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VOLUME VI

THE BUILDINGS OF THE THIRD DYNASTY

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INTRODUCTION

The present volume deals with all the excavated monuments at Ur belonging to the Third Dynasty other than the Ziggurat and its surroundings, which have been fully described in UE V. That the publication of our results should be based on the sequence of historic periods has many advantages, but in practice the rule is not always an easy one to follow. Such buildings as the great Mausolea, erected during the Third Dynasty and finally destroyed when that Dynasty fell, belong to a clearly defined phase; but some of the temples founded by Ur-Nammu or his family were repaired or rebuilt times without number by later rulers, and while in some cases the original lines were so faithfully followed that the existing ruins can be described as Third Dynasty foundations although their actual fabric be for the most part of later date, in other cases there have been changes of ground-plan which oblige us to refer the buildings to a subsequent age even though the evidence proves their descent from the Third Dynasty. Consequently, in the description of E-nun-mah, for example, I have been compelled to anticipate here the reconstructions due to Larsa and Kassite rulers, while in the case of other temples such as that of Nin-gish-zida only some definitely Third Dynasty feature is recorded and the full account is postponed to a subsequent volume. Nothing is said here about our work in the residential quarters; undoubtedly some of the houses excavated were of Third Dynasty foundation, but, with the necessary repairs and rebuilding, they lasted for a very long time and their contents (tablets, e.g.) shewed that their *floruit* fell within the Isin-Larsa period. They will be published in UE VII.

It might well appear that my treatment of small objects, pottery, etc., is quite inadequate; I have indeed confined myself to a short catalogue and a short note on the pottery type-list. This does call for explanation. Most of the buildings described had been so often and so radically repaired that very little of their Third Dynasty contents could possibly have survived, and the stratification was so disturbed that the few objects that were found could very seldom be assigned with any confidence to one level rather than to another; since therefore their evidential value was *nil* it was best to omit them altogether from a volume dealing with a specific period. In the case of the Mausolea the dating evidence was good, but the number of objects was small; no private graves were found. In all, we recorded twenty-eight types of pottery vessels as certainly occurring in the Third Dynasty; all were plain, most were of rather coarse ware, and of very few can it be said that, even on the evidence we possess, they are to be regarded as peculiar to the period. Summary as is my treatment of the small objects it does, I think, do full justice to their scientific importance. Lastly, I have included in the catalogue a few objects of earlier or later date because they had been mentioned in the text as having been found in the buildings of which the post-Third Dynasty history is described.

I should wish to acknowledge here the invaluable help which I received from Miss Joan Joshua in the preparation of this volume, and to record my thanks to Mr. W. C. Brice for re-drawing the pottery types. Also I must express my gratitude to the Trustees of the two Museums for making this publication possible.

London, 1935

C. Leonard Woolley

WOOLLEY: THE BUILDINGS OF THE THIRD DYNASTY

ADDENDUM

The manuscript of the present volume was completed by the late Sir Leonard Woolley in 1935. The long delay in its publication leads inevitably to the question of whether or not any attempt should be made to update its contents in terms of revised spellings of Sumerian names* or of more recent archaeological data. After much deliberation it has been decided in order to preserve the integrity of the original research record to refrain from altering the author's original manuscript in any substantive way. The forms of Sumerian names used are such that they should not confuse any reader aware of current scholarship in that field. In these instances, as in questions of archaeological interpretation, each scholar must exercise his own judgment as to the validity of the statements and usage in the light of more recent evidence and opinion. Thus the report is published to join others in the series bearing both the mold of the author's mind and the reading prevailing in his day.

For the arduous work involved in preparing this report for publication, the Publication Committee wishes to thank Miss Geraldine Bruckner who saw the manuscript through the press assisted by Miss Barbara Baker, Mrs. Barbara A. Wilson, Mr. Christopher Hamlin and Mr. John Alden.

Philadelphia, 1973

Robert H. Dyson, Jr.
Samuel Noah Kramer
James B. Pritchard

*e.g., Dungi = Shulgi; Gimil-Sin = Shu-Sin; Bur-Sin = Amar-Sin; Gimil-ilishu = Shu-ilishu; E-gish-shir-gal = E-gish-nu-gal; Gig-par-ku = Gi-par-ku; E-nun-mah = Ga-nun-mah; Nin-azag-nun-na = Nin-kug-nun-na; Ba-sha-ilishu = Puzur-ilishu; patesi = ensi; sal-me = lukur.

ABBREVIATIONS

The following abbreviations are used in the text, catalogue and footnotes.

Ant J	<i>Antiquaries Journal</i>
SAKI	F. Thureau-Dangin, 1907, <i>Die sumerischen und akadischen Königsinschriften</i> . Leipzig, J. C. Hinrichs
JRAS	<i>Journal of the Royal Asiatic Society</i>
Proc. Soc. Ant.	<i>Proceedings of the Society of Antiquaries</i>
R Assyriol.	<i>Revue d'Assyriologie et d'Archeologie orientale</i>
OIC	<i>Oriental Institute Communications</i> . Chicago
UE	Sir Leonard Woolley <i>et al.</i> , <i>Ur Excavations</i> . London and Philadelphia, Trustees of the British Museum and the University Museum
UET	C. J. Gadd <i>et al.</i> , <i>Ur Excavations: Texts</i> . London and Philadelphia, Trustees of the British Museum and the University Museum



Contour Interval 1 Meter
▲ Survey Station

THE SITE OF UR

CHAPTER I

THE MAUSOLEUM OF DUNGI: GENERAL DESCRIPTION

After the Ziggurat of Ur-Nammu, described in UE V, the mausoleum of his son Dungi¹ is the most important monument of the Third Dynasty. Its attribution to Dungi is proved by innumerable inscriptions on the bricks of its fabric. There is no written evidence on the strength of which the term 'mausoleum' can be accepted as certainly correct, but inasmuch as the building is at once a tomb and a mortuary chapel it may be allowed to stand: on this point more must be said hereafter.

The building, flanked by the two smaller tomb chapels of Bur-Sin, lay at the NE end of the ancient Royal Cemetery, immediately beyond those multiple graves, the latest of the Early Dynastic series which I attributed to the 'Second Dynasty' of Ur (Pl. 1a). For its construction the accumulated rubbish of the cemetery area, which here sloped down from SW to NE, was cut away to form a level terrace of which the SW limit was the heavy wall of plano-convex mud brick running along the SW edge of the 'Second Dynasty' grave-shafts². In that terrace the pits were dug for the building of the subterranean vaults. The statement that the building lies on the extreme limit of the ancient cemetery is true of existing conditions, but must not be taken to imply that the builders were aware of the cemetery's existence and deliberately chose a site adjacent to it; it is far more probable that the cemetery extended farther to the NE than it does at present and that some of its graves were destroyed by the deep excavations required for the new work. Thus the NW vault of Bur-Sin actually overlaps the site of the 'Second Dynasty' grave PG/1847, and its construction led to the plundering of PG/1845 and PG/1846; moreover, we found graves of the Jamdat Nasr period below the pavement of the Dungi vault under room 11³. To some extent the position of the building in relation to the old Royal Tombs must be regarded as accidental; up to the time of the Third Dynasty the cemetery area may have been left vacant and it may have preserved certain religious associations; but in the Third Dynasty it was built over (there were heavy walls of Bur-Sin over the NW part of it) and if Dungi chose the site for his mausoleum it was rather because it was conveniently free than because he was following tradition.

That the site was not inherently sacred might be argued from a curious instance of nonchalance on the part of the builders. Between the line of the SW wall of the mausoleum and the plano-convex mud-brick wall already mentioned as forming the limit of the terrace, there was a space some 12.00 m. wide and slightly sloped from SW to NE, the surface that had lain exposed clearly marked by a layer of ashes; on this convenient patch of low ground the bricks destined for the building of the mausoleum had been stacked, against the face of the old wall which here stood to a height of 2.25 m. When the work was finished there were a number of bricks left over, and instead of being removed they were allowed to remain here; we found the remains of the stack (Pl. 2b), some of it three courses high, the bricks set on edge and leaning one against the other, about four hundred bricks in all (the main stack was of six rows of twenty-seven bricks each), measuring 0.30 m. x 0.22 m. x 0.07-.08 m., often with two impressed fingermarks, *i.e.* precisely the type used in the superstructure. They had been stacked over matting and lying on the matting by and under them were many inscribed tablets, in too bad a state to be legible, but presumably the tallies of the brick manufacturer and of the clerk of the works; the whole pile had gradually been buried beneath accumulated rubbish. It is perhaps characteristic that the surroundings of an important royal building should have been disfigured by the presence of piles of discarded building material, but it is less likely to have happened if the old cemetery area was regarded as sacred in itself.

The mausoleum consists of two parts, a superstructure in the form of a brick building measuring 35.00 m. in length by 27.00 m. in width, a rectangle but for the fact that there was a re-entrant angle at its south corner, and below this, corresponding to its NW and SW sides, two tomb vaults connected with each other and with the ground level by a massive staircase. The detailed account of it is given on pp. 9 ff.; and I propose here to deal with its general character only, though a certain amount of repetition is bound to occur, and reversing the order of construction I shall speak of the superstructure first.

The building lies outside the Third Dynasty Temenos but is crossed by the Temenos wall of Nebuchadnezzar (*v.* the plan, Pls. 53 and Pl. 1a). It was plundered and destroyed at the time of the Elamite invasion and was not rebuilt later as were most of the city's temples, but its site was deserted for a while and afterwards taken over for private use. Since it occupied an artificially levelled terrace with high ground to the SW and a downward slope to the

NE (sufficiently pronounced for walls on that side to require deeper foundations), the SW half was buried by debris very soon after the destruction, while the NE half remained exposed and, since the enormous mass of fine burnt brick in its walls invited plundering by builders in search of material, suffered much more severely; thus we found that the NE wall was ruined down to foundation level and across the building the height of the standing walls gradually increased until on the SW they were preserved for more than 2.00 m. above floor level. The walls were extremely solid; the minimum thickness for an interior wall was 1.50 m. and the outer wall varied from 2.50 m. to 3.00 m., all of burnt bricks set in bitumen mortar⁴, and this up to the full height to which the walls stood. In the debris filling the rooms there was relatively little burnt brick and the fact might rather point to the upper part of the walls having been of mud brick as was invariably the case in private houses, but the evidence cannot be taken as conclusive: not only did the walls themselves shew no sign of any change in material, which might well have occurred at a less height than two metres, but the absence of fallen bricks may be explained by the activities of the quarriers looking for building material; a very great deal of the filling is of a mixed character which could not result from the disintegration of mud-brick walls but seems to be due to the site's having been used as a refuse dump. The question of the original height of the walls and of their composition must therefore remain unsettled, with perhaps a preference for the view that they were of burnt brick throughout; that the building was only one storey high is proved by the absence of any staircase, and the fact that in some rooms there was wood ash and burnt earth immediately on the pavements shews that it had a flat roof of normal type and not vaults such as we find in the substructure.

The building was laid out, as was the Ziggurat, with a slight convex curve instead of a straight line for the outer walls, and all corners were rounded (Pl. 2a). The walls were relieved by shallow buttresses (Pl. 1b) and while they had a pronounced batter they had also the vertical curve or entasis that we see in the Ziggurat; a few post holes in the brickwork were probably for scaffolding only⁵. The whole of the SW and most of the NW walls rest on the walls of the substructure⁶; the other walls have offset foundations of their own which are relatively shallow. The curved corners of the building are peculiarly fine and have an almost Norman air of stark strength (Pl. 2a); in each case robbers had cut deeply down from above into the heart of the brickwork, presumably in search of foundation-deposits, their breaches coming down (in the two south corners) to 1.02 m. and 0.92 m. respectively above the wall footing; we dug deeper than this in the heart of the west corner and found nothing, and the two remaining corners were ruined much below that level. At the south corner there was the re-entrant already mentioned, the reason for which it was difficult to see, unless indeed it be the very simple one that the builder would naturally use the end wall of the tomb chamber as a foundation whereas had he kept to this line he would have cramped unduly the SE chambers of the superstructure. In the recess between the rounded buttress and the ensuing salient there was a vertical groove in the wall face and there was a corresponding groove in the face of the NW wall; these are for drains carrying off the rainwater from the flat roof and present an exact analogy to those which served the first storey of the Ziggurat.

The entrance to the building was on the NE, not central but towards the east corner; it was flanked by buttresses having the same projection as the rest but distinguished by the T-shaped grooves which characterise a sacred building and eased to the door passage by triple reveals. There was also a door in the SE wall leading into the Bur-Sin building there; it had no buttresses and no reveals and it was tempting to suppose that it was not an original feature but had been cut when the Bur-Sin building was erected; however, there was no sign of patching at the door jambs nor any proof of tampering with the original design.

The most remarkable feature of the building is that whereas there can be no doubt of its ritual purpose its ground-plan has nothing at all in common with the orthodox temple scheme but is that of the private house of the time.⁷ The resemblance extends to details. In the private house, as here, the main door is never central but well to one side, and leads into a small lobby through which one passes into a central courtyard surrounded by rooms which open on to it. In the house there is usually a chapel occupying (with its 'vestry') the whole width of the site behind the guest room; here we have on one side a second range of chambers, 10, 11, and 12 in the plan, lying behind that room 7, which, like the private guest chamber, is distinguished by the extra width of its door, and since 10 and 11 form really one room and 12 would correspond to the 'vestry' the fact that the tomb vault is beneath them makes the analogy with the house chapel strikingly close.⁸ One feature of the private house is here lacking; the mausoleum was only one storey high and therefore there is no staircase leading to an upper floor; but even so, an apparent similarity is obtained by the fact that the floor level of room 6 being nearly two metres above that of the courtyard, its door passage is occupied by a flight of steps which might for all that one could see have turned and continued to run upwards.⁹ Obviously there was here no wooden balcony surrounding the court, a necessary feature in a two-storeyed house, but it is possible that there was something on a smaller scale but not altogether dissimilar, for the slightly raised strip of pavement that runs round the foot of the four walls might correspond to a projection of the roof necessitating the support of wooden uprights, and the altar against the SW wall is likely to have been protected from above. I would repeat that there is no material evidence for this apart from the raised pavement (which

however does call for explanation), but while such a restoration would make the mausoleum an exact counterpart of the house the likeness, even without it, is unmistakable.

