# THE MINOR CEMETERY AT GIZA 

BY

## CLARENCE S FISHER

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Note to user:
Fisher refers to tombs G 2071-2099.
Those tombs were renamed G 3071-3099
by George A Reisner after the publication of this book.

## THE ECKLEY B. COXE JR. FOUNDATION

The name of Eckley B. Coxe, Jr., has become so widely and definitely associated with Egyptian Research that, as the results of that association begin to take form, it is fitting that a brief reference to his life and achievements should be made in this place.

Mr. Coxe was born at Philadelphia in 1872 . He graduated from the University of Pennsylvania in the Class of 1893 . In 1903 he was elected to membership on the Board of Managers of the University Museum; in 1910 he became its President, a post that he filled till the time of his death on September 20, 1916.

In 1906 it was proposed that the University Museum should send out its own expedition and take an active part in Egyptian Research in connection with the development of its Egyptian Section and permanent exhibition of Egyptian Art. The scheme was carefully planned to cover an indefinite series of years of intensive work, calculated to obtain the best results with the application of modern methods. It should be mentioned as an instance of Mr. Coxe's ability to look forward and to see this work in its relation to its ultimate results, and to the whole field of Egyptian Research that, from the first he fell in with the idea of continuous and unremitting field work, an attitude of mind from which he never departed and that ultimately found expression in the provision of his will. Mr. Coxe undertook to defray all the expenses of the Egyptian expeditions from the start in 1906 . In the following year and for three consecutive years, excavations were conducted on certain sites in Nubia. The Museum then decided to suspend its work in the field and to effect certain measures of reorganization. Already in 1909 I had accompanied Mr. Coxe on a journey in Egypt. The ground was looked over and a definite plan for future work was gradually matured.

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In 1914 the Museum was ready to start anew and to promote its scientific aims in the field of Egyptian archæology. In January of that year, Dr. Clarence S. Fisher was appointed Curator of the Egyptian Section and Director of the Egyptian Expedition which immediately began work. That work for which Mr. Coxe made the entire provision was prosecuted continuously with his support till the time of his death. In order that the undertaking should be established on a permanent basis, Mr. Coxe made provision in his will for its continuation. At his death in 1916 at the age of forty four, he left the University Museum a generous endowment for Egyptian Research. Under that endowment, the Museum has continued its work in Egypt till the present time. The sites chosen and allotted by the Egyptian Government to the University Museum for this research have been at Giza, at Dendereh, at Thebes and at Memphis. This volume dealing with the work at Giza is the first of a projected series in which the results of these Egyptian Researches will be recorded.
G. B. Gordon,

Director

## PREFACE

This volume, the ninth in the series of publications of the Egyptian Section of the University Museum, is the first of several volumes which will record the results of the excavations made from 1915 onward by the Eckley B. Coxe Junior Expedition. It deals with the work done on a small area in the royal cemetery at Giza.

In the summer of 1914 it was proposed to resume the active work of the Museum in Egypt under my direction as Curator of the Egyptian Section. The beginning of the European war made it seem probable that such a plan would have to be temporarily abandoned. However advices received from Cairo indicated that Egypt itself was but little affected by the war and that in fact the Government was heartily in favor of archaeological work being carried on as in normal times. Acting on this information it was decided to make at least a general survey of the field and the conditions in Egypt and more especially to see which of the more desirable large city sites were available for excavations. For some time it had been the hope of the University Museum to undertake work at Tanis (San-el-Hagar) in the Delta, and the Curator was instructed to make an effort to secure a concession for archaeological researches at that site.

Leaving America near the close of November, 1914, I reached Egypt December 18th, the day after the British Government had declared its Protectorate over the country. This in itself augured well for the continuance of conditions favorable for archaeological research. I applied at once for Tanis, but was informed that this site had some years before been divided equally between French and Austrian interests. The French still held their portion although no actual excavations had as yet been undertaken by them on the site. All German and Austrian concessions had been taken over by the Government upon the outbreak of war, and it had been decided that no new disposition was to be made of them until the close of hostilities.

Efforts were made to have this ruling suspended in so far as it affected sites upon which work had never been done by the enemy holders, but nothing could be done in this direction. In the meantime I inspected Tel Temai (Mendes) at one time a capital of Egypt, and Kom Farain (supposed to be the site of Buto), both Delta sites somewhat of the same character as Tanis. Either might have been a possible substitute for Tanis. The University Museum was looking for a large city site rather than a cemetery for the main effort, and a member of the Service des Antiquités, learning of this desire, suggested Memphis. After investigating the possibilities of obtaining this great site, we decided to undertake the work there and applied for and received a portion of the whole area.

Upon my arrival in Egypt, Dr. G. A. Reisner, the Director of the joint expedition of the Harvard University and the Museum of Fine Arts, Boston, had offered his camp at Giza as a temporary headquarters. He also agreed to provide some of his own trained workmen as the nucleus of an organization as soon as we were in a position to begin actual work. As the negotiations for a site took considerable time and the season of the year and all conditions were favorable for the commencement of work, Dr. Reisner suggested that the University Museum undertake the clearing of a small area of the great Giza cemetery for which he held the concession. The area available lay to the west and north of a section of the royal cemetery already excavated by him. His work had shown that probably here would be found tombs of some of the smaller officials of the court of the Fourth to the Sixth Dynasties. This offer gave us the opportunity to organize our expedition while waiting for a concession of our own and was accepted.

Work was begun on this area on January 28, 1915, and continued until March 9, 1915, when the whole expedition moved over to Memphis to begin our excavations there. Most of the record of the individual tombs was done by Mr. Ashton Sanborn, who had in the meantime been appointed Assistant Curator in the Department, after his arrival in the field. The photographs were made by Bechari Mahfud, an Egyptian who had done this
kind of work for several previous expeditions. The drawings of the Sneferu-hetep offering chamber were made by Mr. W. G. Kemp.

Thanks are due in the first place to Dr. Reisner for his kindness in granting us permission to begin our excavations at Giza and for his assistance in the matter of laborers and in translations of texts. As Mr. Alan Rowe has been largely responsible for the chapter on inscriptions as it now stands, it bears his name. M. Lacau, the Directeur Générale du Service des Antiquités, has always taken the keenest interest in the progress of our work and has endeavored in every way to aid us. This feeling was shown also by every one of his associates. My own thanks are due to Dr. G. B. Gordon who made the progress of work easier by his continued support and encouragement. Above all, every archaeologist must feel the deepest gratitude to the late Mr. Eckley B. Coxe, Jr., for the generosity which made the past work possible and who has now placed our Egyptian researches on a permanent basis.
C. S. F.

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## CHAPTER I

## THE MINOR CEMETERY

## § i. Topography

I. The undulating desert plateau which borders the valley of the Nile on the west, from Abu Roash in the north to Dashur in the south, was from the Third Dynasty onward utilized for the necropolis of the great capital Memphis which lay in the valley below. Owing to the conformation of the rock terraces, this cemetery did not form one uninterrupted stretch between the two limits, but was broken up into several well defined areas. These were not only topographical divisions, but represented to a certain degree dynastic groupings as well. At Sakkara there is at least one monument of the Third Dynasty, the so-called step pyramid, but the chief and most important period of this cemetery was during the Fifth and Sixth Dynasties. Abu Roash may be partly late Third but is mainly early Fourth Dynasty, while the great period of Dashur, so far as known, is mainly Middle Empire. The Giza area was first laid out during the reign of Khufu, and developed as the great royal cemetery by him and his immediate successors. That is, its period which is at the same time the great period of Egyptian art, is the Fourth Dynasty, represented by Khufu, Khafra and Menkaura (ca. 2900-2750 B. C.).
2. While the pyramid of Khufu was being built, the area to the west of it was set apart for the tombs of members of the royal family and for the chief officers of state. The erection of the succeeding pyramids of Khafra and Menkaura limited the extension of the cemetery toward the south and no additional tombs are to be found west of these two pyramids, although the priests of the Menkaura pyramid at one period had a small cemetery of their own to the southeast of that structure. The original royal cemetery therefore developed only toward the
west and north as far as the natural configuration of the plateau made it practicable. This area was from the first laid out according to a fairly regular and predetermined plan. The original scheme as begun under Khufu is now evident only in the western and part of the northern area. These were divided into a series of regular plots of ground, assigned by lot or selection to the different members of the court, who built on them a group of mastabas similar in size, design and structure. ${ }^{1}$
3. With the reign of Khafra began a change in the regularity of the plan, and the newer mastabas were constructed not in straight rows as before but en echelon. Then in succeeding years, as the area became filled, the open passages between the large mastabas were used for smaller tombs built against the sides and ends of the previous ones, and in time the spaces became so filled with these tombs that access to any of them became difficult. Still later, when the cemetery had lost its distinctly royal character, the older structures were used for a number of intrusive burials, placed wherever seemed most convenient.
4. We may assume that, from the first, certain areas outside this plotted portion were set apart for the tombs of minor court officials. These areas would have been around the outskirts of the principal group, to the north near the edges of the plateau, and to the west where extension was limited only by the desirability of keeping within some reasonable distance of the valley. Just west of the western portion of the royal Khufu cemetery and at the end of the series of symmetrical mastabas of this period, was one of these areas. A portion of this had been cleared by Dr. Reisner some years ago, and the work described in the present memoir was a development of that done by him. It covered an area of about 60 meters square. ${ }^{2}$

[^0]5. The earliest tombs belong to the reign of Khufu (2900 B. C.), and the mastaba plan may be traced through various developments and modifications from this date down to the end of the Fifth Dynasty ( 2625 B. C.).

## § 2. Condition

I. Beyond the limits of the previously uncovered cemetery, the surface of the ground presented little evidence of the character of the tombs beneath or of the general plan of the area (Pl. i). Here and there patches of harder material, stone chips and débris, surrounded by yellow drift sand marked the difference between solid structures and open spaces. The plateau was always exposed to the full force of the wind and all masonry, especially brick, was subjected to a gradual but steady detrition. At some places the wind had spread over the surface a thin layer of débris made up of the filling of the mastabas, bits of stone, brick and pottery mixed with the inevitable sand. The remaining portions of many of the mastabas, especially those with stone casings or facings were just below this layer of denudation, but from a third to a half of the height of the structures had been destroyed. The lower parts had been preserved by the densely packed masses of débris and drift sand which had gradually filled up all the open spaces. As this filling accumulated it left only the still exposed parts of the walls subject to further decay. The lower parts suffered no further destruction except from stone plunderers, who sometimes cut special trenches down into the mass, following along the lines of walls. The process of filling began just as soon as the cemetery was laid out. During the use of the cemetery it required constant labor to keep the passage ways and even the offering rooms free from the blown sand. As soon as tombs began to be neglected the filling up made more rapid progress. Still another element entered into the destruction. The coursed stone facings of disused mastabas were often stripped off and re-used for casing later tombs, and even brickwork did not escape a similar fate. In cased core mastabas the removal of the casing did not destroy the interior mass, but when débris
filled mastabas were stripped, the fillings, having no support, gradually spilled out over the surrounding passages.
2. The results of these various conditions could be traced clearly during the excavations. The passages and open spaces were naturally the first to be filled in. In these were found successive layers of yellow sand interspersed with layers of débris, the latter varying in thickness and character. Near the bottom the layers of débris were thicker and more compact, and represented masses of débris filling from the interior of the mastabas, or mud plaster and disintegrated brick material which had gradually washed down from the wall faces and been spread over the already existing layers in a liquid condition. Now and again loose stones from both casing and rubble retaining walls were found mixed with the débris. As the depth of detritus grew, the yellow sand was in larger proportion, and the harder darker layers fewer and thinner. In the offering rooms of mud brick mastabas the collapse of the wood roofs or brick vaulting made the first thick layer of heavy débris over such sand as had already drifted in through the open doors and windows. The offering rooms of the stone cased mastabas of corridor type usually had roofs of flat stone slabs. These resisted natural destruction longest and remained in place above the accumulating débris. Owing to this fact, in nearly all cases the roofing slabs had been carried off before they collapsed. In the shafts conditions similar to those on the exterior were found. Here, however, no accumulation began until the covering at the top or at least some portion of it had given way or been broken through by plunderers. Thus at the bottom of shafts were usually the stones or bricks from the door sealings, where the chambers had been pillaged, and the material from the covering of the shaft, with such rubble or brick as may have become detached from the linings and fallen in at this time. Above these began the series of layers of sand and masses of filling from the cores of the structures, which had poured in as the upper linings had given way from time to time. Again toward the top the sand strata became more clean and unmixed.
3. When the early plunderers undertook to remove stone for their later mastabas, they carried off the niche stelae from the stone cased structures and the stone lintels from over the niches in the brick structures. When these were inscribed they were usually of a finer quality of white limestone and more in demand than the rougher local stone. The uninscribed lintels of nummulitic limestone over the smaller brick niches were not disturbed. The flat niche stelae made admirable coverings for the late burial chambers constructed in the cores of older mastabas or at the bottom of shafts. Sometimes after having been pulled from their places the lintels, and even libation basins, were found not to be adaptable for re-use and were cast aside in the passages at some distance from their original positions. Some of this stone plundering took place at a comparatively recent date, after the cemetery had been covered up. The date of the plundering of burial chambers is a question. Certainly shaft A of G 3030 had been entered in recent years, but whether this was the first plundering or a second one cannot be ascertained. On the other hand certain of the chambers show unmistakable evidence that the spoliation was done very systematically at an early date. The most interesting example of this was in A of G 3041. Here the chamber was still sealed with a wall of rough blocks, intact. The lid of the wooden coffin was in place. Yet the linen wrappings around the neck, wrists and ankles had been ripped open in order to remove the necklaces, bracelets and anklets which either had been there or were suspected of being there, as the burial was that of a woman and evidently known to be such by those who undertook the looting (Pl. 41). After this had taken place the lid of the coffin was restored to its position and the door to the chamber sealed up. One is strongly inclined to suspect the undertakers as the guilty ones.

## CHAPTER II

## PLANS, CONSTRUCTION AND BURIALS <br> § i. General Remarks

i. The development of architectural forms can be traced fully and clearly only in the largest and most important buildings of any period. This is especially true of funerary structures in Egypt. The real growth and change in tomb plans is shown in the burial places of the wealthy class, where space and expense were negligible factors. The minor officials and poorer people, while naturally endeavoring to adhere to the prevailing custom in tomb building, were forced to such modifications in the size, plan and construction, as the space at their disposal or their limited means made necessary. In our minor cemetery, however, there can be traced certain gradual changes in plan which may be said to follow roughly the development of the mastabas in the adjoining royal cemetery. These changes I have grouped as follows, in their sequence order, and only with reference to their plan.
A. Mastabas with an offering room built against the east façade.
B. Mastabas with the offering room wholly or in part within the exterior lines of the main structure.
C. i. Mastaba with small recess offering room at south end of eastern façade outside the lines of the main structure, but connected with a long corridor extending along the whole length.
2. Like C I, but with the recess omitted where neighboring structures prevented its construction.
D. Mastabas with a simple corridor shaped offering room.
E. Mastabas with the shafts in multiple groupings.

In several examples changes in plan were made before the mastaba was completed. Others were later reconstructed and

PLANS, CONSTRUCTION AND BURIALS

then carried out in the prevailing design. Additions were made which changed the scheme. In all these cases the offering room was of the form of the last reconstruction period. This caused to some extent an overlapping of types, but does not affect the general change from the earliest to the latest form. The description of this group of tombs is divided into three parts: The superstructure, including all that part above the rock surface; the hypogeum or the actual tomb chamber with its shaft, cut into the rock; the burial.

## § 2. The Superstructure <br> plan

i. The earliest mastabas, i.e., the A class, in our minor cemetery were G 2091 and G 3030. The first was constructed with a core of débris surrounded with a rubble retaining wall probably with internal cross walls also to divide the mass of filling, and the whole exterior cased with a wall of regularly coursed stone. In G 3030 the interior was built in the same way but had finally been cased with a brick wall instead of stone, as had been intended originally. This was the type of the long series of Fourth Dynasty mastabas just to the east, and it may be that both these mastabas were a continuation of that series and of the same date, as they were in line with and parallel to it. G 2091 was badly wrecked. Its casing was torn off to be re-used in other mastabas and over its northern end was built the later mastaba G 2092. No trace of any offering room remained in either of them of the same period. In both cases, however, it must have been built against the eastern façade. The small recess in the casing of G 3030 may have been left for the purpose of building into it an elaborate stone niche. Mastaba G 2091 had one, or more likely two, shafts, since the A shaft of the later G 2092 seemed to be an incorporation of the older shaft into the newer structure. G 3030 presumably had two original shafts, B and C, while A may have been added later. G 3034 was another early mastaba which, although of much smaller size, was built before the space became
congested. It had a débris filling enclosed by a brick wall, and an offering room built against its eastern façade. G 3050 was of the same character, although the offering room found was a later reconstruction after mastaba G 3042 had been built. The traces of an earlier offering room can be seen in Pl. 9. Even G 2092 built over the older mastaba already described apparently followed this early form. Its offering room was a simple chamber built against the eastern façade, to which afterward another room was added. The first room was lighted by a small window high up in the north wall. In only one of these examples was the serdab traceable. In G 3030 it was in the core just inside the retaining wall and behind the alcove.
2. The next step in development in the large mastaba plan was the construction of a small offering chamber inside the line of the eastern façade near its southern end (B). It is a question whether we had a real example of this class in the minor cemetery. In G 2084 such a recess had been left in the core (Cf. F 1 on Plan 1), but when the brick casing was put on this became the serdab. The well built stone cased mastaba G 2085 had a finely finished interior offering room (Cf. E F 2 on Plan I) but this was at the northern end of the eastern façade and therefore if of this period was an exception to the rule. These two mastabas were the only examples of interior offering rooms.
3. Then began the development of the corridor offering room extending along the whole eastern façade of the mastaba. In its earlier form, $\mathrm{C}_{1}$, this had a room or recess at the south end opposite the principal niche. It clearly was an imitation of the old offering room with an entrance corridor or passage added at the north. The best example was G 3033 which was constructed mainly of mud bricks, with débris filling in the larger spaces. The recess at the south was roofed with a semicircular arch over which was carried the vaulting of the main corridor (Cf. BC 3-4 on Plan 1 and Pls. 17-19). One small window on the east lighted the alcove while another one at the north end lighted the corridor. The entrance was in the east wall near the north end of the corridor. Another brick example
of this type was G 2093 ( $\mathrm{E}_{4-5}$ on Plans I and 2). A stone example was G 30ır (C 5-6 on Plan 2). The use of a regular serdab seems by this time to have become a matter of choice. In the former no serdab was built into the main structure, but one was provided later by using one of the niches and sealing it with a stone niche stela. In G 3011 a regular serdab was built behind the main niche, walled with dressed stone and roofed with slabs. A small window opened into the central division of the niche (Cf. Fig. 77).
4. When the cemetery space became more limited, and tombs had to be built in such spaces as were then vacant, the incorporation of the recess at the south end in the plan was determined by the already existing structures. So that instead of being a part of the definite plan it was used only where possible, and marks the second stage in the C class. Of this G 2086 was a good example. The space here was so cramped that this mastaba was built against the north end of G 2085 and close behind G 2084, leaving just room enough between them for an offering corridor (EF $1-2$ on Plan 1). The irregular space left between G 2083, 2084 and 2085 was utilized for the recess offering room. A mastaba (unexcavated) at the north made it necessary to carry the corridor around the northern end of G 2086 to provide an entrance for it. Here just outside the wall was built a serdab roofed with slabs ( $\mathrm{F}_{\mathrm{I}}$ on Plan I and Pl. 30). Another example of this later recess type was G 3036, where the existence of G 3033 determined the plan of the offering room (B3-4 on Plan 1 ).
5. The final phase in the regular development of the plan was the use of a simple straight corridor along the east façade as the sole offering space. This was either built as part of the plan with its own enclosing walls or the narrow space between the new and an older structure was utilized. In the latter case, when the structure was of stone, the rear wall of the older mastaba was refaced with stone before the roofing was put in place. G 3013-14 was an example of a mastaba enlarged from time to time and in the final form having a straight corridor offering room. This used the re-faced rear wall of G 3002
as one side. The greater number of the mastabas in the cemetery were of this latest class. Here again serdabs occasionally occurred but in no regular position.
6. Down to the beginning of the corridor plan in its various forms, mastabas had but one, two, or three shafts arranged on the north-south axis. In the corridor plan there were as many shafts as could be built within the length of the mastaba. There were also, when the width of the structure permitted, extra shafts off the axis. In a few instances these were later shafts built in the old core. Still later than the corridor variety we find another series of mastabas where the shafts are arranged in multiple. The mastaba lost its characteristic form and became merely a group of shafts arranged as compactly as possible. This was clearly the result of the crowded condition of the cemetery at this time, when what space remained had to be utilized to the best advantage. Offering rooms had no regular plan, but like the main structures were built as the space permitted.
7. In the earlier period there was one niche for each burial shaft. In the royal cemetery the main niche, of large size, was near the southern end of the east façade. Near the north end was a smaller niche, the "wife's" niche. In the minor tombs this rule was early neglected and a variable number of niches used without regard to the number of shafts. In G 2093, G 2095, and others, series of small single niches were introduced between the double niches, for the sake of ornament. Early niches conformed to the dimensions of the bricks used, the offsets being the widths of the brick. In the earlier stone cased mastabas the same proportions were followed. When niche stelae.took the place of regularly built niches in both brick and stone cased structures, the niching became shallow and preserved only the idea of the original niche. Even in the late periods, however, brick built niches continued to be deep, but did not adhere strictly to the brick sizes.

CONSTRUCTION
I. Again roughly following the methods used in the royal cemetery we find here several types of construction.
I. (a) Filled mastabas, débris filling with brick facing wall.
(b) Do. do. with stepped stone casing.
II. (a) Core mastabas having an inner structure of débris filling enclosed in a rough rubble retaining wall. This was cased with brick.
(b) Do. do. with stepped stone casing.
III. Mastabas of solid brick.
2. The filled mastabas (1) were the simplest and most easily constructed and therefore the cheapest. In the Ia type the facing walls C were constructed of bricks laid with a batter on the exterior and the thickness kept constant from bottom to top. In some cases the interior was vertical so that the wall decreased in thickness toward the top where the pressure of the débris filling was least. In this case the filling could be put in after the walls were completed, but when the walls were the same uniform thickness throughout, the filling was packed in place as the walls were built. The filling $F$ was of mixed limestone chips, small stones and other débris well rammed down. The exterior of the sloping face was plastered with mud and stuccoed with fine white plaster. In I $b$ the débris filling was always put in place as the courses of stone were laid.
3. In the core type (II) the construction of the rubble facing and the filling progressed.together. The rubble was from $50-70 \mathrm{~cm}$. thick, built of rough stones laid in mud mortar, with small chips inserted in the chinks (Cf. Pl. 11:2). The face was usually, but not always, plastered with mud before the casing was put on. Some plastered cores never had the casing put on and others not plastered were cased. It appears that the rubble was plastered when the casing was not to be built immediately, but that when work on the casing was purposed to go forward at once, this protection of the rubble face was not considered necessary. The casing $C$ was built as in type I. Brick casings were laid up with good mud joints


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and all spaces between them and the inner core facing filled with mud. Stone casings left greater spaces behind the individual stones and these were packed with fragments of stone and mud. The casing stones themselves were sometimes laid up dry, oftener with mud, and in the better built mastabas, in a hard pinkish plaster. Two varieties of dressing were employed. In the greater number of stone cased mastabas, the stones were coursed and stepped, each course set back 5 to 10 cm . from the one next below it, and the stones had rough vertical faces. In G 3031 (exterior walls) and G 3011 (offering room face), the stones had rough convex surfaces, laid to a batter and fitted only at the joints. Even in the better class work the good jointing was only on the exterior. Inside the face the edges were roughly beveled and the resulting spaces filled in with smaller stones.
4. The classification III as a separate type was made to include a few mastabas, such as G 208ı, G 2083 (original structure), G 2096, G 3024, etc., which were constructed throughout of brick with no apparent filling. This construction was, however, the result of size and not intention, as the thickness of the walls between exterior and shafts was too thin to permit of filling being used. Otherwise these would have been merely type la.
5. Just as in the plans, types of construction were rather loosely adhered to. Here again questions of expense or even time had to be considered. Often a mastaba begun in one style was finished in another. Thus G 2086 was planned to have a stone casing, but only a single course along the rear wall was completed and the mastaba was finished with brick facings. On the other hand it sometimes happened that the owner enlarged his scheme. In G 3035 a well built brick mastaba was finished with a fine stepped casing built along its main eastern façade and continued partly around the southern side. It may have extended around the north end as well.

6 . The shafts were lined above the rock surface with brick or rubble. As a rule both brick and stone cased core mastabas had rubble lined shafts, but this was subject to some variation
and a brick faced mastaba might have shafts lined with rubble or vice versa, especially when a change in the exterior facing material had been decided upon.

MATERIALS

1. The most extensively used material was sun-dried brick made in rectangular molds. These invariably contained chopped straw (tibben) with some admixture of sand. The color varied from a dark gray (almost pure Nile mud) to a yellowish brown, when the clay was mixed with the yellow sand of the plateau. The earlier bricks were small, with the length 0.5 cm . to 1.0 cm . more than twice the width to allow for the mortar joint when they were bonded. The thickness bore no apparent ratio to the other dimensions, as the bricks were rarely laid on edge. When this was done, for example in working up masonry from a sloping or uneven surface to a level, a lavish use of mud mortar and bits of brick and stone chips made up for any irregularities caused by the thickness of the bricks. The later bricks were much larger, some as much as $44 \times 22 \times 18 \mathrm{~cm}$. When used for the casing walls the bricks were laid as one, one and a half or more brick lengths thick. The lowest course was laid as headers, i.e., with the lengths of the bricks perpendicular to the line of the wall. The courses then alternated as header courses and stretcher courses, i.e., laid lengthwise of the line of wall. The same system was followed in the linings of shafts and in the free standing walls of offering rooms. When the mastaba was constructed wholiy or largely of brick, only the exterior rows with the niches which were of a size corresponding to the bricks, were built up carefully. The bricks of the inner face would also be carefully set. But in the middle of the walls they were laid haphazard, plenty of mortar and bits of stone, etc., being used to fill in. In simple vaulting the ordinary bricks were employed, but when the ceiling was to be reeded special bricks had to be prepared. For narrow reeding these were made with a half round on one edge, as in G 3024 (Fig. 96). In cases where a wider unit was required the edges had a quarter round only and two were
necessary to make up the full curve, as in G 2098 (Fig. 52). The vault of G 3033 was constructed with a unique variety of bricks. These had not only a quarter round along one edge but regular tongues and grooves on the short ends, so that they locked into one another (Pls. 17-18 and Figs. 107-108). Only one mold was necessary and the full curve of the reeding was obtained by reversing the setting of the bricks in alternate courses.
2. Stone was either the local nummulitic limestone quarried near the cemetery, or white limestone from the quarries at Turah on the opposite bank of the Nile. The local stone was used for the ordinary construction, such as the rubble linings of shafts and the casing on the exterior, as well as the roofing slabs over the offering rooms. Some of the smaller niches had their lintels of this material. The finer limestone was used for niche stelae, for the better inscribed lintels, and sometimes for lining the interior walls of offering rooms.
3. The mortar used in brickwork and sometimes in stonework was made up of black Nile mud mixed with chopped straw and some sand. When used for plastering, the amount of straw was lessened and the yellow sand increased, so that it had a yellow color and a rough surface to which the final white stucco coat would adhere more firmly. Large spaces and crevices were filled with masses of mud in which broken stone and bits of pottery were freely used. The walls of G 2090 A were coated with a hard grayish plaster made up of mud, straw and evidently wood ashes.
4. Stucco was made of plain plaster of paris. When used for the joints of stone casings and for repairing the rough face of stone work, lintels, etc., it was of a pinkish color obtained from adding some red matter, possibly powdered pottery.

## DECORATION

1. All brickwork was first covered with a thick layer of mud plastering, over which was a coat of white stucco. The interior walls of the offering rooms were always finished in this manner, and as some traces of similar plastering and stucco
were found on several exterior walls, the entire exterior may have been thus decorated. The object may have been to give the appearance of fine stone casings like the large mastabas in the royal cemetery. The stucco was very perishable and had for the most part flaked off, so that few hints of the decoration could be obtained. In G 3024 some bits of color could be detected and the northern end of the offering room of G 3033 had the lower black dado well preserved. Above this the walls had a white ground and the vaulting was painted red.


Fig. 2. Diagram of figure (G 3008 west wall, row 3 , left). Showing artists' ruling for vertical proportions (Scale 1:5)
2. G 3008 was an example of the more elaborate scheme (Pls. 53-55). Here was the usual dado of black with a border of narrow yellow and red bands separated by black. The offering scenes were in color drawn first in red outlines. Human figures were drawn in accordance with certain rules of proportion, which were first marked out by horizontal red lines (Fig. 2). On the west wall registers 3,4 and 5 contained processions of servants bearing offerings (Cf. Pl. 55). The division lines in rows 3 and 4 agree very closely, but 5 had several serious variations.

Table of Proportions

| $\begin{array}{lc} \text { Division } & \text { Row } \\ & \text { Millimeters } \end{array}$ | 3 <br> Height | Dif. | $\begin{array}{c\|c} 4 & \\ \text { Height } & \text { Dif. } \end{array}$ | 5 <br> Height Dif. |
| :---: | :---: | :---: | :---: | :---: |
| Top of head | 285 | 10 | 286 II | 280 11 |
| Forehead (bottom of wig) | 275 | 32 | 275 31 | $269 \cdot 38$ |
| Neck | 243 | 20 | 24420 | $\begin{array}{ll}231 & 17\end{array}$ |
| Breast | 223 | 41 | 224 42 | 21438 |
| Elbow | 182 | 45 | 18244 | 176 |
| Hip. | 137 | 47 | $\begin{array}{lll}138 & 47\end{array}$ | 13848 |
| Top of knee (below skirt) | 90 | 90 | 91 91 | 90:90 |
| Ground | 0 | 0 | o 0 | o : 0 |
| Total height |  | 285 | 286 | 280 |

As far as the hip the proportions were maintained. Unfortunately only the left end figure in this row was preserved entire, and the upper part of the next one. But in both these it was clear that the artist realized the error in the rulings which may have been made by an assistant, and drew in his figures in correct proportion disregarding the red guide lines.
§3. Hypogeum SHAFT
i. The shafts were the last portion of the mastaba to be made, and a number of them were in various stages of completion. In G 3022, for example, none of the shafts was cut below the surface, and in G 3023 only A shaft was sunk and two chambers completed. Thus it is clear that the plan of the mastaba was laid out in brickwork or rubble, as the case might be, and the superstructure finished first, leaving the tops of the shafts uncovered. The rock was quarried out by first cutting a groove around the side of the opening, wide and deep enough to manipulate the tool easily. The central part was then split off, doubtless here as elsewhere, with wooden wedges inserted dry and then wetted. This process of splitting off in horizontal layers was continued until the proper depth was reached. The débris was used for the filling of other mastabas in process of construction. It probably was intended to sink the shafts with
vertical sides, that is to keep the cross section uniform from top to bottom. It was, however, exceedingly difficult to do this, and the care and labor required were not available for most of these smaller tombs. As a result the rock portions were very irregular. Usually the bottom was somewhat smaller than the top, but in a few cases it widened, and in still others the dimensions remained approximately the same. ${ }^{1}$ In G 3020 the shaft X twisted as it descended (Cf. C 6 on Plan 2). This may have been intentional, as the workmen, having discovered the presence of the eastern chamber in G 3011 A , wished to avoid breaking through into it.

