## CHAPTER IV

## THE TEMPLES OF THE THREE SMALL PYRAMIDS SOUTH OF THE THIRD PYRAMID

South of the Third Pyramid and close to the wall of crude brick, which limits the more intimate precincts of the pyramid itself, stand three small pyramids, in a row from east to west (Pl. 73; Pls. IV-VII). These are within the long rubble wall which joins the outer enclosing wall of the Second Pyramid and marks off the burial field of the time of Mycerinus, including within its fold, as far as we were able to trace it, the Third Pyramid and its temple, the three small pyramids, the Mycerinus cemetery, and probably the valley temple as well. Vyse numbered these three small pyramids, V, IV, and VI, from east to west, while Lepsius numbered them X, XI, XII from west to east. But the Giza pyramid field is so obviously dominated by the three great pyramids of Cheops, Chephren, and Mycerinus, and the small pyramids beside these are so clearly those of subordinate persons of the same reigns, that much confusion will be avoided by numbering the small subordinate pyramids from the pyramid of the king in whose reign they were built. Thus I number the pyramids beside the Third Pyramid as III- $a$, III- $b$ and III-c, from east to west.

## 1. THE TEMPLE OF THE PYRAMID III- $a$

(A) The Identification of Pyramid III- $a$

So far as identified, the small pyramids subordinate to the pyramids of kings, have always been the tombs of queens of the king beside whose tomb they stood. It is therefore probable that the small pyramids at the Third Pyramid are the burial places of queens of the family of Mycerinus. Vyse cleared out the underground chambers of all three, but has reported nothing which might serve to identify the owners of the tombs. In pyramid III-b, he found some hieroglyphics written in red paint on the roof; but of these the only intelligible signs form the name of Mycerinus. We cleared the temples of all three pyramids and found only a few objects. In the débris of the inner part of the temple of III- $a$ we found fragments of a beautifully finished alabaster statue of a queen, but nothing bearing her name. Under the plastered floor of room (9) of that same temple, we found a small pot containing five model cups of alabaster, each bearing the name of "the king's son, Kay." But the manner in which these objects had been placed in the temple indicates that they were a later offering, and in that case Prince Kay may have been a pious descendant of the owner of the pyramid. Thus the excavation of the subordinate pyramids and their temples has really yielded no material for their identification.

Pyramid III- $a$ is the most prominent of the three small pyramids, as well as the largest and the most elaborate. It was a true pyramid, cased at least partly in granite, while the other two were step pyramids left uncased (Pl. 73). Thus pyramid III- $a$ was certainly the tomb of the most important lady of the family of Mycerinus. This position I would assign to the wife of Mycerinus, whom I call Queen Khamerernebty II.

## (B) The Excavation of the Temple of Pyramid III- $a$

The southeastern corner of the temple of pyramid III- $a$, the easternmost of the three small pyramids, was marked down in December, 1906, while we were examining the ground for a place to dump the débris from the Mycerinus temple. In March, 1907, the same season, the whole front of the temple was traced in order the prevent any encroachment from the large dump running out from the inner temple of the Mycerinus pyramid temple. But the excavation of the temple was postponed until 1910.

On Saturday, February 26, 1910, as the gangs working on the sand over the surface of decay in the court of the valley temple finished their sections, each was sent over to the temple of the small pyramid III- $a$. This was a very simple piece of work. The walls were entirely of crude brick, and had been de-
nuded by wind and weather to a gentle slope, so that they were about 160 cm . high on the west beside the pyramid and about 60 cm . high on the east. The interior was filled with débris of decay in six layers on the west where deepest:

1. Sand and stones in the surface débris;
2. A thin layer of white limestone chips;
3. A very thin layer of burnt material;
4. A layer of sand;
5. A layer of fallen bricks and dust;
6. The deepest layer, sand mixed with decayed mud brick, plaster from the walls, etc. - débris of decay.

The ground immediately to the south of the temple was found to be clear of all buildings or graves, and the débris was thrown out on this side. All the débris in the temple and between the temple and the pyramid was removed in eight working days, and the temple lay clear on March 6.

Very few objects were found in the course of the excavations:
Tuesday, March 1, 1910. In the broken crude-brick stratum (5) in room (9), fragments of a beautiful alabaster statue of a queen.
Thursday, March 3. In the southwestern corner of the court (2), a pile of eight rough offering jars (R W IV). In room (6), ashes and marks of fire in the northeastern quarter. In room (7), abundant ashes over all the floor.

In broken brick stratum in rooms (3) and (9), several small fragments of statues, and in room (11), a flint knife, type 2.
Friday, March 18. In brushing the floor in room (9) a small pot was found, sunk in the floor, and in it five small alabaster model cups inscribed with the name of Prince Kay, and a smaller one of slate, uninscribed.

Various fragments of pottery, flint flakes, small pottery vessels, and a few fragments of stone vessels were also found in the débris.

## (C) Description of the Temple of Pyramid III- $a$ (Pls. IV, V, VII)

As stated above, the three small pyramids south of the Third Pyramid are within the extensive rubble enclosure which surrounds the whole Mycerinus enceinte, and outside the southern side of the more intimate enclosing wall of the pyramid. They were surrounded by a thick rubble wall of their own, which ran a few meters outside their bases and included the larger temple of pyramid III- $a$. This rubble enclosure was entered near the northeastern corner by a pathway lined on each side by a continuation of the thick rubble wall, and leading off to the northeast toward the inner part of the Mycerinus temple.

The pyramid III- $a$ of the usual pyramidal form, presented a core apparently built of low courses of small blocks of limestone. The two other small pyramids (III-b and III-c) were of large blocks, in step form, and uncased. On the analogy of these and other small pyramids at Giza, it is probable that III- $a$ has an inner core of larger blocks in step form, and that the low courses of small blocks which are visible really form the filling of the steps of the inner core. Pyramid III- $a$ had been cased in red granite from Assuan like the Third Pyramid. On the front, the first course of this casing, 96 cm . high, is still in place, but having been covered by the back wall of the temple, it had never been dressed smooth. The floor of the temple was about 30 cm . above the base of the pyramid, that is, the bottom of the granite casing. Below the casing lay a foundation course of fair-sized limestone blocks, which appeared to extend eastward under the temple. The base of the pyramid was 423 cm . below the granite floor in room (29) of the pyramid temple of Mycerinus.