The likeness however is limited to the ground-plan; from what remains of the furniture of the rooms it is evident that we have not to deal with a building intended for residential purposes.

The paved courtyard¹⁰ sloped, as usually, to a central drain which carried surface water down into the subsoil; from the north and south corners covered runnels (Pl. 3) brought to the intake the rain water from the roofs. By the side of the drain there was a terracotta bath bedded to the pavement with clay and proofed inside with bitumen; presumably it was for lustrations, and was placed here so as to cause as little mess as possible. The distinguishing feature of the courtyard faced one on entry. Against the SW wall, between the two doors which broke its line, was a large brick altar, long and low, in whose bitumen-covered top there were runnels and cup-holes for offerings; ruined as it was there remained of it enough to shew that it was of the same type as that which we found well preserved in room 5. In the west corner there rose a square column of burnt brick (Pls. 4b and 7a) which had originally been about 1.30 m. high and covered with bitumen; it was right in the angle of the walls, and it stood on a low base projecting as far as the lines of the two door jambs on which had been a bitumen coat moulded into a groove parallel with the sides of the column. Similar columns were found in each of the Bur-Sin funerary buildings, and in each case, as here, they stood next to that doorway which was wider than the others, and we must therefore associate the Dungi column with room 7 and not with room 6. It is difficult not to relate these columns with the brick pedestals which in the private house chapels stand at one end of the low altar in a corner of the room; there was something of the sort also next to the door of the *pronaos* in the NW sanctuary of the Gig-Par-Ku of Nin-gal¹¹; and it is also tempting to suppose that the little groove in the bitumen of its base is not a runnel for liquid offerings such as we find in the altars but was connected with the curtains which screened the column from sight; there is proof that the pedestals in the private houses were so screened, and a shallow groove beneath the lower curtain-rod would be a very obvious convenience. In any case the existence of the altar and the column is certain and they at once give to the courtyard a definitely religious character; the moment that you entered it you were confronted with the fact that this was a consecrated building. This was borne out by the richness of its decoration. The courtyard walls preserved no sign of ever having been plastered or panelled; the admirable brickwork was probably left exposed, at least for the lower part, but in the doorways, where there had been raised wooden thresholds and wooden jambs, we found in the ashes of these, in several cases, (rooms 4, 8, and 9) fragments of the thin gold plate with which the door frames had been overlaid, recalling the descriptions given of temple doors¹². Inside the rooms the walls often bore remains of mud plaster, and this was always burnt to a deep red, the colour being so uniform that it was more likely to be due to the burning of a wooden panelling set over the plaster than to that of timbers fallen casually from the roof. One may suppose that, generally speaking, panels of precious wood would be considered sufficient decoration, but there was evidence that this was, at least in some cases, further enriched. In room 8, near the door, we found a crumpled fragment of sheet gold cut into an openwork imbricated pattern which had been inlaid with small shield-shaped pieces of lapis lazuli (U. 16257, Pl. 46). Similar fragments of inlay in banded agate were found in room 5. In room 9 there were some very small gold nails such as are regularly used for fixing sheet gold to a wooden core (they had been scattered when the gold was torn off) and some little stars of extremely thin gold leaf and fragments of sun's rays in similar gold leaf and in lapis lazuli; this leaf was too thin to have been affixed to wood, and there seemed to be traces of bright blue paint on pieces of fallen plaster, so that perhaps the ceiling was painted blue and the gold stars etc. were glued to it. Considering how thoroughly the building had been plundered no more evidence than this could be expected of the riches it had once contained, but little as there is it is sufficient to prove that the decoration must have been most ornate, resembling that of a temple but quite different from anything that a private house would boast.

Of the plundering of the building there was further evidence in room 3. On the pavement there were found a number of stone hammers and pounders (most of them split by the heat of the fire which had afterwards destroyed the place) which bore marks of the gold on which they had been used; it would seem that the treasures of the building had been brought here to be broken up and divided and crushed into more easily portable form. A marble macehead (U. 16272) with an inscription of Gimil-Sin wilfully obliterated shewed the malice of an enemy, and some clay tablets dated to the reign of Ibi-Sin (the latest found in the ruins) proved that it was at the end of his reign that the destruction occurred; evidently it was the work of the Elamite invaders. This room also contained a number of stone weights of various sizes which might have served in the division of the spoil, but may have been part of the normal furnishing of the room; a rough screen wall dividing it into two rather suggested a menial use, and numerous fragments of rough clay cooking pots argued for its having been the kitchen, to which the weights would be appropriate; there was no fireplace or cooking range, but as the whole of the pavement beyond the screen wall had been destroyed something of the kind may well have existed there, and the lack of positive evidence does not amount to disproof.

In room 4 most of the pavement had gone and nothing could be said as to its use. The one feature of interest

was the hollow in the SE wall, a corbel-vaulted recess (Pl. 5b) closed at either end by a mere skin of brick work which was skillfully bonded into the fabric of the main wall so as to disguise the existence of the opening. It had been re-used as a tomb in the Larsa period but originally it had perhaps served for a foundation-deposit¹³. By the door of the chamber were found fragments of an inscribed calcite vase of Dungi which may have been flung out from the walled recess.

The most interesting of the rooms was room 5 having at its NW end the remains of a large altar in whose top were shallow runnels, six in number, which turned and ran down the front of the altar into as many brick boxes filled with wood ash; on the recessed part of the altar nearer the door there was a seventh and perhaps an eighth runnel and box (Pl. 6a), while along the SE and SW walls were long low benches with runnels emptying into cup-hollows, two in front of a raised base, then two more on the SW and two on the SE sides (Pl. 6b). The runnels were in bitumen, but small fragments of gold leaf adhering to the bitumen shewed that the whole had once been covered with precious metal. The NW altar admitted of one explanation only. In each box there had been a small fire of wood or charcoal and the runnel was intended to bring some liquid into contact with the fire; if a pierced or porous vase containing some kind of scented oil were placed over the sloped channel the oil would run slowly along this and trickle down into the fire in the brick compartment and so go up as incense before the statue which presumably stood on the high base at the back of the altar. The theory is amply supported by a text¹⁴ in which a worshipper, describing a sacrifice he has offered, says "seven kinds of sweet oil . . . have I burnt upon seven fires." This burning of oil in honour of the dead may have been part of the family ritual conducted by the heir¹⁵, which would accord well with the view that these buildings are royal tombs. The base against the SW wall was also, undoubtedly, intended for a statue, but since the runnels in front of it and along the benches beyond ended not in fireplaces but in cup-hollows their use must have been somewhat different, although the idea of a trickling liquid still applies. Beer and honey were regular liquid offerings, and we may suppose that jars of such were set above the runnels and that a constant stream of offering passed before the statue; on the back of the bench would be placed the vessels containing solid food, bread and flesh and fruit, whereon the god was nourished. Room 5 was clearly one of the more important cult chambers, the 'dining-room' of the god, and its importance may well have been dictated by its position immediately above the second of the great tomb vaults.

Of room 6, whose floor, as already stated, was raised some 2.00 m. above the level of the court and which therefore was approached by a flight of brick steps in the door passage (Pl. 7a), nothing can be said because the whole of its pavement had been destroyed and thereby any special features which it may have possessed removed. Room 7 was distinguished by having a doorway wider than the norm; in each of the Bur-Sin buildings there is one room similarly distinguished, and it is natural to connect this with the rule in the private house whereby the door of the guest room is wider than any other. The room, it must be admitted, is unlike the ordinary guest room in that it is small and square instead of being long and shallow. The destruction of the pavement by the robbers who dug through it in hopes of treasure involved that of any altar or other feature that it may have possessed, and there is not necessarily any significance in the fact of white cement being used in place of bitumen as mortar in the faces of the door jambs. The room had formed part of the older (temporary) building replaced by the present superstructure, and was the antechamber leading to the great stairway which led to the tomb vaults (Pl. 8a); this fact may have given it special importance in the finished mausoleum, but beyond pointing out the analogy with the private guest room no suggestion as to its character can be put forward.

Room 8, the door of which was also unusually wide, had in its west corner a large and deep brick altar (Pl. 7b), which, as usual, had been dismantled by robbers who suspected that it contained treasure; it was continued by a low bench extending to the south corner of the room. Little of the brickwork was left, and none of the bitumen cover was preserved, but it is probable that the altar was of the type of that at the NW end of room 5. The small room 9 was clearly a cult chamber though of a different sort; as well as the remains of rich decoration already described we found on the floor the stand and the copper hoofs of a statue of a bull, resembling in technique the much earlier examples from the temple at al 'Ubaid.¹⁶ This cannot have been itself a cult image, but it may have been associated with such, serving possibly as a base for a human figure, like the stone figures of bulls in the back of which there is a slot to take a tenon for a statuette, of which several examples have been found¹⁷. Room 10 had a low brick bench running along half the length of its NW wall and the doorway into room 11 was so wide as virtually to make one room of the two. In room 11 there were no special features, but a large part of the pavement had been destroyed by the robbers who dug through it into the tomb chamber and at the same time broke through the blocking of the closed door in the SE wall; it is possible that they were attracted to the latter by an altar standing against it. Room 12 lay high, its pavement almost level with that of room 6, but it had all disappeared and there was nothing left to describe.

It will be seen that there was no communication between the superstructure of the mausoleum and the tomb chambers which lay beneath it, but this is only part of the truth. In the course of our excavations it became evident that there never had been any communication between them, for the superstructure was built only after the approach

to the tomb chambers had been hermetically sealed, and there had actually been a temporary superstructure which though partly incorporated in the existing building was by no means identical with it. The tombs therefore can best be described independently.

From the level of the artificial terrace which they had cut in the sloping cemetery site the builders dug a great L-shaped pit some 7.30 m. deep; the NW x SE limb of the L was 8.50 m. wide and 35.00 m. long, the NE x SW limb was approximately 15.50 m. wide and 12.50 m. long, the former being of just the width required for the tomb chamber and stairway, the latter very much wider than was needed for the tomb; possibly there was some weakness in the soil here, but for some reason or another the cutting was made and its SE face was lined with a heavy wall of mud brick (Pl. 14b) which served as a retaining wall for the soil and later as a foundation for the NW wall of the superstructure courtyard, while the SE wall of the tomb chamber was built across the middle of the open space and only its NW and NE walls against the earth side of the shaft. The interval between the chamber wall and the mud-brick retaining wall was filled with earth as the work of building proceeded.

First the pavements were laid down over the whole of the space reserved for the chambers, taken right up to the earth face, four courses of burnt bricks set in bitumen mortar, and the chamber walls were built along the edges of the pavements; the SE wall of chamber 1 was 3.40 m. thick, and all were of burnt bricks and bitumen, but in the NE wall of the stairwell a certain amount of mud brick was used in the foundations for economy's sake. When the chamber walls had reached their full height (1.75 m. in chamber 1 and 2.00 m. in chamber 2) beams were laid in pairs across the thickness of the walls, their ends projecting into the chamber, at intervals of about 1.30 m.; these formed brackets which faced each other across the chamber, and on them were set stout timbers leaning inwards and fastened together at the top as centering for the construction of the corbel vaults¹⁸. More timbers were inserted in the upper brickwork of the roofs. This was to secure a through bond (which could not be given by the masonry itself when only square bricks were employed) and thereby to utilise the brickwork above the vertical walls as a counterpoise for the overhanging courses of the vaults. At the same time the ends of the beams projecting from the face of the vault were very likely used for the attachment of a wooden panelling with which the rough brickwork was masked. The doorways of the chambers, less high than the chamber roofs, were like them capped with corbelled arches; beams let into the side walls served to fix the uprights of the door frames and a wooden lintel ran through the whole length of the door passage and the triangular space between it, and the arch was filled with a wooden tympanum.

The stairwell was built differently. The side walls were carried straight up and between them the stairs were built, a solid mass of mud bricks overlaid with the burnt bricks of the treads. In the middle was a platform 3.5 m. wide (Pl. 10) from which the steps ran down to the SE in a continuous line through the doorway of chamber 2 (Pl. 12b) (though beyond the door the gradient changed, as if the builders inside the tomb chamber had made a miscalculation which was afterwards rectified), while on the NW they ended in a landing (Pl. 12a) from which a second short flight went NE through the door of chamber 1. When the side walls attained the height of the central platform timbers were laid in the brickwork projecting inwards and a single course of bricks was added above them, and with this the building of the substructure was finished.

