been stated before, these carvings were introduced for the sole purpose of multiplying the images of the defunct and his belongings. Whether meant to be so or not, however, this work possesses real artistic merit entirely apart from its utilitarian purpose.

The stela was always the focal point or center of interest of the decorations in the tomb. Here were lavished the richest carvings and colors. In the early days the stela was external and the decoration was sober -- the name of the master above the false door and his images in relief on the jambs with a few funereal inscriptions sufficed. Soon, however, pursuing the imitation of what had at first been the exclusive privilege of the sovereign, the tablet was made to represent not merely a door but the entire facade of a building, that is, the rectangular structure in which the kings enclosed their horus name.

(See Fig.17, Plate VII.) In the upper compartment was often seated a figure of the dead at a round table heaped with such food and ornaments that he might require. Vertical groovings in the stone jambs below represent the wooden construction of the facade imitated, and throughout the composition are found lists of things required by the dead and mystical inscriptions which insure their transmittal to him. This latter is called a decorated stela and the former a plain stela. Both decorated and plain stela are found in external and internal locations but when located inside they are richer and more elaborate. The decorations are nearly always in low relief except the figures of the deceased which are often almost in the round.

In some examples all the walls of the chapel except the western wall containing the stela were left plain; in the more perfect examples, however, these walls were also decorated. This decoration consists of low relief sculpture applied in horizontal bands of varying widths and its extent was limited only by the amount of wall space available. This relief is very low, much like the stamping on the face



Plate VII.

Fig. 15.— Lintel of the tomb of Theta --  
sixth dynasty  
(After Chipiez)

Fig. 16.— Stela in the form of a false  
door  
(From a photograph by Brugsch)

Fig. 17.— The name Horus of Chephren  
(After Maspero)

Fig. 18.— Quadrangular pier  
(From Prisse)

Fig. 19.— Restoration of a part of the  
Necropolis of Gizeh  
(After Chipiez)