## CHAMBER

I. The position of the chamber in the older period was south. In G 2091 and shafts B and C of G 3030 this arrangement was followed. The development of the smaller mastaba with its series of closely arranged shafts on the north-south axis, made it difficult to construct south chambers, as in that case the depth of the various shafts would have had to be regulated to avoid breaking into an adjoining shaft. Thus it early became the rule to cut the chambers at the west side of the shaft, and sometimes at the east when to place them at the west would have interfered with some existing chamber or have involved the sinking of too deep a shaft. The chambers were made square and of sufficient size to contain a large wooden coffin. Later in the various corridor plans a pit was often sunk in the floor to contain the body, and this was then roofed with stone slabs after the interment. In the chamber A of G 3008, the rock around the edge of the pit was partly cut in the form of a rim (Cf. Pl. 36). The smaller mastabas often had hurriedly cut chambers intended to be rectangular but left with unfinished corners and ends.
2. The shafts of mastaba G 2093 showed how the presence of one shaft or chamber influenced the construction of a sub-

[^1]sequent one. Here the shafts were sunk in regular order from south to north. Shaft A was sunk to a depth of 505 cm . and a chamber (II) made at the south, nothing in the vicinity interfering with this. ${ }^{1}$ When B came to be sunk there remained sufficient room between the roof of the earlier western chamber and the rock surface to permit of a chamber being made on the west and even carried south beyond the line of the shaft without interfering with A. C was carried down to the same level as B but there was space for a small chamber only which was cut slightly off the north line of the shaft. The masons working in D apparently did not know of the existence of the chamber in C. When they had reached the same depth they began the chamber at the west. When quarrying toward the south they broke into the older chamber. They then carried on the wall farther north leaving a rough offset. Apparently the wall sounded too thin and they again changed the plan, and the room was finished toward the north. This, however, cut off the possibility of any other chamber on the west on this level, and when the masons came to cut $E$ they did not care to carry the shaft so much deeper, and so made the chamber at the east. The method of quarrying was exactly the same as used in the shafts. After the door opening was made, vertical grooves were cut first to get out the central mass, and then a series of successive grooves and splittings following around the lines of the walls. All irregularities were chipped off and the walls dressed down by chiseling (Cf. Pls. 33, 35:4, 37:4, etc.). Copper implements were used and the edges as they dulled were resharpened on sandstone hones, one of which was found with traces of rubbing upon it in the chamber G 2091 .
3. The doors were sealed either with one or more slabs of stone ( Pl .32 ); with a rubble wall (Pl. 34); or with brick (Fig. 88). In G 2090 A the door was sealed with a block of stone slanting against the lintel of the door and resting on another flat block. The crevices were plastered tight and probably this was true in every case, no matter what material was used. In

[^2]A of $G 3013$, the door was recessed across the top and down the right side to receive the slab and make a tighter sealing (Cf. Fig. 8o).
§4. Burial
The burial position obtaining throughout the minor cemetery with but few exceptions was as follows:

Head: North facing east. Sometimes placed on a stone or a brick as a head rest.
Body: On left side. Sometimes placed nearly on back but leaning toward the left.
Legs: Usually having the heels drawn up toward the pelvis. The arrangement of the upper legs varied from the old Predynastic fully contracted position, closely drawn up against the chest, to one in which they were at right angles or even at an oblique angle to the vertebrae.
Arms: Sometimes up before the face, but in some examples resting on or clasping the knees, and in yet other cases straight down at the sides.

The amount of contraction of the limbs was influenced by the size of the chamber, and the bodies in some of the smaller rooms were contracted deliberately to make them fit into the space. The exceptions to the regular position were only six in number. Two were placed face downward with the heads toward the north (G2082 A and G 2088 D) and in both cases were late burials at the bottom of shafts. The other four were lying on the left side, with the head west facing north (G 2085 A, G 2092 X, G 2095 A and G 3032 II). All were in chambers cut at the south side of the shaft, but in late mastabas.

## CHAPTER III

## DETAILED DESCRIPTION OF MASTABAS¹

## G 2071

Mastaba, type II $b$, débris filling with mud plastered rubble. Retaining walls and stepped stone casing. The latter had almost entirely been stripped off. Size approximately 465 x 285 cm ., orientated $2^{\circ} \mathrm{E}$. of N . One shaft only, at south end (F 3-4 on Plan 1 ).

Shaft: $80 \times 90 \mathrm{~cm}$. and 450 cm . deep, lined with mud plastered rubble. The shaft widened slightly at bottom. ${ }^{2}$ Chamber at west, $90 \times 100 \mathrm{~cm}$. widening to 120 cm . at the west, and 90 cm . high. Irregular and apparently never finished. Found unsealed.


Fig. 3. G 207I. Burial

Burial: Young adult male lying partly contracted on left side, head north facing east. Heels drawn partly up to hips, with upper legs at right angles to body. Lower arms stretched out at right angles. The body rested on a layer of fine sand (Fig. 3).
${ }^{1}$ In the following catalogue note that:
(a) All dimensions are expressed in centimeters.
(b) When two dimensions are given, the order is always north-south $x$ east-west. Depth or height always given last. Brick sizes are length $\mathbf{x}$ breadth $\mathbf{x}$ thickness.
(c) Magnetic north is indicated by an arrow in each figure. In the text, orientation is expressed as so many degrees E (ast) or W (est) of N (orth). After a few dimensions the letters $\mathrm{N}, \mathrm{S}$, etc., denote dimensions at north, etc. In other cases directions are printed in full. On Plans 1 and 2, the north is at top of sheet.
(d) In the descriptions of shafts, the lining signifies that portion built of brick or rubble above the rock surface. In these mastabas none of the rock sides was faced wi $h$ masonry.
${ }^{2}$ As a rule, the shafts narrowed in both dimensions after entering the rock. In all cases, the dimensions varied because of the roughness both of material and workmanship. Only excep tional differences will be given.

## G 2072

Mastaba, Type III, built of brick, except for the division wall between the two shafts which was of rubble. Size, 450 x 260 cm ., orientated due N . Two shafts on main axis ( F 3 on Plan I).
A. Shaft: $115 \times 110 \mathrm{~cm}$. and 335 cm . deep, lined with brick, rubble on north. Mud plastered. Chamber at west. The door was 100 cm . wide with slight offsets at sides. The south jamb was 40 cm . thick but the walls of the room were not cut more than 25 cm . south of the opening. Work was probably abandoned because of a bad fault in the rock at the west (Fig. 4). Found unsealed.
Burial: In wooden coffin (traces only). Aged female lying on left side, head north facing east. Heels drawn up to hips with knees opposite chest. Hands before face. The coffin had been pushed as far into the chamber as possible.
B. Shaft: $100 \times 95 \mathrm{~cm}$. and 370 cm . deep, lined with brick, except rubble on south side. Chamber at west, $125 \times 120$ cm . and 90 cm . high. Rough and uneven and probably left unfinished as in A. Found unsealed.
Burial: In wooden coffin ca. 90 cm . long. Adult lying on left side, head north facing east. Heels drawn up to hips with upper legs at right angles to body. Body disturbed and only the legs and a few vertebrae remained in situ.

## G 2073

Mastaba, Type II $b$, débris filling with mud plastered rubble retaining wall and stepped stone casing, of which portions remained along the three sides cleared. Size, $690 \times$ ? cm., orientated $2^{\circ} \mathrm{W}$. of N . (F $2-3$ on Plan 1). This mastaba may be a reconstruction of a larger one which included the shaft $X$ at the north. The final mud plastered retaining wall and a fragment of the stepped facing extended over a portion of rubble facing on the south side of shaft X . This shaft, however, was on the same axis as A to C .
A. Shaft: $110 \times 110 \mathrm{~cm}$. and 430 cm . deep, lined with mud plastered rubble. Chamber at west, 145 cm . wide at door increasing to 155 cm . at west, x 85 cm . and 65 cm . high. Found unsealed.
Burial: Adult male lying on left side, head north facing east. The head originally rested on a stone but had

rolled off. Legs slightly contracted. Hands on knees. A fragment of cloth still adhered to vertebrae (Fig. 5).
B. Shaft: $115 \times 113 \mathrm{~cm}$. and 295 cm . deep, decreasing in width to 85 cm . at the bottom. Lined with mud plastered rubble. No proper chamber, but a large slab of stone fitted into the west wall 68 cm . above the bottom formed the roof of a recess, the size of which was increased somewhat by cutting away the rock at the west and south sides.

Burial: Adult male lying almost on back (slightly on left side). Head north, with chin resting on chest, facing south. Legs slightly flexed at knees, with upper legs nearly at right angles to body. Hands over pelvis (Fig. 6).
C. Shaft: $110 \times 105 \mathrm{~cm}$. and 405 cm . lined with mud plastered rubble. Chamber at west, $90 \times 90 \mathrm{~cm}$. and 85 cm . high, cubical in shape, and without offsets at the door. It was found unsealed, but between the door and the body was a single row of rough stones.
Burial: Adult male lying on back, head north facing up. Legs flexed enough to get the body into the chamber. Left arm extended at side, right hand on right knee (Fig. 7).


Fig. 7. G 2073 Burial C


Fig. 8. G 2073 Burial X


Fig. 9. G 2074 Burial A
X. Shaft: $128 \times 104 \mathrm{~cm}$. and 355 cm . deep. At the bottom the shaft cut through poor rock and nearly the entire width of the south side had been repaired with rubb'e to a height of 100 cm . Chamber at west, $115 \times 150 \mathrm{~cm}$. and 80 cm . high. Found unsealed.
Burial: Adult male lying contracted on left side. Head north facing east. Heels drawn up to hips with knees partly drawn up before chest. Hands before chin (Fig. 8).

## G 2074

Mastaba, begun as Type llb, débris filling and stepped stone casing. Finished with brick core and stepped stone casing. Size $550 \times 350 \mathrm{~cm}$., orientated $2^{\circ} 30^{\prime} \mathrm{W}$. of N. Six shafts in multiple system. ( $\mathrm{F}_{2}$ on Plan 1).
A. Shaft: $115 \times 95 \mathrm{~cm}$. and 165 cm . deep, lined with rubble for 40 cm . above the rock surface, thence to top with brick. Sunk only 60 cm . into rock. Apparently never used.
B. Shaft: $105 \times 100 \mathrm{~cm}$. and 345 cm . deep, lined with brick. Chamber at east, $160 \times 90 \mathrm{~cm}$. and 77 cm . high. Found unsealed.
Burial: Adult male lying fully contracted on left side, head north facing east. Teeth much worn. Heels drawn back to hips, with knees opposite chest. Hands before face (Fig. 9).
C-F. Shafts never sunk into rock. All lined with brick.

## G 2081

Mastaba, Type III, built of dark gray bricks, $36 \times 18 \mathrm{x}$ 11.5 cm ., laid in yellowish sandy mud mortar (E F $3-4$ on Plan 1). Enlarged to final size, $810 \times 365 \mathrm{~cm}$. Orientated $8^{\circ}$ $E$. of $N$. The original shafts were $B$ to $D$. On the east façade were two double niches with a single one between them. The west and east faces had a batter of $85^{\circ} 30^{\prime}$ and $85^{\circ} 15^{\prime}$ respectively and the exterior of the brick portion was plastered with a heavy coat of yellowish mortar, a mixture of mud, sand and straw. Later the mastaba was increased by the addition of $E$ at the northern end, built of bricks, $34 \times 16 \times 12 \mathrm{~cm}$. The east façade of this new work was faced with stone in which was a shallow niche stele. This was set back from the line of the older face. At this time the offering room was rebuilt as a corridor type, utilizing the space between G 2081 and 2082. This was probably roofed. The north end of the room destroyed the southern end of G 2087 and the coursed stone wall runs over shaft A of the latter. Still later an intrusive burial A was placed in a shaft cut in the original brick core and relined with bricks, $42 \times 18 \times 14 \mathrm{~cm}$. Another intrusive burial, X, was placed in the corner made by the south wall of G 2081 and the extension around it of the ante-room of G 2094.
B. Shaft: $100 \times 100 \mathrm{~cm}$. and 400 cm . deep, lined with bricks, repaired with rubble. Chamber at west, $115 \times 60 \mathrm{~cm}$., and 70 cm . high. Found unsealed.

Burial: Young adult female lying on left side, head north facing up. Had fallen from a brick $39 \times 18 \times 12$ cm . used as a head-rest. Heels drawn up to hips with knees before chest. Hands before chest (Fig. io).
C. Shaft: $100 \times 100 \mathrm{~cm}$. and 200 cm . deep, lined with brick. No chamber. Empty.
D. Shaft: $115 \times 95 \mathrm{~cm}$. and 220 cm . deep, lined with brick. At bottom a grave $105 \times 41 \mathrm{~cm}$. and 42 cm . high, at the east side. Built with rough stones laid in mud and roofed with slabs 28 cm . thick. Empty.
E. Shaft: $110 \times 100 \mathrm{~cm}$. and 415 cm . deep, lined with brick. Chamber at west, $152 \times 60 \mathrm{~cm}$. and 85 cm . high. Found unsealed.


Fig. 10. G 208I Burial B


Fig. 11. G2081 Burial E


Fig. 12. G 2081 Burial X

Burial: Young adult female lying on back, head north facing up. Legs slightly bent at knees and inclined toward left side. Left arm straight, right hand on pelvis (Fig. il).
A. Shaft: $75 \times 75 \mathrm{~cm}$. and 205 cm . deep. Cut in original brick core and not sunk to rock surface. Relined with larger brick. Chamber at west, $100 \times 70 \mathrm{~cm}$. and 85 cm . high. Found unsealed and empty.
X. Shaft: $105 \times 95 \mathrm{~cm}$. and 227 cm . deep, lined with rubble and brick. At bottom a grave extending 74 cm . under the south side of shaft, lined with stone. The roofing of exposed portion missing.

Burial: Adult lying on left side, head north facing eas $t$ Heels drawn up to hips with knees before chest. Hands before chin (Fig. 12).
G 2082
Mastaba, Type IIb, débris and small loose rubble filling with stepped stone cutting. Size, $1015 \times 390$ (S. end) and 350 cm . (N. end), orientated $3^{\circ} 30^{\prime} \mathrm{E}$. of N. On east façade a shallow niche stele. In the débris over the adjoining mastaba, G 2071, was a large stone offering basin, which may have belonged to this offering room (Cf. Insc. No. I and Pl. 52:3). Near south end, opposite shaft A, the facing was broken away. Another niche stele had been built in here but later removed by stone thieves. On the western face near south end was a vertical offset 240 cm . wide, which appeared to be part of the offering room of G 2081 or of an earlier mastaba which had been replaced by the brick mastaba G 2081. ${ }^{1}$ There were three shafts A-C and in the space between this mastaba and 2071 was an intrusive burial X ( $\mathrm{F}_{3-4}$ on Plan 1).
A. Shaft: $95 \times 78 \mathrm{~cm}$. and 313 cm . deep, lined with rubble. No chamber. At bottom of shaft, two courses of stone had been built along the east side and the south side cut under $c a .20 \mathrm{~cm}$. to
 make a space for an intrusive burial. Burial: Adult female lying nearly on face, head north. The body apparently had lain originally on its right side, facing west. Heels drawn up behind pelvis with upper legs down straight. Hands before chest (Fig. 13).
B. Shaft: $100 \times 110 \mathrm{~cm}$. and 435 cm . deep, lined with mud plastered rubble to a height of 145 cm . above rock surface, thence to top with bricks. Chamber at west, $150 \times 98 \mathrm{~cm}$. and 100 cm . high. Found unsealed.

[^3]

Fig. 14 G 2082 Burial C

Burial: Disturbed remains of adult. Apparently had lain on left side, head north.
C. Shaft: $100 \times 87 \mathrm{~cm}$. and 420 cm . deep, lined with mud plastered rubble. Chamber at east, $120 \times 75 \mathrm{~cm}$. and 80 cm . high. Found unsealed. Burial: Adult male lying on left side. Head, fallen forward on face, north facing east. Heels partly drawn back to hips with upper legs at right angles to body. Hands before face (Fig. 14).
X. Shaft: $80 \times 10 ; \mathrm{cm}$. and 390 cm . deep, lined with rubble. In west side appeared one of the niches of the main mastaba. Chamber at north, 50 x 105 cm . and 65 cm . high. Found unsealed.
Burial: Adult male lying on left side. Head west facing north. Heels drawn up to hips with upper legs partly drawn up before chest. Hands at knees (Fig. 15).

G 2083
Mastaba, originally type III but with several reconstructions. The original mastaba built against the south side of G 2084, was $430 \times 290 \mathrm{~cm}$., orientated $6^{\circ}$ E. of N. Built solidly of brick, $38 \times 21$ $x 13 \mathrm{~cm}$. Along the east façade were four niches. That at the south end was a large double niche. Then a small double niche (worked out in mud plaster) between two single niches. The shafts E and F belonged to this structure. The first extension was $170 \times 320 \mathrm{~cm}$. and built of rough rubble, with mud plastered surfaces. This contained shafts B and C. Still later another rubble extension on the south added an additional 260 cm . to


Fig. 15. G 2082 Shaft and burial X
the length. It consisted of a single enclosure, in which was shaft Y. At this time a new offering room was built along the whole east façade, with walls of rubble. The door was near the north end. In this chamber was an intrusive burial X ( F 2 on Plan 1).
E. Shaft: $100 \times 95 \mathrm{~cm}$. and 460 cm . deep, lined with mud brick. Chamber at west, $145 \times 110 \mathrm{~cm}$. and 110 cm . high. Found unsealed and empty, except for two fragments of leg bones. At the southeast corner the shaft was broken through into the chamber of shaft $B$.
F. Shaft: $90 \times 88 \mathrm{~cm}$. (narrowing at bottom to $75 \times 75 \mathrm{~cm}$.) and 310 cm . deep, lined with bricks. No chamber. Empty.
B. Shaft: $105 \times 76 \mathrm{~cm}$. and 575 cm . deep, lined with mud plastered rubble. Chamber at north, $120 \times 150 \mathrm{~cm}$. and 95 cm . high. Irregular in plan and at the northeast corner broken through into the shaft of $E$. Found unsealed.
Burial: Disturbed. Adult male lying on left side, head north facing east, fallen forward on face. Right leg drawn up and upper leg at right angles to body. Bones of left leg moved to front of breast. The body lay on sand.
C. Shaft: $115 \times 67 \mathrm{~cm}$. and 210 cm . deep, of which only 20 cm . was in rock. Lined above rock surface with mud plastered rubble. No chamber. At bottom an intrusive burial.
Burial: Adult male (?) lying on left side, head north facing east. Heels drawn up to hips with knees before chest. Hands probably up before chin. Resting on a layer of sand (Fig. 16).
X. Shaft: $90 \times 83 \mathrm{~cm}$. and 305 cm . deep. All superstructure destroyed. Chamber at east, $146 \times 105 \mathrm{~cm}$. and 85 cm . high. Found unsealed.
Burial: Young adult male lying on left side, head north facing east. Head had rested on a stone but had fallen face down. Heels partly drawn back to hips with upper
legs nearly at right angles to body. Arms displaced, but probably hands before face. The body rested on a thin layer of fine limestone chips, over a bed of sand (Fig. 17).
Y. Shaft: $97 \times 95 \mathrm{~cm}$. and 90 cm . deep. Superstructure destroyed.
Burial: Young male (?) lying on left side, head north facing east. Heels drawn up to hips with knees before chest. Hands clasping knees (Fig. 18). In débris a rough red ware pointed jar 27 cm . high, like those in offering room of G 2092 (q.v.).


Fig. 16. G 2083 Burial C


Fig. 17. G 2083. Burial X


Fig. 18. G 2083 Burial Y

## G 2084

Mastaba, type IIb, débris filling with rubble retaining wall, but not cased. Size, $700 \times 425 \mathrm{~cm}$., apparently extending farther toward the north under the unexcavated area. Orientated $7^{\circ} \mathrm{E}$. of N. The original structure contained at least three shafts, A to C. On the east front was a chamber M, 255 cm . long, probably intended for the original offering room. Outside of this was later built a façade of bricks, $39 \times 18 \times 12 \mathrm{~cm}$., with two double niches. An offering room N, of brick $30 \times 13$ x 9 cm . was built against this new face, and the chamber M then became the serdab ( F I on plan 1).
A. Shaft: $95 \times 92 \mathrm{~cm}$. and 625 cm . deep, lined with mudplastered rubble. Chamber at south, $100 \times 102 \mathrm{~cm}$. and 80 cm . high. Found unsealed and empty.
B. Shaft: $100 \times 105 \mathrm{~cm}$. and 400 cm . deep, lined with mudplastered rubble. Chamber at north, $150 \times 220 \mathrm{~cm}$. and 120 cm . high. Found unsealed. At western end of
chamber, was sunk a pit $150 \times 60$ cm . and 55 cm . deep, with one large slab of its cover still in situ. A smaller slab had been pulled off and lay on floor of chamber. In the pit was a mass of adult bones. Apparently the body had lain on its left side, head north.
C. Shaft: $96 \times 92 \mathrm{~cm}$. and 283 cm . deep, lined with rubble. No chamber. At bottom the shaft was lined with bricks, enclosing a space $70 \times 60 \mathrm{~cm}$. in which was an intrusive burial.


Fig. 19. G 2084 Shaft and burial C.

Burial: Adult male lying on left side, head north facing east. Knees drawn up to chin and hands before face (Fig. 19).

## G 2085

Mastaba, type $\mathrm{I} b$, débris filling with stepped stone casing. Size, $915 \times 440 \mathrm{~cm}$., orientated $3^{\circ} \mathrm{E}$. of N. (E 2-3 on Plan 1). On east face six to eight courses of the casing were preserved. Near the north end a small offering recess, O, was built in the core and lined with vertical walls of finely dressed and coursed limestone (Fig. 20). In the west wall of this was a shallow double niche cut in a single block. On the main east façade were also a single and a double niche, built into the coursed masonry with the proportions of mud brick niches. In both of them the fifth course of casing served as the lintel of the niche. The main offering room was of the corridor type and occupied the space between this mastaba and G 2083 to the east. Walls of coursed masonry were built at the north and south ends of this, leaving a door at the south end of the east façade. The north wall was built against an earlier brick wall, $d$, which extended out from the rear wall of the original G 2083 ( Pl .20 ). The eastern side of the offering room was faced with limestone
built partly into the rear face of G 2083. Probably roofed with slabs.

The original structure contained four shafts, A to D, of which only A to C were completed. D was sunk only a short distance into the rock and may have been utilized as the serdab behind the offering chamber. Later an intrusive burial X was sunk in the north end of the corridor and a brick wall $a$ was built across the opening into the recess and another across the corridor to enclose the new shaft.


Fig. 20. G 2085. Transverse section through offering room
A. Shaft: $105 \times 110 \mathrm{~cm}$. and 500 cm . deep, lined with mud plastered rubble. Chamber at south, $60 \times 100 \mathrm{~cm}$. and 65 cm. high. Found unsealed.
Burial: Adult female lying on left side, head west originally facing north but fallen face down. Heels drawn up to hips with knees opposite chest. Right arm under legs and left between legs (Fig. 21).
B. Shaft: $97 \times 100 \mathrm{~cm}$. and 424 cm . deep, lined with mud plastered rubble. On west patched with brick. Chamber at west, $140 \times 175 \mathrm{~cm}$. and 94 cm . high. Found unsealed.

Burial: Adult male lying on left side, head north facing east. Heels drawn up to hips with upper legs at right angles to body. Hands up before face. Traces of flesh and of cloth still adhered to bones. Under the head were the remains of a wooden head-rest (Fig. 22).
C. Shaft: $95 \times 100 \mathrm{~cm}$. and 400 cm . deep, lined with mud plastered rubble. Chamber at west, $208 \times 115 \mathrm{~cm}$. and 100 cm . high. The door was 80 cm . wide and had slight jambs 40 cm . thick on either side. The walls of the chamber were very regularly cut. Found unsealed.


Burial: Adult female lying extended on left side, head north facing east. Legs straight, only slightly bent at knees. Left arm straight at sides, right arm bent across abdomen (Fig. 23).
D. Shaft: $100 \times 97 \mathrm{~cm}$. and 225 cm . deep, sunk only 45 cm . into rock. Lined with rubble. Empty.
X. Shaft: $125 \times 90 \mathrm{~cm}$. and 650 cm . deep. The lining walls on the east and north were the walls of the older offering room, and on the west and south of brick. At a depth of 150 cm . below the rock surface a chamber was begun. Its door was the full width of the shaft, but the chamber
itself was cut into the rock only 40 cm . The main chamber was at the bottom at the west. The door jambs were 55 cm . thick and the chamber $227 \times 186 \mathrm{~cm}$. and 110 cm . high. In the floor was sunk a pit, $158 \times 100 \mathrm{~cm}$. and 80 cm . deep. Found unsealed and empty.

G 2086
Mastaba, type III, of gray bricks, $26 \times 12 \times 8.5 \mathrm{~cm}$. It was purposed to enclose the mastaba with a stepped stone casing, but this was begun on the west side only and then completed with brick (Fig. 24). Size, $600 \times 260 \mathrm{~cm}$., orientated $5^{\circ} \mathrm{E}$. of N. Built in the angle formed by G 2084, G 208 ; and


Fig. 24. G 2086. Transverse section showing construction
a stone cased mastaba to the north not excavated (E r-2 on Plan 1). The offering room was of the corridor type with a recess $M$ at the southern end. The latter, however, was built because of the space available. The corridor extended the whole length of the mastaba and around the north end where was the entrance. The east façade had a series of single and double niches. In front of one of the small single niches was the offering basin of Ruwz (Pl. 20. Cf. also Pl. 46:1 and inscription No. 13). Just outside the north end of the corridor was a small serdab $\mathrm{S}(\mathrm{Pl} .30), 80 \times 93 \mathrm{~cm}$. and 75 cm . high with white stuccoed walls and roofed with slabs. In this was the offering basin of Mesat, the wife of Ruwz (Cf. Pl. 46:2 and No. 14). With this were the fragments of a wooden statuette.

On the floor outside this serdab and just inside the entrance was a red granite slab dedicated to Mesat (Cf. Pl. 48:4 and No. 15). In the débris over the roof of the serdab was found a rough limestone statuette ( $\mathrm{Pl} .43: 1,2$ and No. 12).

Later the southern end of the corridor was partitioned off by a thin wall into a smaller chamber and in this was an offering stand of red polished pottery with the name Beb-Іb scratched upon it (Fig. 25). In the débris of the main corridor were fragments of other stands similarly inscribed. There were four shafts, A-D.
A. Shaft: $93 \times 90 \mathrm{~cm}$. and 415 cm . deep, lined with brick. Chamber at west, 150 $x+10 \mathrm{~cm}$. and 85 cm . high. Found unsealed. In the floor was sunk a pit, $150 \times 70 \mathrm{~cm}$. and 49 cm . deep. Covered with three slabs of stone $c a$. 10 cm . thick. One of them had been pulled off and thrown into the shaft. Empty.
B. Shaft: $90 \times 88 \mathrm{~cm}$. and 625 cm . deep, lined with brick. Chamber at north, $190 \times 165 \mathrm{~cm}$. and 105 cm . high. Found unsealed and empty.


Fig. 25. G 2086 Pottery stand of
C. Shaft: $90 \times 90 \mathrm{~cm}$. and 194 cm . deep. Beb-ib (Scale I:5) Never sunk below rock surface. Lined with brick and with an inner casing at bottom of dressed limestone $c a$. 15-20 cm. thick, of which three courses remained. Apparently never used for burial.
D. Shaft: $90 \times 95 \mathrm{~cm}$. and 385 cm . deep, lined with brick. Chamber at north, $180 \times 140 \mathrm{~cm}$. and 75 cm . high. Found unsealed and empty.

## G 2087

Mastaba, type III. The original structure was of brick, and $350 \times 230 \mathrm{~cm}$. in size, orientated $6^{\circ} \mathrm{E}$. of N. (F 3 on Plan I ). On the east façade were two double niches, with rough stone slabs as lintels. The whole surface was plastered with mud mortar and then finished with white stucco. This structure
contained the two shafts $A$ and $C$. The south end of the mastaba was destroyed during the erection of G 208ı and possibly G 2082 and the stone facing wall of the offering room of G 2081 was built across the top of shaft A. Later two shafts, B and D, were added to the east face of the original structure. These were built of rubble and a thin facing in this material was carried around the north end of the brick mastaba. This new addition was built against the north end of G2082. The two old niches appeared in the west sides of the new shafts (Figs. 26, 27). Still later an intrusive burial $X(=E)$ was placed between $D$ and the walls of the final reconstruction of the offering room of G 2083.
A. Shaft: $104 \times 106 \mathrm{~cm}$. and 420 cm . deep, lined with brick but repaired later (possibly at the time the rubble addition was erected) with rubble. Chamber at south, 135 x 90 cm . and 90 cm . high. Found unsealed.
Burial Disturbed. In coffin of wood ca. 1.5 cm . thick. Adult female lying on back, head north (pulled off). Knees drawn up and fallen to east. Hands down on knees.
C. Shaft: $90 \times 79 \mathrm{~cm}$. and 302 cm . deep. Lined with brick, but repaired as in A with rubble. Chamber at west, $100 \times 65 \mathrm{~cm}$. and 74 cm . high. Found unsealed.
Burial: Disturbed. In coffin $80 \times c a .45 \mathrm{~cm}$., of wood 1.5 thick. Adult lying on left side, head north (missing) facing east. Heels drawn up to hips with upper legs out at right angles to body.
B. Shaft: $105 \times 130 \mathrm{~cm}$. and 430 cm . deep. Lined with mud plastered rubble except west side which was the face of older structure with one of its niches. At a depth of 195 cm . below the rock surface was a shallow recess 40 cm . deep. Main chamber at bottom to east, 130 x 50 cm . and 60 cm . high. Found unsealed.
Burial: Adult female lying on left side, head north facing east. Heels drawn partly up to hips with upper legs out at right angles to body. Hands resting on knees. Body rested on a layer of sand (Fig. 26).
D. Shaft: $102 \times 91 \mathrm{~cm}$. and 360 cm . deep. Lined with mud plastered rubble except as in B. Chamber at north, $50 \times 80 \mathrm{~cm}$. and 85 cm . high. Found unsealed.
Burial: Adult female lying on left side, head east facing south. Heels drawn back to hips with upper legs at


Fig. 26. G 2087. Burial $B$


Fig. 27. G 2087
Shaft and Burial D
right angles to body. Supported on a pile of rough stones and a fragment of brick (Fig. 27).
X. (=E) Shaft: $79 \times 70 \mathrm{~cm}$. and 145 cm . deep. Never cut into rock. Lined with rubble, with brick near top (Pl. 31:1). Chamber at west, $120 \times 80 \mathrm{~cm}$. and 55 cm .
high, constructed in the masonry. The door was 48 cm . wide and covered with a lintel 17 cm . thick. The chamber was roofed with stone slabs, two of them still in situ. Found unsealed.
Burial: Young adult temale (?) lying on left side, head north facing east. Heels drawn up to hips with upper legs at right angles to body. Hands between legs (Fig. 28, and Pl. 31:2). At head a bowl (1) of red polished red ware 22.5 cm . diam.