There was then a definite break in the work. Not only did a slight setback of the next course of bricks (see the sectional drawing along the line A-B-C on Pl. 55) mark a fresh start, but there is a slight but noticeable change in the size of the bricks employed, as if a new batch of material had been procured; it is not enough to denote a lapse of time but it does imply the beginning of a new phase in the construction. As soon as the start was made, bracket timbers were laid in the brickwork at either end of the long stairwell, leaving the centre plain, and in the NE wall, above the platform (but not quite in the middle of it) an opening was left for a door. For the height of half a metre, sufficient to enclose and cover the brackets, the wall was built vertically, then at either end centering-beams were placed in position and on their support corbelled vaults were constructed above the descending stairways; the centre remained an open shaft entered by the door in the NE wall, (Pl. 10b), and in the doorway were built steps running up to the NE. But as soon as the top of the wall reached the level which was to be that of the pavement of the building above ground there was another change, and instead of the small bricks measuring 0.28-.29 m. x 0.21 m. x 0.07-.08 m. which had been employed in these foundation courses, we find bricks of 0.34-.35 m. x 0.21 m. x 0.08 m. which are the normal bricks of the superstructure; in this material all the walls were carried up, including those of the tomb chambers and staircase vaults from whose inner face the corbelling projects inwards. The steps in the doorway from the stairwell end with a bitumen-covered threshold, its edge flush with the outer face of the wall of room 7 which gives the floor level of the superstructure; corresponding with it is the threshold of a door (later blocked up) in the SE wall of room 11 which lies above tomb chamber 1; it is therefore certain that room 7 of the existing building is part of the original or provisional superstructure, but originally its pavement was at a lower level (1.30 m. lower), it had two doors which were disused later, and it served as an anteroom to the stairs leading to the tomb chambers the well of which still remained open (Pl. 9b).

It is of course probable that from the outset the whole of the present (permanent) superstructure was planned

in the form in which we have it, but if so there was subsequently a raising of the pavements in all the other rooms and in the courtyard for which no evidence was forthcoming; indeed, such evidence as there was pointed in the other direction. On the NE side of the building the wall foundations were shallow and the footing of the wall proper was only eight courses of bricks, *i.e.*, 1.00 m., below the surface of the late floor, so that an early pavement, even if it had been flush with the offset, would still have been sensibly higher than what was required by the doorsills in room 7. It is certain that for the temporary structure the walls of room 7 must have been carried up to their full height and I could not distinguish in its NW wall beyond the north corner any break of bond proving that the continuation had been added subsequently, but we know from the blocking of the doorways that the Dungi builders were adept at disguising such a joint. The door in the NW wall of the room must mean that room 11, over the tomb chamber, was built contemporaneously, and on that analogy we can assume that room 5 also was early; I am inclined to think that the original superstructure coincided with the outline of the original shaft excavated for the tomb chambers and that while the foundations of the rest of our building may have been laid at the same time its walls were built after an interval which may not have been long but was essential to the ritual of the royal burial.

But from the temporary superstructure the tomb chambers were still accessible. The doorway from room 7 opened on to the unroofed shaft and the steps in the door passage led down to the central platform and thence the side flights ran on under the great corbel vaults. It is of course possible and even likely that a roof of some sort was erected over the central part of the shaft, but if so it too was of a temporary nature; presumably it would have been on the level of the pavement that was laid down afterwards, *i.e.*, a little higher than the apex of the vault on either side, in which case the building as seen from room 7 would have had a height of 3.10 m. from the doorsill to the under line of the roof. There is one feature of the building which seems to be connected with the temporary structure but is not easy to explain. On the NW side of the stair-platform there are two large beam-holes in the NE wall close to the top of the older section of the brickwork and just below the bracket-holes for the centering-beams; in the SW wall there are two corresponding holes, and in the NW wall there are five, all on the same level; on the SE side of the platform, where the distance to the front of the vault is less, there are two holes at the same level but nearer to the vault in both NE and SW walls and holes in the SE wall; further, on each side of the platform there is in each wall a single hole at a lower level. The lowest holes might have been for scaffolding, but the upper holes would have been useless for that purpose, coming as they do just below the springers of the corbel vaulting which was built from the outside against the centering and not from the stairwell; they must have served some purpose not connected with the wall construction. It is natural to suppose that the beams supported something, and I would suggest that this was a wooden floor or gallery running round three sides of the shaft from the platform's edge to the far wall, with a hole in the middle for the descent of the stairs. If this were so, there would have been one great room 16.50 m. long with a flat roof in the centre and a vault at either end having on each side of its central area steps going down to the tomb chambers.

It is obvious that even with a superstructure much simpler than that whose ruins exist now the tomb must have been prepared in advance, during the lifetime of the king who was to occupy it: we must imagine that Dungi saw the vaults and the temporary building above them completed; the material for the permanent superstructure he may have made ready and left to his successor to use. Such a lapse of time as this implies would help to account for the remarkable fact of the raising of the tomb floor. When we dug down into chamber 1 through the hole in the vault made by the Elamite robbers we were astonished to find a chamber so unworthy of its setting. The corbel vault sprang directly from the clay floor (Pl. 13b) on which lay the bones and vases; the long chamber was low and cramped, with no head-room at the sides; it was only later, when we had dug through this floor and exposed the real pavement of burnt brick, that it regained its dignity and proportion. The character of the secondary flooring shewed what had happened. Dungi had overreached himself. Determined that his burial chamber should be as splendid as possible he had laid its foundations very deep, at a time when the water table was much higher than it is today. The tomb had stood ready for a long time (Dungi lived to a great age) and probably its doors were walled up to prevent desecration; then, when the king died and the doors were opened the workmen found the bitumen floor awash with infiltrated water. It must have seemed a most ill-omened accident, and our finding of animal bones on the pavement just inside the door presumably means that sacrifices were offered to re-consecrate the building or to propitiate the gods who controlled the water. But practical measures had to be taken, and that quickly. They brought bricks and stacked them two deep in the shallow water over the whole chamber (Pl. 13a), and above them they laid a solid mass of mud bricks which they topped with a floor of stiff clay: architecturally the vault was ruined, but at least the king's body was raised above the damp.

The same thing had of course happened in the second chamber, and the same measures had to be taken to raise the floor, though here, perhaps because the tomb was less important, there were no animal sacrifices. Then the dead were buried, laid on the clay floors, the offerings were placed with them, and the doors of the chambers were bricked up.

Whether the temporary superstructure was intended for the actual burial rites alone and the building of the

permanent tomb chapel was taken in hand at once, or whether there was an interval, it is impossible to say; but in either case the stairwell remained open until the new building was almost completed. During that time there was access to the doors of the tomb chambers, and it is at least likely that the tomb shaft, especially if, as I have suggested, it was turned by the addition of wooden galleries into one long hall, served as the funerary chapel: if in the case of the private burial vault offerings of food and drink were placed against the blocking of the door, it is probable that in the case of a king offerings would be brought regularly to the tomb door, and therefore the hall with its stairways going down to the chambers would seem to be planned to this end. But it was only for a time. When the new building was nearly finished the ground level inside its walls was raised and in the doorway giving on the stairwell bricks were laid up to the level of the new pavement¹⁹, and earth was poured down into the stairwell until the tomb doors were hidden; the blocking of the door was raised and more earth flung in until the vaults were filled and the crowns of them buried, and finally over the packed soil a brick pavement was laid down to which one went up from the new courtyard by steps in a doorway of the new wall (Pl. 9a). It was while this was being done that an unseemly thing occurred. We found the earth filling undisturbed, but the brickwork closing the doors of both the tombs had been broken through (Pls. 11b and 13a) and the loose bricks lay on the landing and on the stairs; the royal tomb had therefore been plundered before the funeral ceremonies were complete. Had this taken place while the stairwell was kept open — and the risk at that time would have been very great — the priests in charge of the building would assuredly have disguised the sacrilege, or at least would not have left the bricks lying in front of the broken door; the only safe moment was when orders had been given to fill the shaft, and the robbers must have acted the night before the orders were carried out: then the easiest course for the priests was to make no fuss over what could not be mended, but to bury as quickly as possible the evidence of the sacrilege.

By the filling of the shaft both tomb-chambers were finally sealed. Naturally it cannot be definitely proved that both were occupied simultaneously, but the interval between the burial of the body in the first chamber and the completion of the superstructure need not have been long; the construction of two chambers with a common approach and a common superstructure would rather imply that they were intended for use at the same time. We have then to ask why there were two chambers and for whom they were intended. There is the further difficulty that in the second chamber the few scattered bones found represented three bodies, those of an adult man, a woman, and a child, and that while in the first chamber itself only one body was represented there were four skulls found on the edge of the hole cut by the tomb robbers through the vault, and these in all likelihood came from the interior of the tomb. We have therefore to account not only for two burial chambers but for at least four and probably seven or more persons buried in them. The same is true of the Bur-Sin mausolea, where also we have proof of multiple burial.

Our first idea on finding that there was a duplication of provision for burial was that one chamber would be destined for the king and the other for the queen. Against this theory is the unlikelihood that husband and wife would be expected to die at more or less the same time or that the stairwell which it was intended to fill with earth would be left open for what might prove to be many years, during all which time the superstructure would remain unfinished. Moreover, this does nothing to explain the fact of there being more than one body in a tomb. It was tempting to draw an analogy with the burial vaults under the Larsa private houses, where it is the rule to find several bodies, and the general resemblance between the Dungi superstructure and the private house seemed to support the analogy: it might be urged that the various bodies are those of the members of the royal family, buried in turn, and that owing to the size of the royal family — the king having presumably a greater number of concubines — extra provision was made for it. But the parallel will not hold. In the private vault the interments were consecutive; we would find the skeleton of the last person to be buried laid in the proper attitude in the middle of the tomb, and the bones of the other bodies piled unceremoniously in the corners, all in confusion, showing that the flesh and sinews which had held them together had decayed, proof that the different burials were not contemporaneous. The brick vaults lay only half a metre or less below the pavements of the domestic chapels²⁰ and it was perfectly easy, when a member of the family died, to pull up half-a-dozen paving bricks and to re-open the little pit in front of the roughly blocked vault door. In the case of the royal tombs, all the bones had been removed or disturbed by robbers and nothing could be judged from their position, but we could be absolutely certain that the vast mass of earth which sealed the approach had never been disturbed. In the upper part of the filling the soil was clearly stratified and the strata were unbroken; the lower part was too homogeneous perhaps to shew disturbance²¹ but the fact that the two doors had been breached and the bricks from them left *in situ* was proof that the filling once put in had never been cleared out again. While it is probable that the two vaults were occupied at the same time, it is certain that the bodies in each vault were put there all on the same occasion. The Dungi mausoleum was not a family burying-place and the bodies were not those of different members of the royal house.

I venture to think that we have here a survival in the Third Dynasty of the custom which prevailed in the Early Dynastic age whereby a ruling sovereign was followed to the grave by the members of his household or of his court. The king, with his more personal attendants, would be laid in one chamber, the other would be for his retinue; since chamber 1 is the larger and lies under rooms in the superstructure which seem to have been more important

than room 5 and occupy that place in the building which corresponds to the domestic chapel of the private house, chamber 1 is likely to have been the royal tomb proper, while chamber 2 lying under the room in which food and drink were set out for the dead, would appear more appropriate to his staff. There is of course no hint in any Sumerian literary source known to us of any such rite as I here postulate, but since we have no description whatever of a royal burial this is not surprising; so long as we do not know in the least what the ceremonies attendant upon a king's funeral were it is impossible to deny that this may have been one of them.

Here, as in the case of the Early Dynastic tombs, it may be urged that they are not royal graves at all; the theory was put forward that the bodies in the Chamber tombs of the earlier period are those not of kings and queens but of the victims in a 'fertility rite' who after playing the leading parts in a symbolic 'Sacred Marriage' were ceremoniously put to death. That they were not kings and queens is difficult to maintain in face of the fact that one, A-kalam-dug, is expressly entitled on his seal 'the king of Ur' and Shub-ad has the title *Nin*, 'Lady', which is regularly used of queens: and whereas we have a fair number of scattered references to the 'Sacred Marriage' rite, not one of them even hints at the death of the principal actors, which should have been its most striking feature. In the case of the Third Dynasty tombs other arguments must be added. Important as was the annual ceremony of the mystic marriage of the city's god, it would scarcely seem to warrant the construction of so elaborate a building as the mausoleum. Moreover, it was an annual ceremony, so that we should have expected to find more than one example of its celebration during the forty-seven years of Dungi's reign, for forty-seven such buildings as this would have occupied no small proportion of the area of Ur, but so far as our excavations go the Dungi mausoleum remains unique. Lastly, the character of the superstructure does not accord with what we know of the 'Sacred Marriage' rite. That festival took place in a temple lying at some distance from the city, to which the statue of the god was taken in solemn procession; but the mausoleum, lying in the heart of the city, has not at all the plan or appearance of a temple, but for all its magnificence is modelled on the private house: and whereas the victims of a 'Sacred Marriage', if there ever were such, would have enjoyed a purely ephemeral importance and would have been merged in the gods whose worship was conducted in normal fashion in their established temples, this 'house' is adapted to a continuous ritual of offerings connected with the dead buried immediately below. Although the presence of more bodies than one and the explanation of their presence as a survival of 'human sacrifice'²² may offend some historical prejudices it yet seems certain that these great vaults which bear the names of Dungi and of Bur-Sin are the graves of those kings.

Only thus can we understand the domestic character of the superstructures. The Third Dynasty rulers were deified, Dungi at least in his lifetime, and for the worship after death of one who had been a mortal a house might seem more appropriate than a conventional temple such as was suited to a god of unmixed descent; deification would not easily obliterate the human element. The divine Dungi had been and continued to be Dungi the King, and the proper place for him was a palace.