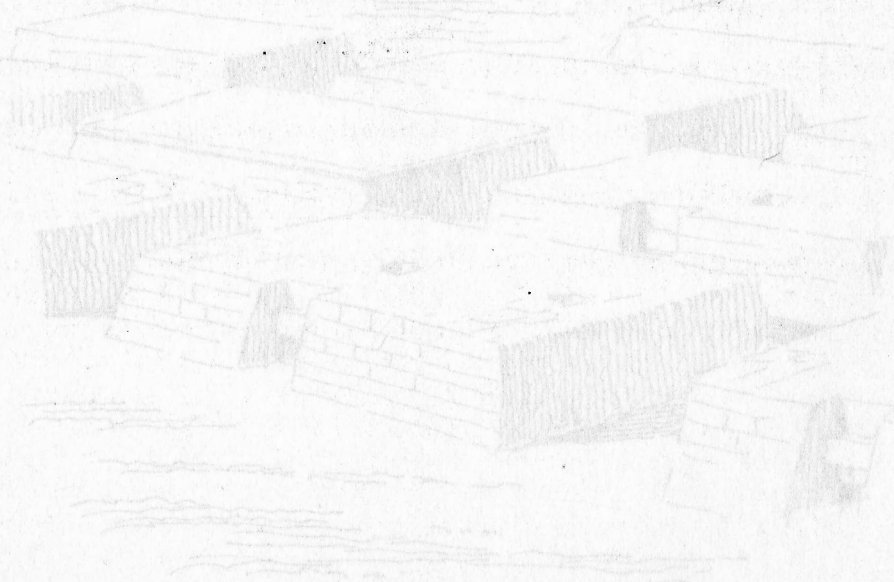


Fig. 19

← PLATE VII ←

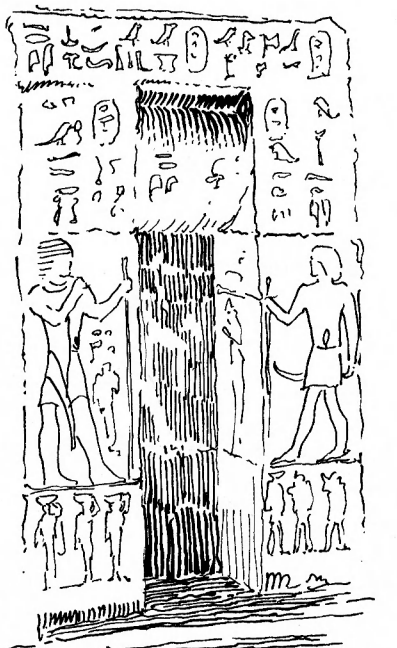


Fig. 16

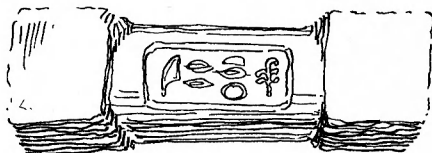


Fig. 15



Fig. 17

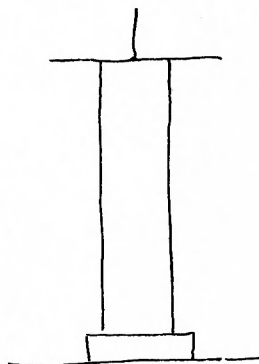


Fig. 18

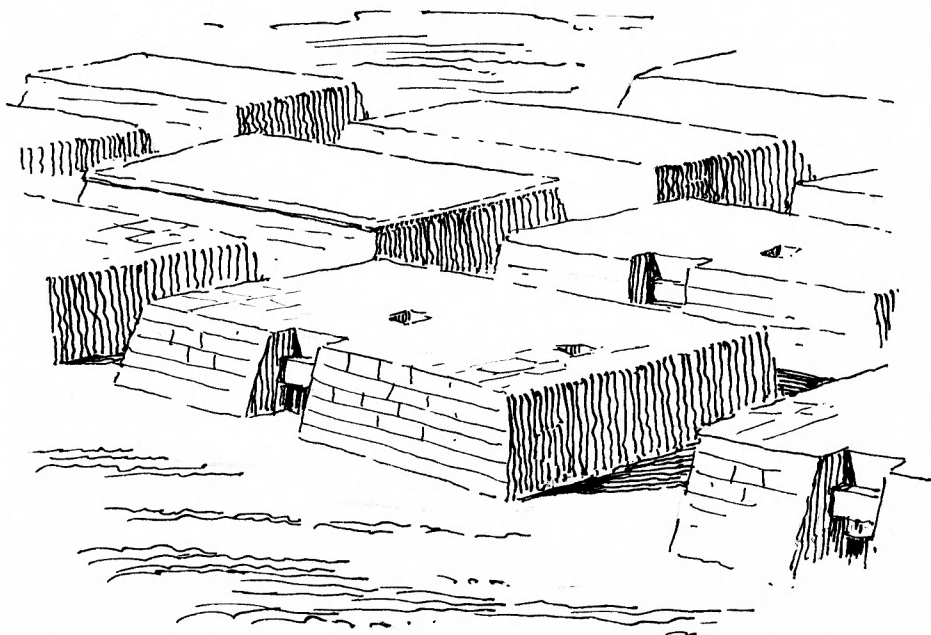


Fig. 19

of a coin. The principal conventions \* that were common to all Egyptian painting and relief work were already established but in spite of these the work shows great delicacy and has the sureness of line that accompanies great skill. Not only the people and their accessories but also the plants, animals, birds and fish of the times are represented with such fidelity that we today have no difficulty in distinguishing them.

All the relief sculpture as well as sculpture in the round was painted and conversely there is almost never found a painting that does not have sculpture as its base.

The Egyptians used flat washes of color. Just as in their relief carving they rendered the outline and suppressed the internal modeling, so in painting they simplified the coloring and merged all play of light, shade, and shadow into one uniform tint. They followed nature as closely as possible and yet were never entirely true to it. In this as

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\* These conventions are briefly as follows: The head and legs are always drawn in profile while the trunk and shoulders are represented in frontal position and the eye in full face. Animals are less conventionalized than men. All men are shown in the prime of life and all women possessed the contours of a marriageable virgin. Such figures as are supposed to be walking always thrust their left leg forward when turned to the right and the right leg forward when turned to the left. A certain stiffness of attitude is always found.

In other things the Egyptian was highly conventional. Arbitrary colors were adopted for certain objects and these colors which sometimes understate and sometimes exaggerate were handed down from generation to generation. Thus water is always blue. The flesh tints of men are dark brown and those of women are pale yellow. Exceptions to the rules may be found but in most cases the rules are strictly adhered to.

It must not be supposed that the effect of this color was crude and garish. On the other hand the conventional methods employed gave a highly decorative and quite pleasing character to the work.