The relatively massive foundation platform of the queen's temple bore only a crude-brick structure, just like the two temples of the king; and this parallelism justifies the assumption that the queen's temple (III-a) was also planned by Mycerinus as a stone temple, but finished after his death by Shepseskaf in crude brick. Three, or rather four, building periods are distinguishable:

1. Unfinished stone temple, foundation platform - Mycerinus.
2. Complete temple of crude brick - Shepseskaf:
(a) The earlier inner half of the temple;
(b) The later outer half of the temple.
3. Restorations and alterations during the period of occupation, not later than Dynasty VI.

## (1) The Unfinished Stone Temple of Pyramid III-a - Mycerinus

It is impossible to determine how far the construction of the pyramid III- $a$ had advanced at the death of Mycerinus. At least the limestone core and one course of the granite casing had been completed, and the limestone platform of the temple had been laid, but beyond that all is uncertain. As the stone walls of the temple had not been begun, it seems to me improbable that the casing of the pyramid with granite had proceeded very far. No clue whatever was found to the plan of the stone temple.

## (2) The Crude-Brick Temple - Shepseskaf (Pls. 74, 77, 78; and IV, V, VII)

The crude-brick temple, omitting later alterations, consisted of an inner and an outer part not structurally bonded together. The inner part had been completely finished, to the plastering and whitening of the interior and exterior walls. The outer part had been built against the plastered and whitened exterior wall of the interior temple, and was therefore later in date, if only by a few weeks or even days. The dividing line between the two parts crossed the temple from north to south about in line with the eastern face of the wall which bounds the entrance corridor, the portico, and the kitchen (?) on the west. Thus the later outer part consisted of the following rooms:
(a) Entrance corridor, room (8).
(b) Open court of niches, room (1) (Pl. $78 a$ ).
(c) Court portico, room (2) (Pl. $78 a$ ).
(d) The magazines or kitchens, rooms (6) and (7) (Pl. 78 b).

But the wall which bounds these rooms on the west belonged, as just stated, to the inner part of the temple. The inner part of the temple contained the following rooms:
(e) The anteroom(3).
(f) The stairway anteroom (4).
(g) The stairway (5).
(h) The hall of niches (9) (Pls. 77; $78 c, e$ ).
(i) The inner offering room (12) (Pl. $77 c$ ).
(j) The magazine (11).
(k) The secondary offering room (10) (Pl. $78 d$ ).

All the walls which surround these inner rooms belonged to the earlier temple. In addition to the plastered face on which the outer walls abutted, the bricks of the outer part were lighter in color and of a different consistency from those of the inner part, which were of ordinary black Nile mud. But apparently the outer part was prescribed in the original plan, because abutments were already built in the front wall of the inner structure opposite the walls which were afterward built to form the outer structure.

The inner temple was functionally incomplete in lacking the outer court, which the evidence of the mastabas shows was used for the slaughter of sacrificial animals, but was complete for all the more intimate purposes of a temple. Thus, considering all the evidence, it appears that the inner part was hastily constructed at the time of the funeral, and the rest completed on the original plan a few weeks or a few months later. The character of this addition, moreover, is against the theory that it was built by the funerary priests of this pyramid at a considerably later date, for as a rule the works of the funerary priest of later times consist only in such necessary repairs as will permit his continuing his services. I am, therefore, of the opinion that both parts of the temple were built by practically the same people (not necessarily by the same masons) probably within the same twelve months.

The analogy between the construction of this pyramid with its temple and the pyramid of Mycerinus with its two temples is patent. Both pyramids were intended to receive a granite casing; all three temples were planned in stone and finished in crude brick; and the very plastering on the walls is the same. There can be no doubt that the massive stone constructions were interrupted in all three cases by the death of Mycerinus and that the crude-brick structures were executed on the orders of Shepseskaf.
(a) The Entrance to the Temple of Pyramid III-a. - In addition to the wide rubble wall $(80 \mathrm{~cm}$. thick) which enclosed all three of the small pyramids, the temple of III- $a$ has a narrow wall ( 32 cm . wide) partly of rubble and partly of crude brick, parallel to the outside walls at a distance of 32 cm .

At the northern entrance to the temple, this narrow wall, here of crude brick, turns inward at right angles, to meet the northern face of the temple on each side of the entrance doorway. Directly opposite, the thicker rubble wall is broken by an opening, and the two ends of that wall are continued in a slanting direction northeastward as the boundaries of a road or path leading toward the crude-brick enclosing wall of the Third Pyramid, probably to a doorway in that enclosing wall. I reconstruct the older inner temple of the Third Pyramid - that built, as I assume, by Shepseskaf, of crude brick - with a doorway in the southern wall opening into the pyramid enclosure. This would have permitted access through the doorway in the southern enclosing wall to the pathway mentioned above, and so to the enclosure of the three small pyramids. Similar connections existed between the enclosure of the king's pyramid and that of the queen, at several other, perhaps all other, pyramids of the Old Kingdom.