Something should be said as to the plundering of the building by the Elamites. That they should have made a clean sweep of the treasures of the superstructure is but natural, and the systematic manner in which they broke up every one of the altars is probably due to their knowledge that these contained dedication deposits of value. But they also knew very exactly the whereabouts of the tombs both here and in the Bur-Sin buildings and in each case went straight for their objective by the easiest route; the only mistake they made was when in room 7 they dug down in front of the blocked doorway in the SW wall and pulled away part of the foundations only to find themselves faced by more solid walling. Since the Dungi vaults had been robbed long before, the Elamites probably found little in them to reward their labour, and from a twice-plundered tomb we could not hope to recover any objects of interest: but it was curious to find that of the bodies themselves no more than a few stray bones remained; the robbers had been at pains to remove the rest through the holes in the roofs of the vaults, and what we found were only those which in the semidarkness they had overlooked. There must have been a purpose in this. The completeness of victory would fitly be symbolised by scattering the bones of the enemy's kings; the regular procedure of a conqueror was to carry away the statues of the gods of the defeated city and to set them as prisoners in the temples of his own gods, and it is quite possible that in the case of the Third Dynasty rulers who were both kings and gods it might have seemed worth while to remove their actual bones as a trophy. "The sacred dynasty from the temple they exiled" declares the poet in his lamentation over the destruction of Ur by the Elamites. The living representative of the dynasty, King Ibi-Sin, had been exiled from his palace, and the only ones who could be 'exiled from the temple' were the dead; the expression may recall that thorough desecration of the royal tombs of which we found the proof.

CHAPTER II

THE MAUSOLEUM OF DUNGI: DETAILED DESCRIPTION

Room 1

NW jamb standing to 0.30 m., SE jamb and east corner of room completely ruined; SE wall towards south corner 1.00 m. high, SW wall 1.15 m., NW wall 1.00 m. at west corner breaking away to 0.30 m. at north corner. Floor paved with three courses of brick later overlaid with a floor of fine clay c. 0.10 m. thick. Both the inner and the outer doorways had thresholds raised one course above floor level and coated with bitumen. Part of the upper pavement courses removed, the lower courses irregular. Against inner NW jamb a brick hinge-box, empty. On the floor two pieces of blue-glazed frit inlay, pear-shaped, (U. 16298) presumably from wall decoration; on the threshold of the courtyard door fragments of thin sheet gold (U. 16256).

Room 2, the Courtyard

There was a late floor of fine, smooth and hard clay about 0.10 m. thick extending over the whole court with the exception of a strip formed of two rows of bricks along the NE, SE, and (probably) SW sides. The floor (removed by us, v. Pls. 3, 4, and 5a) covered an original pavement of burnt bricks 0.31-.32 m. sq. x 0.06 m. overlaid with bitumen. Part of this was in bad condition and had been patched before it was abandoned and covered with the clay floor. It had been well laid, the courses parallel with the walls, except that from the north and south corners there ran to the central drain a line of single bricks set diagonally (v. Pl. 3) covering a surface drain.

Along the NE, SE, and (apparently) SW sides a strip two courses wide was raised 0.08 m. above the general pavement level (Pl. 4a); this seemed to be original, but had certainly been utilised by the layers of the later clay floor to secure the latter against damp along the wall footings. The whole pavement sloped to the central drain; the intake of this was narrowed by brickwork resting on the terra cotta rings. Close to the intake there was a terra cotta bath (Pl. 4) proofed with bitumen; it was bedded to the pavement with clay and would seem therefore to belong to the earlier phase of the building although re-used in the later.

Against the SW wall the pavement is non-existent and there stood here a structure which has been destroyed. This was a brick bench 1.00 m. wide consisting of two elements, a base or altar along the wall, of uncertain height, 0.63 m. wide, and in front of it a ledge 0.30 m. high along which ran two bitumen-lined channels sloping down towards the SE; only a fraction of this was preserved at the NW end, the whole of the SE end being destroyed (Pl. 4b). It can be restored by analogy with rooms 5, 8, etc.

In the west angle of the court was a pillar of bricks (Pls. 4b and 7a) 0.31 m. x 0.21 m. x 0.55-.65 m.; it is detached from the two walls. It stands 1.05 m. high. The doorway to room 6 is occupied by steps of which the lowest projects beyond the wall line into the courtyard, but is not of the full length of the doorway; a brick is missing at the NW end and it would seem that the space between the shortened step and the brick column was occupied by a base connected with the latter. In front of the gap there is on the pavement a lump of brick covered with bitumen shewing the corner of a groove or channel semicircular in section and containing wood ash; a continuation of the groove can be traced against the side of the brick in the lowest (short) tread and, less certainly, against the SE side of the column; there must have been here a base encased in wood, or metal laid over wood, which stood against the column and encroached somewhat on the steps, v. Fig. 1. In the doorways of rooms 8 (Pl. 5a) and 9 there is preserved at the bottom of each reveal a brick, or part of a brick, set upright on edge and fixed with bitumen, obviously as a block securing in position something which occupied the reveal; in the bitumen behind it can be seen the imprint of a horizontal beam, round on the under side, diameter 0.12-.15 m. There was here a wooden sill which was the bottom member of a frame whose sides filled the reveals. No such bedding of the door frame was found in the other doorways, but the strong signs of burning on the reveals of the doors, to rooms 3, 4, and 5 especially, shew that the uprights were normal; but the actual doors were on the inner side of the entrance. On the threshold of room 8, on the line of the wall, there lay numerous fragments of gold leaf and minute gold nails, all embedded in the surface of the bitumen covering the threshold (U. 16258); one fragment resembling a staff-head had roughly embossed ornament; similar fragments of plain gold leaf were found by the doors of rooms 4, 7, and 9 (U. 16256); in front of the door of room 4 was a fragment of a vase of white calcite inscribed with the name of Dungi

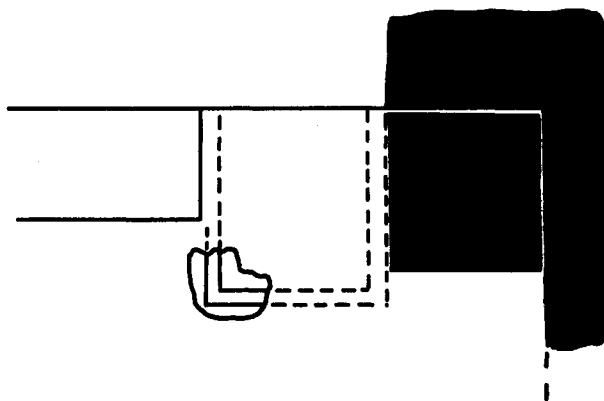


Fig. 1

(U. 16539) which belonged to other fragments found inside the room; with it were large copper nails which probably belonged to the door frame.

Room 3

The NE wall was destroyed below floor level, the brickwork nowhere preserved to more than 0.80 m. above the foundation offset (for the offset, see section D-E on Pl. 55); the SE wall rose from this level at the east corner to 1.70 m. above the offset at the south corner; the SW wall stood 1.10 m. above the pavement, the NW wall went down from this to 0.80 m. and at 1.50 m. from the north corner was destroyed below floor level. The offset in the wall was twelve courses of brick below the pavement; below this the wall footings were carried down for 0.75 m. Below the floor in the NE end of the room was a circular pit, diameter 1.20 m., going down 2.30 m. below the wall offset; it seemed to have no connection with the building but to be of earlier date; it was empty except for earth filling. The pavement was of five courses of burnt brick resting on a mud-brick bedding 0.75 m. thick; at the NE end it had been destroyed. Across the room ran a rough wall of mud brick mud-plastered, with a door or gap in it leading to the NE end of the room; the wall, now standing 0.70 m. high, rested on the pavement but was contemporary with the period during which the room was in use. On the floor, many fragments of rough clay cooking pots shewing signs of heavy burning; they were too fragmentary to be typed, but with them were examples of the common saucer Type III. Just inside the room, along the SW wall, there were numerous objects: a white marble macehead with an inscription of Gimil-Sin wilfully obliterated (U. 16272); a (broken) bowl of white limestone (U. 16273); a cylinder seal of a servant of Gimil-Sin (U. 16269) and two more seals both burnt and defaced; a clay sling-bolt (U. 16271); a number of copper nails; a small inscribed tablet and a fragment of a second; a limestone duck-weight with defaced inscription and two diorite duck-weights, one broken and shewing marks of burning; a number of haematite and other stone weights (U. 16268 A); a number of stone pounders and hammers, most of them shewing marks of gold that had been hammered with them (U. 16268 D); a polished stone adze (U. 16266); a polished stone hammer (U. 16265); a polished stone grinder (U. 16267). All the objects were fairly close together and lay in and under quantities of wood ash; the wall retained some of its mud plaster and this also was burnt to a deep red; the plaster may have been hidden by a wooden panelling of which the ashes are the evidence.

Room 4

The walls were well preserved, the minimum height being 1.20 m. at the north corner and the maximum 1.90 m. There had been a brick pavement but this had been pulled up and there remained only the floor foundation of broken bricks and clay. Just inside the room were found further fragments of a calcite vase (U. 16539) with inscription of Dungi, of which one piece was found outside in the court; the fact would shew that the pavement of the room was destroyed before the desertion of the building. A large block of stone (0.60 m. x 0.40 m. x 0.18 m.) with one face smoothed as if it had been used for a rubbingstone was the only other object in the room.²³ In the SE wall there was in the wall's thickness a corbel-vaulted recess or concealed chamber (the top 1.45 m. above floor level) which had originally had no means of access; the wall face had been carried across the opening both on the inside and on the outside by means of a skin of brickwork one course thick which preserved the continuous bond of the walls and therefore effectually disguised the existence of the hollow behind. On the inside this screen had been broken through from the room (Pl. 5b), and the destroyers had then proceeded to attack the outer screen from the inside, its bricks being pushed outwards; presumably the recess was a cache for a foundation-deposit which was

plundered by the Elamites; and they may have suspected a second secret chamber and so began to knock through the second screen wall but desisted when they found that it was an exterior wall. Afterwards the inhabitants of a Larsa house built above the ruins of the mausoleum dug down and found the wall and its vaulted recess and utilised it for a family vault; they put in a low partition and roughly blocked the 'door' with broken bricks. The grave was found by us undisturbed. In a hole in the floor of the room were two copper staples (U. 16243).

Room 5

The walls (Pl. 6a and b) were well preserved, standing on the NE, SE, and SW to a height of 1.90 - 2.00 m., and on the NW to about 0.80 m. The pavement was of bricks originally proofed with bitumen. The NW end of the room was occupied by a brick bench of which the front part was 0.55 m. high and 0.70 m. deep; behind this was a step up to a platform 0.08 m. higher; against the SW wall there stood on this platform a higher pedestal, 0.16 m. high; all the back part of the bench or platform was destroyed, having been cut away by the Elamites seeking an entry into the vault below, so that it is uncertain whether its top was flat or was carried up by further steps to a greater height. The front line of the bench was not continuous; at the NE end it was set back behind the jamb of the door, while at the SW end it was brought forward 0.70 m. to the line of the jamb's face; in front of this section were six small box-like compartments of burnt bricks set on edge, resting on the pavement, all of which, except that against the SW wall, were found full of wood ash. The top of the bench was thickly plastered with bitumen and in this there were six runnels, in two rows of three each, which went parallel to the front of the bench, from NE to SW, deepening as they went, and then turned at right angles and came down as channels recessed in the front of the bench, each into one of the brick compartments already mentioned. Against the front of the NE section of the bench there were remains of one, certainly, and apparently of two brick compartments similar to those in front of the SW section, and on the top of the bench there were in the bitumen covering traces of similar runnels.

Along the SW wall was a brick bench 0.10 m. high and 0.37 m. wide; at its NW end there rose from it a base 0.10 m. higher (the bench here was widened to admit of it) and by this a very small pedestal, also 0.10 m. high. In front of the highest pedestal there were two cup-hollows in the bitumen surface of the bench; in front of the larger pedestal two parallel runnels deepening from NW to SE and ending in oval hollows; along the whole of the rest of the bench ran two parallel runnels deepening to rectangular depressions in the south corner of the room. Along the foot of the SE wall ran a similar bench 0.10 m. high and 0.37 m. wide, in which were two runnels deepening to rectangular depressions in the east corner of the room. (Fig. 2)

On the pavement there were found a fragment of gold leaf, a piece of agate inlay (U. 16270), shield-shaped, height 0.007 m. and a similar piece of inlay in lapis lazuli. The pavement was evenly covered by a layer of charred wood and fine earth which was discoloured by heat; this probably represented the flat roof. On the bench along the SW wall, near the south corner, there were four or five large-headed copper nails lying in a row 0.10 m. apart. More copper nails, two with gold heads, (U. 16244), and a quantity of narrow copper binding were found on the base in the NW end of the room, for the most part near the room door.

Above the room were remains of a brick corbelled Larsa tomb containing three pots of drab clay.

Room 6

The pavement of the room had been raised to a level nearly 2.00 m. above that of the courtyard, and the door entry was in consequence occupied by brick steps of which five were more or less preserved (Pl. 7a) while a sixth

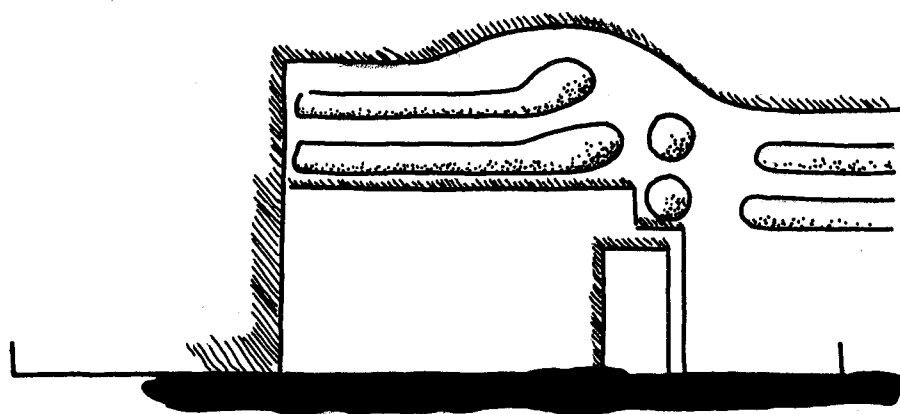


Fig. 2

projected into the court beyond the wall line. The upper steps and the threshold had disappeared and all the brick pavement of the room had been pulled up, only a single brick remaining *in situ* against the SW wall to prove pavement level. Although the tops of the walls in this room were standing to the same level as in room 5, yet owing to the difference in floor levels they rose, in this case, little if at all above the pavement. There was therefore no feature of the superstructure preserved, and there was actually some doubt about it. The NW wall was so badly destroyed that it was impossible to say whether it had been continuous or whether there had been in it a doorway between rooms 6 and 12; on our ground-plan it is shewn as solid, but the possibility of there having been a door must not be overlooked.