The statues found in the mastabas will not be completely described in this thesis because being walled up in the serdabs they add nothing to the architectural character of the whole. A few are illustrated on Plate VIII to give the reader a general idea of their appearance. They were in most cases carved from stone and painted in much the same manner as the relief sculpture already described.

## Plate VIII.

Fig. 20.— Ra- nefer  
(From a drawing by Bourgoïn)

Fig. 21.— Statue of Ti  
(From a drawing by Bourgoïn)

Fig. 22.— Breadmaker  
(From a drawing by Bourgoïn)

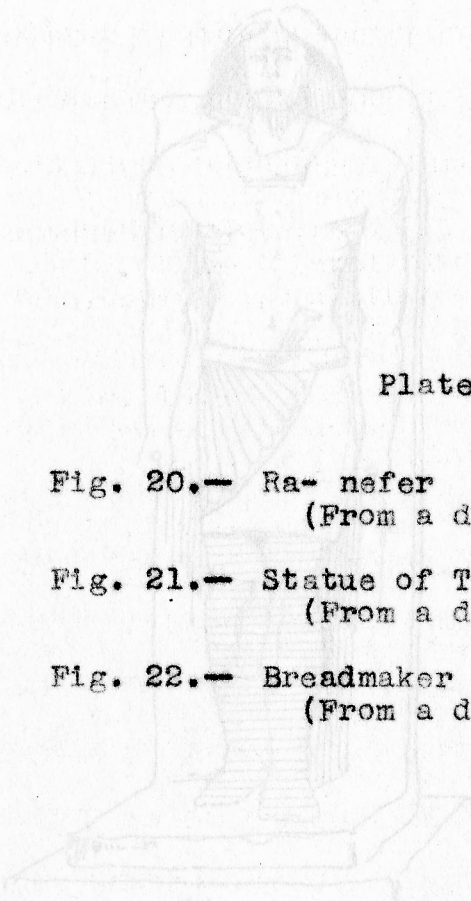


Fig. 20

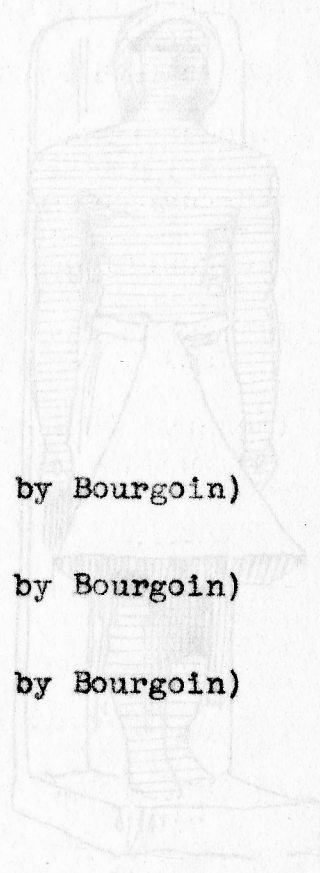
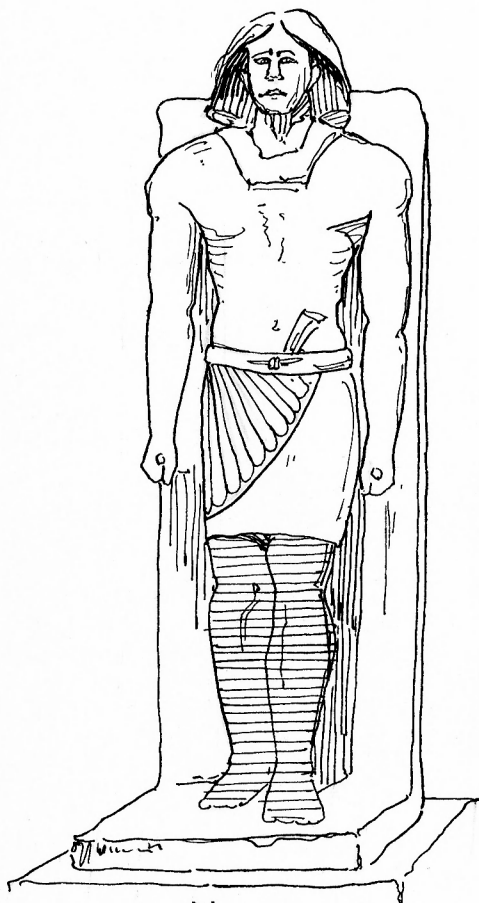