The entrance to the temple of III- $a$ led from this pathway southward into the eastern end of the corridor (8), by a doorway through the northern wall. The floor of this doorway consisted of four limestone slabs built in the brickwork, with socket-holes in the fourth or inmost slab. The inner edge of the third slab was elevated about six centimeters above the fourth slab, to form a ledge against which the wooden door-leaves closed. Outside the doorway, a single sloping stone formed a small ramp, against each side of which a narrow slab was set, sloping in two directions, but not rising above the surface of the ramp. The doorway was plastered with mud and whitened like the other wall surfaces of the temple, and had been closed by a two-leaved wooden door on the inside and opening inward.
(b) The Entrance Corridor (8). - The entrance corridor seems to have served simply as a passage from the outer doorway to the court. The doorway into the portico of the court had a threshold composed of two slabs of limestone, built in the masonry at the ends and with the upper surface 4 cm . above the mud-plastered floor. It was closed by a two-leaved wooden door on the portico side. The floor of the corridor was a thick layer of mud laid over the foundation packing of gravel. A later coat of white plaster covered the older white plaster on the west wall, and on the joint in the masonry in the northwestern corner.
(c) The Court (1), and the Court Portico (2). - The part of the outer temple which, having been added later, brought in one of the most characteristic elements of the plans of the large Mycerinus temples, was the court with its portico. The northern wall of the court showed the same series of one compound niche and three simple niches that was present in the court of both the Mycerinus temples; and although the walls on the east and south were denuded below the base of the niches, it is practically certain that these two walls were also niched in the same manner. ${ }^{1}$

The court was 10.5 meters long from east to west, and 9 meters wide from north to south. Of this area, a strip 2.8 meters long (east to west), running the width of the court, was taken by the portico; the rest, $7.70 \times 9$ meters, was paved with yellow limestone slabs. This pavement sloped very slightly toward the centre, where a rectangular stone basin was let into the floor just south of the middle. The basin was a single block of stone $120 \times 92 \times 45 \mathrm{~cm}$. and was sunk with its top two or three centimeters below the pavement. The bottom of the basin had been broken through by treasure-seekers, who dug about 30 cm . into the gravel foundation filling. The court was, of course, open to the sky.

The portico which, as I have said, measured $2.8 \times 9$ meters, had a mud-plastered floor and was roofed with wood, the rafters of which were supported on the eastern side by four round wooden columns resting on stone bases. The marks of the ends of the columns on the bases showed that the columns had been renewed at some time, the prints of the second set of columns being less in diameter and not centred on the stones. After the erection of the second set of columns, a screen wall of crude brick with a doorway in the middle had been built across the front of the portico, shutting it off from the court. The proof that the wall was later than the columns was given by the fact that where the wall actually touched the columns, it was unplastered in lines 10 cm . broad from the floor upwards (Pl. 78 a ). The resemblance to the screen walls of the two large temples is obvious, but the doorway in this screen wall had no stone threshold and appeared not to have been closed with a door.
(d) The Kitchens (6) and (7). - The doorway in the southern end of the portico led into a long (east to west) structural space 235 cm . wide balancing the corridor space in the north, but 25 cm . wider. The
${ }^{1}$ Cf. temple III-c.
doorway was, on the contrary, only 65 cm . wide compared with the 90 cm . of the opposite doorway from the entrance corridor into the portico. A single limestone slab formed the threshold; the singleleaf door, resting on a stone socket (not in place) was swung on the portico side of the door-jam, but in the original temple the door may have been swung on the southern side of the doorway.

This long structural space was originally 10.5 meters in length and 2.35 meters wide, but had been divided into two rooms (7) and (8) by a cross-wall broken by a doorway. The western room (7), was 6.60 m . long; and room (8), the eastern, 3.15 m . long. The floors of these two rooms had been originally plastered with mud, and the threshold of the doorway in the cross-wall had consisted of a limestone slab. But at some later period, a pavement of slabs of white limestone, not yellow like the court, had been laid over the mud floor in room (7) and perhaps also in room (8), and a new stone threshold set in the connecting doorway over the old one. A slight repair of the northern jamb of the doorway had been built over the new threshold and belongs properly to the same period as the stone pavement. The western half of this pavement had been torn up in room (7), and the whole of the pavement in room (8), if (8) was paved, as I believe it was, had been similarly treated.

In the northeastern corner of room (8), two upright slabs of stone had been set in the pavement, similar to those which were used to support the stone offering benches in the inner rooms. The wall beside these slabs was blackened and reddened by fire, and the floor thereabouts was littered with ashes and coals. The fire had been an open one built on the pavement. In the northwestern corner of room (8) was a hearth (?), a rectangle open on the south, built of stones and bricks set on edge. It was filled with coals and ashes, and the floor of the room was covered several centimeters deep with ashes. The pavement, if it extended throughout this room, was laid over these remains.

It appears, therefore, that rooms (7) and (8) had been used for some purpose for which a fire was required, and the most obvious purpose was the cooking of food, especially meat. Furthermore, the rooms were used for this purpose for a long period, beginning probably before the laying of the stone pavement and lasting certainly during the final occupation of the rooms before the accumulation of any débris on the floors. The faces of the walls of these rooms had been plastered with mud, but not whitened.
(e) The Anteroom of the Inner Part, Room (3). - The front wall of the inner part of the temple was 2.15 m . thick like all the exterior walls of the completed temple, while the walls dividing the rooms varied from 1.35 m . to 1.65 m . in thickness. The length of the doorway from the portico to the anteroom (3) was determined by the width of the wall; the jambs extended 1.05 m . inwards from the outer face of the wall and rested on the ends of a threshold composed of two limestone slabs. In the inner angles of the jambs, there was a stone door-socket on each side in which swung a two-leaved door opening inwards.

The original size of the anteroom (3), was 3.15 m . long (east to west) by 6.20 m . wide (north to south). But the western wall was in the form of a very wide and very shallow niche which increased the length in the middle by 10 cm . to 3.25 m . At some later time the eastern wall had been thickened by a layer of brickwork which reduced the length of the room to 2.60 m . (or 2.70 m . opposite the niche). The room was replastered after this alteration.

In the western corner, a doorway in the south wall led into the room (4). This doorway was provided with a stone threshold and had been closed by a door swinging back into room (3).
(f) Room (4) and Stairway (5). - Room (4), entered as described above from the anteroom (3), was itself the landing or anteroom of the stairway (5), which led to the roof. Room (4) was nearly square, being 3.15 m . long (east to west) and 3.55 m . wide (north to south). It appeared to have served no other purpose than that of giving access to the stairway by means of a doorway through the southern end of its western wall.