Room 7

The walls were standing on the NE up to 1.65 m., on the SE up to 1.80 m., on the SW up to 1.65 m. (the lowest point was 1.15 m.) and on the NW from 0.75 m. to 1.00 m. The threshold was of (broken) brick thickly overlaid with bitumen; the room was paved with burnt bricks coated with bitumen, but had been much destroyed by the Elamites, who had dug through it to a considerable depth (see below).

It will be noticed that the doorway leading from the court is exceptionally wide; it was further peculiar that in the inner face of each jamb many of the bricks were laid in *jûs* cement²⁴ instead of the bitumen normally employed; this is not due to reconstruction or patching, for the bitumen occurs both below and above the *jûs* cement and actually one brick was bedded for half its length in *jûs* and for the other half in bitumen; there seemed to be no reason for the variation of material.

In the SW wall there was originally the doorway through which the staircase ran, leading down to the tomb chambers; it had been walled up while the building was in use, and the greatest care had been taken to conceal its existence. Corresponding to the pavement level there are three courses of brick laid between the jambs of the door, and the straight joint is visible in the course shewing immediately above the bricks of the floor (Pl. 8a), but above that level the break in bond is most effectually disguised. The lowest courses of the blocking are of bricks 0.28-.29 m. x 0.21 m. x 0.07-.08 m., and the courses sag decidedly in the middle, perhaps because the steps on which the walling rests were worn in the centre (?). As this sagging would have betrayed the secret of the doorway it has been corrected in the first place by inserting an extra course in the middle of the space, the bricks being trimmed to allow of this; the brick at the left-hand end of the course has been cut to shape and is followed by two thin bricks of which one overlaps the trimmed end of the first; then come two bricks again, a thin brick below a thicker above; then comes a course of larger bricks (0.34-.35 m. x 0.21 m. x 0.08 m.) and above this a layer, in the centre only, of brick slithers which give a true horizontal bedding for the upper courses. All the upper courses are of the 0.34-.35 m. x 0.21 m. x 0.08 m. bricks, identical in measurement with those of which the wall is built; at the same time, they do not appear the same, being rather more sharply moulded with sharper corners and also of a very slightly different tone; it can be recognised that they do form an incongruous patch in the surface of the wall. But this difference is minimised by the builders having cut away half of every alternate brick in the angle of the door jamb so as to secure an apparent bond between the old and the new work (v. Pl. 8b); this is done only on this side of the doorway, facing into the room; on the other side (room 6) where the blocking is below pavement level no such precautions were taken and a vertical break in the bond of the brickwork shews the edges of the original jambs (Pl. 9b). The difference in the moulding and texture of the new bricks in the blocking as compared with those in the wall on either side is largely due to the more pronounced effects of time and burial on the latter; the new bricks are of better clay, better fired, and have suffered less: there can be little doubt that they were intended to match the old and probably they were specially made for the purpose.

In the NW wall there was a doorway to room 11 which also has been bricked up, and here too the same precautions were taken to disguise the blocking, the alternate bricks in the corners of the door jambs being cut away so as to secure a bond;²⁵ the straight joint is left for two courses above the pavement but above them the old and new work are skilfully dovetailed together (v. Pl. 8a). Most of the bricks in the blocking are of the 0.34-.35 m. x 0.21 m. x 0.08 m. type, but there are with them a few of the thinner sort. The whole of the new work has collapsed; the end bricks have broken away from their shallow bond in the door jambs and have sunk some 0.10 m., and the courses have sagged to such an extent that their centres are 0.22 m. below their ends. Since there is in the original doorway a solid brick threshold which has not sunk at all the only explanation of the collapse is that the new brickwork rested on a timber baulk lying along the threshold; the decay of the wood would involve the collapse of the bricks. The blocking consists of two skins of properly laid bricks, set in bitumen mortar, between which there is dry walling of bricks simply stacked in piles. While then the appearance of the blocking here is very similar to that in the SW wall the facts are totally different.

The features found below the floor level, since they have nothing to do with the room proper, will be described in connection with the substructure, pp. 15 ff.

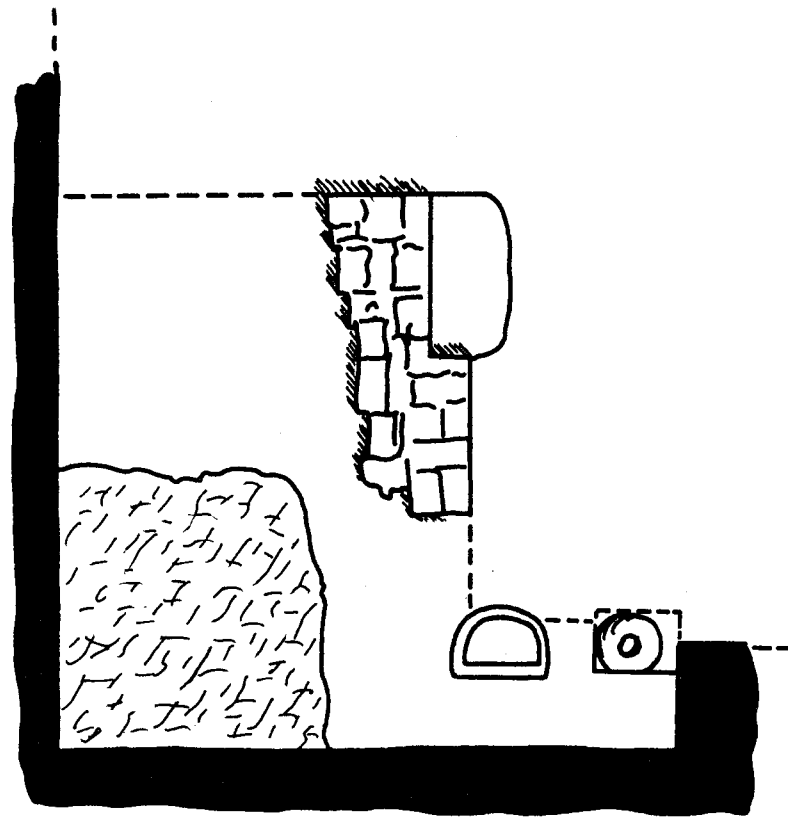


Fig. 3

Room 8

Of the walls, the SW wall stood to a height of 1.80 m. but had sagged badly, the SE wall for the NE half of its length was broken down to floor level, the NE wall stood scarcely above floor level and the NW wall from the doorway to room 10 to the west angle rose from 0.90 m. to 1.80 m. The destruction of the SE wall halfway between the door and the east corner was due to a late drain of terra cotta pipes which had been cut down through the brickwork. The original pavement of burnt bricks coated with bitumen lay 0.18 m. below the threshold of the courtyard door; later there had been laid over it a clay floor c. 0.10 m. thick. Against either jamb of the courtyard door was a brick hinge-box containing an uninscribed socket-stone; the hinge-box in the south corner rose 0.25 m. above the brick pavement.

In the west corner an area 3.30 m. x 3.00 m. was unpaved; there had been here a large 'altar' similar to that in room 5 but it had been destroyed, and in the actual corner of the room a hole had been sunk through it deep below pavement level. There remained only part of the front of the altar, five courses of burnt brick (Pl. 7b), shewing a recessed front precisely like that of the room 5 altar; in front of the recessed section there was a patch of bitumen; against the SW wall was solid clay packing retained at its SE end by the upstanding bricks of the hinge-box; it stood 0.25 m. above the brick pavement and let in to it, on the line of the front of the altar, was a semicircular bitumen-lined depression in the pavement which looked like a socket (Fig. 3) for an upstanding object. It measured 0.50 m. x 0.37 m. with a straight side 0.20 m. high of which 0.08 m. was below pavement level, this seeming to have been its full height, and the curved sides only just above the floor; it was rather rough inside. The clay packing seems to have been a projection from the main altar which was therefore L-shaped. The altar belonged to the room's second phase, for the bitumen which was spread over the bricks was brought down in front of them and carried forward over the surface of the clay floor; moreover, the bricks rested not directly on the brick pavement but on a layer of clay above that. Along the NW wall ran a bench of burnt brick 0.07 m. high and 0.35 m. wide; this belonged to the original phase of the room and was hidden when the clay floor was laid down.

On the threshold of the courtyard door, inside and to the NE of the centre, there was a fragment of sheet gold cut out into openwork imbricated design set with shield-shaped pieces of lapis lazuli (U. 16257) (Pl. 46e); also much wood ash.

Room 9

Most of the NE wall was razed to floor level, SE and NW walls stood to a maximum height of 0.50-0.60 m., SW to 0.85 m. The pavement was of burnt bricks overlaid with bitumen. Along the NE wall was an unpaved strip 3.00 m. long and 0.75 m. wide; possibly in the east corner there had been pavement which was destroyed with the wall, possibly there had been a raised altar; nothing was left standing above pavement level. In front of the altar (?) but not in position, for it stood diagonally to the room, facing north, were the remains of a wooden stand (?) on which were the copper hooves of a statue of a bull — three were found, in a row, the first and last 0.80 m. apart; at 0.30 m. in front of the front hoof was a fragment of gold foil and in a straight line parallel with the hooves were three copper nail-heads, probably from the base. The hooves were of thin copper hammered over wood in the style of the bulls from the al'Ubaid temple and measured 0.08 m. long. Scattered about the floor (the bitumen on which was very thick and curiously rough and uneven) were the bases of several large clay vessels, two or three rubbingstones, some large flat-headed copper nails, and a few small gold nails and some minute gold brads, a copper nail with gold head (diameter 0.022 m.) and some strips of copper binding; near the middle of the room was a stone pick (U. 16293, Fig. 4). Lying on the floor, or slightly above it, there were also some minute stars of thin gold leaf and some very small strips of gold leaf and also of lapis lazuli engraved with parallel zigzag curves (U. 16270), which were certainly representations of rays of light. On one smooth lump of earth to which a gold star adhered there seemed to be traces of bright blue paint.

Room 10

A raised threshold was found in the doorway from room 8; on the NE jamb was mud plaster burnt red, on the SW jamb mud plaster also shewing signs of heavy burning. Of the walls, the NE wall stood to a maximum height of 0.80 m. lowered in the centre to 0.45 m.; the SE wall 0.75 m. at the NE end rising to 1.50 m., at the south corner broken down by an intrusive drain to 0.35 m.; half of the NW jamb of the door to room 11 and most of NW wall completely destroyed, beyond which, for 2.30 m., the inner face only preserved up to 0.50 m. and the outer face destroyed. Most of the brick pavement had gone; against the NW wall at its SW end there seems to have been a raised bench whose front was flush with the inner face of the door jamb.

Room 11

In the very wide doorway from room 10 there was a raised brick threshold. The walls were well preserved up to an average height of 1.90 m.; the pavement was of brick thickly covered with bitumen, but a large part of it had been destroyed (Pl. 9a) by the robbers who dug through it to reach the tomb beneath. At the SW end there lay above the floor a thick layer of burnt rubbish, wood ash, and powdered brick; in the doorway at the foot of the stairs there were large copper nails lying in the ashes shewing that the door frame had been burnt; farther to the NE, close to the edge of the robbers' hole, there were remains of a wooden pole to which were attached two copper holdfasts (Fig. 5). In the SE wall was the blocked doorway already described (v. notes on room 7). There had been here the same masking of the doorway by a screen wall which had been given an apparent bond with the wall on either side of it by cutting away the alternate bricks in the outer corners of the jambs (as the cutting was only from 0.05 m. to 0.10 m. deep the bond had no real constructional value, and often the new brick was chipped away at the back and only a fraction of its thickness found lodgement in the old work) where these shewed above pavement level; below the



Fig. 4 & Fig. 5

pavement the corners of the jambs were left intact and the screen simply abutted on them. The sham front had been detected by the robbers who had broken through it, had removed most of the interior filling, which was of bricks dry-piled with little or no mud mortar, and had dug down in the door opening. It was found that the rough blocking continued down below pavement level; the door jambs also continued down and at 1.30 m. below the pavement rested on a rather broader wall of burnt brick which ran across the opening and served as a threshold. At 0.90 m. below this threshold the springers of the corbelled vault of the underlying tomb chamber project from the face of the broad wall; the angle between the vault and the wall and the whole space up to the brick pavement of the room is filled with broken brick, earth, bitumen and builders' rubbish generally, which is uniform throughout; it was put here to support the brick pavement and there is no break in it corresponding to the threshold of the (low) door; if there was ever a floor corresponding to the threshold (and presumably there was) it was pulled up before the existing pavement was laid. The existing pavement of course belongs to the present building; it is on the level of most of the other pavements, and the stairs going up to room 12 start at its level; the blocked doorway therefore belongs to an older phase contemporary with the tomb vault, the wall of which is in effect the wall in which the doorway occurs; further, the door must have been blocked at the time when the existing room was built and its floor laid, not after the laying of the floor, and it was then considered necessary to disguise the fact of the door's existence. A whetstone (U. 16409) was found here.