Fig. 28. G 2087. Shaft and burial E
G 2088
Mastaba, type $\mathrm{l} a$, débris filling with brick facing walls. Size $615 \times 410 \mathrm{~cm}$. exclusive of addition, and orientated $14^{\circ} \mathrm{E}$. of N. (E 2-3 on Plan 1). This mastaba was built between G 2097 and the earliest (i.e., western) portion of G 2098. At its northern end the north side of shaft $D$ was the already existing face of G 2098. The joint between its southern end and G 2097 was nearly vertical and it may be that the face of the latter was cut away somewhat when G 2088 was being built. The east façade had quite a different orientation from the two adjoining mastabas, which were the same. The bricks were yellowish sandy clay, $40 \times 20 \times 15-16 \mathrm{~cm}$. One double niche
was visible opposite shaft A. Against the east façade an addition of dark gray bricks $42 \times 20 \times 15 \mathrm{~cm}$. was built later. This did not contain any shafts, and its purpose was not clear. It was built before the addition to G 2098 was erected, as the south side of B of the latter was the face of G 2088. A much denuded wall enclosed the visible niche. This wall was apparently the latest offering wall as it was built outside the face of the addition. Four shafts, $\mathrm{A}-\mathrm{D}$, on the main axis, almost in line with those of mastaba G 2007.
A. Shaft: $95 \times 95 \mathrm{~cm}$. and 430 cm . deep, lined with mud plastered rubble. Chamber at west, $130 \times 101 \mathrm{~cm}$. and 110 cm . high. Found unsealed. Burial: Disturbed. Adult, skull and leg bones only.
B. Shaft: $88 \times 90 \mathrm{~cm}$. and 380 cm . deep, lined with mud plastered rubble and brick. Chamber at west, $84 \times 60 \mathrm{~cm}$. and 95 cm . high. Found unsealed and empty.
C. Shaft: $89 \times 88 \mathrm{~cm}$. and 505 cm .
 deep, lined with mud plastered Fig. 29. G 2088. Burial D rubble and brick. Chamber at west, $150 \times 108 \mathrm{~cm}$. and 115 cm . high. Found unsealed and empty.
D. Shaft: $120 \times 100 \mathrm{~cm}$. and 165 cm . deep. Never sunk into rock. At bottom a shaft burial.
Burial: Adult lying almost face down, but on right side, head (crushed) north facing down (west?). Heels drawn up to hips, with knees opposite chest. Left arm straight down. Right arm bent under body (Fig. 29).

## G 2090

Mastaba, type $I b$, débris filling with stepped stone casing. Size, $705 \times 290 \mathrm{~cm}$. orientated the same as the series of large mastabas of the Fourth Dynasty lying to the east. It was built to fill the space between the westernmost of these, G 1223 , and a similar mastaba of practically the same date, the original

G 2091-2. The rear wall of the new mastaba was built against the face of the latter, while a space was left along the east for a corridor type offering room (E 6 on Plan 2). The space available was just sufficient to include in the mastaba a row of shafts and this offering room. The stepped stone casing was carried all around the main structure, but while on the exterior walls the courses were set back $c a .5 \mathrm{~cm}$. each, in the wall of the offering room the offsets were 2 cm . only, and several of the


Fig. 30. G 2090. Shaft and chamber A
courses were set flush. In the corridor was a shallow triple niche in one block built into the masonry. The offering chamber was 197 cm . high and roofed with slabs ca. 22 cm . thick. One end of these rested on a ledge of the stepped courses of the large Fourth Dynasty mastaba (Cf. Section CD on Plan 3 and Pl. 3). It had been intended originally to have four shafts, but one had been used for the chamber of shaft A . At the northern end of the offering chamber two pits had been begun in the rock, but were sunk only slightly below the chamber floor. Outside of the tomb just to the left of the door was a
shaft to which belonged the fragmentary rubble wall to the west. In the débris outside door of offering chamber were an uninscribed basin and fragments of large jars.
A. Shaft: $95 \times 90 \mathrm{~cm}$. extending only to the rock surface. Lined with mud plastered rubble. Chamber on north, $118 \times 90 \mathrm{~cm}$. and 75 cm . high. Entered through a door 72 cm . wide, the jambs of which were two single vertical stone blocks 17 cm . thick. The chamber was roofed with three slabs, one of them a re-used niche stele. The roofing extended through to the shaft forming the lintel of the door. The walls of the chamber were plastered with grayish stucco, probably a mixture of mud and ashes. The door was sealed with a large slab of stone resting on another smaller block and leaning against the opening. The joints were filled with mud plastering (Fig. 30).
Burial: Disturbed. ${ }^{1}$ Adult lying on left side, head north facing east.
B. Shaft: $88 \times 89 \mathrm{~cm}$. by 630 cm . deep, lined with mud plastered rubble. Contained two burial chambers, both at west. The floor of the upper (I) was at a depth of 265 cm . below the rock surface. The lower (II) at bottom of shaft (Cf. Section CD on Plan 3). I. Chamber $138 \times 108 \mathrm{~cm}$. and 80 cm . high. Door 67 cm . wide with jambs 27 cm . thick. Sealed to a height of 40 cm . with a wall of small square blocks, above which the opening was filled with rubble thickly coated with mud. In the floor was sunk a pit 52 cm . wide, 45 cm . deep and extending the full ( $\mathrm{N}-\mathrm{S}$ ) length of the chamber. This had been covered with large flat slabs, one still in situ.
Burial: Adult male, somewhat disturbed, lying on left side, head north facing east. The legs were bent at the knees to get them into the pit. The right forearm was missing and the left arm extended under the pelvis (Fig. 31, I).

[^4]II. Chamber $135 \times 92 \mathrm{~cm}$. by 80 cm . high. Door 68 cm . with jambs 30 cm . thick. It had been sealed with a plastered coursed wall of squared blocks as in chamber 1 . Of this only one course remained. A pit was sunk in the floor 54 cm . wide, 53 cm . deep and the full ( $\mathrm{N}-\mathrm{S}$ ) length of the chamber. This had been covered


Fig. 31. G. 2090 Burial B I and II with flat slabs $12-13 \mathrm{~cm}$. of which the middle one had been pulled off and lay in the door.
Burial: Adult female lying on left side, head north facing east. Under the head were two small stones as a pillow. Heels drawn up to hips with knees down to squeeze body into the pit. Arms extended down between legs (Fig. 31, II).
C. Shaft: $88 \times 90 \mathrm{~cm}$. and 498 cm . deep, lined with mud plastered rubble (Fig. 32). Chamber at east, $143 \times 90 \mathrm{~cm}$. and 78 cm . high. Door 59 cm . wide with jambs 20 cm . thick. Sealed with a single large slab 20 cm . thick. The floor was 7 cm . lower than the sill of door. Pit sunk in floor 54 cm . wide, 48 cm . deep and the full ( $\mathrm{N}-\mathrm{S}$ ) length of chamber. Covered with three slabs, the middle one dragged over end slab. Nothing remained of the burial.
X. Shaft: $91 \times 90 \mathrm{~cm}$. and 255 cm . deep (in rock). Chamber at west $160 \times 46 \mathrm{~cm}$. and 75 cm . high. Cut in poor friable rock, and the south end had crumbled and the débris been cleared out before burial had taken place. Door nearly full width of shaft, only one slight jamb cut at north side. Sealed by one large slab with small ones packed in on either side and the whole plastered with mud. Burial: Adult, all bones broken and scattered, head north, resting on two small stones.

## G 2091

Mastaba, type IIb, débris filling with rubble retaining wall and stepped stone casing. The construction of the mastaba is shown in PI. 11:3. The original rubble faced core $a$ was $c a$.


Fig. 32. G 2090. Shaft and chamber C

810 cm . wide. This was increased by a layer of rubble $b c a$. $80-90 \mathrm{~cm}$. thick. Outside of this was built the casing $c$. This mastaba had been badly denuded, and a later mastaba G 2092, built over its northern end, a small mastaba against its south end, and all but the lowest courses of the stepped casing torn off to be re-used in later mastabas


Fig. 33. G 2091
Jar of red ware from A (DE 5-7 on Plan 2). The original size was approximately $1800 \times 1070$ cm ., orientated the same as the series of Fourth Dynasty mastabas to the east to which it was closely linked in point of time (Cf. Pls. 3 and 4). Two shafts may be identified as belonging to this mastaba, that described below and the shaft A of G 2092, which was incorporated in that mastaba, but probably belonged to the earlier one.
A. Shaft: $160 \times 150 \mathrm{~cm}$., decreasing to $125 \times 125 \mathrm{~cm}$. at the bottom and 980 cm . deep. Lined with mud plastered rubble but patched just above the rock with brick and stone blocks. Chamber at south, $210 \times 118 \mathrm{~cm}$. and 140 cm . high. It had been sealed with rubble. The rock stratum here was very poor, and during the cutting of the chamber a considerable portion of rock had fallen. The more dangerous parts had been picked loose by the workmen, as the pick marks on the irregular roof indicate. The débris had been removed before the burial took place.
Burial: In a wooden coffin, the decayed fragments of which were scattered over the floor and the remains of the body. An adult, head north (Pl. 33). In the doorway lay a broken jar of fine red ware (Fig. 33). In the débris was a hone of red sandstone with marks of copper on it.

Mastaba, type II $a$, as completed, débris core with rubble retaining wall and mud brick casing $790 \times 1050 \mathrm{~cm}$., the east façade orientated same as the Fourth Dynasty series. Built over the northern part of G 2091, the brick casing continuing the face of the few remaining courses of stone casing of the latter (DE $5-6$ on Plan 2 and Pl. 2). The method of reconstruction over the original core is shown in Pl. 11:3. The old rubble faced cores $a$ and $b$ of G 2091 were removed where not required for the new structure. The exposed face was patched


Fig. 34. G 2092. Window in first offering room
and plastered with mud. On the lowest casing stones $c$ the new casing $d$ was built. The bricks used in the casing wall were $34 \times 17 \times 11 \mathrm{~cm}$. The surface was plastered with gray mud, over which was a layer of yellower stucco and a final coat of white stucco. The finished face had a batter of $82^{\circ} 25^{\prime}$. On the east façade were two large double niches in the brickwork. A small offering chamber was formed opposite the south niche by building a brick wall 90 cm . thick in line with the south façade, to the large Fourth Dynasty mastaba. The north wall of the room was only 50 cm . thick, with a door, the east jamb built against the stepped face of the Fourth Dynasty mastaba The room was lighted by a small window near the ceiling line
in the same wall (Fig. 34 and $\mathrm{Pl} .12: 3$ ). The opening on the outer face was $39 \times 23 \mathrm{~cm}$., and the sill sloped down into the room an additional 46 cm . The lintel was a flat stone slightly concave on the underside. Later a second chamber was added enclosing the north niche. Its east wall, in which was the door, was built so as to leave a passage to the first room ca. 125 cm . wide. The bricks were approximately the same as those used in the main structure and first offering room. The north wall was built outside the line of the north face of the mastaba and the brickwork was carried around the northeast corner to form one jamb of an outer door. The other jamb of this was built against the south wall of mastaba G 2093 before the casing of rubble was built around the latter (In E 5 on Plan 2 and $\mathrm{Pl} .11: 2$ ). In the northeast corner of the passage was a large block of limestone and fragments of small pointed jars of coarse red ware, thrown out when the burials were plundered, were scattered over the floor of the second room. The mastaba had three burial shafts, A being the main shaft, probably a re-use of the old north shaft of G 2091. Both B and C with their chambers were built askew with the axis of the mastaba, and while $C$ had its chamber cut in the rock just below the surface, B was built wholly in the core of the mastaba. B and C may be later than the reconstruction of G 2092. A later shaft X was sunk in the southwest corner of the second offering room.
A. Shaft: $122 \times 138 \mathrm{~cm}$., decreasing to $106 \times 100 \mathrm{~cm}$. at the bottom, and 529 cm . deep, lined with mud brick for 55 cm . above the rock and thence to top with rubble. At a depth of 222 cm . below the rock surface the shaft had a ledge $6-10 \mathrm{~cm}$. wide on the north and west sides (Fig. 35). In the débris near the bottom was a limestone jar stopper with part of the mud plaster sealing still adhering to it. Chamber at east $212 \times 142 \mathrm{~cm}$. and 104 cm . high. The door was 93 cm . high and extended 53 cm . in from shaft to chamber. It was still partly closed with squared stones laid in a pinkish plaster and the displaced stones from the sealing lay on the bottom of the shaft. The floor of the chamber was 11 cm . below


Fig. 35. G 2092. Shaft and chamber A
the bottom of shaft and this level extended through the passage to the face of the shaft (Fig. 35). In the floor was a pit 181 cm . long ( $\mathrm{N}-\mathrm{S}$ ), and 75 cm . deep. This was covered with three slabs, $c a .7^{-8} \mathrm{~cm}$. thick. The middle one had been removed, and leaned against the wall of the chamber. It had a hole of 7 cm . in diameter through one corner.
Burial: Adult, bones all taken out of pit and scattered over floor of chamber.


Fig. 36. G 2092. Shaft and burial B
B. Shaft: $100 \times 119 \mathrm{~cm}$. and 190 cm . deep, built wholly in the rubble. Chamber at north $136 \times 73 \mathrm{~cm}$. and 65 cm . high, built with limestone blocks and roofed with two layers of slabs. Door sealed with mud bricks.
Burial: Adult female lying contracted on left side, head north facing east. Heels drawn up to hips with knees opposite chest. Hands before chin (Fig. 36).
C. Shaft: IIIX 110 cm . and 315 cm . deep, lined with mud plastered rubble. Where the shaft entered the rock it was only $100 \times 75 \mathrm{~cm}$., a small ledge of rock being left all around it. Chamber at north, $100 \times 120 \mathrm{~cm}$. and 85 cm . high. Found unsealed.

Burial: Removed, and bones stacked in a heap at the left of entrance.
X. Shaft: $97 \times 93 \mathrm{~cm}$. and 300 cm . deep. Chamber at south, $100 \times 120 \mathrm{~cm}$., widening from door to 110 cm . and 82 cm . high.
Burial: Disturbed. Adult male lying contracted on left side; head west facing north (the skull found inverted). Heels drawn up to hips with knees before chest. The left hand was opposite the chin, while the Fig. 37. G 2092. Burial X right hand was between the legs. Some of the finger bones were held between the leg bones, while the others were mingled with the toes. With the bones were a few bits of wood, not from a coffin (Fig. 37).

G 2093
Mastaba, type $\mathrm{l} a$, débris filling with brick facing walls. Size $820 \times 450 \mathrm{~cm}$. exclusive of offering room. Orientated $9^{\circ}$ E. of N . Originally built of bricks $37 \times 18 \times 13 \mathrm{~cm}$. An extra facing of rubble 50 cm . thick was added to the whole of the west and south sides. This was not built at one time but in three separate stages. The west facing was built first in two stages, and the line of separation is clearly traceable in Pl. 11:1. This rubble had a batter of $81^{\circ} 30^{\prime}$. When this was finished the southern casing was put on (Cf. also Pl. 11:2 for a detail of the southwest corner). This rubble facing was erected after the completion of the offering room which was built of bricks $42 \times 21 \times 15 \mathrm{~cm}$. The original brick east façade had a batter of $83^{\circ} 40^{\prime}$ with a series of three double niches alternating with two single ones. At the south end there was a large break in the masonry where a niche stele had been built in. The southern double niche had been partly closed in by the stone stele of Kha-Khenmet, No. 5 ( $\mathrm{Pl} .44: 2$ ), and the space above filled in with rubble plastered over with mud flush with the façade.

Beside her stele stood that of her husband Mededy, No. 4 (Pl. 44:1) which had been inserted in a roughly cut recess in the brickwork (Pl. 23). These two stelae were later insertions. The whole face of the original mastaba had been plastered and then white stuccoed. This white coating covered the niches as well. Behind the stele of Kha-Кhenmet the lower half of the niche had been cut away to form a small serdab. Above the stele was a flat lintel slab which had been let into the original brickwork (Fig. 38). Above this, where the niche was not utilized, the original size was preserved (Cf. Pl. 24, where the rubble filling and the lintel block have been removed, and Pl. 25, where the entire niche is exposed). The new serdab was re-coated with white stucco. In this later serdab were the fragments of a wooden statuette. On the floor opposite stele No. 5 was an uninscribed offering basin, No. 6. All the original niches had rough stone lintels, below which, in the inner divisions, were round "log" lintels. None of these was inscribed. In the northwest corner of the offering room the small statuette No. 3 (Pl. 43:3) stood leaning against the wall (Pl. 28). On the floor opposite the north niche was another small offering basin, likewise uninscribed. The offering room was built as a corridor with a large recess at the south end, the entrance being toward the east near the northern end. This offering room probably belonged to the reconstructed mastaba made by Mededy for himself and his wife, and the missing stele probably belonged to the original owner. To the east of the offering room in the space between it and the west face of G 1223, a small cubicle $N$ had been walled in (Pl. 27). In the southwest corner of this was the fine colored limestone statuette of Mesty, No. 2 (Pl. 42). Beside it had stood a wooden figure fallen to pieces. There were five shafts, A to E, arranged on the main axis. The tops of all these had been repaired with rubble, which may have belonged to the reconstruction period of Mededy when the rubble facings were added along the west and south. Against the north end was built a later shaft X , lined with bricks, 31 x 16 (?) $\mathrm{x}_{11 \mathrm{~cm}}$. (E $4-5$ on Plans 1 and 2).

Fig. 38. G 2093. Transverse section through shaft B and offering room
A. Shaft: $98 \times 95 \mathrm{~cm}$., narrowing to $90 \times 80 \mathrm{~cm}$. at the bottom, and 730 cm . deep, lined with brick. Two chambers, I at west and II at south, both at bottom of the shaft.
I. Chamber at west, $155 \times 130 \mathrm{~cm}$. and 117 cm . high with the floor slightly above the bottom of the shaft. The chamber was not finished, the inner wall never having been cut away regularly. One side of the door had a well cut rabbeted jamb 47 cm . thick but the other was left in the rough. The opening had been blocked with roughly squared limestone blocks set in pinkish plaster, traces of which also appeared on the jambs. In the floor was a pit $122 \times 70 \mathrm{~cm}$. and 82 cm . deep, covered with two slabs 9 cm . thick.
Burial: In wooden coffin (traces only). Adult male, disturbed, had been lying on left side, head north facing east (Fig. 39).
II. Chamber at south, $115 \times 93 \mathrm{~cm}$. and 75 cm . high. Found unsealed and empty.
B. Shaft: $100 \times 105 \mathrm{~cm}$. and 425 cm . deep, lined with brick. Chamber at west $203 \times 183 \mathrm{~cm}$., and 107 cm . high. Door sealed with two slabs slanting against opening. In floor a pit $185 \times 62 \mathrm{~cm}$. and 54 cm . deep, covered with three slabs with traces of pinkish plaster.
Burial: Adult (skull missing) and bones scattered about chamber (Fig. 38).
C. Shaft: $100 \times 105 \mathrm{~cm}$. and 400 cm . deep, lined with brick. Chamber at west, $100 \times 138 \mathrm{~cm}$. and 90 cm . high. Found unsealed. At northwest corner was a break in the rock into the chamber of D. Empty.
D. Shaft: $100 \times 100 \mathrm{~cm}$. and 390 cm . deep, lined with brick. At the rock surface small stones were laid first to level up the unevenness of the surface. Chamber at west, $205 \times 116 \mathrm{~cm}$. and 90 cm . high. It had been intended to extend the chamber toward the south, but as the shaft was the same depth as C , the workman broke through into the already existing chamber of the latter. He


Fig. 39. G 2093. Shaft and chambers A I-II
then left this end unfinished and cut the chamber toward the north. The door was sealed with two slabs leaning slantwise against the opening with the joints plastered with mud.
Burial: Adult female, all bones scattered.
E. Shaft: $109 \times 109 \mathrm{~cm}$. and 410 cm . deep, lined with brick. Chamber at east, ${ }^{1} 155 \times 85 \mathrm{~cm}$. and 85 cm . high, the floor 15 cm . below the bottom of the shaft. Door sealed with three slabs placed slantwise against the opening.
Burial: Adult female (?) lying on left side, head north facing east. Legs slightly bent at knees but upper legs at right angles to body. Left arm and right forearm missing (Fig. 40).


Fig. 40. G 2093. Burial E


Fig. 41. G 2094. Jar from débris in offering room (Scale $1: 5$ )
X. Shaft: $115 \times 106 \mathrm{~cm}$. and 190 cm . deep, lined with brick, and never sunk into rock. At bottom on west side a small piece of rubble set in the brickwork .

## G 2094

Mastaba, type $I a$, débris filling with brick facing walls. Size, $770 \times 365, \mathrm{~cm}$., orientated $8^{\circ} \mathrm{E}$. of N . The bricks were dark gray, $40 \times 21 \times 14 \mathrm{~cm}$., laid in dark gray mortar, the east façade having a batter of $85^{\circ}$. Along the east was a corridor

[^5]offering room which had been extended around the south end of $G 2081$. The bricks in the extension were yellowish, 33 x $16.5 \times 12 \mathrm{~cm}$. The north wall of the corridor, built between the two mastabas, was also of these bricks. In this wall was a window 35 cm . wide, and 120 cm . above the floor, the sill sloping down into the corridor. On the east façade was a double niche between two single ones. The interior of the corridor was plastered with yellow sandy plaster, and probably the whole exterior was covered in the same way. Over this was the usual fine finishing coat of white stucco. In the débris of the offering chamber were found a jar of red ware (Fig. 41), and a stone "log" lintel with the name of Khuwt (No. 37 and Pl. 50:3).


Fig. 42. G 2094. Burial D


Fig. 43. G 2095. Burial A

Outside the north end of the mastaba was a burial shaft X hopelessly destroyed. In the débris of what had been small rubble and brick compartments, were found the flat lintel of Ankh (No. 20 and Pl. 52:2) and the lintel of Khety (No. 21 and Pl. 49: 1). There were four shafts A to D (E3 on Plan 1 ).
A. Shaft: At the top the brick opening was $115 \times 100 \mathrm{~cm}$., but at a distance of 105 cm . above the rock this was narrowed by a ledge in the brickwork on the north and west sides to $85 \times 69 \mathrm{~cm}$., and the shaft was cut this size in the rock to a total depth of 573 cm . Chamber at south, $154 \times 234 \mathrm{~cm}$. and 125 cm . high.
B. Shaft: $90 \times 90 \mathrm{~cm}$. and 570 cm . deep, lined with brick. Chamber at west, $150 \times 155 \mathrm{~cm}$. and 105 cm . high. Empty.
C. Shaft: $85 \times 90 \mathrm{~cm}$. and 345 cm . deep, lined with brick. Chamber at west, $108 \times 70 \mathrm{~cm}$. and 75 cm . high. Empty.
D. Shaft: $90 \times 90 \mathrm{~cm}$. and 210 cm . deep, lined with brick. Small chamber or recess at west, $115 \times 65 \mathrm{~cm}$. and 50 cm . high.
Burial: Young adult male lying on left side, head north facing east. Heels drawn partly up to hips with upper legs at right angles to body. Hands down between knees (Fig. 42).

## G 2095

Mastaba, type $\mathrm{I} a$, débris filling with brick facing walls. Size, $875 \times 385 \mathrm{~cm}$., orientated $8^{\circ} 30^{\prime} \mathrm{E}$. of N . The structure was denuded to the lowest courses of brickwork. These courses run through under the rear wall of G 2096 which was built over them at a slightly different orientation. The bricks were dark gray, $37 \times 18 \times 12-13 \mathrm{~cm}$. On the east façade was a series of at least five niches, alternately double and single, and possibly an additional two were concealed by a mass of structural rubble built at the northern end between this mastaba and G 2093. There were four shafts, A to $D$; at the south was a small ser$d a b \mathrm{~S}$. Later the superstructure for a grave X was built against the rear wall of the mastaba ( $\mathrm{D}_{4-5}$ on Plans 1 and 2).
A. Shaft: $105 \times 100 \mathrm{~cm}$. and 265 cm . deep, lined with brick. Chamber at south, $57 \times 103 \mathrm{~cm}$. and 55 cm . high. The door had been sealedwith mud bricks.
Burial: Adult male lying on left side, head west facing north. Heels drawn up to hips with legs nearly at right angles to body. Hands down to knees (Fig. 43).
B. Shaft: $100 \times 110 \mathrm{~cm}$., narrowing to $100 \times 88 \mathrm{~cm}$. at bottom, and 255 cm . deep. Lined with bricks. Chamber at west, $120 \times 82 \mathrm{~cm}$. and 85 cm . high. The floor was 25 cm . below the bottom of the shaft, so that the door was only 60 cm . high.
Burial: Adult female lying on left side, head north facing east. Bones badly decayed (Fig. 44).
C. Shaft: $115 \times 100 \mathrm{~cm}$. and 260 cm . deep, lined with brick. Chamber at east, $95 \times 55 \mathrm{~cm}$. and 70 cm . high. Empty.
D. Shaft: $100 \times 120 \mathrm{~cm}$. and 128 cm . deep. Never sunk below rock level.
X. Intrusive surface burial. An L shaped grave, $75 \times 95 \mathrm{~cm}$.

## G 2096

Mastaba, type III, built wholly of bricks. Size, $400 \times 430$ cm ., orientated $8^{\circ} 30^{\prime} \mathrm{E}$. of N . Built over the north end of G 2005. Two varieties of bricks were used. In the lower part,


Fig. 44. G 2095. Burial B
including the linings of shafts, were dark gray bricks, $40 \times 17 \mathrm{x}$ 15 cm ., while the upper walls and shafts had yellowish bricks, $32 \times 18$ (?) $\times 11.5 \mathrm{~cm}$. The east wall had a batter of $83^{\circ} 45^{\prime}$, while the north wall was $87^{\circ} 10^{\prime}$. The east façade had two double niches, the southern one unusually deep (Fig. 45). Above the latter was the impression of a stone "log" lintel (Cf. Pl. 8). ${ }^{1}$

[^6]


Fig. 45. G 2096. Transverse section through mastaba with shafts A and C

The offering room was built against the east façade and its size and plan were influenced by the mastabas already in existence around it. The north wall was built at a slight angle, made thinner toward the east, and the corner rounded off to leave sufficient access to G 2097 and the mastabas to the west. The bricks in the offering room walls were yellowish-gray, 27 x $13 \times 9 \mathrm{~cm}$., laid in yellowish sandy mortar. All the walls were coated with a layer of yellow mud plaster. The four shafts, A to D, were grouped in multiple type ( $\mathrm{DE}_{4}$ on Plan I).
A. Shaft: $100 \times 85 \mathrm{~cm}$. and 345 cm . deep, lined with brick. Chamber at east, $108 \times 55 \mathrm{~cm}$. and 87 cm . high. Found unsealed (Cf. Fig. 45).


Fig. 46. G 2096. Burial B


Fig. 47. G 2096. Burial C

Burial: Adult, skull missing and other bones in a heap at north end of chamber.
B. Shaft: $88 \times 80 \mathrm{~cm}$. and 190 cm . deep, lined with brick and never sunk into rock. At bottom a grave 35 cm . wide was made by building two brick walls across it.
Burial: Adult male (?) lying on left side, head north facing east. Heels drawn up to hips with knees before chest. Hands before chin (Fig. 46).
C. Shaft: $105 \times 95 \mathrm{~cm}$. and 398 cm . deep, lined with brick. Chamber at west, $90 \times 58 \mathrm{~cm}$. and 88 cm . high.
Burial: Adult lying on left side, head (missing but had been) north facing east. Only the vertebrae, three ribs and the legs in situ. The other bones together with some fragments of wood were in a heap at north end of chamber (Fig. 47).
D. Shaft: $90 \times 90 \mathrm{~cm}$. and 200 cm . deep, lined with brick and never sunk below rock level. At bottom on west side a large limestone block was built into the wall, projecting 16 cm . from the face of the brickwork. Empty.

## G 2097

Mastaba, type $\mathrm{l} a$, débris filling with brick facings. The bricks were $35 \times 17 \times 12 \mathrm{~cm}$., laid in gray sandy mortar. Twice enlarged. Size of original structure, $700 \times 390 \mathrm{~cm}$., orientated $10^{\circ} \mathrm{E}$. of N . The original façade had two double niches with a single one between them. This face was plastered with mud and finished with white stucco. There were four shafts, C to F. Later an addition containing the shafts, A and


Fig. 48. G 2097. Burial E $B$, was built against the south end of the east façade. This was of bricks $32 \times 16 \times 10 \mathrm{~cm}$., and its new façade had one dobuble niche. A large recess near the south end had contained a niche stele. This addition left the original north niche exposed and the recess thus formed became the inner offering chamber, access to which and to the outer offering space (or chamber) was through a door at the south. Still later this inner recess was closed by a new face built in line with the exterior of the previous addition. This was constructed after the addition to G 2088 had been erected. On the new face were two single niches. In front of that at the south were two offering basins, the larger having an inscription of NeferHy (Cf. No. 8), the smaller uninscribed (No. 9). In the débris of the offering room were two crude flint scrapers and in the passage outside were some blue faience tubular beads (DE 3 on Plan I).
C. Shaft: $92 \times 90 \mathrm{~cm}$. and 380 cm . deep, lined with brick. Chamber at west, $150 \times 150 \mathrm{~cm}$. and 100 cm . high. Found unsealed and empty.
D. Shaft: $77 \times 85 \mathrm{~cm}$. and 530 cm . deep, lined with brick. Chamber at west, $148 \times 120 \mathrm{~cm}$. and 85 cm . high. Found unsealed.