It will be noted that the ground plan of this inner part of the temple is nearly symmetrical; room (4) balances with room (11) and the L-shaped space of the stairway, room (5), balances room (10). The doorway to the L-shaped room (5) had no stone threshold and appeared to have been closed by a door swinging into room (4). As excavated by us, a stair of crude bricks set on edge began on a line with the outside of the door-jamb towards room (4), rose by seventeen low steps to a line over the middle of the inner arm of the L, beyond which line it had disappeared by weathering. These steps consisted of two courses of crude bricks laid on edge on a filling of small limestone chips; and the whitened plaster of the
walls of room (5) descended below the brickwork of the steps and the filling. Thus this stair was, in any case, a later construction built after room (5) had been in use. But an examination of the western end of the stair in the western arm of the L, showed the foundation course of a lower stair of similar construction, also resting on limestone chips (Pl. V). This earlier stair had reached the level of the floor of room (5) in the western part of the eastern arm of the L, leaving unoccupied the eastern part of this L adjoining the doorway into room (4). The plaster in room (5) descended to the top of this lower stair, which appears to have been about 50 cm . lower than the later stair.

It is to be noted that the later stair had no landing in the turn of the L-shaped space and must have reached the roof somewhere over the masonry between the temple and the pyramid without making a turn. The earlier stair, following the lines of the L-shaped space, made a turn north and apparently reached the same height as the later stair, but at a point over the inmost room (12) of the sanctuary. The earlier stair clearly belonged to the original period of construction, that of the inner part of the temple. The later stair was built of lighter colored mud bricks.

In the southern wall of room (5) was a narrow opening like a doorway, but straight-sided without jambs. This opening had been walled up and plastered over in the original plastering of the room. Outside, the narrow enclosing wall had been denuded away so that it was impossible to determine whether an opening had existed in that wall opposite the opening in the main wall. I came, therefore, to the conclusion that this opening in the south wall of room (5) was left in the masonry as a construction entrance to facilitate the introduction of bricks and plaster used in the construction especially of the interior walls and the stairway.
(g) The Hall of Niches (9). - The hall of niches was 1.90 m . long (east to west) and 10.50 m . wide (north to south). The southern end was closed against the stairway space (5), while the northern end opened by a doorway into room (10). In the axis of the temple, a doorway led in from room (3), and another led out opposite into an inner room (12). The doorway from room (3) had no stone threshold, but was plastered level with the mud floors inside and out; the jambs were 85 cm . long; on each side at the inner end of the jamb was a stone door-socket; in these had turned the doorposts of a two-leaved wooden door; the leaves had been of the usual battened type; and the wearing marks of the turning door post and of the battens were plain on the walls for all to read ${ }^{1}$ while decayed wood was abundant in the sockets and on the floor. The opening into room (12) was plastered with mud and had never been closed by a door. The doorway into room (10) was paved with stone slabs, but was otherwise exactly like the doorway from room (3) with the same kind of wearing marks in the plaster. The leaves of the door swung inwards into room (9). But this doorway was a later construction, for the western doorjamb was a separate half-brick wall built against the old plastered face of the doorway, apparently in order to permit the western leaf of the door to swing back against the front of the stone bench in the northwestern corner of room (9). This offering bench projected about 10 cm . beyond the old western face of the doorway. The older doorway may not have been closed with a door.

The western wall of room (9) was built in a series of niches exactly symmetrical on each side of the entrance which led into room (12). In the middle of each side was a large deep double compound niche flanked on the north and the south by three small compound niches (Pls. V, and 78 e ). This room contained several offering places, added after the walls had been plastered and whitened. In the northwestern corner was a complete and unbroken offering table built of seven limestone slabs (Pl. $77 a$ ). It was partially closed in front by an upright slab and had a horizontal slab set some distance below the tops of the side and back slabs. In this horizontal slab was a small circular depression large enough to take a round-bottomed stone or pottery bowl of medium size. The front of the depression was worn as if by the hand in placing and removing a bowl. Below the horizontal slab, a rectangular stone basin rested on the floor. In the débris below the horizontal slab and before the whole table were found 50 to 60 small model offering jars and saucers of red-brown pottery. In front of the double compound niche, south of this table, a rectangular limestone slab was set on a low mud foundation so that its top was level with the base of the niche (Pl. 77 b). In this slab were two depressions for bowls, and both were handworn on the outside like the bowl depression in the table. Adjoining the floor slab on the south, a sort

[^0]of platform ran along the wall keeping level with the top of the floor slab, that is, with the bases of the niches. The first part of this platform next to the floor slab was of stone, but the rest was of crude brick. In the double compound niche, however, there was a clearly marked line of indentation, as if a table of similar character to the one in the corner had once stood in the outer part of the niche. Directly opposite the middle one of the three small compound niches south of the great niche, in the middle of the room, the small pot which contained alabaster vessels with the name of Prince Kay was sunk upright in the floor and covered by the mud plaster of the floor ( Pl .77 b ).