Room 12

The room lay high. In the doorway from room 11 (Pl. 9a) there were six steps of three courses each, and the pavement of the room, which was nearly flush with that of room 6, was about 1.50 m. above that of room 11. Most of the pavement had been destroyed by the collapse of the vault, and the walls stood only to its level.

The Tomb Shaft

(Pls. 10, 11a.) The NE and SW walls of room 6 went down some 11.30 m. below the level of the room's pavement and formed the long sides of a shaft which constructionally extended along the entire length of the building from NW to SE, but was in use confined by a cross-wall under the SE wall of room 6 and therefore corresponded to rooms 6 and 12 taken together; the central part of the shaft was an open pit, the two ends were corbel-vaulted in brick. The blocked doorway in room 7 originally communicated with the open part of the shaft.

The pavement of room 6 had been destroyed and instead of it there was a layer of burnt wood and ashes resting on a stratum of very clean sandy soil, below which again came soil not entirely clean, for there were in it small fragments of broken pottery and brick, but soft and uniform, which was obviously a packing purposely laid down (Pl. 10b). The upper, more sandy stratum was not quite horizontal but sloped somewhat from the centre both to NW and SE. (This was due to the settling of the soil over the great staircase, a fact of which we were ignorant when the observation was recorded.) This has been corrected to some extent by brick rubble forming a 'pocket' against the end walls. The tomb robbers who had pulled up the bricks of the pavement had also dug down to some depth against the SE wall, disturbing the stratification, but had not got to the tomb door. The shaft had been deliberately filled and the packing levelled as a foundation for the brick pavement. Above the clean packing and burnt stratum was a thick bed of broken brick, pottery, etc., sloping from SW down to NE, the normal accumulation of rubbish over the ruins; into this had been dug a trench for the foundations of the Temenos Wall of Nebuchadnezzar, which ran (at a slightly different angle) above the NE wall of the room.

The packing extends over the whole shaft, under the brick vaults as well as in the open centre.

The shaft is the means of approach to the two tomb chambers which underlie the main building; one of them runs under room 5 and its doorway is at the SE end of the shaft; the second is at right angles to the length of the shaft, running under rooms 11 and 10, and its door is in the NE wall of the shaft, close to the north corner. The packing of the shaft effectually closed all access to the tomb chambers; when therefore the superstructure took its present form the tombs became inaccessible; they had originally been approached through the door in the NE wall of the shaft (room 7), whose threshold is at a lower level than the existing superstructure, and which was blocked when the superstructure was built. The door-passage is occupied by a flight of brick steps (Pl. 10b) of which, since the blocking is only about half as thick as the wall, four are still visible; they lead down onto a clay-covered platform extending across the whole width of the shaft. From the platform brick steps run down to NW and SE, each step three courses high, the treads bordered by a sort of balustrade in solid brick against either wall, the top of it stepped down course by course.

The NE, SW, and NW walls have a slight batter. All are very carefully built, the bricks set in bitumen mortar which was used very freely and has generally been pressed out from between the courses and adheres in gouts to the wall face. The brickwork is pierced by numerous holes which will be described later. The 'balustrade' (Pl. 10a) on either side is bonded into the wall against which it seems to lean (its coping-bricks are not always bonded, but the body of the brickwork is), and the stairs are bonded into the balustrade; so that side walls, balustrade, and stairs

form a single construction unit. On the line of the top of the balustrade, which rises two courses above the floor of the landing, there is in the side walls a constructional break marked by a slight offset of the lower part of the wall; this is shown on the section (Pl. 55).

In the NE wall the two lower treads of the stairs running through the doorway (Pl. 10b) are of bricks 0.28 m. x 0.21 m. x 0.08 m. and are covered with bitumen, while the upper treads are of bricks 0.31 m. x 0.155 m. x 0.05 m. and have no bitumen cover. The main wall below the level of the landing is of bricks 0.29-0.30 m. x 0.21-0.22 m. x 0.07 m.; above the offset already mentioned the bricks are probably the same but tend to be on the small side, *i.e.*, according to measurements, they are 0.28-0.29 m. x 0.21 m. x 0.07-0.08 m.; this building continues up to a point 1.50 m. above the top of the highest visible step in the doorway, and above that point the wall bricks measure 0.34-0.35 m. x 0.21 m. x 0.08 m. The two lowest treads of the stairs are bonded into the door jambs (with which they agree in brick measurement) but the upper treads, made of the larger bricks, are not bonded. In the blocking of the doorway the lower part, up to 2.05 m. above the highest step, is of bricks 0.31 m. x 0.155 m. x 0.05-0.06 m., but then there is a change and the bricks measure 0.34-0.35 x 0.21 m. x 0.08 m., but though their dimensions are identical with those of the bricks in the wall on either side of the door they differ from those in appearance, being cleaner, more sharply moulded, and apparently better fired, and have resisted better the action of the salts in the soil. The lower part of the blocking had sagged badly, owing to the builders having put more mortar at either end of each course than in the middle of it; before the large brick courses began the builders inserted in the middle thin slithers of brick to obtain a true horizontal bedding. On this, compare notes on room 7. Since on this side the blocking of the door did not rise to floor level (high in this room 6) no attempt was made to disguise it as there was in room 7, and the break in bond is obvious up to the top. In the main wall, where the change in the bricks occurs, *i.e.* at 1.50 m. above the offset, there are on the NW side of the door two and on the SE side of the door one hole for timbers; the holes run back into the brickwork for a depth of 0.50-0.60 m. and in each there had been put two round poles, diameter *c.* 0.13 m., side by side, bedded in bitumen; the wood had perished but the imprint of the poles in the bitumen was quite clear. The first and third holes had been roughly filled in with fragments of brick. In the SW wall there were at the same level corresponding holes and a fourth opposite the doorway in the NE wall; the second from the SE end had been roughly filled with brick. The fact that these holes could be bricked up must mean that they were purely constructional and of no more use when once the wall had been built; probably they were for scaffolding.

On either side of the double staircase block there is a lower row of holes in the brickwork, just above the offset which seems to mark two distinct phases in the work of construction.

The stairs on the NW of the landing end in a lower platform from which a second flight of steps leads into the NW tomb chamber, running through the door-passage in the thickness of the NE wall. The stairs on the SE continue through the door-passage of the SE tomb chamber and the flight is unbroken. The treads on both sides are thickly and smoothly plastered with bitumen; the central landing was covered with a layer of hard clay beaten down into the brickwork. The massive character of the staircase invited further investigation, so a hole was made in it from the top. Below the clay of the landing were two courses of bricks set in bitumen, used very thick; the third course was dry-laid. When a brick of this was lifted there appeared a square hole 0.12 m. x 0.10 m., 1.00 m. deep, which was 0.90 m. from the front edge of the second tread of the NW flight and 0.80 m. from the face of the NE balustrade; this proved to be an aperture left between bricks filling a larger pit. The real pit measured 0.55 m. square with rather rough sides of burnt bricks bonded and set in bitumen mortar, these being the bricks of the staircase construction; in the pit had been laid dry bricks (0.29 m. x 0.21 m.), four to a course, the bricks fitted to the angles of the pit, therefore leaving in the centre an open space which was the hole first found by us (Fig. 6). There was nothing to explain the pit. The burnt brick sides went down for 1.15 m. and then came mud brick to 1.55 m., the piled burnt bricks going down for three courses below the bottom of the burnt brickwork in the sides and then resting on dirt. At the 1.55 m. level three sides of the pit stopped and gave place to mixed filling, but the NE side proved to be a longer wall face going down to 2.60 m. below the pavement of the landing, and then giving place to burnt brickwork set in mud mortar and plastered with fine reddish clay. This feature must be taken in conjunction with those found below room 7, *v.* p. 20 and Fig. 9. The earth against the face of this low-lying wall (the foundation of the NE wall of the shaft) is the filling put in between it and the outer SW wall of the mausoleum as the stairs began to rise and formed a box in the centre of the shaft. When the stairs had reached a height 1.55 m. below the level of the proposed landing, the earth was levelled and the mud-brick foundations for the landing were laid over it (leaving, for some reason, the pit 0.55 m. square which was subsequently carried up in burnt brickwork and filled with dry bricks), and then the pavement proper was laid over the whole.

The NW Tomb chamber

The door of the tomb had been walled up. The wall had been broken through at the top and the bricks dislodged from it were found on the floor of the landing outside, buried beneath the clean filling of the shaft. Brick

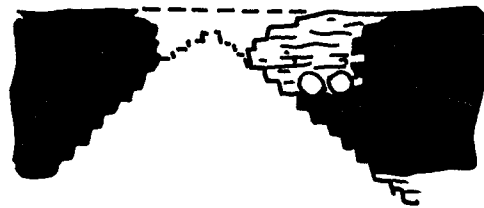
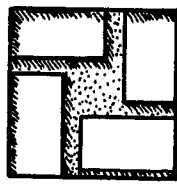


Fig. 6 & Fig. 7

steps ran through the door-passage and led to the floor of the chamber. The tomb had been broken into also from above, through the pavement of room 11. Digging down through the hole made by the robbers, we found on a ledge of the broken brickwork of the vault (Fig. 7) four human skulls, and in the earth at the same level was a clay pot of Type XIV, ht. 0.45 m., rim diameter 0.16 m., of drab clay. At 3.75 m. below the crown of the corbelled vault was a floor of good beaten clay from which the corbelled sides of the vault rose; it was covered by the debris which had fallen through the hole in the roof. On the clay floor there were found a number of human bones, including the limb bones of an adult male (there was no skull) some of which had been exposed to fire²⁶. The bones, and two plain silver bangles, lay about 1.00 m. inside the door; against the door were many pottery fragments and a few complete vessels; the following could be identified: Types III, XIII, XVII, XXI. The whole of the rest of the chamber had been swept clean and there were not even fragments of broken pots to be found.

The corbelled roof of the chamber was in very bad condition and had to be secured by timber baulks before the earth which filled it could be removed. When this had been done and the chamber had been cleared it became obvious that the clay floor was not original; in fact, there were now found at the door the steps going down below its level. Accordingly the floor was removed over the greater part of the chamber, only a section at the NE end being left to illustrate the conditions as found. Beneath the clay floor was a solid packing of mud bricks (0.23 m. x 0.15 m. x 0.08 m.) to a thickness of 1.35 m., and this rested on two (or sometimes three) courses of burnt bricks standing on edge and leaning against each other, loosely arranged with interstices between them which were partly filled by infiltrated mud (Pl. 13a); the bricks were of two types, 0.33 m. x 0.22 m. x 0.08 m. with two impressed finger-marks, and 0.29-0.30 m. x 0.21-0.22 m. x 0.07 m.; the latter are of the sort used in the construction of the walls and vault of the chamber; the dry bricks gave a depth of 0.60 m.

The dry bricks rested on a proper pavement of burnt bricks set in bitumen, over which had been poured bitumen which was in places as much as 0.05 m. thick. The pavement was four courses of brick thick in the middle and six courses thick at the sides, where it was bonded into the side walls of the chamber. Owing to the weight of the walls they had sunk into the subsoil, so that the pavement sloped down in a curve to the wall's footings, but the pavement had originally been laid flat and was now even slightly concave in the middle. Immediately in front of the door there was below the dry bricks a layer of soil of a peculiar sort, of a distinctly greenish colour, dirty, and loose in texture, rather like soil from sewage: in it, in front of the door and, more especially, to either side of it,

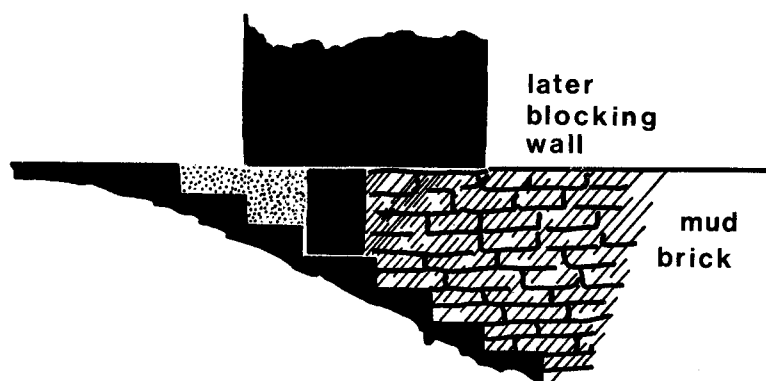


Fig. 8

there were numerous animal bones. Some of the bones had sunk into the bitumen covering the pavement, implying that they had been put here while it was still soft, and some (broken) bones were between the loosely piled bricks, as if the bricks had been laid over the bodies of the animals while the latter still retained their form, as was further implied by the fact that here the courses of dry bricks had sunk below the level of the rest. No bones were found elsewhere on the floor of the chamber.

The blocking of the tomb door was interesting (Pl. 13a). A mere screen, thickened behind to make a more solid foundation, it rested for the most part on the high clay floor. A thin wall had been built on the third tread of the stairs up to the level of the clay floor, which was also that of the bitumen-covered landing outside, and the mud-brick floor foundation had been brought up against this wall (which was therefore either earlier than or contemporary with the clay floor) while the space between it and the landing, above the first and second treads, had been filled in with clay. The base of the real blocking wall, 0.85 m. thick, rested partly on this low wall and partly on the clay filling in front of it and the mud brick behind (Fig. 8). When the tomb was built the outer face of the wall on either side of the doorway was left unfinished, the front bricks of the jambs and arch being omitted, so that when the blocking-wall came to be built, it could overlap the old work on the SE as far as the stair balustrade and bond with it while keeping flush with its surface (v. Pl. 13b). The robbers who broke through the tomb door had not known this, for they had pulled away all the late bricks, which could easily be recognised by their size, being 0.30-0.31 m. square x 0.05-0.06 m. with a few half-bricks 0.31 m. x 0.155 m. x 0.06 m. as against the 0.29 m. x 0.075 m. shewn by the bricks of the wall, and so had exposed part of the core of the old wall without adding thereby to the size of their hole (v. the section of the shaft, Pl. 55).