Fig. 21

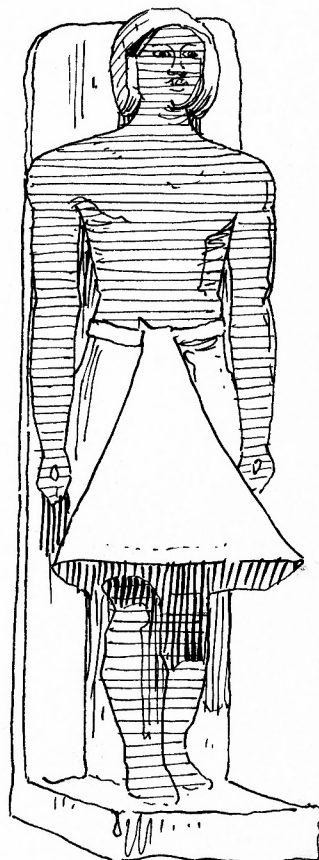


Fig. 22

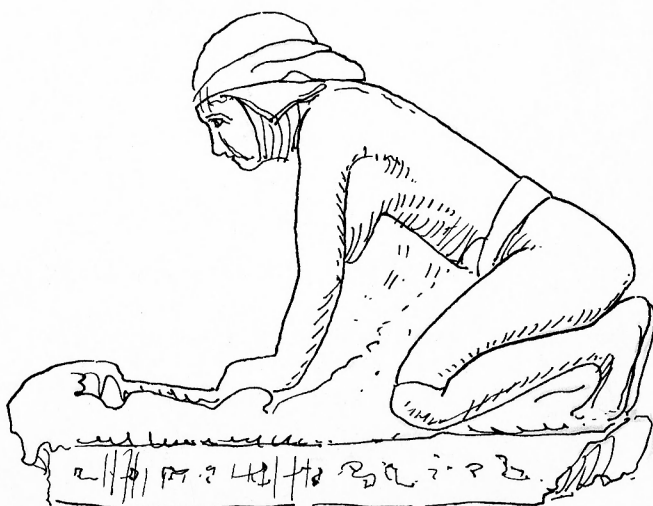
— PLATE VIII —



— Fig. 20 —



— Fig. 21 —



— Fig. 22 —

## SUMMARY

We may sum up the foregoing details by the following description of the Egyptian mastaba which was erected in the early ages of their national life when the national civilization first put on the form and color which it retained through so many centuries.

The mastaba was a product of the strong belief in a real life on earth after death and its consequent belief in the necessity for preserving the body of the deceased. When complete it consists of two parts: (1) A built-up part above the surface of the soil and (2) a subterranean part cut into the rock below and containing the actual remains of the dead.

The built-up part contains a chapel or recess which is sometimes internal and sometimes external. This chapel was used for the reception of offerings for the deceased and for the shelter of priests and others who took part in the ceremonies. The most important position in the chapel was given to the stela or false door through which the "double" of the dead was supposed to come and go, and before which priests officiated. This stela was the only

indispensable part of the built-up structure. There were also in many cases walled up rooms called "serdabs" which contained statues of the deceased.

The subterranean portion consisted of a well, usually vertical and averaging forty feet deep, at the base of which is the mortuary chamber containing the sarcophagus with its mummy. The well which usually extended entirely through the mastaba and ended on the roof, was carefully filled after interment and its opening carefully closed.

The stela and the walls of the chapel were richly carved and decorated in colors. The serdabs and mortuary chamber were devoid of decoration.

Such are the constituent elements of the mastaba, that is to say, of those private tombs which are contemporary with the pyramids. Wherever situated or what their date the same elements are to be found; sometimes modified but always easily recognizable.



ACKNOWLEDGMENT

I wish here to express my deep indebtedness to Prof. Paul Weigel, who was of invaluable assistance to me in the finding and selection of the required material and in the design of the ideal restoration, as well as for reading and correcting the manuscript.

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## ← PLATE IX ←



— PART OF DECORATED STELA IN —  
 — THE MASTABA OF PTAH-HOTEP. —  
 — One fifth full size. (After Bourgoignz) —

## ← PLATE X ←

← NETTING BIRDS. ←  
— (After Rosellini) —