In the southern half of the room (9), against the western plastered face between the first small niche and the doorway into room (12), stood a mud-brick basis (Pl. $78 e$ e) about $30 \times 30 \mathrm{~cm}$. and 30 cm . high. The outer part was slightly rounded off, and the whole had been plastered and whitened. If it had been entirely square I should have assumed that it had served as the basis for a small obelisk and had been balanced by a companion basis on the northern side of the doorway into (12), for which analogies occurred in the mastabas. But as it stands, I am doubtful of its purpose. The double compound niche on the south had a line of horizontal indentations like the northern double compound niche; but there were no other traces of offering tables or stones in this half of the room.
(h) The Inner Offering Place, Room (12). - On comparing rooms (9) and (12) with the offering places of the early mastabas of crude brick, room (12) seems to be really an integral part of the niched wall of room (9). It is as if a third double compound niche mid-way between the other two had been enlarged into a small room of niched form. The entrance, as stated above, was not a real doorway and had never been closed with a door. The large part of the inner niche, like a small "wide-room," measured 1.30 m . long (east to west) by 2.90 m . wide (north to south). The west wall had contained an offering niche in the middle, but the destruction of the brickwork at this place prevented our tracing the exact plan of this niche.
(i) The L-shaped Offering Room (10). - The L-shaped offering room (10) (Pl. 78 d ) was entered by a door in the northern end of the hall of niches (9), the construction of which has been described above. The western arm of the $L$ contained traces of three offering places. In the extreme southern end against the southern wall was an offering table of stone slabs of the general form of the table in (9), with a single depression for a bowl; but the table had been upset, leaving the stones displaced and in confusion. Beside this table in the western wall, the marks in the brickwork below indicated that there had been a niche in the wall above, toward the pyramid. In front of this niche, on the floor, was a large limestone slab, $190 \times 80 \mathrm{~cm}$., perfectly plain, without the bowl depressions. This served as an offering stone or possibly as a resting place for a basin or something similar. North of this slab there had been a third offering place, apparently a table, of which there remained two smaller stones set in the floor at a distance of 150 cm . apart.
(j) The Magazine (q), Room (11). - From the northern end of the L-shaped room (10), a doorway opened eastward into a small square room (11), measuring 3.13 m . long (east to west) by 3.65 m . wide (north to south). The doorway had been closed by a single-leafed door pivoted on a socket inside the northern door jamb. For some reason the opposite angle at the inside end of the southern door jamb had been lessened by building a pillar of half bricks in the angle against the white-plastered face.

In the room were two inserted structures. In the southeastern corner, a manger-like basis was built of crude brick, except that the top of the northern wall was formed by a single block of stone of square section, set level with the brickwork in the west end. The cavity behind was filled with débris not unlike that of the room. The whole, about 60 cm . high, may have been covered with a stone or wooden slab. In the northeastern corner was a construction of an entirely different sort. Two walls, about one meter high when excavated, stood, one against the eastern wall, and the other, at right angles to the first, against the northern wall 140 cm . from the NE corner of the room. They appear to have supported a floor, like the second floors in magazines, and would thus have formed a shelf in the corner, $185 \times 80 \mathrm{~cm}$. in area. Against the eastern wall adjoining the end of the shelf wall was a low buttress about 50 cm . high and $65 \times 50 \mathrm{~cm}$. in area, which I can only interpret as a step on which a person might stand in order to reach the shelf. The second floors in magazines were often reached by means of steps of this sort.
(k) The Plastering of the Whole Temple. - The walls had been originally heavily plastered with yellowish mud and covered with a good thick coat of white plaster of Paris. Wherever alterations had been carried out, the new parts were also plastered and whitened. In the inner rooms the whitening had been repeatedly renewed and covered irregularly the edge of the mud floor. In rooms (3) and (4), a greyblack band ran round the rooms, except in the recesses of the doorways, at a height of 1.32 m . above the floor. Otherwise no trace was visible of any attempt to decorate the walls. It is of course possible that scenes had been painted on the walls above this black band as in the mastabas, but no trace was visible. In rooms (3) and (9), the mud plaster of the floor had been washed with a bluish-grey color which had splashed up on the bottom of the wall in places but had been worn away in the middle of the floors.

## (3) The Later Alterations and Repairs

The alterations and repairs to the temple have been mostly noticed in the description of the completed temple, but for convenience they are reviewed in this paragraph:

1. In the portico (2), the wooden columns had been replaced and the screen wall built with its doorway into the court.
2. In rooms (6) and (7), the dividing wall had been made later; still later the stone pavement was laid and the connecting doorway repaired.
3. The shallow recess at the western end of room (6) had been filled by a half-brick wall built against the face of the older inner part of the temple.
4. Room (3) had been made 45 cm . shorter (east to west) by the insertion of a brick-and-a-half wall built against the plastered eastern face.
5. In room (5), a second stair had been built which began in the doorway instead of in the room and rose therefore about 50 cm . higher than the first stair. The second stair rose in a straight line westwards, while the first stair followed the lines of the L-shaped space in which it was built.
6. In the room of niches (9), the table and the offering places had been added after the room had been plastered and whitened. The doorway into room (10) had been altered to permit the western leaf of the door to swing back against the offering table.
7. The whitening had been repeatedly renewed.

Thus none of the alterations made after the completion of the temple were extensive and all were of a very practical character. The building of the screen wall has a striking resemblance to the similar alteration at both the large temples of Mycerinus and was probably done at the same time (Dynasty V). The reason for the reconstruction of the stair is less obvious, but was probably due to some damage from weather or to the decay of the temple.

## 2. THE TEMPLE OF PYRAMID III-b

(Pls. VI, VII; and Pls. 73, 75 b)
Pyramid III-b is the second of the small pyramids south of the Third Pyramid and stands 10.15 meters west of the queen's pyramid III- $a$. The general situation of the three small pyramids and their relation to the enceinte wall, to the enclosing wall of the Third Pyramid, and to their own enclosing wall proper, has already been described in this chapter.

Pyramid III- $b$ and Pyramid III-c are both "step-pyramids" in four stages and practically duplicates in size and form. The measurements vary slightly according to the place where they are taken, and the similarity is probably greater than appears from the figures.



Although some of the variations in the measurements of the two pyramids are undoubtedly due to difficulties of measuring and to the weathering of the masonry, all the variations cannot be ascribed to these causes; and the two sets of measurements taken from two pyramids of similar types of masonry and plans erected probably by the same masons afford an illuminating example of the practical methods of the Egyptian builders.