On the inner face of the door jambs there are holes in the brickwork, of which one, larger than the rest, is halfway up the jamb; a row extends across the jamb's width just below the springers of the vault, and others come in two tiers in the corbelling. The larger hole seems to imply a wooden door frame (and therefore a wooden door) for which this would be an attachment. The holes below the springers might be merely constructional, but they are unnecessarily numerous for an arch of this small size, and too close together, and I should take them to be for a lintel above which there would probably be a wooden tympanum for which the upper holes might also have served. (See Section D-E, Pl. 55.)

The tomb chamber itself, measuring 10.80 m. x 4.00 m., had walls 1.75 m. high and the total height to the crown of the vault was 5.45 m. Immediately below the springers is a row of wide holes in the brickwork, each of which contained two round poles set in bitumen; the holes go right through the thickness of the wall (3.40 m.), at least on the SE side, and it is obvious that (1) they were built into the wall during the construction and (2) though the holes in the two walls correspond fairly closely the poles did not extend across the chamber (in which case they would have had to be ten metres long and there would have been little headroom in the chamber) but projected from the wall only far enough to form brackets on which the centering poles could rest; this explains the use of two poles side by side instead of a single baulk — the foot of the centering pole, trimmed to a wedge shape, would fit between

the rounded surfaces of the two parts of the bracket and would be held absolutely firm. The use of centering poles is amply demonstrated by the remains in the tomb under the courtyard of Bur-Sin's NW annexe (v. Pl. 26b and p.35). But here the holes in the vaulting are too many for so simple a purpose and the upper holes do not come vertically above the lower: that they were not merely intended as a bond for the brickwork is shewn by the fact that the two rows in the middle of the vaulting are separated from each other by a single course of bricks only: there must be another explanation, and it would seem to be that the whole of the brickwork of the vault was concealed by a wooden false roof. The real centering poles resting on the brackets are constructional; the holes of the horizontal rows come in pairs, a hole against either side of each centering pole; these may have been for the attachment of horizontal beams which formed a framework for panels of lighter wood: the roughness of the brickwork certainly favours such a theory.

The SE Tomb chamber

The stairs led directly to and through the door of the tomb chamber (Pl. 12b) but at the door there was a change, the gradient inside being gentler, the treads being 0.35 m. deep x 0.15 m. high, as against the 0.35 m. deep x 0.25 m. high of the upper section. The steps were necessarily narrowed to the width of the door-passage and continued at the same width for the three steps inside the chamber, which were contained by a block or baluster whose top was flush with the third tread from the bottom and which filled the NW end of the chamber up to the line of the stair's foot, 0.95 m. from the NW wall. The pavement of the chamber was of burnt brick heavily coated with bitumen; the chamber measured 7.75 m. x 4.10 m., with walls 2.00 m. high and a vault giving at its crown 5.40 m.; the bricks of pavement, walls, and vault alike measured 0.29-0.30 m. x 0.21-0.22 m. x 0.07 m. The vault was in relatively good condition and required no modern centering for its support, but at the NW end there was a hole large enough to admit a man, where the robbers had cut their way through the altar in room 5 of the superstructure. The upper part of the door-blocking also had been broken through and the bricks were found lying on the steps in front of the door. The blocking wall (Pl. 11b) rested on the steps and had all been built at one time, although the lower half was solidly constructed and the upper half no more than a screen; it was of bricks 0.35 m. x 0.21 m. x 0.08-0.085 m., but in the upper half were a few bricks 0.31 m. x 0.155 m. x 0.06 m. As in the case of the other tomb chamber, the wall face round the door had been left unfinished, the outermost bricks being omitted, so that the new work could fit onto and overlap the old. In the inner faces of the door jambs were holes in the brickwork which corresponded exactly and seemed to be attachment holes for a wooden door frame. Immediately below the springers was a line of holes (each of which had contained a single round pole) separated from each other only by one or two bricks set on edge; this pointed undoubtedly to a wooden lintel forming the top of the door, and a single hole in the brickwork higher up was presumably for attaching a wooden tympanum that blocked the arch (v. Section, Pl. 55).

As in the other tomb chamber, the floor had been raised by two courses of burnt brick dry-laid and loosely set on edge, (ht. 0.42 m.) above which was mud brick overlaid by a clay floor, total height 2.00 m., burying all the stairs inside the front line of the tomb door (the clay floor had been cut through to lay the foundations of the blocking wall). We dug away the high floor in front of the stairs, exposing nearly half the bitumened pavement, but found here no such bones as were in front of the door of the other tomb.

On the high clay floor there were scattered in confusion a number of human bones representing at least three bodies, an adult male of small stature and slender build, a child of ten or twelve years of age, and a woman. With them were: fragments of a bowl of finely-veined white calcite, Type VII (U. 16431); fragments of a large white calcite vase Type I (U. 16432); very many fragments of clay vessels, including some nearly complete, which gave the following types: I, VIII, XII, XVI, XX, XXI, XXVI.

The Pit in Room 7

The robbers had pulled up the pavement, as already stated, and had dug a deep hole below it which we cleared and enlarged. The very complicated result is shown on Pl. 14 and Fig. 9. Below the burnt-brick pavement came a solid foundation of mud brick resting ultimately on rubble. The blocked door in the SW wall (*i.e.*, that through which ran the stairs leading to the tomb shaft) went down for 1.15 m. below the pavement's surface (Pl. 14a) and ended at a threshold; below this the burnt-brick foundation of wall and threshold alike went down for 1.20 m. and then rested on an L-shaped wall of burnt brick, of which the projecting element (it may have been a buttress) was 0.30 m. in advance of the line of the upper wall, while the recessed element was 1.00 m. behind that line, so that the footings of the upper wall here overhung it, and here the footings for another 0.70 m. were stepped forward so as to come at their base flush with the buttress line. There they rested on a foundation of seven courses of mud brick. Between the angle of the buttress and the stepped foundations there was naturally a break in bond, and the robbers, noting this and suspecting that something lay behind, had hacked away the (later) wall foundations abutting on the buttress until they came to the main face of the lower wall, *i.e.* the face of its recessed element, when they had stopped work. The lower wall had a height of 1.40 m. (this on the buttress front; the recessed element started three courses of brick higher up) and rested on a foundation of mud brick. The foundation was flush with the face of the buttress but on its return formed an offset 0.55 m. wide, and continued along the face of the recessed element with an offset 0.60 m. wide; the top of the offset was plastered with bitumen. The mud-brick wall stood to a height of 1.15 m.

The buttress of burnt brick had a width of only 0.65 m.; at its SE end it was built up against the strongly-battered face of a mud-brick wall running NE x SW; at 1.40 m. from the burnt-brick face the mud-brick wall returned to the NW and abutted on the burnt-brick SE wall of the tomb chamber underlying room 11 of the superstructure. This mud-brick wall, forming the NE and SE sides of a walled pit, was not the same, constructionally, as that recessed wall which underlay the burnt brick and formed the SW side of the pit; that, like the burnt brick, merely abutted on the L-shaped wall, which stood at least 0.80 m. higher than the mud-brick foundations of the buttressed burnt-brick wall.

On the NW side of the pit (Pl. 14b) was the burnt-brick tomb-chamber wall. At 0.85 m. below the bitumen-coated top of the recessed mud-brick wall on the SW side there was a line of burnt bricks set on edge, leaning against the NW wall on a mass of mud brick which was by degrees stepped down to the SE until it reached a surface covered with black ashes 1.60 m. below the top of the recessed mud-brick wall, and sloping down further to the SW, by which time it had got below the foundations of the walls on the other three sides of the pit. Here there was between the mud-brick mass and the face of the burnt-brick wall an interval of 0.50 m., at the bottom of which was the offset of the tomb-chamber wall and, on the offset, burnt bricks set on edge and leaning against the wall so as to shield the opening of a beam hole running through the brickwork to the inner wall face.

I was quite unable to explain all the features of this pit. It was clear that there had been modifications and changes in the plan; possibly some of the apparently meaningless mud-brick walls were put in for purely temporary reasons, *e.g.*, if the soil happened to be unusually loose it may have been thought wise to widen the pit excavated for the construction of the tomb chamber underlying room 11 and to line the upper part of its walls so as to prevent falls of earth — that the pit was widened is evident from the fact of the bricks being piled against the end of the beam holes and of there being a mud-brick floor extending well outside the wall. But for the burnt-brick buttressed wall I can suggest no explanation whatever; it does not seem essential to the vault construction and it has nothing to do with the wall containing the blocked doorway, which belongs to a phase of the superstructure preceding that of the existing ruins.

The Lower Soil

The examination of the mausoleum could not be considered complete until work had been carried down to or below its foundations. Accordingly a breach was made through the brick pavement of Tomb 1 and the underlying soil was tested.

For the first forty centimetres there was mixed dirty earth, then a band about 0.10 m. thick of yellowish clay, and then a pronouncedly black stratum 0.12 m. thick. This may have been at one time a surface. In the top stratum were found three large bowls (Types JN 4 and 8)²⁷ inverted. Below the clay came mixed dark soil containing quantities of potsherds; and between 1.00 m. and 1.50 m. was a grave (or graves) of the Jamdat Nasr period. The only bones found were fragments of an animal's skull and teeth, but over the whole excavated area (2.40 m. x 1.50 m.) there was a mass of pottery lying in the disorder usual in a Jamdat Nasr grave. There were about eleven examples of the bowl Type JN 2; seven or eight long spouted jars, Types JN 109 and JN 113; and one example of JN 130. This was an undisturbed burial, and it proved that the Third Dynasty workmen had not dug so deep.

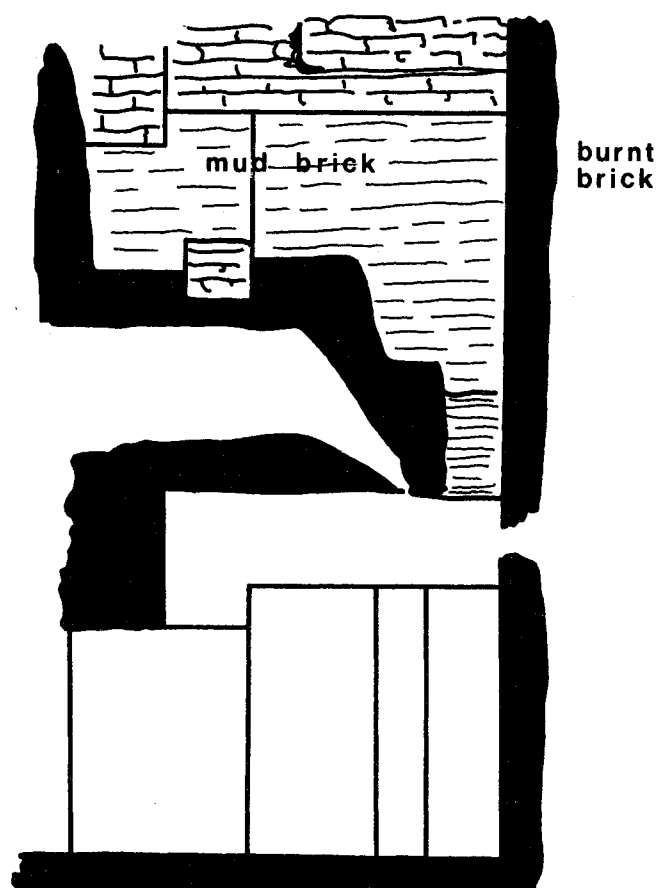
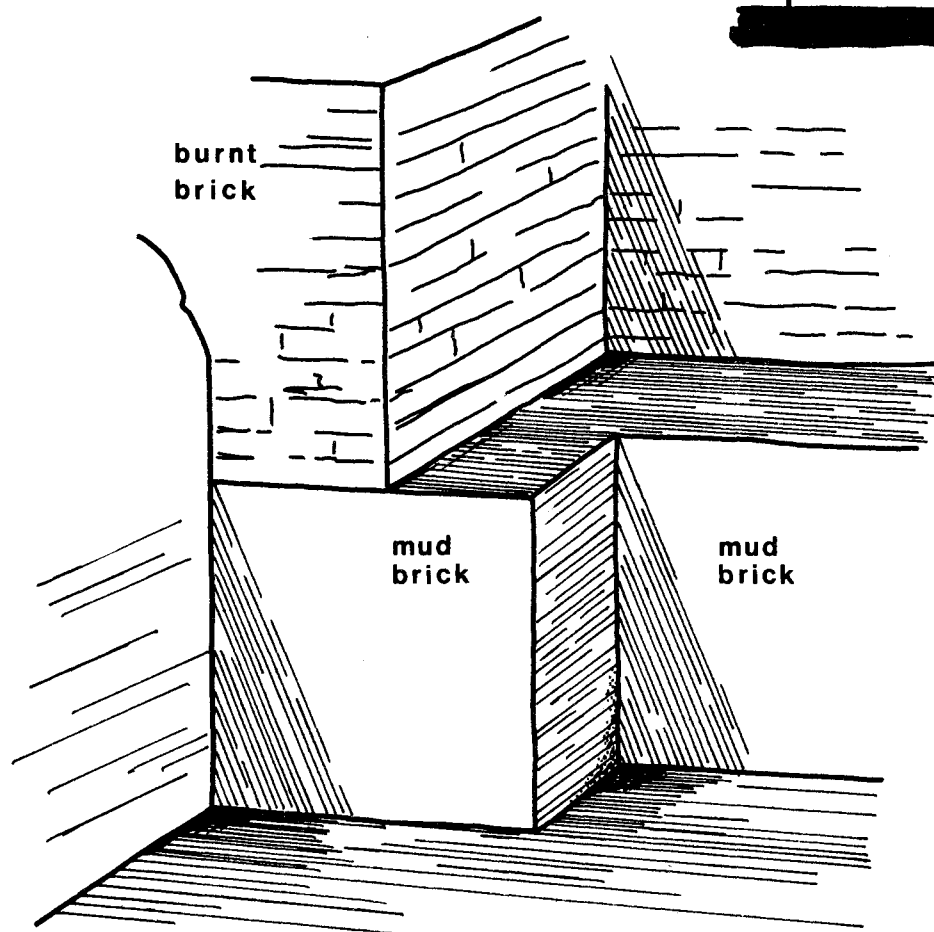


Fig. 9



CHAPTER III

THE MAUSOLEA OF BUR-SIN: GENERAL DESCRIPTION

At either end of the Dungi mausoleum, against its NW and SE walls, is a building proved by innumerable brick inscriptions to be the work of Bur-Sin and by its character to be similar in purpose to that of the older ruler. In each case we have what is clearly a mortuary chapel with tombs below it.