Burial: Adult, all bones except skull and leg bones missing.
E. Shaft: $95 \times 85 \mathrm{~cm}$. and 373 cm . deep, lined with brick. Chamber at west, ilo $\times 75 \mathrm{~cm}$. and 63 cm . high. Found unsealed.
Burial: Adult female lying on left side, head north facing east. Heels drawn up to hips with knees before chest. Hands before face (Fig. 48).
F. Shaft : $100 \times 100 \mathrm{~cm}$. and 375 cm . deep, lined with bricks. Chamber at west, $121 \times 90 \mathrm{~cm}$. and 85 cm . high. Found unsealed.
Burial: Adult, only two leg bones remaining.


Fig. 49. G 2097. Flint from débris in A (Scale 1: 2)
A. Shaft: $115 \times 90 \mathrm{~cm}$. and 590 cm . deep, lined with brick. Chamber at south, $145 \times 115 \mathrm{~cm}$. and 100 cm . high. Empty, except for a broken flint knife (Fig. 49) in the débris.
B. Shaft: $110 \times 95 \mathrm{~cm}$. and 650 cm . deep, lined with brick. Two chambers, I at east with its floor at a depth of 220 cm . below the rock surface, and II at the west with its floor 60 cm . above the bottom of the shaft (Fig. 50). I. Chamber at east, $c a .148 \times 170 \mathrm{~cm}$. and 90 cm . high. It had been the intention to make a larger regular chamber, and quarrying grooves were run in on both sides of the door. The north side of the chamber was, however, cut in line with the jamb, and only a small portion of the rock on the south side was cut away (Fig. 50 I). Found unsealed.


Fig. 50. G 2097. Shaft and burials B I and II

Burial: Young adult male lying on left side, head north facing east. Upper legs at right angles to body. Lower legs pressed against wall of chamber. Hands before chin. Patches of dried skin adhered to the bones.
II. Chamber at west, $205 \times 108 \mathrm{~cm}$. and 80 cm . high. Found unsealed.
Burial: In wooden coffin (traces only). Adult female lying on left side, head north facing east. Heels drawn up partly to hips with upper legs nearly at right angles to body. Right forearm out at right angles. Left hand before chin (Fig. ;o II).

## G 2098

Mastaba, type Ia, débris filling with brick facing. Original structure $500 \times 230 \mathrm{~cm}$. and orientated $10^{\circ} \mathrm{E}$. of N. (E 2 on Plan I). The bricks used were $24 \times 12 \times 11 \mathrm{~cm}$. On the eastern façade were one single and two double niches. The single niche had a brick lintel, while the others were covered with flat stones. The original offering room may have had approximately the same size as the later vaulted space between this mastaba and the addition on the east (Fig. 51). Sunk in the floor in front of the south niche was the offering basin of Iy-Merer (No. 17. Cf. Pl. 48:3). Before the single niche at the north was the basin of Ruwz (No. 16. Cf. Pl. 48:1). Near the centre of the façade, but not opposite a niche, was the basin of Per-Senet (No. 18. Cf. Pl. 48:2). The latter was apparently not in its original position, but one edge was against a later brick wall lining an intrusive burial shaft. It is possible, however, that this later wall was built over a low offering ledge as in the case of No. 17. In the débris of the offering room was the $\log$ lintel No. 19 (Cf. Pl. 50:6), with the names of Ruwz, Per-Senet and Iy-Mery. The latter were respectively the mother and father of Rcwz. In the débris near the northern end of the chamber were the fragments of a red polished cylindrical stand with the name of ly-Mery (No. 40). The original mastaba contained only one shaft, A, which was built askew with the axis. Just behind this the rear wall was reinforced with a rubble facing.

The first addition was not so long as the original structure and was built against the north end of the final enlargement of G 2088. Space was left for an offering room between this new addition and the original mastaba. The same size bricks were

used. On the new east façade were one single niche and two double niches. Between the double niches was a small serdab, hollowed in the brickwork and plastered over with mud flush with the face to conceal it (Fig. 51, $a$ and Pl. 26). In this were the remains of a wooden statuette with traces of stucco
and color. In this extension were two additional shafts, B and C, the latter more like a serdab. A second addition was built against the north end of the first one, with its east façade in line with that of the latter and making the east part of the whole mastaba equal in length to its original western portion. In the latest façade were two niches, one single and the other a shallow niche stele with an inscription of Nefer-Hetep-EsWer, No. 10 (Cf. Pl. 47:1). In front was the basin No. il (Cf. Pl. 47:2) belonging to it. When the final addition was built the offering room enclosed between the two structures was vaulted with rectangular bricks with one edge rounded off.


Fig. 52. G 2098. Detail of vaulting of offering room (Scale 1: : 0 )
These, like the bricks used in the latest addition, were $30 \times 15 \mathrm{x}$ 10 cm ., and they were laid so as to form a reeded roof (Fig. 52). Jambs were built against the respective faces at the north end to form a door, probably round arched. The interior of the offering chamber was first plastered with mud, then finished with white stucco. The reeded roof was colored red, while the side walls appeared to have been left white. At a still later period the offering room was used for an intrusive burial X . The north door was blocked with dark gray bricks, $35 \times 16 \mathrm{x}$ 13 cm ., and cross walls of brick formed a shaft and a burial chamber. On the east side were two courses of limestone blocks, which may have been the beginning of a fine facing of the last offering chamber (Cf. Fig. j1).
A. Shaft: $100 \times 95 \mathrm{~cm}$. and 347 cm . deep, lined with mud plastered rubble. Chamber at west, $95 \times 85 \mathrm{~cm}$. and 127 cm . high, its floor 60 cm . below the bottom of the shaft. Found unsealed and empty (Fig. 51).
B. Shaft: $100 \times 95 \mathrm{~cm}$. and 325 cm . deep, lined with brick. Chamber at south, $100 \times 133 \mathrm{~cm}$., and 109 cm . high, the floor 39 cm . below the bottom of the shaft. Found unsealed and empty (Fig. 51).


Fig. 53. G 2098. Burial D
C. Shaft: $60 \times 100 \mathrm{~cm}$. and 85 cm . deep, built wholly in the brickwork.
D. Shaft: $80 \times 120 \mathrm{~cm}$. and 165 cm . deep, lined with brick and never sunk below rock surface. At the west side was a slab of stone $c a$. io cm . thick, built into the sides at a height of 55 cm . above the bottom. At the north end of this covered grave a hollow was cut in the brickwork to make room for the head.
Burial: Adult male lying on left side, head north facing east. Heels drawn up to hips with knees before chest. Hands before chin (Fig. 53).
X. Shaft: $70 \times 84 \mathrm{~cm}$. and 170 cm . deep, lined with brick, built against the walls of the older mastaba. Chamber at south, built in the older offering room. Had been roofed with slabs. Nothing left of the burial.

## G 2099

Mastaba, type III, all brick. Size, $565 \times 340 \mathrm{~cm}$., orientated $3^{\circ}$ E. of N. Superstructure denuded to 105 cm . in height. South end partly built over by the last addition to G 2098 (E 1-2 on Plan i). On east façade were four regularly spaced niches, two double and two single alternating. Two shafts, $A$ and $B$, on main axis.
A. Shaft: $90 \times 85 \mathrm{~cm}$. and 327 cm . deep, lined with brick. Chamber at east, $101 \times 165 \mathrm{~cm}$. long, 102 cm . high. Contained a paneled wooden coffin 124 cm . long, 62 cm . wide and ca. 57 cm . high. The framing was $c a .3 \mathrm{~cm}$. thick and the panelling $c a .1 \mathrm{~cm}$. thick. The joints were fastened together with wooden pins and the panels rabbetted into grooves in the framing. ${ }^{1}$ No trace of body.
B. Shaft: $80 \times 85 \mathrm{~cm}$. and 132 cm ., lined with brick and never sunk into rock.

## G 3000

Two distinct mastabas (D 6 on Plan 2). The earlier one, at the south, was of type $I l b$, débris filling with rubble facing and stepped stone casing. Size, $510 \times 380 \mathrm{~cm}$., orientated due north. The sequence in construction was not quite clear. Just south of this mastaba was another with multiple arrangement of shafts. ${ }^{2}$ The shaft called A of G 3000 was clearly built against the north face of this, but could not have formed part of the scheme of G 3000 as it lay partly outside the liens of the core. While the whole structure was badly wrecked by stone thieves, it appeared probable that the shafts, $B$ and $C$, with the mud plastered retaining wall at least, composed one mastaba earlier

[^7]than that to the south. A was cut later and the stepped stone casing was then added or rebuilt so as to include the whole structure, the casing walls built against those of the south


Fig. 54. G 3000. Shaft A with burial in chamber II
mastaba. The only niche on the east façade was a shallow stela opposite shaft A . On the west side the casing had been stripped off to make room for the offering room of G 3010 .

The second mastaba was of type $\mathrm{I} a$, débris filling with brick facings, and was built against the stone casing of the first mastaba and apparently after the casing had been removed from the north side. In Pl. 11:4 is shown the northeast corner of the first mastaba. Inside is the mud plastered angle of the core. At the left a remnant of the stone casing with débris filled in between it and the core. At the right is the end of the brick mastaba. The east façade of the second mastaba had two niches, a double one at the south opposite shaft D and asingle at the north opposite E. Only these two shafts existed. It may have been the intention to have a third shaft in the addition, west of $E$, but no cutting was made in the rock, and only a few bricks remained of any division wall. The upper part of the outer wall west of $E$ had been repaired with rough rubble, probably the backing of the dressed facing slabs of the offering room of G 3010. This rubble rested on a stratum of débris, consisting of sand and limestone chips, part of the filling of the addition.


Fig. 55. G 3000 Burial in upper chamber (I) of A

First Mastaba:
A. Shaft: $96 \times 85 \mathrm{~cm}$. and 455 cm . deep, lined with mud plastered rubble. Two chambers at the west. The floor of the first, I, was 132 cm . below the rock and the second, II, was at the bottom of the shaft (Fig. 54).

1. Chamber, or recess, $100 \times 72 \mathrm{~cm}$. and 77 cm . high. Found unsealed.
Burial: Young adult lying contracted on left side, head (missing) north facing east. Heels drawn up to hips with knees in front of breast. Left arm down between legs and body. Right hand on pelvis. Right leg missing (Fig. 55).
II. Chamber $195 \times 109 \mathrm{~cm}$. and 95 cm . high. Door 9I cm . wide with jambs 22 cm . thick. Found unsealed, but in bottom of shaft were two door slabs with traces of pinkish plaster.

Burial: Adult male contracted on left side, head north facing east. This had rested on a stone but had rolled off. Heels drawn up to hips with knees in front of chest. Arms clasping legs (Fig. 54).
B. Shaft: $100 \times 100 \mathrm{~cm}$. and 260 cm . deep, lined with rubble. Sunk only 90 cm . into rock and never finished with cham-


Fig. 56. G 3000. Shaft and chamber C
ber. At bottom a single large slab stood upright. No burial.
C. Shaft: $107 \times 100 \mathrm{~cm}$. and 505 cm . deep, lined with rubble (Pl. 31:3). Chamber at south. The door was slightly less in width than the shaft, leaving jambs of $2-5 \mathrm{~cm}$. on either side. The chamber widened from the door to 110 cm . at 80 cm . in, with a height of 105 cm . Beyond
this it continued as a recess $53 \times 80 \mathrm{~cm}$. and 13 cm . less in height. Found unsealed, but bottom of shaft filled with roughly squared blocks from the sealing of door.
Burial: The floor of recess covered with remains of wooden box, amongst which were scattered bones of an adult-fragment of a leg bone and the two pelvis bones (Fig. 56 and Pl. 31:4).
Second mastaba:
D. Shaft : $100 \times 97 \mathrm{~cm}$. and 422 cm . deep, lined with rubble for 65 cm . above rock surface, thence to top with brick. Chamber at west, $122 \times 90 \mathrm{~cm}$. and 102 cm . high, its floor 20 cm . below the bottom of shaft. The door was 73 cm . wide, leaving jambs of 7 and 5 cm . on either side. The chamber was never finished. Lying across the bottom of the shaft was a single large block of stone for sealing the door (Pl. 35:1). Empty.
E. Shaft: $98 \times 80 \mathrm{~cm}$. and 390 cm . deep, lined with brick. Chamber at east, widening from 105 cm . at door to 132 $\mathrm{cm} . \times 80 \mathrm{~cm}$. deep and 85 cm . high. Door sealed with rubble (PI. 34 and Fig. 57).
Burial: Adult female lying on left side. Head north facing east. Bones much decayed.

## G 3001

Mastaba, type $I b$, débris filling with stepped stone facing. Size $710 \times 400 \mathrm{~cm}$., orientated almost due north. Most of the facing had been stripped off. On the east façade was a double niche stele, opposite shaft B (D 5 on Plan 2). At the north was an addition in the same type extending the length to 930 cm . The offering room although practically entirely destroyed, was of the corridor type, with its entrance at the north, the south end shut off by a wall connecting this mastaba with G 2092. In the original structure were three shafts, A to $C$, and in the addition $D$ and $E$. On the west a later shaft $X$ was sunk between this mastaba and G 3012. In the sand above the main structure was a small unfinished limestone bowl, 9.5 cm . in diameter (Fig. 58).
A. Shaft: $85 \times 75 \mathrm{~cm}$. and 50 cm . deep, lined with rubble, not sunk into rock and empty.
B. Shaft: $88 \times 89 \mathrm{~cm}$. and 425 cm . deep, lined with rubble. Chamber at west, $168 \times$ iol cm . and 75 cm . high, its floor 35 cm . above the bottom of shaft. The door was 65 cm . with jambs of 12 and 15 cm . wide and 45 cm . thick. Sealed with a wall of brick, broken through. In the floor was a pit $150 \times 51 \mathrm{~cm}$. and 29 cm . deep. This had been covered with three slabs, which had been broken and tipped back against the wall of chamber (Fig. 59).


Fig. 58. G 3001. Limestone bowl from débris (Scale 1:2)
Burial: Adult male (?). Skull and leg bones only. In the chamber was a small saucer like the one from G 3001 X (q.v.).
C. Shaft: 95 x 90 cm . and 355 cm . deep, lined with rubble. Above the rock was also a rubble lined space, $165 \times 100 \mathrm{~cm}$. which had been a later chamber using this shaft as an entrance. It was partly destroyed and empty. No chamber in rock. At the bottom a row of rough stones along the west side narrowed the shaft to 70 cm ., to provide for a shaft burial like that in shaft D. In this were found the leg bones of an adult
D. Shaft: $92 \times 90 \mathrm{~cm}$. and 300 cm . deep, lined with rubble. No chamber. At bottom the shaft had been narrowed by two walls of rough masonry on east and west sides, forming a burial space $90 \times 52 \mathrm{~cm}$. and 45 cm . deep.

Burial: Adult lying contracted on left side, head north facing east (down). Heels drawn back to hips with knees to chin. Hands up before face (Fig. 60).
E. Shaft: $95 \times 75 \mathrm{~cm}$. and 126 cm . deep, lined with rubble and not cut into rock. Small recess at south, $69 \times 100$ cm . and 80 cm . high. Walls lined with small rough


Fig. 59. G 300I. Shaft and chamber B


Fig. 60. G 3001
Shaft and burial D
stones covered with pinkish stucco. Roofed with limestone slabs, 16 cm . thick. Found unsealed.
Burial: Disturbed remains of adult, skull missing. Bones in a heap at west side of chamber.
․ Shaft: $80 \times 68 \mathrm{~cm}$. at top, widening irregularly to too x 97 cm . at bottom and 458 cm . deep. The linings on the east and west were the stepped faces of the adjoining mastabas and on the north and south regularly coursed walls. Two chambers. The upper one at the west was
an unfinished recess with the floor 200 cm . below the rock surface and cut into the rock ca. 30 cm . In this were three small model offering vessels of red-brown ware Fig. 61). The second was at the north with its floor 38 cm . above the bottom of shaft. The chamber was irregular, $200 \times 105 \mathrm{~cm}$., and 83 cm .


Fig. 61. G 3001
Small pottery from recess I in shaft X (Scale 1:2)
high. Found unsealed.
Burial: Adult female lying contracted on left side (but turned face down), head north facing east. Heels drawn back to hips with knees to chest. Hands before face. Over the pelvis, spine and at shoulders and knees, were remains of linen wrappings. The body lay on a bed of limestone chips in which were fragments of coarse red-black ware. Also a bit of charcoal (Fig. 62).

G 3002
Mastaba, type III, constructed wholly of dark gray brick, $40 \times 20 \times 15 \mathrm{~cm}$. with some $34 \times 17 \times 12 \mathrm{~cm}$. on the east face (D 4 on Plan i). Size, $790 \times 340 \mathrm{~cm}$., orientated due north. The east façade had a row of four double and two single niches alternating. A fragment of a wall of the offering space was near the south end. Four shafts, A to D.
A. Shaft: $105 \times 100 \mathrm{~cm}$., and ca. 150 cm . deep, lined with brick.
B. Shaft: $110 \times 109 \mathrm{~cm}$. and 150 cm . deep, lined with brick and never sunk into rock. In bottom of shaft a broken leg bone.
C. Shaft: $85 \times 100 \mathrm{~cm}$. and 270 cm . deep, lined with brick. Chamber at west, $95 \times 80 \mathrm{~cm}$. and 70 cm . high. Empty.
D. Shaft: foo $\times 95 \mathrm{~cm}$. and 380 cm . deep, lined with brick. Chamber at west, $90 \times 90 \mathrm{~cm}$. and 80 cm . high. In the southwest corner a hole broken through into shaft B of G 3014. Empty.

## G 3003

Mastaba, type III, built throughout of brick, $40 \times 19 \times 12 \mathrm{~cm}$. Size $530 \times 320 \mathrm{~cm}$. (exclusive of offering rooms), and orientated slightly E. of N. (D 3-4 on Plan 1). A double offering room consisting of an inner chamber, the real offering room, and an outer vestibule with its door to the north. The two were connected by a passage 180 cm . long. These chambers filled the space between this mastaba and the rear of G 2096. Both rooms with the connecting passage had been roofed with a smooth barrel vault of brick, not reeded. The whole of the exterior and interior had been coated with a thick layer of yellowish plaster. Inside the offering room were abundant remains of a fine white stucco over this. but all traces of it had vanished from the vestibule and the exterior walls. In the offering room were two double niches with stone lintels opposite their respective shafts, A and B. Between these was a single niche and in the brickwork to one side of it was a small serdab S (Pl. 29). This was stuccoed with white plaster and hada roof of slabs, and the opening into it was sealed with bricks covered by the stucco of the chamber. In the serdab were the remains of a small pair statuette of wood. Two shafts.


Fig. 62. G 3001 Shaft and chamber X
A. Shaft: $125 \times 100 \mathrm{~cm}$. and 590 cm . deep, lined with brick. Chamber at west, $205 \times 128 \mathrm{~cm}$. and 136 cm . high. The door had been sealed with blocks of stone. In the floor was a pit 73 cm . wide and 64 cm . deep. The walls of the chamber, where the rock was poor, were filled in with mud, over which was pinkish white plaster. Empty.
B. Shaft: $120 \times 95 \mathrm{~cm}$. and 575 cm . deep, lined with brick. Chamber at west, $212 \times 165 \mathrm{~cm}$. and 140 cm . high, with its floor 20 cm . below the bottom of the shaft. Found open and empty.

## G 3004

Mastaba, type III, constructed entirely of bricks, those in the faces of the walls dark gray $40 \times 20 \times 16 \mathrm{~cm}$., while inside the wall were $24 \times 12 \times 9 \mathrm{~cm}$. brown bricks. The latter were re-used from an earlier mastaba. The east façade at least was plastered and then finished with white stucco


Fig. 63. G3004 Burial B (D 3 on Plan 1). Opposite the main shaft A was a large double niche (Pl. 21). Over the inner part was a log lintel with the name Khufu-Mer-Neteru. Over this was a limestone relief stele, No. 3 I (Pl. 45). In front of the niche was an offering basin. A small offering space was enclosed by a light wall of brick not roofed. There was a large shaft A immediately behind the niche and three smaller shafts built where practicable.
A. Shaft: $175 \times 150 \mathrm{~cm}$. and 745 cm . deep, lined with brick. Chamber at west, $170 \times 155 \mathrm{~cm}$. and 140 cm . high, its floor $4 ; \mathrm{cm}$. above the bottom of the shaft. Found unsealed and empty.
B. Shaft: $100 \times 100 \mathrm{~cm}$. and 170 cm . deep, lined with brick. No chamber.
Burial: Adult male lying contracted on left side, head north facing east. Heels drawn back to hips with knees to chest. Hands between legs, clasping feet (Fig. 63).
C. Shaft: $125 \times 105 \mathrm{~cm}$. and 360 cm . deep, lined with brick. Chamber at west, $150 \times 100 \mathrm{~cm}$. and 135 cm . high. The north jamb was broken away, so that the opening extended partly across the north side of the shaft.
Burial: Disturbed. Adult, head north. Only the pelvis and a few ribs in situ.
D. Shaft: $110 \times 101 \mathrm{~cm}$. and 410 cm . deep, lined with brick. Chamber at north, $143 \times 120 \mathrm{~cm}$. and 120 cm . high.
Burial: Skull and a few scattered bones of an adult.

## G 3005

Mastaba, type Ila, débris filling with rubble retaining wall, and casing of brick ( $\mathrm{D}_{2-3}$ on Plan 1). Size $1010 \times 490 \mathrm{~cm}$., orientated $12^{\circ} \mathrm{E}$. of N . There were three stages of construction. The original structure was planned to contain, within the core, the three shafts, A to $C$, and a small cubicle $F$ (a serdab?). The linings of the shafts had been begun with brownish bricks, $32 \times 16.5 \times 10 \mathrm{~cm}$. They were then finished with mud plastered rubble, except A, which was finished with bricks $36 \times 17 \times 14$ cm . (Fig. 64). Before the casing wall was finished two more shafts, D and E, were added at the south end and these were then enclosed within the casing wall. This wall was begun with bricks like those in the shafts, which constitute the lowest nine courses. Above this, the wall was finished with dark gray bricks, $34-36 \times 18 \times 13 \mathrm{~cm}$. In Pl. 14:2 the northwest corner of the original core, with the brick casing, can be seen at the inner end of the row of shafts. Finally several of the shafts were repaired with various sizes of bricks, some $36 \times 17 \times 14 \mathrm{~cm}$., and in A were some $27 \times 14 \times 8 \mathrm{~cm}$.-these evidently taken from some earlier structure. In the casing around the added shafts, the lower part was built with $34 \times 17 \times 11 \mathrm{~cm}$. bricks, practically the same as those in the other parts of the wall, while above were the larger gray bricks. The outer walls had a batter of $85^{\circ}$ and were plastered with yellow mortar. On the east façade were a double and a single niche, but between $B$ and $C$ was a space where a stone niche stele had been. In front of this on the floor was an offering basin uninscribed. Near the south
end a small recess had been built later into the facing and lined with stone slabs, which were coated with pink stucco. Behind this in the original brick extension, was a serdab $\mathrm{S}, 80 \times 40 \mathrm{~cm}$. and 155 cm . deep. The east and west walls of this ran through, but the small south wall, consisting of the later larger bricks, rested on débris. The offering enclosure, a corridor with recess at south end, was added later. It was entered from the north.


Fig. 64. G 3005 . Transverse section, showing shaft B
Between the passage and the outer face was a small shaft X . On the exterior wall of this offering room was a row of one double and two single niches. In the débris in the offering room was another offering basin, uninscribed, and a hand from a limestone statuette.
A. Shaft: $97 \times 125 \mathrm{~cm}$. and 555 cm . deep, lined with brick. At 150 cm . from the bottom the shaft was narrowed on the east side by a ledge 52 cm . wide. Chamber at
west, $190 \times 150 \mathrm{~cm}$. and 120 cm . high. The east side had broken away, so that the door opening continued partly around the north side of the shaft.
Burial: Only the skull of adult lying in chamber.
B. Shaft: $105 \times 95 \mathrm{~cm}$. and 545 cm . deep, lined with brick for 105 cm . above rock surface, thence to top with mud plastered rubble (Fig. 64). Chamber at west, $152 \times 120$ cm . and 105 cm . high. Empty.
C. Shaft: $95 \times 105 \mathrm{~cm}$. and 390 cm . deep, lined with brick for 100 cm . above rock, thence to top with mud plastered rubble. No chamber.


Fig. 65. G 3005
Pottery from the débris in D
(Scale I: 5)


Fig. 66. G 3005
Pottery from the débris in E (Scale 1:5)
F. Cubicle: $95 \times 55 \mathrm{~cm}$. and 90 cm . deep, lined with rubble. Empty.
D. Shaft: $105 \times 110 \mathrm{~cm}$. and 660 cm . deep, lined with brick on the east, west and south sides, the rubble retaining wall of the original core forming the north side. Chamber at west, $165 \times 98 \mathrm{~cm}$. and 100 cm . high.
Burial: Remains of a wooden coffin. Skull and a few bones only, of an adult. In the débris were found two bowls (Fig. 65). Of these x 1 was of brown ware, with haematite wash, partly burnished, x 2 was of brown ware, wet smoothed.
E. Shaft: $108 \times 80 \mathrm{~cm}$. and 215 cm . deep, lined as in D, but not sunk into rock. Empty. In the débris were three bowls (Fig. 66). Of these x I was of brown


Fig. 67
G 3005
Burial X ware, with haematite wash; x 2 was red-brown ware, polished; and $x 3$ of brown ware, wet smoothed.
X. Shaft: $85 \times 80 \mathrm{~cm}$. and 220 cm . deep. The real shaft was cut only 20 cm . below the rock surface, but a pit along west side, 41 cm . wide, was sunk 40 cm . deeper.
Burial: Adult male, lying contracted on left side, head north facing east. Heels drawn back to hips with knees before chest. Hands apparently clasped around knees (Fig. 67).

## G 3006

Not a mastaba, but a single shaft $95 \times 88 \mathrm{~cm}$. and 180 cm . deep, with enclosing walls built in the space between mastabas G 2088 and G 3005 (D 2 on Plan i). The lowest five courses were of bricks $35 \times 17 \times 12 \mathrm{~cm}$., while above were dark gray bricks, $44 \times 20 \times 13 \mathrm{~cm}$. (Fig. 68).

Shaft: $95 \times 88 \mathrm{~cm}$. and 180 cm . deep, lined with brick. Chamber at east, $119 \times 65 \mathrm{~cm}$. and 80 cm . high, with door opening cut partly around north side. Found unsealed.
Burial: In wooden coffin ca. $95 \times 62 \mathrm{~cm}$. Adult male, lying partly contracted on left side, head north facing east. Upper legs at right angles to body with heels drawn up to hips. Right hand near knee, left arm straight down.

## G 3007

Mastaba, type III, constructed wholly of dark gray bricks, $30 \times 15 \times 10 \mathrm{~cm}$., very sandy in texture. Some of the shafts were patched with rubble. Orientated $12^{\circ} 30^{\prime} \mathrm{E}$. of N. Along the east façade so far as it was cleared, were alternate double and single niches. Each of the double niches had a log lintel over the inner part with a plain flat lintel above it. The walls
were plastered with mud and then covered with white stucco. A row of shafts on main axis, of which four were cleared. The mastaba extended beyond the northern limits of the excavation (D 1-2 on Plan 1).
A. Shaft: $100 \times 100 \mathrm{~cm}$. and 555 cm . deep, lined with brick. Chamber at west, $139 \times 155 \mathrm{~cm}$. and 110 cm . high. Found unsealed and empty.


Fig. 68. G 3006. Shaft and burial
B. Shaft: $100 \times 110 \mathrm{~cm}$. and 300 cm . deep, lined with brick. Chamber at west, $140 \times 110 \mathrm{~cm}$. and 110 cm . high. Found unsealed and empty.
C. Shaft: $100 \times 110 \mathrm{~cm}$. and 370 cm . deep, lined with brick. Chamber at west, $125 \times 165 \mathrm{~cm}$. and 70 cm . high. Found unsealed and empty.
D. Shaft: $155 \times 120 \mathrm{~cm}$. and 335 cm . deep, lined with brick. At 75 cm . above the rock the size was decreased by a ledge to $110 \times 110 \mathrm{~cm}$. and where it entered the rock it was $110 \times 95 \mathrm{~cm}$. Chamber at west (unfinished) $70 \times 60$ cm . and 50 cm . high.

## G 3008

Mastaba, type $1 b_{\star}$ débris filling with stepped stone casing. This mastaba showed three stages of development. The first structure was built against the north and part of the west side of G 3005 and was planned from the first to have the offering room included in the body of the structure. Size $820 \times 755 \mathrm{~cm}$., including offering room and final brick casing. Orientated $11^{\circ}$ $30^{\prime} \mathrm{E}$. of N. The north side and probably also the west and south sides, although these were concealed under a later brick casing, had a stepped casing of local limestone. This stepped casing existed also on the east outside the offering room. The offering room was lined with irregularly coursed fine white limestone, dressed with a batter of $85^{\circ}$ (Fig. 69). Built into this were two double niche blocks, each in one piece. The south end wall was vertical and the east wall was intended also to be so, but at the south end it inclined slightly inward. The floor at the north end was natural rock, but farther south was of slabs of stone laid on rubble and débris to level up the sloping surface. The chamber was roofed with slabs well fitted together (Pls. 6 and 16). The walls were coated with a smooth hard layer of pinkish plaster, then finished with white. On this were painted funerary scenes, and inscriptions (Pl. 16). (For full description see Chapter V and Plates 53-55.) Around the lower part of the wall was a dado of black, with a border of narrow yellow, red and black bands. The ceiling was painted red. Later a new stepped casing was added at the north, immediately outside the original one. The door was apparently always at the north. All four pits belonged to the original construction. Under the floor of the south end of the offering chamber was an unfinished shaft $Y$, cut only a little way into rock and before the offering room was constructed. Finally the whole structure


Fig. 69. G 3008. Transverse section through mastaba, showing offering room, shafts A and Y and the various casings
was surrounded with a casing of dark gray bricks, $37 \times 20 \mathrm{x}$ 14 cm . The exterior was plastered with mud and had a batter of $84^{\circ}$. This brickwork extended across the denuded top of G 3005 and included a much larger area toward the north. The shafts were lined with rubble but repaired at the tops with similar bricks. The cross walls between shafts $A-B$ and $B-C$ had not been bonded into the sides and were almost entirely destroyed (Pl. 14:2). At the northwest corner was a later brick structure, probably intended for a new shaft $Z$. Near the northeast corner, was an intrusive burial X. In the débris to north of the offering chamber was a fragment of inscription No. 36 (CD ı-2 on Plan 1 ).
A. Shaft: $100 \times 90 \mathrm{~cm}$. and 420 cm . deep, lined with rubble. Chamber at west, $370 \times 240 \mathrm{~cm}$. and 160 cm . high, its floor 70 cm . beiow the bottom of snaft (Fig. 70). in the floor was a pit, $263 \times 97 \mathrm{~cm} .(\mathrm{N}-\mathrm{S})$ and 62 cm . deep. This had a rim, $22-27 \mathrm{~cm}$. wide which on the shaft side had been partly cut down to a depth of 50 cm . It apparently was the intention to cut from the rock a sarcophagus or at least give the pit the semblance of one, but the work had been left incomplete (Pl. 36). Its cover slabs had been pulled off and laid against the wall. Burial: Adult, a broken skull and two leg bones only.
B. Shaft: $90 \times 87 \mathrm{~cm}$. and 275 cm . deep, lined with mud plastered rubble, and sunk only 50 cm . into rock.
C. Shaft: $95 \times 95 \mathrm{~cm}$. and 450 cm . deep, lined with mud plastered rubble. Chamber at west, $190 \times 175 \mathrm{~cm}$. and 100 cm . high. The door had been sealed with rubble. In the floor was a pit $177 \times 65 \mathrm{~cm}$. and 75 cm . deep. It had been covered with slabs, some of them thrown out into the shaft. No remains of body.
D. Shaft: $90 \times 95 \mathrm{~cm}$. and 233 cm . deep, lined with rubble and never sunk below rock.
X. A tomb built inside the final east brick casing wall. It was of brick with a roof of slabs ca. 22 cm . thick. Over the roof was a mass of brick 68 cm . thick (Fig. 71).