The lowest stage of pyramid III-b, consisted of four courses of medium-sized blocks of local limestone founded on the rock; the second and third, of five courses each; and the fourth, which was broken, had three courses still preserved. The faces of each stage were stepped like the faces of the mastabas of the period and consequently had a slight batter, about like the core-structure of the Chephren mastabas, or a little less. The steps had been dressed in the stone after the construction and corresponded roughly to the courses of the masonry; but as the lines of the steps were straight (level) and the lines of the courses rather irregular, the two did not coincide. The carelessness with which the courses were laid seems to indicate that the structure, like the cores of the Chephren mastabas, was intended to be cased with some better stone. ${ }^{1}$

Against the eastern face of the lowest stage, a temple had been built of crude brick. On this face the lowest step of the pyramid had been omitted to obtain a flat surface for the crude-brick wall. Owing to the proximity of the back of pyramid III- $a$, the temple was much wider in the north to south direction than it was long (east to west).

As already stated, the burial chambers of pyramid III-b were cleared out by Vyse. ${ }^{2}$ The inner room contained a granite sarcophagus of small size, remains of wooden boards, and fragments of a skull and other bones which Vyse judged to be those of a young woman. A fragment of inscribed stone was found in the anteroom and bore the two signs "endowed with life" which usually follow royal names. On one of the limestone slabs composing the roof of the burial chamber were a number of hieroglyphic signs written in red, some of which Vyse copied. ${ }^{3}$ These include the name of Mycerinus in a cartouche, Pl. XI, No. xvii; and the whole was probably the name of the crew "Mycerinus-is-drunk."

In the débris of the temple, we found nothing which might assist in the identification. One small fragment of a statue might even have been intrusive. The other objects were exclusively fragments of pottery.

Thus the name of the owner of the pyramid is lost. Nor do we know the names of any other members of the family of Mycerinus with which, by inference, the owner of pyramid III-b might be identified. We may say, however, that she was a young female who died after the death of Mycerinus and was probably a second wife of the king.

## (A) The Excavation of the Temple of Pyramid III-b

When we approached the excavation of the temple of pyramid III-b the ground was encumbered on the side next to pyramid III- $a$ with a mass of débris sloping down from that pyramid towards the middle of the space between the two pyramids. This débris consisted mostly of broken stone and was the result of recent destructive work on the pyramid III- $a$. Under this broken stone the old débris of decay of the temple of pyramid III-b lay intact. It sloped from near the top of the first stage of the pyramid eastwards towards the base of pyramid III- $a$ and had received its form through the action of the prevailing north wind which eddies around the Third Pyramid and sweeps between these small pyramids.

[^1]
## MYCERINUS

The surface débris, largely of sand mixed with decayed bits of limestone, was an even layer of about 20 cm . over the whole. Under the top débris lay a surface of decay, and below that the rooms of the temple were filled with decayed mud brick mixed with a little sand. On the floor was a layer of ashes, coals, and dust.

On Wednesday, March 9th, 1910, we began clearing away the recent limestone débris. We worked on this until noon of the 10th, resumed work on the 11 th and by 4 P.m. had removed all the upper débris to the surface of decay. The removal of the mud débris began at noon on April 5th and continued until the afternoon of April 7 th when the temple was clear. Thus four working days were employed in the excavation with a force of about fifty men.

## (B) Description of the Temple of Pyramid III-b

## (1) Massive Stone Temple-Mycerinus

At the temple of pyramid III-b, as at all the other temples hitherto described, a beginning at least had been made with the construction of a massive stone foundation for the temple, and the temple had then been built of crude brick over this foundation. The exact extent of the foundation was not traced, but some of the stones were visible in intrusive holes. This condition is parallel to that at the Mycerinus pyramid temple, the valley temple, and the temple of pyramid III- $a$ and justifies the conclusion that Mycerinus had planned for pyramid III-b a stone temple with granite-cased limestone walls. This temple was obviously less advanced at the death of Mycerinus than any of the others and was therefore probably begun after them. But it is to be noted that work on all four of these temples was proceeding simultaneously at the death of the king.
(2) The Crude-Brick Temple—Shepseskaf

The crude-brick temple of pyramid III-b like the other crude-brick temples of the Mycerinus cemetery, was presumably built by Shepseskaf. Being about the same size as the crude-brick funerary chapels attached to the old mastabas in the western part of the Cheops cemetery, it presented the modest simplicity of these chapels and resembled especially the chapel of G 1203 , the tomb of Prince Ka-nofer, which had been built in a narrow space between two mastabas.

The entrance was from the north, from the pathway bounded by the 80 cm . rubble wall which led along the northern side of these small pyramids as already described. This path, it will be remembered, led off from the eastern end of the northern side, opposite the entrance to the temple of pyramid III- $a$ towards the Mycerinus temple. On the outside of the temple, the entrance doorway opened in the middle of a broad shallow recess in the north wall placed a little east of the middle. The threshold was a single slab of limestone; the single-leaf door opened inwards and rested on a stone socket (not found) against the inner end of the western jamb.

The anteroom (1), entered by the outer doorway, had two other doorways, one in the west wall leading to room (2), and one in the south wall leading to the open court (3). The doorway into room (2) had a small stone threshold, but appears not to have been closed by a door. Room (2) may have been some sort of magazine, or a kitchen, or may have been occupied by a watchman. The wall between the first two rooms and the third is about 25 cm . thinner between (2) and (3) than it is between (1) and (3), as if room (2) had been widened by cutting back the wall.

The court (3), judging by its size and the analogy with other temples and chapels, was not roofed over. It was a plain room, nearly square, with a mud-plastered floor. The plaster of the walls had been almost entirely worn away - another proof of the absence of a roof. The doorway from room (1), and that into room (4), had no traces of doors.

The wide outer offering room (4) was entered from the north by the doorway leading from the court and gave entrance to the inner offering room (5) and the magazine (6) by two separate doorways in the west wall. In the northeastern corner was an offering bench not entirely preserved, but clearly of the form of the offering bench in the northwestern corner of the hall of niches in the queen's temple. The stone basin on the floor and the upright front slab were still in place.