Fig. 70. (i 3008. Shaft and chamber of A
Y. Shaft: $95 \times 80 \mathrm{~cm}$. and 90 cm . deep, extending 25 cm . under the south wall of the offering room. Never used.
Z. Shaft: $95 \times 135 \mathrm{~cm}$. and 215 cm . deep, lined with brick, except on north, where there was a mass of rubble extending northward beyond the limits of the excavation.

G 3010
Mastaba, type $\mathrm{I} b$, débris filling with stepped stone casing. Size, $815 \times 320 \mathrm{~cm}$. orientated slightly E. of N. (C 6 on Plan 2). The stone casing on the east was not laid in regular courses, but was dressed to a batter of $84^{\circ}$. There were three niches, a double one near the south end opposite the serdab S and two single ones


Fig. 7I. G 3008
Section through intrusive grave X


Fig. 72. G 3010
Two bowls from débris in offering room (Scale I : 50)
opposite shaft B. All were cut in single blocks. At the north end opposite D was a break in the face and another niche stele may have been inserted here. This mastaba was built against the south end of G 3011 and the stones were cut to fit into the stepped casing of the latter. It is possible that the east façade was reconstructed at the same time that a new offering room was made between this mastaba and G 3000 . This room had its door at the north and a recess at the south end. To make room for this, the old casing of G 3000 was removed, and the new facing built against the old retaining wall of its core. The serdab S was lined with well dressed limestone blocks, and had a small window W, 14 cm . wide and 8 cm . high, which did not, however, open through the niche as was usually the case. There
were four shafts, A to D. In the débris in the offering room were two bowls of red ware (Fig. 72).
A. Shaft: $90 \times 90 \mathrm{~cm}$. and 490 cm . deep, lined with rubble, except on north and west where the faces were repaired with ten courses of bricks. Chamber at south, $117 \times 100 \mathrm{~cm}$. and 70 cm . high. Found unsealed, but a single large slab $90 \times 81 \mathrm{~cm}$. and 15 cm . thick was lying against the face of the shaft opposite the opening.
Burial: Adult male, lying contracted on left side, head north facing east. The skull was broken and had originally rested on a stone. Large bones (Fig. 73).
B. Shaft: $112 \times 100 \mathrm{~cm}$. and 440 cm . deep, lined with rubble above the rock surface. Small chamber at west, $118 \times 55 \mathrm{~cm}$. and


Fig. 73. G 3010 Burial A 80 cm . high. Found open, but it had been sealed with three large rough blocks which were lying at the bottom of the shaft.
Burial: Adult female lying partly contracted on left side. Head north facing east. Legs slightly bent. The elbows rested on pelvis and forearms along


Fig. 74. G 3010 Burial B upper legs. Large bones (Fig. 74).
C. Shaft: $93 \times 95 \mathrm{~cm}$. and 430 cm . deep, lined with four courses of bricks for 45 cm . above the rock surface and thence to top with rubble. Chamber at west, $117 \times 64 \mathrm{~cm}$. and 100 cm . high. It was intended to make the chamber larger as two vertical grooves were quarried out in order to split off been sealed with small stones, a number of which lay at the bottom of the shaft (PI. 35:3).
Burial: Adult female, lying contracted on left side, head north facing east. Heels drawn well up to hips, with the knees opposite the chest. Right arm down over hip
the rock. Found open, but it had and left arm bent up opposite breast. At the head was a small rough stone. (Fig. 75 and Pl. 35:4).
D. Shaft: $120 \times 98 \mathrm{~cm}$. and 465 cm . deep, lined with rubble except the north side which was the stepped facing of mastaba G 3011. The east side had been repaired with three irregularly laid courses of brick at the rock level. Chamber at east, $96 \times 88 \mathrm{~cm}$. and 75 cm . high. The door was 86 cm . wide and placed in the center of the shaft, with regularly cut jambs 20 cm . thick. Found unsealed.
Burial: Adult female lying on left side, head north facing east. The bones were disturbed and broken. Heels drawn up to hips with knees before chest. Hands before chin (Fig. 76).


Fig. 75. G 3010 . Burial C


Fig. 76. G 3010. Burial D

G 3011
Mastaba, type $\mathrm{l} b$, débris filling with stepped stone casing. Size, $800 \times 780 \mathrm{~cm}$. orientated due north. This mastaba was apparently planned to include the offering room and the shafts E and F in the original scheme, as the stepped casing was continuous around the west, south and east (C 5-6 on Plan 2). It was later than both G 3012 and G 3021 , and the end of the former was used as one side of the entrance door. The offering room had a recess at the south end. The east wall of this room was vertical while the west wall of coursed masonry was battered. No faces were, however, dressed smooth. The entrance door opened to the east near the northern end of the room ( $\mathrm{Pl} .14: 3$ ). The recess at the south end was afterward used as the chamber for a later burial $Y$ and a wall built across
the south end of the offering room to form its entrance shaft (Fig. 77). This division wall was of rough dressed blocks resting on a rubble filling over the floor of the old offering room. The walls of the offering room were laid in pinkish plaster and covered with pinkish stucco. There were two niches, a double one at the south end opposite the serdab, and a single one at the north (Pl. 14:3). A narrow window W opened from the center of the double niche into the serdab, which was roofed with two slabs.
A. Shaft: $97 \times 107 \mathrm{~cm}$. and 735 cm . deep, lined with rubble. Two chambers, I at west, with its floor 337 cm . below the rock surface, and II at east, its floor 40 cm . below the bottom of the shaft (Fig. 77).
I. Chamber, $128 \times 70 \mathrm{~cm}$. and 95 cm . high. The door was 70 cm . wide with jambs of $15-20 \mathrm{~cm}$. on either side and 35 cm . thick. Found unsealed and empty.
II. Chamber, irregular, $250 \times 110 \mathrm{~cm}$. (N) and 172 cm . (S) and 140 cm . high. The north jamb of door projected 25 cm . and was 30 cm . thick, reinforced where the rock had crumbled by the insertion of two blocks of stone. Found unsealed.
Burial: Adult female. The bones piled in a heap in the southeast corner.
C. Shaft: $102 \times 102 \mathrm{~cm}$. and 480 cm . deep, lined with rubble. Chamber at west, $100 \times 110 \mathrm{~cm}$. and 95 cm . high. Found unsealed and empty.
D. Shaft: $95 \times 90 \mathrm{~cm}$. and 570 cm . deep, lined with rubble. Chamber at south, $132 \times 135 \mathrm{~cm}$. and 75 cm . high. The door had jambs of 8 cm . at sides. The chamber never completely finished. Found unsealed and empty.
E. Shaft: $85 \times 80 \mathrm{~cm}$. and 440 cm . deep, lined with rubble. Chamber at south, irregular, $103 \times 135 \mathrm{~cm}$. and 90 cm . high. Found unsealed and empty.
F. Shaft: $90 \times 74 \mathrm{~cm}$. and 195 cm . deep, lined with rubble and cut only 17 cm . into rock.
G. Shaft: $100 \times 61 \mathrm{~cm}$. and 240 cm . deep, lined with rubble. Never sunk into rock.

H. Shaft: $100 \times 88 \mathrm{~cm}$. and 470 cm . deep, lined with rubble. No chamber.
X. Shaft: $80 \times 80 \mathrm{~cm}$. and 218 cm . deep. Chamber at south, $70 \times 75 \mathrm{~cm}$. and 82 cm . high. The floor was 41 cm . above the bottom of the shaft. Empty.
Y. Shaft: $85 \times 80 \mathrm{~cm}$. and 222 cm . deep, built in south end of offering chamber and north and east walls of similar masonry built in. Chamber at east, the old offering room of mastaba, $160 \times 108 \mathrm{~cm}$. The door opening spanned by a heavy block lintel. Empty (Fig. 77).

## G 3012

Mastaba, type $I b$, débris filling with stepped stone casing. Size, $640 \times 280 \mathrm{~cm}$., orientated $1^{\circ} 30^{\prime} \mathrm{E}$. of N. (C 5 on Plan 2). On the east façade a break in the masonry opposite the serdab $S$ probably contained a niche stele. The serdab was faced with rough dressed blocks and one slab of the roof was in situ. The rear wall of the mastaba had a recess forming part of the offering room of G 302 I . Whether this had been left by the builders of G 3012 or cut away by the builders of G 3021 was not clear. Three shafts, B to D.
B. Shaft: $72 \times 75 \mathrm{~cm}$. and 148 cm . deep, lined with mud plastered rubble, never sunk into rock.
C. Shaft: $97 \times 92 \mathrm{~cm}$. and 434 cm . deep, lined with rubble. On the east the lining was of more regular blocks. Chamber at west and south, $99 \times 95 \mathrm{~cm}$. and 95 cm . high. The door jamb was repaired with an inserted block of limestone. It was intended to sink the shaft deeper and grooves 20 cm . wide and 19 cm . deep were cut all around the edge of the shaft in order to split off the rock (Fig. 78). The door had been sealed with three slabs found lying at the bottom of the shaft.
Burial: Adult male, disturbed. All the bones, including the skull, were piled in a heap in the southwest corner.
D. Shaft: $82 \times 80 \mathrm{~cm}$. and 450 cm . deep, lined with rubble. Chamber at west, $202 \times 130 \mathrm{~cm}$. and 85 cm . high. The chamber was wedge-shaped in plan, widening from the
door. The door had been sealed with stone blocks, which were found lying at the bottom of the shaft.
Burial: Adult female lying on left side, head north facing east (but displaced). Legs and arms displaced (Fig. 79).


Fig. 78. G 3012. Shaft and chamber C
G 3013
Mastaba, type $1 b$, débris filling with stepped stone casing. Orientated $3^{\circ} 30^{\prime} \mathrm{E}$. of N . The original structure included the shaft A only. Later B was added at the north, the lines of the east and west façades being carefully maintained. Opposite A apparently had been a niche stela.
A. Shaft: $90 \times 92 \mathrm{~cm}$. and 450 cm . deep, lined with brick $36 \times 18 \times 11 \mathrm{~cm}$. Chamber at south, $156 \times 158 \mathrm{~cm}$. and 82 cm . high, extending partly along east side (Fig. 8o.) The door was recessed at top and west side to receive


Fig. 80. G 3013. Shaft and chamber A
the sealing block, fragments of which lay in the shaft. In the floor of east part of chamber was a pit, $136 \times 66$ cm . and 56 cm . deep. Contained only a broken leg bone of an adult.
B. Shaft: $88 \times 87 \mathrm{~cm}$. and 355 cm . deep, lined with rubble. Some of the covering slabs lay in the shaft (Pl. 37:1). Chamber at east, $201 \times 155 \mathrm{~cm}$. and 80 cm . high. In


Fig. 81. G 3013. Shaft and chamber B
the floor was a pit, $175 \times 54 \mathrm{~cm}$. and 49 cm . deep, around which a rim was to be cut similar to that in G 3008 A (Fig. 81 and Pl , 37:2).
Burial: Disturbed remains of an adult, skull missing.

## G 3014

Mastaba, type $I b$, débris filling with stepped stone casing. This was a further extension of G 3013 (q.v.) and was the final enlargement. The east façade was lined up with that of G 3013 and dressed down to a smooth surface. A corridor offering room was built along the whole combined length of G 3013-14. The rear wall of G 3002 and the corner of G 3003 were faced with smoothed stonework to form its walls and it doubtless had a slab roof. The stepped casing of the last period was evidently intended to continue along the rear wall, to make the


Fig. 82. G 3014. Burial B


Fig. 83. G 3015. Burial B
structure the same uniform width, but this was never carried beyond the limits of the latest addition ( $\mathrm{C}_{4}$ on Plan 1 and Pl .5 ).
A. Shaft: $105 \times 103 \mathrm{~cm}$. and 200 cm . deep, sunk only 60 cm . into rock. Lined with brick and repaired with rubble. Empty.
B. Shaft: $80 \times 75 \mathrm{~cm}$. and 415 cm . deep, lined with brick. Chamber at east, $235 \times 107 \mathrm{~cm}$. and 90 cm . high.
Burial: In wooden coffin $130 \times 55 \mathrm{~cm}$. of planks ca. 2 cm . thick. Adult male (?) lying on left side, head north (missing) facing east. Heels drawn partly up to hips, enough to get the body into coffin. Left arm straight down under body, right across abdomen (Fig. 82).

G 3015
Mastaba, type $I b$, débris filling with stepped stone casing. Irregular shape, 590 cm . long and narrowing from 255 cm . at the south end to 210 cm . at the north. The plan was entirely determined by the mastabas around it (C 3-4 on Plan 1). On the east was a small double niche in one block at the south end. Under the mastaba, at this point, was an unfinished shaft in the rock. A was a shaft and chamber wholly in the superstructure, while B, placed askew at the north end, was the main shaft.
A. Shaft: $90 \times 75 \mathrm{~cm}$. and 130 cm . deep, lined with rubble. Chamber at south, $210 \times 54 \mathrm{~cm}$. and 70 cm . high, lined with roughly dressed blocks and roofed with slabs among which was a re-used lintel slab with inscription (No. 23). In the shaft were a few bones of an adult, dragged out from the chamber.
B. Shaft: $90 \times 90 \mathrm{~cm}$. and 255 cm . deep, lined with brick. Chamber at east $158 \times 85 \mathrm{~cm}$. and 80 cm . high. Had been sealed with a slab of stone.
Burial: Adult male lying extended on left side, head north facing east. Knees slightly drawn up. Arms down toward knees. Body lay on a bed of fine sand (Fig. 83).

## G 3020

Mastaba, type $I b$, débris filling with stepped stone casing. Size, $880 \times 470 \mathrm{~cm}$., orientated $2^{\circ}$ E. of N. (C 6-7 on Plan 2). The space between this mastaba and G 3010 was utilized for a corridor offering room, with its door at the south. The shafts were grouped in multiple but without any regularity. Near the north end of the offering room were two later shafts X and Y , of which no superstructure remained. In the débris near the south end of the offering room was a fragment of stela, No. 22 (Pl. 50:1).
A. Shaft: $90 \times 90 \mathrm{~cm}$. and 90 cm . deep, built in the superstructure. Chamber at west, $150 \times 65 \mathrm{~cm}$. and 65 cm . high. Roofed with slabs resting on walls and on the
lintel of the door. Empty (Fig. 84). In the débris was a jar of rough red ware (Fig. 85).
B. Shaft: $105 \times 105 \mathrm{~cm}$. and 407 cm . deep, lined with rubble. At the bottom the rock was not cut away, leaving a rough ledge 40 cm . high opposite the chamber. Chamber at east, $142 \times 8 ; \mathrm{cm}$. and 87 cm . high. The chamber was wedge-shaped in plan, widening from the door. Found unsealed.


Fig. 84. G 3020
Shaft and chamber A


Fig. 85. G 3020 Jar in débris of A (Scale 1:10)

Burial: Adult female. All the bones were piled in a heap at the north end of chamber. In the débris was a rough red ware jar like that in shaft A (Fig. 85).
C. Shaft: $105 \times 105 \mathrm{~cm}$. and 260 cm . deep, lined with rubble. A chamber begun at west.
D. Shaft: $110 \times 103 \mathrm{~cm}$. and 255 cm . deep, lined with rubble and brick. Chamber begun at east, but cut in to a depth of 68 cm . only. In the débris in shaft was a small bowl with a lip, brown ware (Fig. 86).
E. Shaft: $86 \times 63 \mathrm{~cm}$. and 100 cm . deep, built entirely in the superstructure and mud plastered.

## MINOR CEMETERY AT GIZA

Burial: Adult female contracted on left side, head north facing east. Heels drawn close up to hips with knees before chest. Hands at knees (Fig. 87).
F. Shaft: $105 \times 105 \mathrm{~cm}$. and 565 cm . deep, lined with bricks $26 \times 13 \times 8 \mathrm{~cm}$. The division wall between this shaft and D had been repaired with bricks of a slightly larger size. Chamber at west, $200 \times 128 \mathrm{~cm}$. and 110 cm . high, its floor 10 cm . above the bottom of the shaft. Wedge-shaped in plan, widening from the door, but with the south wall recessed 50 cm . from the jamb. Found unsealed.


Fig. 86. G 3020. Bowl from D (Scale 1:2)
Burial: Adult male. Most of the bones in a heap in the southwest corner. Head had been north, as shown by the position of some of the vertebrae still in situ.
G. Shaft: $105 \times 100 \mathrm{~cm}$. and 410 cm . deep, lined with rubble on the north and east sides to a height of 50 cm . above the rock surface, thence to top with small bricks, like those in F. On other sides all brick (Cf. section C D on Plan 3). On the north side the two remaining top courses were of the slightly larger size bricks. At the west was a small chamber on the rock level built in the masonry. This probably was a later grave and


Fig. 87 G 3020 Burial F was badly wrecked (Fig. 88 and Pl. 37:3). The bottom chamber was at the west, $160 \times 120 \mathrm{~cm}$. and 107 cm high, with its floor 13 cm . above the bottom of the shaft. The door had been cut the full width of the shaft and then narrowed to 55 cm . by a brick wall 48
cm . thick, with mud plastering on the jamb. No other evidences of sealing were found. In the floor was a pit, $105 \times 42 \mathrm{~cm}$. and 50 cm . deep. At the north end a ledge


Fig. 88. G 3020. Shaft and chamber G
of rock had been left, 20 cm . wide and 21 cm . high, as a head rest (Fig. 88 and Pl. 37:3-4).
H. Shaft: $75 \times 70 \mathrm{~cm}$. and 135 cm . deep, lined with mud plastered rubble, except on the north side which was the
stepped casing of G301. Built entirely in the filling of the mastaba. Chamber at west, $106 \times 80 \mathrm{~cm}$. and 63 cm . high. Roofed with slabs.
X. Shaft: $110 \times 100 \mathrm{~cm}$. and 410 cm . deep. As it descended it twisted so that at the bottom the southwest corner was 20 cm . further east than at the top (Fig. 89).


Fig. 89. G 3020. Shaft and burial X
Chamber at west $190 \times 100 \mathrm{~cm}$. and 100 cm . high, its floor 20 cm . below the bottom of the shaft. The door was recessed 55 cm . in from the shaft and the top of the chamber was 25 cm . below the top of the recess. This was to receive the sealing slabs, one of which was in situ (Fig. 89).

Burial: In wooden box $128 \times 68 \mathrm{~cm}$. and 75 cm . high, including the cover; 58 cm . without it. A stone was placed under the northeast corner to jack the coffin up level. The sides were 8 cm . thick and fitted into the ends with a housed shoulder mitre. The housing was not squared but had a slight bevel on the under side (Pl. 38:I) but the fitting of the two parts was not very close. The fastenings were thongs reinforced with wooden pegs. The sides, ends and bottom were of two pieces each, tenoned together. The bottom was beveled along the edges and let into grooves in the sides and ends. On the top edge of each side were three irregular patches of wood and on the inside were a number of similar patches. These were fastened in place with one or two pegs each. Many of these concealed the tenoning of the planks. The lid was convex, the curved portion fitting into heavy square ends.
An elderly female lying on left side, head north facing east. The legs had been contracted enough to get the body into the coffin. The arms were nearly straight with the hands together near the knees (Fig. 89).
Y. Shaft: $100 \times 102 \mathrm{~cm}$. and 293 cm . deep. Chamber at west, $124 \times 80 \mathrm{~cm}$. and 100 cm . high. Found unsealed. Burial: Adult female (aged) lying on left side, head north facing east, originally resting on a stone (Fig. 90).

## G 3021

Mastaba, type $\mathrm{I} a$, débris filling faced with brown bricks, $37 \times 15 \times 10 \mathrm{~cm}$. Portions of the shafts were rubble. Size $825 \times 430 \mathrm{~cm}$., orientated due north. The exterior was plastered with mud mortar and had a batter of $83^{\circ} 25^{\prime}$. On the east façade were three niches, one double between two single ones. A niche stela had been opposite A, in a break in the masonry. This had rested on a broad stone ledge. The offering room was of the corridor type with a recess extending into the rear of G 3012 (C 4-5 on Plans ı and 2). There were four shafts A to $D$ arranged on the main axis.
A. Shaft: $92 \times 92 \mathrm{~cm}$. and 210 cm . deep, lined with rubble. Never sunk into rock.
B. Shaft: $98 \times 107 \mathrm{~cm}$. and 485 cm . deep, lined with rubble for a distance of 118 cm . above rock and thence to top with mud brick of which the lowest five courses were the same size as those used in the exterior of the mastaba, while those above were $36 \times 19 \times 11.5 \mathrm{~cm}$. Chamber at west, $108 \times 147 \mathrm{~cm}$. and 100 cm . high. In the chamber were abundant remains of a wooden coffin broken to pieces. Found unsealed.
Burial: Adult, all bones scattered and broken.
C. Shaft: $103 \times 103 \mathrm{~cm}$. and .440 cm . deep, lined with rubble for 85 cm . above rock and thence to top with


Fig. 90. G 3020. Burial Y


Fig. 91. G 3021. Burial C
mud bricks of the smaller size. Chamber at west, 135 x 110 cm . and 85 cm . high. It was the intention to make the chamber larger, as at the south were two vertical grooves cut in order to split off the rock. Found unsealed ( $\mathrm{Pl} .38: 3$ ).
Burial: Adult male lying almost on back, head north apparently originally facing up, but fallen to east. Hands drawn up before face, and legs apparently contracted. The leg bones were broken and position of body disturbed (Fig. 91 and Pl. 38:4).
D. Shaft: $92 \times 82 \mathrm{~cm}$. and 185 cm . deep, not sunk into rock. Lined to a height of 100 cm . with rubble and above that with brick. Chamber at west, $120 \times 95 \mathrm{~cm}$. and 57 cm .
high, built of rubble in the filling of the mastaba. Found unsealed.
Burial: Adult female lying on left side, head north facing east. Heels drawn up close to hips with upper legs out at right angles to body. Hands near knees (Fig. 92). In front of body a rough pointed jar (I) of brown ware like that from the débris of G 3030, No. 2. At the knees was a small model cup (2) like that from G 3001 X (Fig. 61, $\times 2$ ).


Fig. 92. G 3021. Shaft and chamber D

## G 3022

Mastaba, type II, débris filling with rubble retaining wall. Never cased. Size, $560 \times 320 \mathrm{~cm}$., orientated $4^{\circ}$ E. of N. (C 4 on Plan 1 and Pl. 5). Three shafts, all lined with rubble and never sunk below rock surface.
A. Shaft: $100 \times 106 \mathrm{~cm}$. and 122 cm . deep.
B. Shaft: $107 \times 112 \mathrm{~cm}$. and 125 cm . deep.
C. Shaft: ito $\times 115 \mathrm{~cm}$. and tio cm . deep.

## G 3023

Mastaba, IIb, débris filling with rubble retaining wall and stepped stone casing. Only the lowest course of this remained. Size, $320 \times 340 \mathrm{~cm}$., orientated $10^{\circ}$ E. of N. (C 3-4 on Plan 1 and Pl. 5). Four shafts, arranged in multiple.


Fig. 93. G 3023. Shaft A
A. Shaft: $80 \times 105 \mathrm{~cm}$. and 485 cm . deep, lined with rubble. Two chambers, both on the west (Fig. 93 and Pl. 39:2). I. Chamber, $108 \times 75 \mathrm{~cm}$. and 100 cm . high, the floor 330 cm . below the rock surface.
Burial: Adult female, lying on left side, head north facing east. Resting on a stone. Upper legs at right angles to body, with heels drawn up to hips. Left arm
nearly straight down under body. Right arm with hand resting on knee (Fig. 94 and Pl. 39:3).
II. Chamber, $105 \times 106 \mathrm{~cm}$. and 85 cm . high.

Burial: Adult male lying contracted on left side, head north facing east. Resting on a stone. Heels drawn back to hips with knees to chest. Hands up to face (Fig. 95 and Pl. 39:4).
B. Shaft: $100 \times 100 \mathrm{~cm}$. and 140 cm . deep.
C. Shaft: $95 \times 80 \mathrm{~cm}$. and 150 cm . deep.
D. Shaft: $80 \times 90 \mathrm{~cm}$. and 140 cm . deep.

All lined with rubble and none sunk below rock surface.


Fig. 94. G 3023
Burial I of shaft A


Fig. 95. G 3023
Burial II of shaft A

## G 3024

Mastaba, type III, constructed wholly of brick $28 \times 15 \times$ 9 cm . The main structure was $490 \times 305 \mathrm{~cm}$., orientated $23^{\circ}$ E. of N. (C 3 on Plan 1). On the east façade were two double and two single niches. That at the south had been constructed with stone, laid in several courses with small blocks. This face had originally been finished with a hard pinkish white stucco. The niche $a$ extended above the spring of the reeded vaulting so that it was clear that the offering room as finally constructed was not part of the original scheme. It was of bricks, $25 \times 13 \times 9 \mathrm{~cm}$., and the joint between it and the main structure is shown in Pl. 12:1. The reeded barrel vault was built of rectangular bricks $28 \times 15 \times 91 / 2 \mathrm{~cm}$., the exposed edge rounded to form the reeding (Fig. 96). The string course below the vault was molded in the mud plaster with a slight projection from the face of the wall. The whole interior of the offering room was plastered with a thick layer of mud finished
with white stucco. This new plaster was over the original pinkish plaster of the niched façade. On the walls were traces of painting. The string course and the reeded ceiling were colored red. In front of the niche $b$ was a low ledge of brickwork. The latest offering room extended beyond the north end of the main structure and had a door at the north end. This was blocked with dark gray bricks $26 \times 13.5 \times 9.5 \mathrm{~cm}$., and a door in the east wall was then used.
A. Shaft: $111 \times 92 \mathrm{~cm}$. and 350 cm . deep, lined with brick. Chamber at south, $135 \times 90 \mathrm{~cm}$. and 80 cm . high. Contained only leg bones of adult.
B. Shaft: $103 \times 92 \mathrm{~cm}$. and 330 cm . deep, lined with brick. Small recess at west, $100 \times 27 \mathrm{~cm}$. and 50 cm . high.


Burial: Adult female lying contracted on left side, head north facing east. Heels drawn back to hips, with knees near chest. Hands near knees. Head and knees supported on bricks (Fig. 97).

## G 3025

Not properly a mastaba, but a series of late burials built one against the other along the rear wall of G 3005 . Of these A and B form the earliest group, with bricks $35 \times 17 \times 11.5 \mathrm{~cm}$. C and D were later, with bricks $36 \times 19 \times 12 \mathrm{~cm}$. E may have been the entrance shaft to the burial chamber north of it, instead of $D$. The division wall between $E$ and $F$ was of plastered rubble. None was sunk below the rock surface (C 2-3 on Plan I).
A. Shaft: $97 \times 105 \mathrm{~cm}$. and 230 cm . deep.
B. Shaft: $90 \times 105 \mathrm{~cm}$. and 155 cm . deep.
C. Shaft: $95 \times 100 \mathrm{~cm}$. and 155 cm . deep.


Fig. 98. G 3025. Shafts D and E with burial chamber between them
D. Shaft: $55 \times 100 \mathrm{~cm}$. and 105 cm . deep. Opening at south into the chamber of $E(?)$.
E. Shaft: $150 \times 127 \mathrm{~cm}$. and 120 cm . deep. Chamber at north, $160 \times 55 \mathrm{~cm}$. and 62 cm . high. The side walls
were lined with rubble on which rested the three roofing slabs (Fig. 98).
Burial: Adult lying contracted on left side, head north facing east. Heels drawn partly back to hips with upper legs nearly at right angles to body. Head and arms displaced.
F. Shaft: inox ino cm . and 75 cm . deep. Surface burial against east wall. Adult lying contracted on left side, head north (missing). Disturbed.


Fig. 99. G 3026. Shaft and burial.
G 3026
An extension of G 3035 of type IIb, débris filling with rubble retaining wall, mud plastered, and with stepped stone casing. Only the lowest course of casing remained, orientated $10^{\circ} \mathrm{E}$. of N. (C 1-2 on Plan 1). Ca. 70 cm . inside the east façade was a fragment of an earlier casing with a slightly different orientation and belonging to a mastaba of type $I b$. This mastaba had been destroyed by G 3035, while G 3026 was subsequent to G 3035. The only burial was in the core of the G 3026.

Shaft: $100 \times 70 \mathrm{~cm}$. and 175 cm . deep, lined with rubble. Chamber, $143 \times 55 \mathrm{~cm}$. and 70 cm . high, built with rubble in the débris core and roofed with three slabs.

Burial: In wooden coffin, ca. $80 \times 53 \mathrm{~cm}$. Adult male (?) lying contracted on left side, head north facing east. Heels drawn up to hips with knees before chest. Hands to chin (Fig. 99).

G 3030
Mastaba, type Ha, débris filling enclosed by a well built retaining wall, composed for the most part of roughly squared stones but begun, however, with rubble. Size, $2480 \times 1150 \mathrm{~cm}$., orientated slightly W of E . The batter of the retaining wall,


Fig. 100. G 3030. Model offering vessels from débris at south (Scale 1:2)
where exposed on the east side, was $82^{\circ} 30^{\prime}$. The core was cased with brick, 170 cm . thick on the east, south and north, and apparently only half this thickness on the west ( $\mathrm{AB} 4^{-7}$ on Plans 1 and 2). The lowest five to seven courses of this facing were built of bricks $44 \times 22 \times 18 \mathrm{~cm}$., while above these were bricks $40 \times 20 \times 15 \mathrm{~cm}$. The batter varied; $81^{\circ} 30^{\prime}$ on the south face, $83^{\circ} 5^{\prime}$ on the west (rear) face and $84^{\circ} 5^{\prime}$ on the east (niched) face. On the east façade were three double niches, two of them of large size. Near the south end the brick casing was omitted to make a small offering room 290 cm . long, the retaining wall forming its inner wall. It may have been the intention to place here a large niche of stone, but this was never done. A rough wall of rubble, with a small opening at its
north end, was built later across the open side. Behind this chamber were the remains of a serdab, which had been wrecked. The mastaba contained three shafts, A to C, arranged on the main axis. In the débris in the passage south of the mastaba, were a number of model offering cups and saucers of several varieties (Fig. 100). Of these $\times \mathrm{I}, \mathrm{x}_{3}$, and $\times 7$ were of coarse red ware, wet smoothed; the others of coarse brown ware, wet smoothed. There was also a pointed jar of coarse brown ware (Fig. ıoı).
A. Shaft: $125 \times 125 \mathrm{~cm}$. and 750 cm . deep, tapering to $100 \times 110 \mathrm{~cm}$. at bottom. Lined with brick which, for at least a distance of 55 cm . above the


Fig. IoI. G 3030 Jar from débris at south (Scale I:5) rock, appeared to have been covered with coarse plaster. Chamber at west, widening from 155 cm . at door to 245 cm . at inner end. Length 180 cm ., and height 120 cm . The door had been sealed with bricks $40 \times 21 \times 10 \mathrm{~cm}$., the two bottom rows laid as headers. In the chamber were sand and bits of dried grass, and the chamber had evi- dently been opened in very recent years.
B. Shaft: $230 \times 200 \mathrm{~cm}$. and 1740 cm . deep, lined with coarse rubble laid without mud mortar to a height of 150 cm . above the rock surface, thence to top with brick ( Pl . 13:1). The rock portion tapered to 136 x 121 cm . at the bottom. Chamber at the south $272 \times 295$ cm . and 155 cm . high. The door was the full width of the shaft and 100 cm . high. From the shaft a short passage 105 cm . long, its floor 45 cm . below the bottom of the shaft, led to the chamber. Near the chamber, the roof had a drop of 21 cm . The floor of the chamber was 25 cm . lower than that of the passage, a short unevenly cut incline connecting the two. The floor of the western part of the chamber was covered to a depth of $25-35 \mathrm{~cm}$. with limestone chips, forming a sort of ledge on which lay the body (Fig. IO2).


Fig. 102. G 3030. Shaft and burial B

Burial: Adult female lying on left side, head north facing east. Legs slightly flexed with upper legs at right angles to body. Both hands in front of abdomen. The body was wrapped in fine linen. Behind the head were four stones and under the hips another (Fig. 102 and Pl. 40). The linen wrappings had been torn off by plunderers from the ankles, wrists and neck.
Objects: 1. bowl, brown ware, red polished (Fig. 103); 2. small rectangular piece of wood, $13 \times 8 \mathrm{~cm}$.
C. Shaft: $175 \times 180 \mathrm{~cm}$. and 1030 cm . deep, lined with rubble for 110 cm . above rock, thence to top with brick (Pl. 39:1). Rock portion tapered to $124 \times 106 \mathrm{~cm}$. at


Fig. 103. G 3030. Bowl from B (Scale I: 5)
bottom. Chamber at south, widening from 94 cm . at door to 105 cm . at inner end. Length 225 cm . and height 140 cm . The door had slight offsets at the sides. The chamber was to have been sunk deeper, as in B. Found unsealed and empty.

## G 3031

Mastaba, type $I b$, débris filling with stone casing, with rough convex faces and not stepped. Size, $815 \times 200 \mathrm{~cm}$., orientated slightly W. of N. (B 4-5 on Plans 1-2). A stepped wall was built across the northern end of the space between this mastaba and G 302I, to enclose an offering room. There were no niches, but at the southern end was a serdab $S$ (?) $160 \times 67$ cm . and 85 cm . deep, lined with rubble and brick. The serdab and the three shafts were built against the sloping face of G 3030 .
B. Shaft: $122 \times 110 \mathrm{~cm}$. and 770 cm . deep, lined with rubble.

In the débris at the bottom of shaft was a limestone lintel block with a painted inscription (No. 28 and Pl. 49:3). Chamber at south, $200 \times 160 \mathrm{~cm}$. and 140 cm . high. The
floor was $c a .15 \mathrm{~cm}$. above the bottom of shaft. The door was cut the full width of shaft and then narrowed by a jamb 48 cm . wide and 35 cm . thick, built of roughly squared blocks laid in pinkish plaster. The sealing of door was rubble, still in situ for a height of 64 cm . In floor of chamber was a pit $156 \times 63 \mathrm{~cm}$. and 50 cm . deep. Covered with three slabs, one still in situ.
C. Shaft: $110 \times 110 \mathrm{~cm}$. and 370 cm . deep, lined with rubble, brick on north side. Chamber at east, $132 \times 100 \mathrm{~cm}$. and 75 cm . high, irregularly cut. The door had been sealed with a brick wall still in situ for a height of 35 cm . Burial: Young adult female lying on left side. Head north facing east. Lower part of body displaced.
D. Shaft: $100 \times 110 \mathrm{~cm}$. and 570 cm . deep, lined with rubble with brick on south side. Chamber at east, 96 $\times 126 \mathrm{~cm}$. and 98 cm . high. The floor was 22 cm . above bottom of shaft. Had been sealed with a rubble wall, $c a .50 \mathrm{~cm}$. thick, the stones of which lay in the shaft.
Burial: Young person, all the bones scattered and skull in fragments.

## G 3032

Mastaba, type $1 b$, débris filling with stepped stone casing. A single shaft built against the south side of G 3033. No niche and a small space on the east side between this mastaba and G 3022 served as an open offering room ( $\mathrm{BC}_{4}$ on Plan I).

Shaft: $110 \times 112 \mathrm{~cm}$. and 535 cm . deep, decreasing to $102 \times 102 \mathrm{~cm}$. at bottom. Lined with rubble. Two chambers, I at west and II at south (Fig. IO4).
I. Chamber at west, $107 \times 108 \mathrm{~cm}$. and 90 cm . high, the floor 195 cm . below the rock surface. Found unsealed. In the floor a pit, $107 \times 55 \mathrm{~cm}$. and 25 cm . deep.
Burial: Adult female lying contracted on left side, head north facing east. Heels drawn back to hips, with knees to chest. Hands up before chest. Body lay on a bed of fine sand (Fig. 105).
II. Chamber at south, $100 \times 95 \mathrm{~cm}$. and 85 cm . high. Burial: Adult female lying contracted on left side, head west facing north. Heels drawn up to hips with knees out from body. Arms folded across chest. Body lay on a bed of sand (Fig. 106).


Fig. 104. G 3032
Shaft and chambers I and II


Fig. 105. G 3032. Burial I


Fig. 106. G 3032. Burial II

## G 3033

Mastaba, type $\mathrm{I} a$, débris filling with brick facing. Size, including room, $1050 \times 765 \mathrm{~cm}$., orientated $7^{\circ} 30^{\prime} \mathrm{E}$. of N. (B C 3-4 on Plan 1). The tomb of the priest Sab-Ef. This was the best example of the corridor-recess type of plan, as the
whole structure was built according to one scheme and never reconstructed or enlarged. The walls were of bricks, $29 \times 15 \mathrm{x}$ 9 cm . The interior was divided into compartments E to J by tie walls and these spaces were afterward used for intrusive burials, sometimes being refaced with bricks $38 \times 19 \times 17 \mathrm{~cm}$. The shafts belonging to the original structure were A and D . The exterior walls were battered $74^{\circ} 30^{\prime}$ on the west, $82^{\circ} 30^{\prime}$ on the east. The niched façade was $75^{\circ} 20^{\prime}$. Here were a series of four double and three single niches, not regularly alternating as there was a smaller double niche next to a larger one in the center of the façade. In front of this smaller niche was a low ledge for offerings. The two southern niches had lintels, flat and $\log$ (PI. 18) of limestone with inscriptions (Nos. 25-26 Pl. 51:2). The other double niches had had merely flat roughly worked stone lintels.

The offering room was the corridor type with a recess at the south end. The walls were built against, i.e., after the main structure but this was simply to facilitate the construction and was not a later idea. The walls of the offering room were vertical inside, except the niched face. The recess was covered by a low arch in line with the east wall of the corridor (Pl. 19). The entire corridor portion had a barrel vault with reeded ceiling (Cf. section E F on Plan 3). For the courses of this special bricks were designed with interlocking ends (Fig. 107 and Pls. 17-18). One course of the walls projected as a string course. From it sprang the arch which, owing to the batter of the niched wall, had here a span of 125 cm . The bricks were of the shape shown in Fig. 108 and Pl. 13:2. The long edges were flat and the ends tapered from the outside to allow for the curve. The opposite ends were molded with projections and corresponding insets so that adjoining bricks could be fitted one into the other. The inner edges were molded to form half only of the full reeding. This would have required two molds, one the reverse of the other, in order to make the full curve. However, only one shape was made and the result obtained by reversing the alternate courses (Cf. PI. 17). Thus one course was laid as shown in Fig. $1_{7}{ }_{7}$, while the adjoining
one was laid with the projecting ends pointing the opposite way. Interlocking bricks, in order to fit perfectly, must be designed for the particular radius of the arch for which they are intended. These builders realized this to a certain extent, probably after experiment, but they evidently did not have the


Fig. 107. G 3033. Transverse section through offering room vaulting (Scale 1:50)
means of laying out the design so as to be assured of a perfect joint. As a result the bricks had to be scraped away to fit during the progress of building. Large wedge-shaped spaces between the ends were unavoidable, and these were chinked up with pebbles and mud (Fig. 108). The trouble involved may be one reason why the innovation was not used more extensively. All the other vaults found in this part of the cemetery were of
common bricks, with only one edge rounded off for the reeding. At the spring of the vault the ends of the bricks were set in mud mortar with plenty of pebbles mixed in it. Above the interlocking bricks was one course of ordinary bricks. The horizontal courses were carried to this and the irregular spaces Silled in with mud and small stones.

The faces of the walls and vault were coated with yellowish mud mortar and finished with white stucco. A dado of black 57 cm . high was painted on this, and at a height of 90 cm . was a narrow black border. The string course and the ceiling were red. The main corridor was lighted from the north by a small window 45 cm . wide. The sill sloped down to the rcom at a


Fig. 108. G 3033. Interlocking bricks from vaulting of offerıng room (Dimensions indicated)
height of 190 cm . above the floor. In the east wall of the recess was a smaller window ( $\mathrm{Pl} .12: 2$ ). This was blocked up when the later mastabas G 3022 and G 3023 were built against the east side.

After the mastaba had fallen into disuse, part of the offering room was used for an intrusive burial X . Cross walls were built of bricks and part of the vaulting was destroyed to make room for the shaft and to enable its chamber to be more easily constructed.
A. Shaft: $115 \times 105 \mathrm{~cm}$. and 575 cm . deep, lined with brick. Chamber at south, $205 \times 143 \mathrm{~cm}$. at door, narrowing to 108 cm ., and 130 cm . high with the floor $1 ; \mathrm{cm}$. below the bottom of the shaft. The door had
been sealed with roughly squared limestone blocks of which three remained in situ, laid in pinkish plaster.
Burial: Adult, disturbed.
D. Shaft: $120 \times 130 \mathrm{~cm}$. and 550 cm . deep, lined with brick. Chamber at west, $140 \times 120 \mathrm{~cm}$. and 100 cm . high. Door had been sealed with roughly squared blocks of limestone.
E. Shaft: $95 \times 65 \mathrm{~cm}$. and 310 cm . deep, lined with brick. Chamber at west, $100 \times 61 \mathrm{~cm}$. and 72 cm . high. As


Fig. 109. G 3033. Shaft and burial E Fig. ito. G 3033. Shaft and burial F
the shaft was not sunk deep enough to enable the chamber to be cut wholly in the rock, the upper part was constructed in the brickwork and roofed with a thick slab of limestone.
Burial: Adult female lying almost on back, but slightly to left, head north (only lower jaw) facing east. Heels drawn up to hips with upper legs at right angles to body. Hands down to knees (Fig. Io9).
F. Shaft: $90 \times 130 \mathrm{~cm}$. and 255 cm . deep, lined with brick. At the bottom a grave $90 \times 43 \mathrm{~cm}$. and 40 cm . deep, with sides formed by limestone blocks.

Burial: Youth lying on left side, head north facing east. Heels drawn up to hips with upper legs at right angles to body. Lower arms missing (Fig. ıוо).
G. Shaft: $90 \times 40 \mathrm{~cm}$. and 165 cm . deep, built wholly in the body of mastaba. Empty.
H. Shaft: $107 \times 100 \mathrm{~cm}$. and 230 cm . deep, lined with brick. At bottom a grave $107 \times 56 \mathrm{~cm}$. and 40 cm . deep, with side formed by limestone blocks.
Burial: Adult male lying on left side, head north facing


Fig. ill. G 3033. Shaft and burial H
east. Legs contracted at knees but right one down and left up. Hands apparently clasping legs (Fig. iti).
I. Shaft: $80 \times 75 \mathrm{~cm}$. and 120 cm . deep, lined with brick. Empty.
J. Shaft: $63 \times 74 \mathrm{~cm}$. and 108 cm . deep, lined with brick. Narrowed by a ledge of brickwork half way down to $63 \times 58 \mathrm{~cm}$.
Burial: Young adult, lying on left side, head north facing east but down toward knees. Knees drawn up before chest. Hands resting on knees (Fig. 112).


Fig. 112 G 3033 Burial J
X. An intrusive burial in the offering chamber. Entrance shaft $45 \times 40 \mathrm{~cm}$. and soo cm. deep. Chamber at south, roo x 40 cm . Constructed of brick with a slab roof. Empty.

## G 3034

Mastaba, type $\mathrm{I} a$, débris filling with facing of bricks, 24 x $12 \times 7 \mathrm{~cm}$., except in the west wall; there they were $25 \times 11 \mathrm{x}$ 9 cm . Size, $775 \times 425 \mathrm{~cm}$., orientated $6^{\circ} 30^{\prime} \mathrm{E}$. of N. (B C 2-3 on Plan 1). Most of the filling had been


Fig. 113. G 3034 Burial removed and also the lining of the one shaft. South of the latter was a portion of a cross wall tying the exterior walls together (Pl. 12:4). On the east façade were two double niches, one at the south and the other near the north. The latter was partly covered by the stone casing of G 3035 which extended over the north end of the mastaba. An offering enclosure was built against the mastaba. This had very slight walls, one or one and a half bricks thick; the bricks being $22 \times 10.5 \times 8 \mathrm{~cm}$. Later a wall was built of large bricks parallel to the south face of G 3035 but where this joined the face of G 3034 a half arch or flying buttress was made so as to permit of access to the north niche ( $\mathrm{Pl} .14: 4$ ). All these walls were plastered with mud mortar.

Shaft: $140 \times 113 \mathrm{~cm}$. and 205 cm . deep, narrowing at the bottom to $113 \times 100 \mathrm{~cm}$. Chamber at east, 185 x 123 cm . and 87 cm . high. The door opening was cut partly around the south side.
Burial: In wooden coffin ca. $160 \times 57 \mathrm{~cm}$. Wood 5 cm . thick. Adult lying on left side, head north facing east. The skull in fragments. Knees partly drawn up, with upper legs nearly at right angles to body. Arms displaced (Fig. 113).

## G 3035

Mastaba, type $\mathrm{I} a$, débris filling with brick facing. Size, $1100 \times 520 \mathrm{~cm}$., exclusive of offering room, orientated $10^{\circ} \mathrm{E}$. of N. (B C 1-2 on Plan 1). The east face was of bricks, $35 \mathrm{XI}_{17} \mathrm{X}$ 12.5 cm ., plastered with a batter of $83^{\circ}$. In it was a large double niche near the south end with a limestone inscribed lintel (No. 29 and PI. 5 : : 1 ). Below it on the floor was a double basin, uninscribed. Two single niches and a recess near north. The mastaba extended beyond the limits of the excavation. The offering chamber was of the corridor-recess type. The inner part of the walls of the offering room were built of brown bricks, $32 \times 16 \times 12 \mathrm{~cm}$., but on the exterior was a fine stepped casing. This was complete along the east façade, around the main offering chamber and partly along the south face. The rear wall was left with the original brickwork. On the west the batter of the brick wall was $86^{\circ} 20^{\prime}$ and $88^{\circ} 15^{\prime}$ on the south. The door was at the north (Pl. 14:1), and the lowest stone of the north jamb was still in situ. It had a panel with five figures of slaves bearing offerings ( $\mathrm{Pl} .13: 3$ ). The figures were just blocked out, and not finished. In the south wall of the offering room near the southwest corner, a distance of 111 cm . above the floor, was a small serdab carefully concealed in the brick masonry by a mud blocking and the plastering, leaving only a small hole or "window" near the top (Fig. i14). The interior was plastered and stuccoed with white. In it had been two standing wooden figures, almost entirely destroyed by white ants. That on the left was a man (the larger one) 50 cm . high to neck, the right ca. 45 cm . high, a woman. These had been packed around with broken bricks and fragments of stone. Pl. 14:1 shows this serdab before being opened, Pl. 13:4 after being cleared. Later a new shaft $X$ was cut through the brick facing just inside the southwest corner of the main structure, and for this a new niche of stone was built in the adjacent corner of the offering room.
A. Shaft: $100 \times 100 \mathrm{~cm}$. and 574 cm . deep, lined with rubble. Two chambers, both on west side.
I. Chamber, $100 \times 100 \mathrm{~cm}$. and 106 cm . high. The floor was 143 cm . below the rock surface. Empty.
II. Chamber, $120 \times 180 \mathrm{~cm}$. and 144 cm . high. Empty.
B. Shaft: $100 \times 98 \mathrm{~cm}$. and 435 cm . deep, lined with brick for 70 cm . above the rock, thence to top with rubble. Chamber at west, $131 \times 125 \mathrm{~cm}$. and 110 cm . high.


Fig. 114. G 3035
Serdab concealed in wall of offering room (Scale I:50)


Fig. 115. G 3035 Faience beads from débris in B (Scale 1: 1)


Fig. ı16. G 3036. Burial B

Burial: Adult. Only the skull and a few vertebrae remained. In the débris some faience beads, faded greenish blue glaze (Fig. 115).
(a) Small discs;
(b) Long cylindrical;
(c) Bell shaped;
(d) Pendant.
D. Shaft: $80 \times 95 \mathrm{~cm}$. and 128 cm . deep, lined with rubble.

Chamber at west, $108 \times 105 \mathrm{~cm}$., roofed with slabs. Empty.
E. Shaft: $75 \times 78 \mathrm{~cm}$. and 131 cm . deep, lined with rubble and built in the core of the structure. Chamber at west, $9 \mathrm{I} \times 180 \mathrm{~cm}$., lined with rubble and roofed with slabs. Empty.
X. Shaft: $90 \times 90 \mathrm{~cm}$. and 635 cm . deep, cut through brick walls. Chamber at north, $180 \times 135 \mathrm{~cm}$. and 85 cm . high. Rock poor and walls of chamber had scaled off with large fragments partly filling the chamber. On west an irregular hole broke into the shaft of $A$.

## G 3036

Mastaba, showing two stages in construction. Originally planned to include only the shafts A and B and begun in type $\mathrm{l} a$, débris filling faced with bricks $28 \times 14 \times 9 \mathrm{~cm}$. Before the work had advanced very far the shafts $C$ to $F$ were added at the south end and the work continued in type Ila, the filling enclosed by a rubble wall and the brick facing continued as a casing wall with bricks $36 \times 18 \times 12 \mathrm{~cm}$. The four additional shafts were included in the new casing wall. The line of demarcation between the smaller bricks and the larger bricks was very clearly traced through the structure, at a height of $c a$. 125 cm . above the rock level (D 3-4 on Plan 1 and section E F on Plan 3)..$^{1}$ The exterior faces had a batter of $83^{\circ} 40^{\prime}$ on the north, $84^{\circ}$ on the west, $83^{\circ}$ on the south and $84^{\circ} 10^{\prime}$ on the east. All plastered with mud. On the east façade were three double and two single niches alternating. The offering room was the corridor type with a larger space at the south end. These simply utilized the space available west and south of G 3033. The large space was divided into two by a slight wall and the whole offering structure was not massive enough to support anything but a roof of light beams covered with mats and mud. Against the north end of the main structure was a small mastaba (?) with two single niches on its east façade. It was badly denuded, and may have been part of the original core of G3036. In this case it must have been decided to

[^8]extend the mastaba toward the south for the sake of the offering room area, and this part at the north was abandoned. It contained no shaft. The two original shafts were on the main axis but those in the extension were in multiple.
A. Shaft: $120 \times 117 \mathrm{~cm}$. and 525 cm . deep, lined with bricks for 125 cm . above the rock surface, thence to top with rubble. Chamber at west, $90 \times 165 \mathrm{~cm}$. and 125 cm . high. Found unsealed.
Burial: Adult. Bones in a heap along south side.
B. Shaft: $102 \times 90 \mathrm{~cm}$. and 425 cm . deep, lined with brick to a height of 150 cm . above the rock surface thence to top with rubble. Chamber at west, $152 \times 100 \mathrm{~cm}$. and 80 cm . high. Found unsealed.
Burial: Adult, elderly female lying on left side, head north facing east. Knees slightly drawn up. The body had been pulled apart while the flesh was still holding the bones together. The legs and the right arm were pulled from their sockets but the limbs themselves were still approximately in position (Fig. 116).
C. Shaft: $85 \times 90 \mathrm{~cm}$. and $220 . \mathrm{cm}$. deep, lined with brick except on the east, where the division wall between it and the shaft to the east was of rubble. Not sunk into rock.
Burial: Adult lying on left side, head north, facing east. Skull and some vertebrae only.
D. Shaft: $95 \times 90 \mathrm{~cm}$. and 255 cm . deep, lined with brick except on west (Cf. C above). Not sunk into rock. Across the bottom was a thin wall of brick forming a burial place.
Burial: Young adult lying on left side, head north facing east. Heels drawn close up to hips with knees before chest. Hands had been before face (Fig. 117).
E. Shaft: $130 \times 93 \mathrm{~cm}$. and 230 cm . deep, lined with brick, except on east as in C. Empty.
F. Shaft: $100 \times 85 \mathrm{~cm}$. and 500 cm . deep, lined with brick except as in D. Empty.

G 3037
Mastaba, type $1 b$, débris filling with stepped stone casing, but finished on east with bricks, $37.5 \times 19.5 \times 13 \mathrm{~cm}$. Size, $335 \times 240 \mathrm{~cm}$., orientated $8^{\circ}$ E. of N. (B $2-3$ on Plan 1). On the east façade were one double and one single niche. One shaft. At the south was a small square structure with débris filling and a facing of bricks $37.5 \times 19.5 \times 13 \mathrm{~cm}$. This had two single niches, but no shaft. It was separated from G 3037 by a small space, which was afterward used for the intrusive burial X.
A. Shaft: $96 \times 110 \mathrm{~cm}$. and 325 cm . deep, lined with brick. Chamber at west, $115 \times 72 \mathrm{~cm}$. and 70 cm . high. Found unsealed.


Fig. 117. G 3036. Burial D


Fig. 118. G 3037. Burial A

Burial: Adult male lying on left side, head north facing east. Skull dolichocephalic. Some dried flesh adhering to skull, with short hair. Heels drawn up to hips with upper legs nearly at right angles to body. Arms partly raised (Fig. 18 ).
X. Surface grave, $50 \times 103 \mathrm{~cm}$. and 40 cm . deep, the ends of brick built in between the older structures.
Burial: Adult lying on left side, head west (missing) facing north. Heels drawn back to hips with knees to chest. Arms missing.

## G 3040

Mastaba, type $\mathrm{I} a$, débris filling with brick facing. The bricks in the lower seven courses were $37 \times 18 \times 16 \mathrm{~cm}$. and above $32 \times 17 \times 13 \mathrm{~cm}$. Orientated slightly W. of N. (A 6-7 on Plan 2). Only the east façade and part of the north wall were
excavated. There were two double niches and two single ones laternating. The whole surface had been mud plastered and stuccoed white. Afterward was added a second thin layer of gray plaster with another finishing coat of white. In the débris over the north end was a roughly worked flint. In the unfinished later shaft X , were a number of the small model offering vessels, of the same shape as those found south of G 3030 (Fig. 100), and also of the two shapes shown in Fig. 119. Here x 1 was of coarse brown ware and x 2 of coarse red ware.


Fig. 119. G 3040. Model vessels from X (Scale 1: 2)

## G 3041

Mastaba, type $1 b$, débris filling with stepped stone casing. Size, $760 \times 330 \mathrm{~cm}$., orientated slightly W. of N. and the east face set back ca. io cm. from that of G 3040 (A 5-6 on Plan 2). At the north end, a wall of stepped masonry connected it with the rear wall of G 3030 to enclose the offering space. There were two niches, a double one opposite A and a single one opposite D. The four shafts were on the main axis (Pl. 9).
A. Shaft: $130 \times 120 \mathrm{~cm}$. and 550 cm . deep, lined with roughly dressed and coursed masonry (Fig. 120). Where the shaft entered the rock, it was narrowed by a ledge on the east and north sides. Chamber at east, $220 \times 130$ cm . and 118 cm . high, with a door 30 cm . deep. Sealed with rough stones and blocks, with no mortar.
Burial: In a wooden coffin (Fig. 121). The coffin was $172 \times 61 \mathrm{~cm}$. and 57.4 cm . high (with cover 76.2 cm .). Each side was composed of two planks the full length of


Fig. 120. G 3041. Shaft and burial A
the coffin and 5.5 cm . thick, fastened together with four flat tenons set in mortises (Fig. 122 b). These were held in place by round pegs. The workman had neglected to peg one of the tenons on one side. The ends were made up of two planks similarly fastened (Fig. $123 a, b)$. The ends and sides were joined with a housed shoulder mitre and fastened with leather thongs run diagonally through the corners in double holes. To


Fig. 121. G 3041. Coffin in A (no scale)
conceal the fastening the connection between the holes was deeply counter-sunk on the exterior (Fig. 124). Small flat pegs were also driven through to hold more firmly the thongs in place. The ends of these were cut off flush and the holes filled with white plaster.

The bottom was composed of two planks 4 cm . thick tenoned together like the sides (Fig. 122 c ). The ends and sides were beveled and fitted into mortises cut along the bottom of the sides and ends. For further strength the bottom boards were fastened to the sides with three
tenons on each edge, but none on the ends. The floor planks were tenoned together, but not pegged.

The cover was rounded and consisted of four long planks let into heavier ends (Fig. 125). The two outer planks were 6.8 cm . thick and cut to form the vertical edges and part of the curving top. Around the top this


Fig. 122. G 3041. Details of side and bottom of coffin (Scale 1: 20)
thickness lessened to 3 cm . (Fig. 125 e ). The ends were 7.2 cm . thick, and the joining was the same as that of the body of the coffin, except that the housing was not square (Fig. 125 d ). The insides of the end pieces were cut with a curved groove, 4.2 cm . deep and of varying width. to receive the ends of the longitudinal planks (Fig. $125 c$ and $e$ ). The cover was reinforced by two


Fig. 123. G 304I Corner mitre (Scale 1:5)


Fig. 124. G 3041
Coffin details: (a) end (Scale 1:20). (b) Sketch of corner mitre (No scale)


Fig. 125. G 3041. Cover of coffin: (a) Plan looking up inside cover. (b) Half elevation of side. (c) Half longitudinal section. (d) End piece, exterior. (e) End piece, interior with section through planking. (Scale 1:20)
half round battens pegged from the under side into the planks (Fig. 125 a ). The corner fastenings were thongs and pegs as in the lower part. The cover was kept in place by four tenons in the top edge of the box.

Adult female (aged) lying on left side, head north facing east. The knees were only slightly drawn up (Pl. 41). The body was first wrapped with strips of fine mesh linen ca. 7.5 to 11.0 cm . wide. The arms were bandaged separately, while the legs were bandaged together. Wads of coarse linen were inserted on shoulders and breasts to build up the form. Some of these were lightly sewed to the linen bandages to keep them in place. Others were quite loose. On the outside were two thicknesses of medium mesh linen, made like a single shroud. These were wrapped around the whole body. Grave robbers had torn the head, hands and feet from the wrappings to remove the jewelry. As the cover of the box was in place and the door to chamber found sealed, this apparently was done by the workmen entrusted with the disposal of the body in the chamber. ${ }^{1}$
B. Shaft: $104 \times 100 \mathrm{~cm}$. and $8 ; \mathrm{cm}$. deep, lined with rubble, and never sunk into rock. At the bottom was a narrow pit 47 cm . wide made by filling in along the sides with a rubble wall. This pit was 30 cm . deep.
Burial: Adult lying on left side, head north facing east. Heels drawn back to hips with knees before chest. Arms displaced.
C. Shaft: $93 \times 117 \mathrm{~cm}$. and 220 cm . deep, lined with rubble and never sunk into rock. Empty.
D. Shaft: $90 \times 100 \mathrm{~cm}$. and 360 cm . deep, lined with rubble. At the bottom a shallow recess was cut at the east, and a rough rubble wall built so as to form a pit 50 cm . wide and 40 cm . deep. This was roofed by slanting slabs, resting on the rubble wall against the side of the shaft above the recess.