The inner offering room (5) was entered by a doorway in the middle of the eastern wall, which was recessed on the outside, in room (4), but apparently not closed by a door. In the western wall there was a compound niche near the southern end. The rest of this wall, as well as part of the mud floor, had been destroyed by treasure-seekers. It is impossible therefore to reconstruct the system of niches used in the west wall, but the niche at the south end was doubtless one of a series. This room is opposite the middle of the pyramid. Theoretically it should have been opposite the burial chamber; but as so often happens in Giza tombs, the burial chamber lies to the north. The curious position of the burial chambers in this pyramid led Vyse to search for another chamber farther east, but his search was vain.

The magazine or secondary offering room (6) lies just south of the primary offering room and is entered also by a doorway, apparently not closed by a door, from the outer offering room (4). The inner rooms were heavily plastered with mud and coated with white plaster (plaster of Paris).

## 3. THE TEMPLE OF PYRAMID III-c

(Pls. VI, VII; and Pls. 75, 76.)
Pyramid III- $c$, the third or westernmost of the three small pyramids south of the Third Pyramid, is separated from III- $b$ by a space of about 13.60 meters, as compared with 10.15 m . between III- $a$ and III-b. Pyramid III-c is a step pyramid similar to III-b, as explained in section $2 .{ }^{1}$ We cleared out the passage and the burial chambers in April 1907, but have nothing to add to the record made by Vyse and Perring. The large inner chamber had not been finished, and Vyse was of the opinion that the burial place had never been occupied. He found the passage and the adjoining part of the anteroom filled with sand and rubbish which had fallen in from the entrance; and on the floor of the anteroom, masons' débris, pounding stones, and some decayed wood. We found much the same conditions in 1907. The evidence is by no means sufficient to justify Vyse's conclusion, and the evidence of the chapel leaves no doubt that the burial place was actually used.

Nothing was found in the pyramid or in the chapel which would give a hint as to the name, rank, age, or sex of the owner of the pyramid.

## (A) The Excavation of the Temple of Prramid III-c

In the month of July, 1923, when the guards at our camp at the Pyramids were changed in order to give them a vacation, I detained the outgoing guards for a short time and proceeded to clear the mass of huge stone blocks lying against the eastern face of the pyramid. The pyramid was more seriously damaged than III-b. The fourth or top stage was demolished; the northern half of the second and third stages had been thrown down; and the upper northern face of the first stage was partly broken away. The stone blocks from these damaged parts lay in confusion around the eastern, northern, and western faces of the pyramid. Vyse had difficulties with the stones on the north when he searched for the entrance. On the east, the stones embedded in sand and rubbish lay in a fan-shaped mound against the northern half of the face, sloping sharply to the ground-level south of the pyramid. Underneath this modern surface débris, a shallow layer of old surface débris sloped southwards, showing that the damage to the pyramid had been done long after the decay of the temple. Underneath this in turn lay the surface of decay of the mud-brick temple sloping from the north to the south.

On Friday, July 6th, we began removing the fallen blocks of stone, employing twenty-eight of our trained Egyptian foremen. On July 17th, forty boys from the pyramid villages were added to carry out the sand and rubbish, and the removal of the stones continued until the 21st when the surface of decay was exposed. Thus the preliminary work of clearing away the surface débris required twelve working days, more than either of the other two small temples. The excavation of the débris of decay from the rooms began in the late afternoon of the 21st and continued until July 28th, being six working days.

The débris of decay had been penetrated by an excavation made after the fall of stones from the pyramid, perhaps within the last hundred years. This excavation had been begun on the west where it

[^2]had exposed the face of the pyramid in the inner offering room (7) and penetrated downwards to rock. From this larger hole a trench had been dug eastwards across rooms (6) and (5), cutting through the lower floors. In the eastern side of room (5), the trench, grown shallow, turned northwards for about two meters, and, passing through the eastern wall of the temple to pyramid III- $b$, became a tunnel forced in the lowest course of that pyramid.

The débris in the undisturbed rooms consisted largely of decayed mud brick, especially in the narrow rooms and near the walls of the open court, room (3). No evidence of a burning of the roof was found. The mass of walls and débris had been denuded by water and wind passing from north to south, so that the walls and floors at the southeastern corner, rooms (8) and (9), were worn away to a point below the floor level.

In the portico of the court, a large circular basin of limestone stood against the south wall between the second and third columns. It was 106 cm . in diameter and 85 cm . high. In room (6), in the southwestern corner, was a rectangular basis of mud brick. In front of this and before the door to room (9), on the floor stood a rectangular offering basin of the form usual in this period, but uninscribed. This offering basin seemed to be in its original place.

In addition to these two uninscribed stone basins, a number of pottery vessels and small model offering jars and bowls were found in the rooms, as follows:

Room (2), in floor débris:

1. Traditional offering jar of coarse red ware, type IV-3.
2. Four or more rude trays, coarse red-brown ware, red wash, type XXVI-2; two were red (hard-baked) and two or more were brown (soft-baked); the red wash was laid on the upper surface and the underside of the rim but not on the bottom; 23-7-2.
3. Six small model jars, of coarse red-brown ware, type XLIII.
4. Two model bowls, of coarse red-brown ware, type XLIV.
5. Part of the neck of a R. P. shoulder jar, type XVIII-1 (?).
6. A hammer stone, a flint nodule, with both ends bruised by pounding.

Room (4), in débris in western end; in upper débris and in the big limestone basin, apparently thrown into the room from room (7).
7. Lower part of low bowl-stand, red-brown ware, red wash; type XXII-2; no holes.
8. Fragment from the side of a R. P. flaring bowl of type XXXIX-2.
9. Fragment from the side of a R. P. flaring bowl of type XXXIX-1.
10. Fragment from the recurved rim of a R. P. bowl of type XXXIII-1.
11. 278 small model offering jars of various subtypes of type XLIII.
12. 620 small model offering bowls, type XLIV.