[^9]

Fig. 126. G 304 I .
Shaft and burial D

Burial: Adult male lying contracted on left side, head north facing east. Heels drawn back to hips with knees before chest. Arms in front of chest (Fig. 126 and Pl. $35: 2$ ).
G 3042
Mastaba, type II, only the core of débris with its rubble retaining wall preserved. Probably never cased. Size, $1240 \times 335 \mathrm{~cm}$., orientated $9^{\circ} \mathrm{E}$. of N. (A $4^{-5}$ on Plans 1 and 2). Three shafts on the main axis ( $\mathrm{Pl}, 10$ ).
A. Shaft: $125 \times 120 \mathrm{~cm}$. and 760 cm . deep, lined with rubble but patched on east side with brick. Chamber at south, $150 \times 90 \mathrm{~cm}$. and 100 cm . high, with the floor 40 cm . above the bottom of the shaft. The door had been sealed with a wall of bricks, $40 \times 17 \mathrm{x}$ 12 cm . Empty.
B. Shaft: $120 \times 117 \mathrm{~cm}$. and 460 cm . deep, lined with rubble. Chamber at west, $142 \times 102 \mathrm{~cm}$. and 100 cm . high, with its floor 30 cm . above the bottom of the shaft. Found unsealed.
Burial: Adult female lying almost on back, slightly turned to left, head north facing east. Legs bent enough to get body into the space. Left arm straight with the hand under pelvis, right hand resting on pelvis. The body rested on a layer of limestone chips (Fig. 127).
C. Shaft: $120 \times 123 \mathrm{~cm}$. and 225 cm . deep, lined with rubble. Never sunk below rock surface. Empty.


Fig. 127. G 3042. Burial B

The four mastabas following formed the western boundary of our area. Only their eastern façades were cleared.

## G 3043

Mastaba, probably type $\mathrm{l} a$, débris filling with brick facing. ${ }^{1}$ Orientated $8^{\circ} 30^{\prime} \mathrm{E}$. of N . ( $\mathrm{B} 1-2$ on Plan I). It had a series of alternate double and single niches. The offering room was at the south end, but this had been reconstructed and two additional double niches, one set back in a recess, were built, half filling the original room.

## G 3044

Mastaba, probably type $\mathrm{I} a$, with bricks on east face, 40 x $20 \times 16 \mathrm{~cm}$., plastered with batter of $83^{\circ} 40^{\prime}$. Orientated $8^{\circ}$ E. of N. (B 2-3 on Plan 1). One double niche at south and two single ones nearer the north end. The space between this and G 3037 was used for an offering room and a brick jamb at the southwest corner of the latter constructed to form a door.

## G 3045

Mastaba, not cleared, probably type la faced with bricks, $30 \times 15 \times 10 \mathrm{~cm}$., orientated as G 3044, which it preceded.

## G 3050

Mastaba, probably of type Ia (A 5 on Plan 2). The bricks in east face were $32 \times 16 \times 11 \mathrm{~cm}$., brown in color and full of small flint chips, bits of pottery and sometimes stray beads. There was one large recess which may have contained a stone stele. An offering room, clearly a reconstruction, was built around the southwest end of G 3042, of dark gray bricks 35 x $16 \times 11 \mathrm{~cm}$. In the area between this and the neighboring mastabas were the remains of small division walls of an earlier offering room, much denuded (Pl. 9). In the débris, filling the offering room, were a number of small model vessels of brown and red ware like those near G 3030 (Cf. Fig. 100). In the outer offering room was the lintel of Ankh, No. 30, lying in the débris (Pl. $51: 3$ ).

[^10]
## CHAPTER IV

## INSCRIPTIONS AND SCULPTURE

By Alan Rowe

## § I. Introduction

I. The inscribed material from the minor cemetery consisted of the usual funerary formulae and dedications built into the eastern façades of the various tomb structures. They consist of:
(a) Stone lintels, both of the flat and round (log) types, used for the tops of the mud brick niches.
(b) Libation basins, set in the floor of the offering rooms in front of a niche. Most of them had one or two well cut troughs with sloping sides. Single basins had one or two double ledge rims on which were cut the inscriptions. Double basins had but one ledge rim. On No. 11 the basin was indicated by a roughly cut shallow place only, and possibly No. 32 (a fragment) was similar. No. 15 was a slab without any basin and apparently was a dedicatory slab only. It was the only one of red granite, but was built into the floor like the regular basins. The elaborate and well cut basins with inscriptions apparently belonged to the built niches, while those in connection with stone niche stelae were smaller and, with the exception of No. II, uninscribed.
(c) Stone stelae, the successors of the built niche. These had a shallow niche, single or double, which, with the flat and round lintels and also usually an additional panel above, were cut in one block.
(d) Stands of black ware with a polished red surface. These formed the bases of tables or supports for bowls and plates of offerings. Three were found with the name of the owner inscribed upon them, one of them in situ on the floor

[^11]of an offering room. A number of fragments of other stands without inscriptions were found in the débris.
2. The sculpture, apart from the several fine reliefs on the niche stelae, consisted of three small statuettes only, and the large relief of Mededy. Only one of the statuettes, Mesty (No. 2), had the name inscribed upon it. The relief of Mededy had the character of a stela, although cut in very high relief, the arms and legs being almost free-standing. It was interesting because the figure faced full front with both legs together and not with the left foot advanced as was usual. The workmanship was poor and the proportions and modeling especially of the legs very clumsy.

## § 2. Catalogue

(a) Stone
I. Libation basin, from the débris in front of mastaba G 2082, to which it probably belonged (F3-4 on Plan 1). White limestone, $52 \times 37 \mathrm{~cm}$., with double ledge rim. Incised inscription on one of the sloping inside faces and with traces of another inscription beginning the same on the adjoining short face (Pl. 52:3).

"Overseer of the washers (or washermen), Sen-Ka."
(b) Short face: - 险 $\rho 8$ 多
"Overseer . . ."

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\text { Ph. E } 13515
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2. Portrait statuette of Mesty, from the small added chamber N of mastaba G 2093 (E 5 on Plan 2. Cf. Pl. 27 for statuette in situ). Limestone, 43.2 cm . high. Male figure standing, left foot advanced; arms straight at sides, hands holding rolls. Short skirt, necklace and wig. Color: body, red; eyes, white and black; wig, black; collar, white with the rows of beads indicated with blue and green; shirt and rolls,
white; base and spaces between legs and between arms and body, black. Inscription on top of base in front of right foot (Pl. 42).

"Overseer of the boat cordage, Mesty."
Ph. E13514
3. Statuette, from northeast corner of offering room of mastaba G 2093 (E 4 on Plan 1. Cf. Pl. 28 for statuette in situ). Limestone, 56 cm . high, crudely modeled and much weathered. Male figure standing, with arms straight at sides, legs together. Short skirt and linen head-dress or a wig hanging low down at back (Pl. 43:3).

Ph. E ${ }_{13516}$
4. Portrait stela from the offering room O of mastaba G 2093 (E 5 on Plan 2. Cf. Pl. 23 for stela in situ). Limestone, 126 cm . high, 37 cm . wide at top and 43 cm . at bottom. Male figure standing full face. Legs close together and arms straight at sides, the hands holding rolls. Short skirt and large wig. High relief. Modeling heavy and coarse, and the surface had been finished with stucco. Nose missing. Above figure was a projecting panel with well cut incised inscription (Pl. 44:I).

"Acquaintance of the King, ${ }^{1}$ aide ${ }^{2}$ (of) the commander of the army, Mededy."
5. Niche stela from the offering chamber of mastaba G 2003, beside No. 4 (E 4 on Plan I. See Pls. 23-24 for stela in situ).

[^12]Limestone, 91 cm . high and 56 cm . wide. Divided into a top panel $a$, flat lintel $b, \log \operatorname{lin} t e l ~ c$, and a niche $d$, with side panels $e$ and $f$. Over the log lintel was a small opening into the serdab behind (Pl. 44:2 and Fig. 128).


Fig. 128. Diagram of stele No. 5 (Scale I: Io)
(a) Kha-Khenmet seated facing toward right, extending her right hand toward a table of offering loaves. On two low stands and on the floor are additional offerings including bread, cakes, meat and beer. Across the top is the inscription:

"Concubine (?), ${ }^{1}$ priestess of Neit, the 'Opener of the Ways', ${ }^{\text {, }}$ Kha-Khenmet." ${ }^{3}$
${ }^{1}$ Occurs in Petrie, Medum, PI. IX.
${ }^{2}$ Comp. L. D., 11. 87, 100 and 109.
${ }^{3}$ Possibly an Old Kingdom writing of noms hieroglyphiques, 2081.
（b）A list of offerings：＂Two measures of seb grain，two measures of seteb（or sebt）grain，two measures of wine，two measures of sycamore figs，two measures of aget grain，roasted aget grain（and）tesef cakes（to）Kha－Khenmet．＇

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＂Кha－Кhenmet．＂

＂Кha－Khenmet，priestess of Hathor，the mistress of the Sycamore．＂${ }^{1}$

＂Acquaintance of the King，Kha－Khenmet，revered before the great god，${ }^{2}$ his（i．e．，Mededy＇s）beloved wife．＂

＂Acquaintance of the King，the aide（or assistant）${ }^{3}$ Mededy．＂

Cairo 46495
6．Libation basin，in front of No．5．Limestone， $19 \times 15 \mathrm{~cm}$ ． Uninscribed．

Cairo．Unnumbered
7．Lintel，log type，from débris north of the offering room of mastaba G 2093．Probably from the south niche of G 2096 （Comp．Pl．8）．Limestone．Incised inscription in rectangular panel．

[^13]
## 

"The assistant ${ }^{1}$ Nezsu."
Ph. E 13517
8. Libation basin from floor in front of north outer niche of mastaba G 2097 (E 3 on Plan 1. See Pl. 22 for basin in situ). Limestone $30.5 \times 22.2 \mathrm{~cm}$., with double ledge rim. Incised inscription along the outer upper edge, i.e., the one farthest from niche.
"Acquaintance of the King, the adorner of the King, ${ }^{4}$ revered before the great god, Nefer-Hy." ${ }^{\prime}$

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\text { Ph. E } 13518
$$

9. Libation basin found beside No. 8. Limestone, 22.2 x 17 cm . Uninscribed.

Ph. E. 13549
10. Stela from east façade of the latest addition to mastaba G 2098 (E 2 on Plan 1). Limestone, 52 cm . high and 31 cm . wide. Single shallow niche with vertical line of inscription down each side, and two lines across top ( $\mathrm{Pl} .47: 1$ and Fig. 129).

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[^14]"Grace given by the King (and) Anubis, foremost in his temple. May there be buried in the western desert, in a great good old age (she who is) revered before the great god, the acquaintance of the King, the adorner of the King, Nefer-hetep-Es-Wer."
$(b, c)$ Both sides have the same inscription reversed for symmetry.
"The son of the King, of his body, Duwa-RA; his daughter, the acquaintance of the King, Nefer-hetep-Es." ${ }^{3}$

Ph. E 13519


Fig. 129. Diagram of stele No. io (Scale I: io)
11. Libation slab from floor in front of stela No. io. Limestone, $39 \times 24 \mathrm{~cm}$. Small basin cut at one end. Inscription across back, i.e., edge nearest to stela ( $\mathrm{Pl} .47: 2$ ).

"Acquaintance of the King, adorner of the King, Nefer-hetep-Es-Wer."

Ph E 13520
${ }^{1}$ The name DUWA-RA was omitted by the scribe from its proper place in column $b$ and was added at the side.
${ }^{2}$ The determinative appears as $\frac{\{ }{\pi}$ in column $c$ and in $a$, yut as $\frac{9}{\sqrt{3}}$ on the libation slab No. 1 .
${ }^{3}$ The woman named here as Nefer-hetep-Es-Wer and Nefer-hetep-Es was the daughter of a prince of the royal family, Duwa-RA, who may be the same Prince Duwa-Ra of mastaba G 5 rio found by Dr. Reisner in the royal cemetery. (Note by G. A.R.)
12. Statuette, from débris over roof of serdab S. outside north end of offering room of mastaba G 2086 (F 1 on Plan 1). Limestone 37 cm . high. Man seated on high back chair. The right arm rests on abdomen, the left crossed over chest. Hair parted in middle. Poorly modeled and finished with white stucco. Traces of red color on body (Pl. 43:1 and 2).

Ph. E 13521
13. Libation basin from offering room of mastaba G 2086 (F 1 on Plan 1 . See Pl. 20 for basin in situ). Limestone, 36.2 x 25.8 cm . with double ledge rim. Incised inscription filling both ledges. The inscription begins at the upper right hand corner, reads from right to left across top, down the left side, then down the right side and right to left across bottom. The continuation on the inner ledge follows the same arrangement, except that the right side is a repetition of the left to completely fill the space, but not reversed (Pl. 46:1).

Outer ledge:


Inner ledge:

right and left $\ddagger$

"Acquaintance of the King, priest of Khufu. Priest of Khafra. Libation priest ${ }^{1}$ of the King's mother. Beloved of

[^15]his lord, whom his lord loves every day. Priest of Ded-ef-ra. Revered before the great god. Grace given by the King, 1000 loaves of bread and cakes, 1000 jugs of beer, 1000 pieces of linen, 1000 garments, 1000 of all good things, daily for the master of the bank, ${ }^{1}$ to the assistant of the houses of food, ${ }^{2}$ the acquaintance of the King, Ruwz (and for) his wife, the acquaintance of the King, Mesat."
14. Libation basin from inside the small serdab $S$ at the north end of the offering room of G 2086 ( $\mathrm{F}_{1}$ on Plan 1). Limestone, $40.5 \times 25 \mathrm{~cm}$., with ledge rim. The incised inscription continues around all four ledges (Pl. 46:2).



"Master of the bank, Ruwz. Libation priest of the King's mother, Ruwz. The acquaintance of the King, Mesat. His beloved wife, Mesat."

Ph. E 13522
15. Slab from floor in entrance passage outside of the serdab S of mastaba G 2086 (E I on Plan 1). Red granite, $29 \times 20 \mathrm{~cm}$. and 9 cm . thick. Incised inscription roughly cut (Pl. 48:4).

[^16]"Libation priest of the King's mother, Ruwz (and) his wife, Mesat. Offerings which come forth at the voice, loaves, beer, cakes, geese, and cattle."

Ph. E 13523
16. Basin, from north niche in east face of original structure of mastaba G 2098 (E2 on Plan 1). Limestone, $34 \times 19 \mathrm{~cm}$. Incised inscription, beginning at upper right corner and reading continuously around to left (Pl. 48:I).

"Grace given by the King (and) Anubis, foremost in the temple. May there be buried in the west land, at a good great old age, the one revered before the great god, the purifying priest of the King's mother, the master of the bank, the superintendent of the house of food, ${ }^{4}$ the revered before his mistress, ${ }^{5}$ Ruwz."

Ph. E 13524
17. Libation basin from south niche in offering room of mastaba G 2098 (E 2 on Plan 1). Limestone, $30 \times 18.5 \mathrm{~cm}$. Incised inscription (Pl. 48:3).

[^17]

"Grace given by Anubis, foremost in the cemetery (literally 'Holy Land'), in his sarcophagus in the western desert, to the revered one, the superintendent of the gate, ${ }^{2}$ Iy-Merer. ${ }^{3}$

Ph. E 13525
18. Libation basin from offering room of mastaba G 2098. Limestone, $30 \times 19 \mathrm{~cm}$. Incised inscription, reading from right to left across top, down left and along bottom to right to a vertical division mark. Then down right and across bottom to the division mark. The first line was partially concealed under a layer of pink plaster (Pl. 48:2).
"Grace given by the King (and) Anubis. May there be buried in (the necropolis of) the western desert, in a good old age (she who is revered) before the great god. The ac-
${ }^{1}$ The letters $\Longleftrightarrow \rightarrow$ omitted. Note that the order is $\begin{gathered}\text { 可 }\end{gathered}$ on Nos. 18, 33 and in $G$ 3008; and $\uparrow$ 牙 in Nos. 10, 16, 20, 25, 28 and 30.
${ }^{2}$ Porter?
${ }^{3}$ On No. 19 the name is written $f$ the first sign incomplete (front leg missing). and on his pottery stand, No. 40. $3 x \rightarrow 40$

For $\left\{\begin{array}{l}x \\ \infty\end{array}\right.$
© Omitted by scribe, $\square 4$
quaintance of the King, Per-Senet. For the mistress of reverence before the (great) god, that which made the son of (her) body, ${ }^{1}$ the purifying priest, Ruwz."

Ph. E 13526
19. Lintel, $\log$ type, from the débris above south end of offering chamber of G 2098 (E 2 on Plan 1). Limestone, 82 x 20 cm . Incised inscription (Pl. 50:6).
"May the King give an offering, and Anubis, offerings which come forth at the voice, bread, cakes, beer, (to) the son of (his) father's body, the master of the bank, Ruwz. That which he made for the acquaintance of the King, the purifying priest of the King's mother, Iy-Mery ${ }^{2}$ (and for his) mother Per-Senet."
20. Lintel, flat, from débris in the small compartment north of the offering room of G 2094 (E 3 on Plan 1). Limestone, $71.5 \times 10 \mathrm{~cm}$. Relief inscription (Pl. 52:2).
"Grace given by the King (and) Anubis, foremost in the temple. May there be buried in the western desert as a revered one before the great god, in an old age, the priest of the ka, Ankh. ${ }^{\prime \prime}{ }^{3}$

Ph. E 13528

[^18]21. Lintel, from débris along east side of compartment north of offering room of G 2094 (E 3 on Plan 1). Limestone, $76 \times 23 \mathrm{~cm}$. Divided into three panels. Sunk relief (Pl. 49:1).
(a) Left panel. Woman seated facing right before table of offerings. Much weathered but similar to right panel $c$.
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"Concubine, priestess of Neit, Nebeh."
(b) Central panel. Man seated facing right before table of offerings.

"Acquaintance of the King, the worthy one belonging to Hathor, Khety."
(c) Right panel. Woman seated facing left before a stand on which is a conical heap of grain (?). Other offerings on the floor beside her.
"Concubine, priestess of Hathor, Khery-Ka."
Ph. E 13529
22. Stela or flat lintel block from débris in passage between mastabas G 3010 and G 3020 and probably belonging to the latter ( $\mathrm{C}_{7}$ on Plan 2). Limestone, 30.5 cm . high and more than 31 cm . long (left end only). Incised inscription (Pl. 50:1).
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[^19]"...................revered before the great god, Semer-Ka.
"..................festival, every day, the acquaintance of he King, Semer-Ka.
"...................priest of Khnem-Khufu ${ }^{1}$, Semer-Ka."
Ph. E 13530
23. Lintel, log type, re-used in the roof of burial chamber A of mastaba G 3015 (C 4 on Plan 1). Limestone, $86 \times 17 \mathrm{~cm}$. In a sunk panel $24 \times 11 \mathrm{~cm}$., a relief inscription ( $\mathrm{Pl} .50: 5$ )


"Overseer of the scribe(s) of the boat-crews, commander of the young boat crews, scribe of the royal documents, overseer of the treasury, Nefer."
24. Lintel, $\log$ type, from débris east of mastaba G 2071 (F4 on Plan I). Limestone, $58 \times 20 \mathrm{~cm}$. Relief inscription in panel (Pl. 52:1).

"The royal scribe, Nefer."
25. Lintel, containing both flat and log lintels, in one block. From south niche of the offering room of G 3033 (C 4 on Plan 1). Limestone, $55 \times 22.5 \mathrm{~cm}$. Relief inscription in panel (Pl. 51:2).

"Grace given by Anubis, foremost in the cemetery, in his sarcophagus (in) the tomb chamber, to the priest of the ka, Sab-Ef."

[^20](b) $-\lfloor[\rho \Omega]$ m
"The priest of the ka, Sab-Ef."
Ph. E 13533
26. Lintel, flat, from niche next to No. 25. Limestone, $29 \times 9 \mathrm{~cm}$. Relief inscription in panel. Traces of red paint used for guide lines below J. Inscription same as No. 25, b.

Ph. E 13534
27. Lintel, $\log$ type, with No. 26. Limestone, $37 \times 13 \mathrm{~cm}$. Relief inscription same as on No. 25,b.

Ph. E13535
28. Lintel, from débris at the bottom of shaft B, mastaba G 3031 (B 5 on Plan 2). Limestone, $91.5 \times 29.2 \mathrm{~cm}$. Inscription in black paint faded (Pl. 49:3).
"Grace given by the King, (and) grace given by Anubis, foremost in the temple, in his sarcophagus in the western desert at a great good old age (to him who is) revered before the great god. May there come forth at the voice, bread and cakes, beer, cattle and geese to him at the New Year festival, the Thoth festival, the First of the Year festival, the Wag festival, ${ }^{3}$ the Heat festival, the monthly festival of Saz, the festival of the Coming Forth of Menu, ${ }^{4}$ the First of the Month festival, and the First festival, every day, the acquaintance of the King, Semer-Ek."

[^21]29. Lintel, log type, from niche in the offering room of mastaba G 3035 (C 2 on Plan 1). Limestone, $99 \times 16.5 \mathrm{~cm}$. Relief inscription in panel (Pl. $51: 1$ ).

"The master scribe Thenty; his wife, the concubine Nefer-Et."
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\text { Ph. E } 13548
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30. Stela, from the débris in outer offering room of mastaba G 3050 (A 4 on Plan 2). Limestone, $45 \times 29 \mathrm{~cm}$. The stela contained in one slab, the central top panel $a$, left panel $b$, right panel $c$, flat lintel $d$ and $\log$ lintel $e$ (Fig. 130). Figures and inscription in fine low relief (Pl. 51:3).


Fig. 130. Diagram of stele No. 30 (Scale 1: 10)
(a) Figure of Ankh seated at left and his concubine Ded-Nef-Eret seated at right. Between them a table with loaves.

Over Anкн's head:

"The priest of the ka, Ankh."
Over woman's head:
$\rightarrow \& \stackrel{\Delta}{\theta}=$
"The concubine, Qed-Neferet."

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{ }^{1} \text { The } \longleftrightarrow \text { had been cut away. }
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List of offerings, repeated reversed for symmetry, above table:

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"Incense, green eye paint, black eye paint, 1000 (portions) of bread, cakes and beer."
(b) Figure of a girl standing facing right:

"His daughter, Khent-Ka."
(c) Figure of a girl standing facing left:

"His daughter, Qed-Neferet."
(d)

"Grace given by the King (and) Anubis, foremost in the temple. May there be buried in the tomb chamber, at a great good old age, as a lord of reverence before the great god, the priest of the ka, Anki."
(e)

"The priest of the ka, Ankh."
31. Panel and lintel over niche of mastaba G 3004 (D 3 on Plan 1. See Pl. 21 for stele in situ). Limestone, $70 \times 55 \mathrm{~cm}$.
with $\log$ lintel below it as a separate piece. In central panel a limestone, $70 \times 55 \mathrm{~cm}$. The upper part contains a square panel $a$, with a flat lintel $b$. The $\log \operatorname{lintel} c$, was on a separate piece (Pl. 45 and Fig. 131).
(a) Khufu-Mer-Neteru seated facing right before a table on which are a goose and other offerings. Traces of red color still remain on the body ( Pl .45 ).


Fig. 131. Diagram of stele No. 31 (Scale I: 10)

"Overseer of the boat(s), acquaintance of the King, Khufu-Mer-Neteru

Below the table:

" 1000 loaves of bread, 1000 jugs of beer, 2000 clothes of all kinds."
(b) List of offerings:

"Incense, one measure of sefth ointment, two measures of oil of first quality, nebes fruit, sebt grain, awit cakes, two seth... cakes, two...th cakes (and) a khetem cake."
(c)

"Khufu-Mer-Neteru"
32. Slab from débris near northern edge of excavations. Probably set in the floor like No. 15. Limestone, $28 \times 23.2 \mathrm{~cm}$. (Pl. 50:2).

"Grace given by the King, and Anubis. May come forth at the voice

"... 1000 loaves of bread, 1000 jugs of beer, ıooo pes-(en)cakes, 1000 therp-geese, 1000 ser-geese, 1000 sat-geese, 1000 sageese, 1000 pigeons, joints of cooked meats, green sebt-grain, thigh of meat, figs, bua-grain, joints of meat, green leaves, grain, ${ }^{2}$ sycamore figs, wine (and) sekba(t)...-fruit."
33. Lintel from débris in the offering room of mastaba $G$ 3030 (B 6 on Plan 2). Limestone, $93 \times 26.5 \mathrm{~cm}$. The stone was used with surface partly dressed and the irregularities in

[^22]the surface were filled in with cement. At left was part of seated figure facing to right ( $\mathrm{Pl} .49: 2$ ). This was the lintel block belonging over the niche of Khenut, the wife of SneferuHetep, of mastaba G 3008 (Comp. Pl. 55).
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$$
\]

"Grace given by the King (and) Anubis, foremost in the temple, in (her) sarcophagus in the necropolis of the western desert. May Osiris (give) an offering, may come at the voice for her, at the festival of the New Year, the Thoth festival, the First of the Year festival, at every festival and daily. The acquaintance of the King, revered before the great God, Khenut who is called Yenty."

Ph. E 13542
34. Lintel, from débris between G 3003 and G 3015 (C 4 on Plan I). Limestone, $65 \times 28 \mathrm{~cm}$. Incised inscription.

". .... in the western desert at a good old age, to the revered one before the great god, the adorner of the King, the acquaintance of the King, Nefer-Es-Hetep.
"........ the Wag festival, the great festival ......., the festival of the appearance of Yam-a-Khe(n)-su, ${ }^{3}$ the First of the Month and (of) the Half-month, to the acquaintance of the King, Khaut ....'

Ph. E 13540

[^23]35. Fragment of jamb of door to offering room of mastaba G 3008, found in the débris, shaft $C$ of the mastaba. Limestone, 46.5 cm . wide and 44 cm . high. At bottom appears part of the head of a large figure of Sneferd-Hetep. Relief inscription (Pl. 50:4).
\[

$$
\begin{aligned}
& \text { 1117 }
\end{aligned}
$$
\]

" ................ the foremost (in the temple) beloved of his lord,
"................ revered before the great god,
"................. the acquaintance of the king, SnifferuHetep."

$$
\text { Ph. E } 13543
$$

36. Fragment from débris north of G 3008 . Limestone, 11 cm . wide and over 40 cm . long.
"Overseer of the King in every place of his, revered before the good god

$$
\text { Ph. E } 13546
$$

37. Lintel, log type, from the débris in offering room of mastaba G 2094 (E 3 on Plan 1). Limestone, $38 \times 14.8 \mathrm{~cm}$. Relief inscription (Pl. 50:3).

"Acquaintance of the King, overseer of the treasury, Khuwt."
38. Stele fragment from débris in north end of offering room of G 3033 (C 3 on Plan 1). Limestone. Incised inscription.

"
his daughter, Meseht.' ${ }^{1}$
Ph. E 13547
39. Offering basin, with double receptacle. Found in surface débris, but exact position in cemetery not recorded. On one edge roughly incised inscription (Pl. 47:3).
 Ph. E:3544

## (b) Pottery

40. Stand (top only) from débris in north end of the offering room of G 2098. Black ware, red polished. Roughly scratched inscription repeated on opposite sides.

$$
\begin{aligned}
& \text { "Superior (?) libation priest Iy-Mery." }
\end{aligned}
$$

$$
\text { Ph. E } 13545
$$

${ }^{1}$ From other fragments found Meseht appears to have been the daughter of the priest Sablf to whom this mastaba belonged.
${ }^{2}$ Breasted in A R and Borchardt, Ne-user-re, p. 72, make a $\|_{0}$ scribe, priest or other officer subordinate to one without the prefix. Breasted translates it "Inferior" scribe, etc., and Borchardt "Cnter-offizier". On the other hand Erman, Glossar, p. 117, transiates "Aufseher" and Sethe, A. 7.55 (1918) p. 66, as "Vorsteher" (Cf. No. 4, note 2). Perhaps the word is connected with schei, "to make clear," or "to explain"; thus "instructor" and the like. As this basin was not found in situ we hav'e no certain archaeological evidence upon which to judge whether he held the greater or the lesser authority. If this Nefer-Es- . . . is the Nefer-EsHetep of No. 34, his position as "adorner of the King" probably would have giv n him the higher rank.
41. Stand in situ in small room built in the southern end of the offering room of G 2086. Black ware, red polished. Triangular openings in sides. Roughly scratched inscription on one side only.

## [7] $\int \mathbb{D}_{6}$

"May (offerings) appear at the voice for Beb-Ib.'
Cairo 46496
42. Stand from débris near No. 41. Similar in shape, size, ware and inscription.

## CHAPTER V

## CHAMBER OF SNEFERU-HETEP

(Pls. 53-55)

1. The offering room of G 3008 contained stelae of SNffereuHetep and his wife Khenut called Yenty. These were of stone built into the facing of the mastaba. In each case the niche with its $\log$ and flat lintel and the additional panel above were cut in one block while the main top lintel was in a long separate piece. The main walls were of coursed white limestone rough dressed and covered with a coat of hard pinkish white stucco On this the main decorative scheme was carried out in color. About two-thirds of the entire length of the chamber was intact, but the painted decoration except on the end (south) wall, had badly faded and also in many places quite disintegrated and scaled off. Some of the red guide lines made by the artist were preserved, as were many of the red outlines of the figures. Only here and there were any traces of further coloring and it seems that, for the most part, the drawing was never carried bevond the outline stage.
2. Neither inscriptions nor scenes differ much from those found in a better state of preservation in other parts of the royal cemetery: Only the system of guide lines and the several corrections made by the artist as the work progressed, were worthy of special note. On the east wall it was evident in several places (Cf. Pl. 53), that after the first scenes were drawn in outline, the artist changed his intention and either drew in an entirely new scene over the unfinished first one, or changed the position of the arms and legs of individual figures. On the south was one correction of a figure, but on the west or main niched wall, there were no evidences that any such changes had been made.
3. East Wall (Pl. 53 and Fig. 132):
(I) Part of a sacrificial scene, of which traces remain of two men cutting up an ox. This was drawn over an earlier

Fig. 132. Sneferu-hetep chamber. Diagram of east wall (Scale I: 20)
scene representing a procession of men walking toward the right, bearing offerings.
(2) Men leading donkeys toward the right. Drawn over a partly erased scene of a procession of women walking toward right, bearing offerings. Over the donkeys at right were remains of an inscription.
(3) Procession of women walking toward right, bearing trays and baskets of fruit, etc. Led by a man carrying a staff. The latter figure had been corrected, one leg being advanced farther and the position of the arm changed. At the extreme left were traces of rows of male servants walking toward the left.

The next eight vertical columns of inscription (4-11) were very fragmentary. The first three extended the full height and the others only a short distance from the ceiling, thus forming a panel, i2, in which was a large figure of Sneferu-Hetep with a long staff walking, toward the left.

## 

(4) "(There hath been performed for) him his purification (i. e. the ceremony of the opening of the mouth); he hath journeyed to the Western Land . .... Ankh."

## 

(5) ".... his beloved (eldest) son, the judge and district chief of the town of .... Ankh, who is called ldu."

(6) "..... Snefer(U-Hetep)."

## 

(7) ". . . . libation priest."
(8) ". . . . . his."

## 

(9) "He who is the chief of the mysteries of his god."

(io) "Lord of reverence before the great god."
(13) A drove of donkeys being driven to the right. Traces of horizontal and vertical guide lines.

(14)" (not at any time letting) anger inflame his heart; he hath done . .... daily(?) ...."
(15) Four men reaping. A guide line for the position of the cutting hands.
(16) In centre a stack of grain or straw. At left a man sifting grain:
"... sieving the grain". At right two men:

". . . third child."
(17) Drove of donkeys threshing grain. Driven by two men with short sticks. Above them an inscription referring to beating the animals.

## - |nnluzisk <br> "..... smiting ..... thou."

Then follow five short vertical columns of inscription (18-22) above another panel, 23, containing a figure of the owner with a long staff, walking toward the left.

## 4 1 llan

(18) ".... (chief of the secrets) of the works of the fields." : Hilles $\alpha^{24 T}$
(19) ".... superior (?) libation priest of the pyramid Kha .. (Sneferu).'

(20) ".... (chief of) the mysteries of his god."

(21) ". . . lord of reverence . . . . beloved (?) of his lord." : $11(10-8)$ -
(22) ".... Sneferu-Hetep."
4. South Wall (Pl. 54 and Fig. 133):
(1) Vertical row of four menservants bearing a conical lump of grease (?), a haunch of meat, a goose and a covered cup. The drawing of the man with the goose had been corrected. First the right arm grasped the goose by the base of the wings, which drooped. It was then changed so that the right hand grasped the goose by the neck, while the left held the base of the wings, which were redrawn straight out. All four figures were arranged on a vertical red line which bisected them.
(2) Central panel with "(Sneferu)-hetep."

(3) ".... great ${ }^{3}$ libation priest of the pyramid (KhaSneferu), royal scribe, acquaintance of the King."

[^24](4) ".... him, Sneferu-Hetep."

- F
(5) "Grace given by the King, and Anubis, thousands of all good things daily."


Fig. 133. Sneferu-hetep chamber
Diagram of south wall (Scale 1:20)
(6) Seated figure of the owner facing left. Red guide lines partially visible below the eye, through the neck at the shoulder height, waist, top of back of chair and top of knee. Right hand outstretched toward a table of offerings below which was:

$$
\cdots q_{8} q_{8} q_{8} \in q_{8} q_{8} \times q_{d}
$$

" 1000 loaves of bread, 1000 jugs of beer, 1000 head of cattle, 1000 geese, 1000 bundles (or suits) of clothing, 1000 pieces of 4-ply linen."
5. West Wall (Pl. 55 and Fig. 134):
( $\mathrm{I}-2$ ) Offerings.
(3-5) Menservants walking toward the right bearing trays, bowls and offerings. All three rows were first ruled off with parallel horizontal red lines to mark the different parts of the figures. These have been discussed in Part II 2. a. Decoration.
(6) The main top lintel of the niche of Sneferu-Hetep unfortunately badly weathered. At the left was a seated figure of the owner facing right. Three lines of inscription:
$\rightarrow$ H1HLHL Sonlll

"May the King give (an offering) ..... give ..... to him ...... superior libation priest of the pyramid Kha-Sneferu, (acquaintance) of the King, great one of the 'Ten of the South', Sneferu-Heter."
(7) Small relief panel with the owner seated before a table of offerings over which was: " (IOOO) loaves of bread, beer, clothing." Across the top was: "Acquaintance of the King, SneferuHetep."

$$
-15(16-9)
$$

(8) Flat lintel; "Revered one, Sneferu-Hetep."
$-4500 \rightarrow 0$
(9) Log lintel inscribed simply with the name of the owner: "Sneferu-Hetep."
(10-11) Duplicate inscriptions on the opposite sides of the niche reversed for the sake of symmetry:


VZID Ly रyヨlawgo yoniw

Fig. 134. Sneferu-hetep chamber. Diagram of west wall (Scale I:20)


1才< in
"Grace given by the King and grace given by Anubis (in) his sarcophagus in the tomb chamber (in), in a great good old age, to the great one of the 'Ten of the South,' the acquaintance of the King, Sneferu-Hetep."
(12-13) Duplicate inscriptions reversed on opposite sides:
"Grace given by the King and grace given by Anubis, May offerings come forth at his voice, for the acquaintance of the King, Sneferu-Hetep.'
(14) Central niche.
(15-16) In each seven menservants walking toward the right, bearing bowls of food, fruit, and geese, haunches of meat, etc.
(17) At the left three men similar to those in (15-16). At the right two men slaughtering an ox.

The main top lintel of the wife's niche was missing and was afterward found in the débris of $G$ 3033. It has been described in the main body of inscriptions as No. 33 (q.v.).
(18) Small relief panel with Khenut seated facing right before a table of offerings under which were traces of the usual list of offerings (as in 7 ).
(19) Flat lintel:

"The revered one, Khenut who is called Yenty."
(20) Log lintel with no trace of the name.
(21-22) Duplicate inscription in two columns repeated reversed on opposite sides of the niche:
"Grace given by the King and grace given by Anubis, foremost in the temple, lord of the holy land (in) her sarcophagus in (the cemetery of) the western desert,....... priestess of (Hathor), lady of Nehet (i. e., 'House of the Sycamore'), priestess of Neit, the 'Opener of the Ways.' Revered one, Kh)Enu(T) who is called Yenty."
(23-24) Duplicate inscriptions reversed on opposite sides:

"Acquaintance of the King, priestess of Hathor, Khenut who is called Yenty."
(25) Central niche.

The lower portions of the walls of the chamber were decorated with a dado 50 cm . high, of black, with a border above of two bands, red and yellow separated by narrow black stripes.

## CHAPTER VI

## POTTERY

1. So many of the graves, had been opened and rifled of their contents that very few of the smaller objects were found. Outside of the small offering saucers and cups, the varieties of pottery types were limited. Most of them had been cast aside by the plunderers, and lay either in the débris of the shafts, beside the mouth of the shafts, or more usually in the offering rooms. It is quite probable that in some cases they had formed part of the offering room furnishings rather than the tomb equipment. A rough classification may be made as follows:


Fig. 135. Pottery Group A. Brownish red ware smoothed (Scale $1: 5$ )
2. Group A. Bowls of brown or brownish-red ware, wet smoothed and finished with a wash of hæmatite red (Fig. 135).

```
1. Bowl, straight sides and plain edge, convex bottom.
2. Do., curved sides with a slight hip near bottom, which is convex. Roll rin with
    groove belour it.
3-4. Do., cursed sides with convex bottom. In 3 the sides are thicker where they
    curve into the bottom.
5. Do., cursed saucer shape, plain outside, but rim strengthened inside.
```

3. Group B. Bowls of red or brownish-red ware, with pebble burnished surfaces (Fig. 136).
i-3. Bowl, rounded sides and bottom and with re-curved rims.
4. Do., flaring straight sides, round bottom and with a small drop rim.
5. Do., hemispherical, molded rim with a groove below it.
6. Do., flat, curved sides with a convex bottom.
7. Do., hemispherical with in-curved rim. Turning marks visible inside rim.
8. Group C. Jars of rough brownish red ware (Fig. 137).
9. Jar, well modeled, but rough smoothed.
10. Do., roughly and hurriedly made. Possibly turned to shape and then hand finished. This type of jar was found in large numbers around every large mastaba and apparently was used for carrying up the mud mortar during the building operations (Cf. foreground in Pl. 2).
11. Bowl, with lip, rough ware, hand modeled (Fig. 86).
12. Group D. Jars of fine red ware, wet smoothed (Fig. 138).
13. Jar, wet smoothed to a cream surface. Small convex bottom.
14. Do., with bluntly pointed bottom.
15. Group E. Model offering vessels. Brownish-red ware, some of them almost a paste. Roughly made, some apparently wholly by hand. Others wet smoothed to a cream or pinkish surface. These were found in large numbers in the débris of the offering rooms (Fig. 139).

1-4. Narrow shapes, with flat bottoms, except $I$, which had a convex bottom.
5-6. Saucers, thick coarse rims, flat bottoms.
7. Do., with nearly straight sides, beveled at rim, flat bottom.
8. Do., similar to 7 , but with roll base and convex bottom.
9. Do., roll rim with a groove below it, flat bottom.
10. Do., or bowl, with in-curved rim, flat bottom.

Besides these there were several stands of black ware, red polished, three of them inscribed (Cf. IV, b, Nos. 40-42).


Fig. 136. Pottery Group B. Red polished (Scale 1:5,


Fig. 137. Pottery Group C. Rough ware jars (Scale 1: 5)


Fig. 138. Pottery Group D). Fine red ware, wet smoothed (Scale 1: 5)


Fig. 139. Pottery Group E. Model offering vessels (Scale I: 2)

## PLATES

## PATE

The Minor Cemetery Befori Excabamons Were Begun, lookrg liast of North

The mastabas in the immediate foreground form part of the cemetery excavated by the Harvard Lniversit-Museum of Fine Arts Boston Expedition in previous years. They formed the southern limit of the work of the Eckley B. Coxe Junior Expedition. In the distant plain is the camp of the Australian Expeditionary Force.

25 January, 1915.


PLATE 2
Cemetery Area, Looking North, After Excavations Were Completed

The mastabas in the foreground form the southern group, and are practically all built of stone and laid out in rows parallel to the larger Fourth Dynasty mastabas at the east and west. In the background is the northern group, differently orientated and constructed mainly of mud bricks.

7 March, 1915


## PLATE 3

Work in the Southern Part of the Cemetery, Looking
Northeast
At the right is the west face of G 1223, a Fourth Dynasty mastaba. At left the denuded core of G 2091 with G 2092 built over its northern end. In the centre is G 2090 .


## PLATE 4

## The Southern Part of the Cemetery, Looking Northeast

Showing the group of denuded mastabas lying between the stepped stone cased mastaba, G 2091, and the large brick cased mastaba, G 3030.


## PLATE 5

The Southern Part of the Cemetery, Looking South
Showing the group of smaller stone mastabas orientated parallel to the large mastabas at either side (Comp. Pl. 2).


PLATE 6
Looking South over the Entire Cemetery
Showing the change in orientation between the mastabas in the southern group and those of the northern group. In the foreground is the offering room of Sneferu-Hetep, G 3008 . (Comp. Pls. 2 and 5.)


## PLATE 7

The Eastern Part of the Cemetery, Looking Southwest
Showing the group of mud brick mastabas, G 2081, 2092, 2093, 2096, 2097, and 3003. In the background is G 3030.


## PLATE 8

The Central Part of the Cemetery, Looking West

In the centre is the small mud brick mastaba, G 2096.


2096

## PLATE 0

The Passage West of G 3030, Looking North
Showing the offering room of G 3050 partly cleared of débris.


G
3030

## PLATE Io

The Passage West of G 303o, Looking South
Showing the smaller mastabas, G 3041 and G 3042, built between G 3030 and G 3050 .


PLATE in

1
G 2093. West wall, showing the successive stages in construction of the rubble facing. L.ooking east.

2
G 2093. Southwest corner, a detail view of above. Showing also the passage leading to the offering room of G 2092. Looking north of east.

## 3

G 2092. Southwest corner, showing (a) the original rubble core of G 2091; (b) a rubble extension; and (c) the final casing of stepped stone completed above with brick (d). Looking northeast.

4
G 3000. Northeast corner, showing the original mud plastered retaining wall of the original core, and part of the stone casing. At the right is the end of the mud brick extension. Looking southwest.


B
A


PLATE 12

1
G 3024. Southeast corner, showing walls of offering room added to main structure. Looking northwest.

2
G 3033. Window in alcove at southern end of offering room, later sealed up with mud bricks. Looking east.

3
G 2092. Window in southern end of main offering room. Looking north.

## 4

G 3034. The interior with the filling of débris almost entirely removed, leaving only the brick facing walls. Looking south.


G 3030. Mud brick lining of shaft B. Looking down, south side.

2
G 3033. Interlocking brick from vault over offering room. One edge rounded to form reeded ceiling. Portions of the red painted stucco still adhering to top.

3
G 3035. Lower block of doorway into offering room of latest reconstruction of mastaba, with an unfinished relief. Looking west.

4
G 3035. Small serdab built in south wall of offering room of latest reconstruction of mastaba, with remains of two wooden statuettes. Looking south. For the exterior sealing of the serdab before it was opened see Pl. i4: 1.


## PLATE 14

1
G 3035. Offering room of latest reconstruction of mastaba, showing door (Cf. Pl. 13:3) and the small serdab in south wall (Cf. Pl. 13:4). Looking south.

2
G 3008 . Shafts A to C. with superstructure partly destroyed. In the background appears the northwest corner of $G 3005$, with mud plastered core and brick facing. looking south.

3
G 3011. Entrance to offering room. On right the end of an earlier mastaba, G 3012 , forms one side of the door. Looking west.

## 4

G 3034. Arch carrying a later enclosing wall, thus preserving access to the offering niche of the original mastaba. Looking north.

1


4


## PLATE 15

G 3024. Offering room. Vaulted with bricks having one edge rounded to form a reeded ceiling. Looking southwest.


PLATE 16
G 3008. Offering room of Sneferu-Hetep. Walls faced with limestone slabs and decorated with scenes and inscriptions in color (Cf. Pls. 53 to 55). Looking south.


## PLATE 17

G 3033. Offering room of Sabef. The reeded roof was constructed with interlocking bricks (Cf. Pl. 13:2). Below the arch is a wall built as part of the shaft of a later intrusive burial. Looking north.


## PLATE 18

G 3033. Offering room of Sabef. Showing the reeded ceiling, one of the niches with inscription of Sabef (Cf. Pl. 51:2), and the stucco remaining on walls. Looking northwest.


## PLATE 19

G 3033. Offering room of Sabef. Recess at south end. Showing the arched roof of recess, the reeded ceiling, plastering and part of the later intrusive burial shaft. Looking east.


G 2086. Offering room. Offering basin in situ before single niche. Inscription No. 13 (Cf. Pl. 46 : 1). In background is the stepped stone casing of G 2085. At left the rear wall of G 2084 . Looking south.


## PLATE 2I

G 3004. Offering niche of Khufu-Mer-Neteru. Inscription No. 31. Stela, log lintel and offering basin in situ. Looking west. Detailed view of stela (Pl. 45 : 1).


## PLATE 22

G 2097. Offering room of latest reconstruction. The niche belonging to the original mastaba appears in the background. The later one with its offering basins, inscriptions Nos. 8 and 9, is in the foreground. Looking west.


## PLATE 23

G 2093. Offering room of Mededy. Partly cleared, with stelæ of Mededy, No. 4 (Pl. 44 : 1) and Kha-Khenmet, No. 5 (Pl. $44: 2$ ), in situ. The plastered wall over the niche stela not removed. Looking down, northwest.


G 2093. Offering room of Mededy after Stele No. 4 and the rubble filling above No. ; had been removed. Showing also the offering basin in front of No. 5 and the rough stone lintels above the niches. I ooking northwest.


## PLATE 25

G 2093. Offering room of Mededy. Stele No. 5 removed, showing the stuccoed niche of the original mastaba, used as a serdab. Looking west. (Cf. Pls. 23 and 24.)


PLATE 26
G 2098. Serdab. Wooden statuette in hole in east façade of mastaba, which was plastered over toconceal it. Looking down, west.


PLATE 27
G 2093. Chamber N , adjoining offering room. Containing the statuette of Mesiry, No. 2 (Pl. 42). Looking down, south.


## PIATE 28

G 2093. Offering room of Mededy. Statuette No. 3 standing in northeast corner ( $\mathrm{Pl} .43: 3$ ). Looking northwest.


## PLATE 29

G 3003. Serdab concealed in the brickwork of the east façade between two niches. Looking northwest.


## PIATE 30

G 2086. Serdab S at north end of offering room. Containing offering slab No .14 (Pl. $46: 2$ ) and fragments of a wooden statuette. Looking southeast.


## PLATE 31

1
G 2087. Shaft $\mathrm{E}(=\mathrm{X})$, built wholly in the rubble core of the mastaba. Looking down, southwest.

2
G 2087. Burial $\mathrm{E}(=\mathrm{X})$. Looking north.

3
G 3000. Shaft C, with rubble lining above rock. Looking down, south.

4
G 3000. Chamber C. Bones of body beneath fragments of the wooden coffin. Looking south.


## PLATE 32

G 2090. Shaft C. I ined with rubble. Door of chamber sealed with a single block of stone. Looking down, east.


## PLATE 33

G 2091. Chamber A. Body crushed beneath the decayed fragments of the wooden coffin. Looking south.


## PLATE 34

G 3000. Shaft E. Lined with brick. Door to chamber sealed with rubble masonry, Looking down, east.


## PIATE

I
G 3000. Shaft D. The sealing block from the door lies at the bottom of shaft. Looking down, west.

2
G 3041. Shaft D. Lined with rubble. An intrusive burial at the bottom of shaft. Looking down, north.

3
G 30ro. Shaft C. Lined with rubble. Stones from the rubble sealing of door scattered over bottom of shaft. L ooking down, west.

4
G 3010. Burial C. Looking west.


PLATE 36
G 3008. Chamber A. The pit sunk in the floor is partly cut around the edges to represent a sarcophagus. The covering slabs are at the back. Looking west.

G. 3013. Shaft B. Lined with rubble. At the right is the stepped facing of the original G 3013 . Looking down, east.

2
G 3013. Pit in floor of chamber B. Mason's chisel marks on wall. Looking east.

3
G 3020. Shaft G. Lined with rubble and brick. Looking down, west. On west and south sides the brick superstructure has been cut away probably for later burials.

## 4

G 3020. Pit in floor of chamber G. Chisel marks on wall. Looking west.


## PLATE 38

I
G 3020. Burial in X. One side of wooden coffin removed. Looking west.

G 3031. Pit in floor of chamber $B$, with its covering slabs. Looking south.

3
G 3021. Shaft C. Lined with rubble. Looking down, west.

4
G 3021 C. Burial in chamber C. Looking west.


PLATE 39
1
G 3030. Shaft C. Lined with brick and rubble. Looking down, south.

2
G 3023. Shaft A. Lined with rubble. Two chambers, I above II. Looking down, west

G 3023. Burial A I. Looking west.

G 3023. Burial A II. Looking west.


## PLATE 40

G 3030. Chamber B with Burial
Linen wrapping of body partly intact; head, wrists and ankles disturbed by plunderers to remove jewelry. Looking west.


PLATE $4{ }^{1}$
G 3041. Burial A
Lid and sides of coffin removed, showing wrappings and displacement of head, hands and fcet by plunderers.


PLATE 42
Statuette of Mesty, No. 2
Limestone. Found in chamber north of mastaba G 2093. (Pl. 27.) Height, 56 cm .
(Ph. E 13514)


PLATE 43
1-2. Statuette of Woman, No. 12

Limestone. Found in débris over roof of serdab $S$ at north end of offering room of G 2086. Height, 37 cm .
(Ph. E 13521 )

## 3. Statuette No. 3

Limestone. Found in northwest corner of offering room of G 2093. (Pl. 28.) Height, 56 cm .
(Ph. E 13516)


PLATE 44
I. Stele of Mededy, No. 4

Limestone. Found in situ in offering room of G 2093. (Cf. Pl. 23.) Height, 126 cm .
(Cairo 46494)
2. Stele of Mededy and His Wife, No. 5

Limestone. Found in situ in offering room of G 2093. (Cf. Pl. 23-24.) Height, 91 cm .


PLATE 45
Stele of Khufu-Mer-Neteru, No. 31
Limestone. Found in situ in offering room of G 3004. Height, 55 cm . (Cf. Pl. 21 .) Not removed.


## PLATE 46

i. Basin of Ruwz and Mesat, No. 13

Limestone. Found in situ in offering chamber of G 2086. (Cf. Pl. 20.) Size, $36.2 \times 25.8 \mathrm{~cm}$.
(Cairo 46497)
2. Basin of Ruwz and Mesat, No. 14

Limestone. Found in serdab $S$ at north end of offering chamber of G 2086. (Cf. Pl. 30.) Size, $40.5 \times 25 \mathrm{~cm}$.


## PLATE 47

i. Stele of Nefer-Hetep-Es-Wer, No. io

Limestone. Found in situ in east face of G 2098. Size, $52 \times 31$ cm.
(Ph. E 13519 )
2. Basin of Nefer-Hetep-Es-Wer, No. ii

Limestone. Found in situ in front of stele No. 1o. Size, $39 \times 24 \mathrm{~cm}$.
(Ph. E 13520)
3. Basin of Nefer-Es---(?), No. 39

From débris. Size, $33 \times 20 \mathrm{~cm}$.
(Ph. E 13544)


PLATE 48

1. Basin of Ruwz, No. 16

Limestone. Found in situ before north niche of original offering room of G 2098. Size, $34 \times 19 \mathrm{~cm}$.
(Ph. E 13524)
2. Basin of Per-Senet, No. 18

Limestone. Found in situ (?) between Nos. 16 and 17 in offering room of G 2098. Size, $30 \times 19 \mathrm{~cm}$.
(Ph. E 13526)
3. Basin of Iy-Mery, No. 17

Limestone. Found in situ before south niche of original offering room of G 2098. Size, $30 \times 18.5 \mathrm{~cm}$.
(Ph. E 13525 )
4. Dedicatory Slab of Ruwz and Mesat, No. 15

Red granite. Found in situ in anteroom of offering chamber of G 2096. Size, $29 \times 20 \mathrm{~cm}$.
(Ph. E 13523 )


## PLATE 49

I. Lintel of Khety, No. 21

Limestone. Found in débris south of offering room C 2094. Size, $76 \times 23 \mathrm{~cm}$.
(Ph. E 13529)
2. Lintel of Khenut, Called Yenty, No. 33

Limestone. Found in débris of offering room of G 3030. Size, $93 \times 26.5 \mathrm{~cm}$.
(Ph. E 13542)
3. Lintel of Semer-Ka, No. 28

Limestone. Found in débris at bottom of shaft B. Mastaba G 3031. Size, $91.5 \times 27 \mathrm{~cm}$.
(Ph. E 13536 )



## PLATE 50

1. Lintel of Semer-Ka, No. 22

Limestone fragment. Found in débris between mastabas $G 3010$ and G 3020. Height, 30.5 cm .
(Ph. E 13530)
2. Stele of ———(?), No. 32

Limestone fragment. Found in débris near northern edge of excavations. Height, 28 cm .
(Ph. E 13538)
3. Log Lintel of Khuwt, No. 37

Limestone. Found in débris in offering room of G 2094 Size, $38 \times 14.8 \mathrm{~cm}$.
(Ph. E 13539)
4. Door Jamb of Sneferu-Hetep, No. 35

Limestone. Found in débris in shaft C of G 3008 . Width, 46.5 cm .
(Ph. E 13543)
5. Lintel of Nefer, No. 23

Limestone. Found re-used in the roof of the burial chamber $A$ of G 3015. Size, $86 \times 17 \mathrm{~cm}$.
(Ph. E 13531)
6. Lintel of Iy-Mery and Per-Senet, No. 19

Limestone. Found in débris above the south end of the original offering chamber of G 2098. Size, $82 \times 20 \mathrm{~cm}$.
(Ph. E 13527)



## PLATE 5I

I. Lintel of Thenty and Neferet, No. 29

Limestone. Found in situ in offering room of $G$ 3035. Size, $99 \times 16 \mathrm{~cm}$
(Ph. E 13548 )
2. Lintel of Sabef, No. 25

Limestone. In situ above south niche of offering room of G 3033. Size, $55 \times 22.5 \mathrm{~cm}$.
(Ph. E13533)
3. Stele of Ankh, No. 30

Limestone. Found in débris in offering room of G 3031. Size $45 \times 29 \mathrm{~cm}$.
(Ph. E 13537)


2


## PLATE 52

1. Lintel of Nefer, No. 24

Limestene. Found in débris east of G 2071. Size, $58 \times 20 \mathrm{~cm}$.
(Ph. E 13532)
2. Lintel of Ankh, No. 20

Limestone. Found in débris in small compartment north of offering room of G 2094. Size, $71.5 \times 10 \mathrm{~cm}$.
(Ph. E 13528)
3. Basin of Sen-Ka, No. i

Limestone. Found in débris east of G 2071. Size, $52 \times 37 \mathrm{~cm}$.
(Ph. E. 13515)


2




EAST WALL

CHAMBER OF SNEFERU-HETEP



WEST WALL





[^0]:    ${ }^{1}$ For a description of the royal cemetery, its chronology and details of the various types of mastabas which developed in different periods, Cf. Reisner and Fisher, Preliminary report on the work of the Harvard-Boston Expedition in 1911-13, in Annales du Service des Antiquités, XIII, 227 ff .
    ${ }^{2}$ Ibid. PI. 11. At the left of the black line under the words W Cem is the centre of the space cleared by our expedition.

[^1]:    ${ }^{1}$ In this respect the minor tombs differed from the mastabas in the royal cemetery. In them every effort was taken to construct the shafts symmetrically and often very beautifully laid masonry linings were built in the shafts.

[^2]:    ${ }^{1}$ The second chamber in this shaft most probably was considerably later.

[^3]:    ${ }^{1}$ It may, however, represent an extension containing shaft A, built at the south end, although we have no internal structural evidence for this.

[^4]:    ${ }^{1}$ During the clearing, one of the three slabs of the roof broke and fell into the chamber.

[^5]:    ${ }^{1}$ As shaft was same depth as $D$, the chamber had to be cut on the east to avoid that on the west of $D$, which extended northward from its shaft. The sequence of these shafts is therefore in the order $\mathrm{C}, \mathrm{D}, \mathrm{E}$.

[^6]:    ${ }^{1}$ The $\log$ lintel, No. 7, found in the passage north of G 2093, leading from the mastaba probably belonged above this niche, as it was of the right size and shape.

[^7]:    ${ }^{1}$ Probably had been similar in construction to that described by Mackay, Heliopolis, Kafr Ammer and Shurafa. London, 1915. Pp. 29-30 and PI. 25: 12-22.
    ${ }^{2}$ Excavated by the Boston-Harvard Expedition

[^8]:    ${ }^{1}$ On the plan the upper part (type Ila; is shown. The section shows the two different types one above the other

[^9]:    ${ }^{1}$ Our excavations in the cemetery at Dendereh gave us additional evidence that some of the looting of graves was done at the time of burial and not later.

[^10]:    ${ }^{1}$ This mastaba had been begun in type 16 , two courses of stepped casing extending along the whole line of the east face. Above these was the plastered brick face.

[^11]:    ${ }^{1}$ Mr. Rowe, owing to his absence in Egypt when this portion of the volume went to press, has not been able to revise his proofs himself.

[^12]:    ${ }^{1}$ This title is discussed in full by Sethe in Sahure, II, pp. 76 f . He interprets this to mean a literal relationship to the king. In this small cemetery out of a total of 39 persons named, it was borne by 9 men, all of minor authority, and 5 women, one of them expressly stated to be the daughter of a prince of the blood royal (Cf. No. io). It would, therefore, appear from the examples in this cemetery at least, that the title was too common to have meant such an actual royal kinship.
    ${ }^{2}$ Sethe in Aegypt. Zeit 55 (1918), p. 66, considers易 $\leftrightarrows$ and 10 , with the meaning "corstcher."

[^13]:    ${ }^{1}$ I．e．，Hathor of the Pyramids．
    ${ }^{2}$ I．e．，The king
    ${ }^{3}$ See the full title on No． 4.

[^14]:    ${ }^{1}$ See note under No. 4.
    ${ }^{2}$ The scribe has in error written kher for rekh, "acquaintance."
    ${ }^{3}$ Restore by $\mathrm{N} i t$, the whole word then reading $N u d$ "clothing." Cf. the last word to left in lower register, Plate XXXII, Davies, The Mastaba of Ptahhetep and Akhethetep, Part 11.

    4 For this title and its connections Cf. Blackman, The House of the Morning, in Jour. Egypt. Archaeology, V. (1918) pp. 148 ff . Juncker also found an example of this title borne by a woman. (Vorlaufiger Bericht uber die Grabungen bei den Pyramiden von Gizeh, 1912, p. io). Comp. Nos. soa, 11 and 34 . For value of sign, eti, see note 2 to inscription Nio 34
    ${ }^{5}$ Another example of this name is given by Lieblein, Op. cit. No. 50 . quoted as Boulaq stela 41. Written with $\sqrt{L}\}$ it is rare.

[^15]:    ${ }^{1}$ I. e., Purifying priest.

[^16]:    ${ }^{1}$ Comp. also Nos. 14 and 16 . The title is well known from other examples. Sethe in Borchardt's Sahure, II. p. 97, briefly discusses it and suggests that it may correspond to the modern Egyptian Wakf administration.
    

[^17]:    ${ }^{1}$ Omitted by scribe and inserted below.
    ${ }^{2}$ No room at end of line. Inserted below.
    ${ }^{3}$ Instead of
    ${ }^{4}$ Cf No. 13 , note 3
    ${ }^{5} I$ e., the King's mothes

[^18]:    ' / e., "Made for the mistress, etc., by the son of her body."
    ${ }^{\text {\& }}$ Cf. No. 17, note 3 On his pottery stand, No. 40, 1Y-Mery is called a superior (?) libation priest

    Perhaps the same as No. 30.

[^19]:    ${ }^{1}$ Reversed in original text

[^20]:    ${ }^{1}$ A variant of Khufu's name. Cf. Burchardt u. Pieper, Handbuch der Aegyptischen Königsnamen, 1, 1912, p. 11

[^21]:    ${ }^{1}$ For
    ${ }^{2}$ For
    ${ }^{1}$ Held on the 18 th day of the month of Thoth.
    4 Held on the 3oth of the month.

[^22]:    ${ }^{1}$ Doublless a variant of
    圆 na. $\infty$
    ${ }^{2}$ Probably yt, "harley."

[^23]:    "In the original kher is written after the words "great god."
    ${ }^{2}$ Sbaker (var. kbaker); this is a variant of the sign shaker in inscriptions Nos. 8, 11a and 11 . Cf. the variants given by Murray, Index of names and titles of the Old Kingdom, Pls. XXIII, XXVII and XLV. Also see the 5th Dynasty signs similar to above in Möller's Hieratische Paläographie, 1, No. 592.
    ${ }^{3}$ Cf. the form of the word "Khensu" with that in Beni Hasan Pt. I, pl. XXXII. Yam-akhensu seems to mean "the benevolent wanderer" (i. e. the moon).

[^24]:    ${ }^{1}$ On plate 53 (col. 19), but see plate 55 (col. 6c)
    ${ }^{2}$ Sic $\Lambda$ on piates 53 (col. 19), 55 (col. 6c). The name of the pyramid "Kha-Seneferu" is of course well known. Cf. the sign (base portion only) after the word "libation priest" on pl. 54 ( col .3 ).
    ${ }^{3}$ Perhaps this word should be read before the title "royal scribe."