Room (6), in floor débris:
13. Small bag-like jar with rimless neck, of red-brown ware, with a wash, the original color of which is not clear, probably drab, wheel-made.
14. 34 small model offering jars, type XLIII.
15. 76 small model offering bowls, type XLIV.

## (B) Description of the Temple of Pyramid III-c

The site of the pyramid and the temple of III-c was cleared to rock before construction, and the pyramid was founded directly on the rock. The site of the temple was packed with gravel, but the slope of the rock, a fall of about 185 cm . from north to south, was never completely compensated, so that the floors still show a fall of $60-65 \mathrm{~cm}$. from north to south. The walls were founded in trenches in this packed floor.

The rooms consisted of the following:
(a) Entrance doorway in middle of north wall; north wall not recessed for doorway (cf. III-b); slab threshold of three stones, of which the inner stone is 15 cm . lower forming a step; closed by a two-leaved wooden door on the inside, opening inwards.
(b) Room (1), entrance corridor with west end walled off to form room (2); doorway in south wall at east end leading to room (3).
(c) Room (2), small room formed in west end of room (1) by cross wall bonded with the other walls; cf. III-b.
(d) Room (3), large open court with series of one compound and three simple niches around the western, northern, and eastern faces; the entrance from room (1) appears not to have been closed by a door; the southern side is taken by the portico.
(e) Room (4), the portico with three wooden columns on circular limestone bases along the southern side of the court; east and west, opposite the columns, a rectangular anta in the wall; between the western and the middle columns, against the south wall, a large circular basin of limestone (diam., 105 cm .; height. 80 cm .).
(f) Room (5), anteroom to hall of niches, room (6), doorway from east end of room (4) (portico), doorway in south end of west side, leads to hall of niches; doorway in south end leads to room (8); no evidences of doors in these doorways, but doorway from room (4) probably closed by wooden door opening inwards into room (5).
(g) Room (6), hall of niches, with complex system of niches as in room (9) of temple III- $a$ doorway from room (5) opens in middle of east wall and probably had a wooden door swinging into the hall of niches; doorway in middle of west side leads to inntr offering room (7), a third doorway in south wall leads to room (9), in the southwest corner, a rectangular basis of crude brick, $55 \times 35 \mathrm{~cm}$. and 30 cm . high, was built against the plastered surface of the room (cf. room (9) in III- $a$ ); in front of this basis, on the floor stands a square limestone basin ( $60 \times 65 \mathrm{~cm}$.) of the usual type but uninscribed.
(h) Room (7), the main offering room, greatly damaged by thieves' excavation, doorway from room (6) enters at south end of east wall, west wall only 90 cm . thick, was probably niched.
(i) Room (8), corridor leading from room (5) to rooms (9) and (10); doorway in north end leading from (5) and another in south end of west wall leading to (9).
(j) Room (9), anteroom (?) to room (10); doorway from corridor (8) as just stated; another in the north wall connecting with room (6) (hall of niches); a third doorway in the west wall leads to room (10).
(k) Room (10), secondary offering-room (?) or magazine, entered from room (9); walls plain without evidence of niches, table-altars or shelves; cf. room (6) in III- $b$ and perhaps room (10) in III- $a$.

The stairway and its anteroom, rooms (4) and (5), in III- $a$ are the only parts of III- $a$ which are not represented in temple III-c. It appears that the plan of III-b presents all that is functionally necessary in a funerary temple. The temples of III- $a$ and III-c present these same functional apartments, but with accessory features like the portico at the end of the court of offerings.

Like III- $a$, the walls of the temple of III-c have been repeatedly plastered with a yellow mud plaster. Over this a thin layer of fine white plaster had been laid.

The spaces between the walls were filled with a layer of clean débris packed hard on the underlying "gebel." This packed layer had been plastered with mud to form the first floor. The first layer of yellow plaster was laid from the first floor upwards. On this first floor after it had become footworn, a fresh layer of clean débris largely limestone chips (masons' spills) fifteen centimeters deep, was laid down, and on that a fresh floor of mud plaster. The second floor was only slightly footworn.

There were only two minor alterations in the structure: -
(a) The doorway to the entrance magazine, room (2), had been blocked with a wall of crude brick, as often in the mastaba chapels.
(b) In the southwestern corner of the portico, room (4), on the southern wall, there appeared to have been a niche or the opening of a doorway to room (7); the eastern side of this niche or doorway was plastered in continuation of the south wall to a depth of $10-15 \mathrm{~cm}$. southwards and the eastern wall to a similar depth on the opposite side of the doorway or niche; but the lines of doorway and niche could not be traced any further and certainly did not show in room (7); the space between the two plastered strips had been filled with brickwork and the surface of this brickwork coated with yellow plaster like the main wall; probably this added brickwork and plaster represented some slight change in plan made before the completion of the temple.

## 4. COMPARISON OF THE PLANS OF THE TEMPLES OF PYRAMIDS III- $a$, III- $b$, AND III- $c$

A comparison of the plans of the temples of the three small pyramids south of the Third Pyramid show the following facts:


In the mud-brick chapels of the mastabas of the Cheops cemetery, the apartments are usually reduced to:
(1) Court; (2) Anteroom (often omitted); (3) Magazine; (4) Offering room.

In the case of the mastabas of Dynasty V , the exterior mud-brick chapel usually contains (1) Court; (2) Magazines, one or two.


[^0]:    ${ }^{1}$ See Pl. V, and Pl. 78 c.

[^1]:    ${ }^{1}$ For the plan of the pyramid and its burial chambers as well as the measurements, see Vyse, Pyramids of Gizeh II, pp. 41 and 124.
    ${ }^{2}$ L.c., pp. 46-49. ${ }^{3}$ L. c., p. 48.

[^2]:    ${ }^{1}$ For the plan of the pyramid and the subterranean chambers, see Vyse, Pyramids of Gizeh II, pp. 41, 126.