Again the ground-plan is that of a private house. An ornate doorway in the NE wall leads through an entrance lobby into a central court (though in the NW building there are rooms on three sides of this only); in the court is the altar for sacrifice with its channels and cup-holes for liquid offerings, and in the NW building we have the terra cotta bath such as was found in the Dungi court. Opening off the court is one room with a door wider than the rest, close to which stands a pedestal of brick coated with bitumen, this in a corner of the court. In the rooms below in which lie the tombs, there are altars, always of more or less the same pattern. The SE building of Bur-Sin is indeed a reproduction on a smaller scale of that of his father; the position of the tomb chambers beneath it is the same, the approach to them is by a smaller but similar stairwell with its brick stairs branching to right and left from the central flight. Here, as in the case of Dungi's building, it is evident that the superstructure is posterior to the tombs but that the tombs were planned with a view to the superstructure; there is one consistent scheme although the two parts of it were executed at different times. The peculiarity of the NW Bur-Sin building results from the fact that it was not laid out from the outset in the same deliberate way. The tombs existed not only before the superstructure was built, but also before it was planned. Instead of occupying a site conformable to the lines of the future building, they are independent of each other, and clearly the architect was hard put to it to design his building on the proper model of the private house and yet to include the tombs in a correct relation to its chambers. That is the explanation of the irregularity of the ground-plan of the NW mausoleum. It really looks as if the tombs had been constructed as in a cemetery, with no idea of including them in a mortuary chapel, and as if the latter had been an afterthought; it would indeed appear that the tomb-makers had been influenced mainly by the existence of the Dungi mausoleum, and the sanctity attaching to it, and had tried to put the new tombs under its protection, as close to its walls as might be, even using the offsets of its foundations as a footing for their own work. Judging by the way in which the approaches of the three tombs are arranged, I would go so far as to suggest that there may have been a temporary superstructure consisting of a single court corresponding fairly closely to the existing court, but rather wider from NE to SW, *i.e.* with its SW wall where the present wall is and its NE wall on the SW or front wall of Tomb 2, so that both entrance-pits came within its limits but that of the principal tomb was blocked from the outset. There is an argument supporting the theory in the character of the building material; the lower part of the wall in front of the blocked door of Tomb 1 is of two types of bricks, one of which is identical with those used for the tomb itself, and the mortar is mud, whereas nowhere else in the three mausolea is mud mortar employed even in foundations; I suspect that we have here the lower part of a temporary superstructure wall subsequently dismantled and its bottom courses utilised as a foundation for the permanent building, of which the bricks are again of different types: in that case the erection of the temporary structure would have followed immediately on the burial in the tomb (which is certain in any case, as the rough entrance-pit would not have been left open for long) and that of the permanent building may have come much later.

The point as to building materials may be carried further. The SE mausoleum is constructed uniformly with bricks measuring 0.32 m. sq. x 0.06-0.07 m., a characteristic Third Dynasty size: in the NW mausoleum the bricks of the walls and vault of Tomb 1 are uniformly of that same size, but in the superstructure such are rare and there is a curious mixture of bricks in which the predominating types measure either 0.26-0.27 m. x 0.135 m. x 0.055-0.07 m. or 0.29 m. sq. x 0.065-0.07 m. Such small bricks approximate to the normal type of the Larsa period (0.27 m. x 0.18 m. x 0.09 m.) and appear to be uncommon in the Third Dynasty; it is not unreasonable to suppose that they are a later Third Dynasty development.²⁸ In that case the SE mausoleum, the copy of the Dungi building, would be the earlier, Tomb chamber 1 of the NW mausoleum might be roughly contemporary with it, and the irregular superstructure of the NW mausoleum would be a late addition in whose construction odd lots of stock bricks left over from the other royal buildings were used indiscriminately. This seems to suit all the conditions. In the SE building the whole plan has been carefully thought out beforehand and the bricks were evidently provided *ad hoc*;

in the NW building the absence of plan in the placing of the tombs, which so seriously embarrassed the architect and upset the symmetry of his work, is in keeping with the makeshift character of the material. After the SE building had been finished, true to its model, it was decided to enclose in a building as like it as possible the scattered tombs which had originally been built under the shadow of the walls of Dungi's mausoleum.

To some extent this conclusion affects the difficulty that arose when first the buildings were brought to light. If these are royal tombs, why should Bur-Sin have required two? Is not the duplication a strong argument against their being royal tombs at all?

Everything that has been urged in the case of the Dungi building holds good for the SE building of Bur-Sin; the identical arrangement of rooms and tomb chambers proves an identity of purpose, and did the Bur-Sin building, like that of Dungi, stand alone there could be no doubt but that it was the burying-place of the king. Actually it does stand alone. The comparison made above of the two Bur-Sin buildings emphasises their differences rather than the obvious points of resemblance; only the SE building possesses the characteristics of a royal tomb as defined by the Dungi model, and the other is due to an afterthought, set up over the graves of members of the royal house who had been buried individually without any idea of the house-chapel being ultimately required. The fact that a number of women's bodies were represented in Tomb 1 of the NW mausoleum may suggest that Bur-Sin's queen had been buried here; the small tombs 2 and 3 might well be those of children: but the SE tomb and chapel were designed in his lifetime for the use of Bur-Sin himself.

An alternative explanation of the three buildings has been suggested. The Dungi mausoleum, which is obviously the first construction of the kind on this site, may have been built by that king for his father Ur-Nammu; the SE mausoleum was built by Bur-Sin for his father Dungi; the NW mausoleum was built for Bur-Sin by his son Gimil-Sin who used for the purpose bricks remaining over from the various building schemes which his father had initiated. This explanation has the advantage that it gives us a tomb of Ur-Nammu who, as the founder of the dynasty, should have been buried with more pomp than any of his successors, while nothing else that could possibly be his tomb has been found in the neighbourhood of the Temenos, and it avoids the awkward theory of two Bur-Sin tombs one of which has to be explained away as an afterthought. It is also reasonable to suppose that the tombs both of the son and of the grandson of Ur-Nammu should be set alongside that of the founder of the kingdom, and certainly such a position is more suited to one of Ur-Nammu's successors on the throne than to any queen or minor member of the royal house. There is no evidence to determine the question; I have therefore left it open, and accepting the witness of the bricks as to the authorship of the buildings am content to speak of the 'Dungi Mausoleum' and of the 'SE and NW mausolea of Bur-Sin'.

CHAPTER IV

THE MAUSOLEA OF BUR-SIN: DETAILED DESCRIPTION

A: THE SE MAUSOLEUM

The superstructure abutted on the SE wall of the Dungi Mausoleum. Of the two free corners the southern was slightly rounded, just the angle being taken to a curve; the eastern was probably the same but had been destroyed by a Kassite house wall; of the south corner (Pl. 15a) very little was left. The entrance (Pl. 15b) was in the NE face and was not central between the two buttresses but lay towards the east corner. It was flanked by buttress jambs having each a single T-shaped groove down its centre; between them was a bitumen-covered threshold; the jambs had double reveals which did not come right down to threshold level but to a raised base which completed the true wall angle. To this an addition had been made later of two buttresses or pedestals which are now ruined, that on the NW to ground level, that on the SE to a height of 0.80 m., so that their original height cannot be determined; they are of burnt brick, project 0.85 m. from the face of the old jambs, which they enclose, and have each a single T-shaped groove which is central in the NW pedestal but not in the SE. The brick pavement had been carried out as far as the front line of the new work.

Room 1

The bitumen-covered threshold of the outer door comes 0.35 m. above the offset of the wall foundations. From that offset the walls stand to a height of 1.90 m. in the north corner, 1.40 m. in the south, 1.70 m. in the east, and 1.55 m. in the west. There was no pavement left, only an earth filling and stiff mud rising to the level of the NE threshold. In the SW doorway the threshold is raised (0.50 m. above the wall offsets) and is built with a line of bricks set on edge and over them bricks laid horizontally, a single course on the wall line and two courses beyond that, making a step in the door-passage; very likely the 'step' is due to the removal of bricks when the pavement of the room was destroyed, and originally a pavement at the level of this threshold extended over the whole room.

Room 2: the Courtyard

(Pl. 16a) The courtyard was brick-paved throughout: the paving bricks measured 0.32 m. sq. x 0.06-.07 m., this being the normal type used for pavements throughout the building. In the walls the bricks shew a certain variation; the commonest type measures 0.32 m. sq. x 0.065-.07 m. or 0.32 m. x 0.16 m. x 0.065-.07 m., but the length of the brick may be anything from 0.30 m. to 0.33 m., the other dimensions remaining constant; a very large proportion of them are stamped with the name and titles of Bur-Sin, but they are 'stock bricks' and the special name of the building is never recorded.

The entrance from room 1 was closed by a single door on the inside. The hinge-stone, uninscribed, was against the SE jamb; in front of the NW reveal is a brick with a shallow bolt hole. The whole pavement sloped towards the centre, where was the intake of a circular brick-lined seepage-drain. The doors of all the rooms opened onto the court. In the south corner, between the doors of rooms 4 and 5, there was in the pavement a rectangular, bitumen-lined depression which extended partly across the door of room 4; it was c. 0.10 m. deep and had an outflow by a bitumen channel which ran under the first row of pavement bricks against the threshold of room 5. Between the doors of rooms 5 and 6 there was against the SW wall of the court a brick altar. At the SE end it stands to the height of 0.30 m. but has apparently been higher; then the brickwork has been broken down course by course and after 2.20 m. destroyed below pavement level (the pavement itself was destroyed up to the drain), but by the jamb of the door of room 6 one course of bricks belonging to it remains, giving its original length. It was 0.85 m. wide altogether, but was stepped, the upper part being 0.60 m. wide, while in front of this was a lower ledge 0.25 m. wide and 0.30 m. high, along which ran two parallel channels of bitumen which, at the SE end, turned outwards and emptied into two basins or cup-holes of bitumen 0.15 m. square, contrived in a lower step 0.15 m. high; at the foot of this step a narrow double channel of bitumen ran at pavement level in front of the altar (see Pl. 16b and Fig. 10). The arrangement was more or less similar to that in room 5 of Dungi's mausoleum.

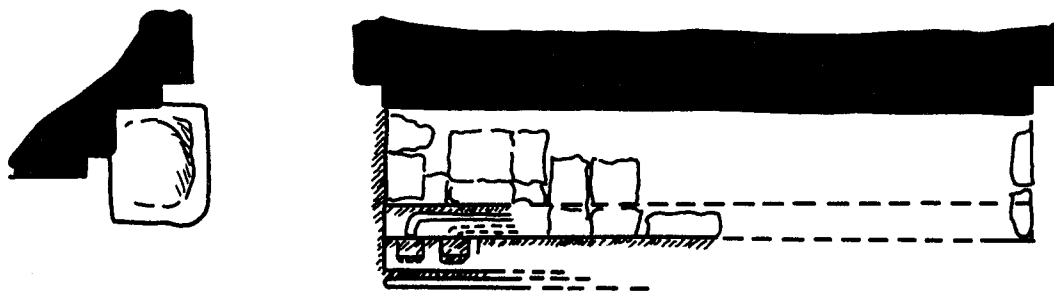


Fig. 10

In the west corner of the court stood a brick pedestal 0.65 m. high, the top coated with bitumen.

Room 3

The pavement, of bricks thinly coated with bitumen, ran flush with the threshold and was preserved at the SW end of the room for about a third of its length and beyond that had been torn up by the robbers cutting through to the tomb below. The NE wall stood up to 1.05 m. at the north corner, the SE wall from 0.55 m. at the east to 0.95 m. at the south corner, the SW wall to 1.20 m., and the NW to 0.65 m., the last having been destroyed by the foundations of a Kassite house wall. No features of interest.

Room 4

The threshold was raised 0.15 m. above the courtyard pavement; built with one course of bricks set on edge, above which three courses horizontal; it was bitumen-covered. The pavement lay 0.55 m. below the level of the threshold; it was of brick, intact except for a hole 1.00 m. x 0.70 m. at the east corner, where the robbers had started to break through into the tomb chamber (see below, p. 28). The walls stood to an average height of 1.60 m. above the pavement.

Room 5

(Pl. 17a) The walls stood to an average height of 1.10 m. above floor level but at the south corner were destroyed down to 0.70 m. In the NE wall was a shallow recess from the east corner for a distance of 2.40 m. A peculiar feature was that in each of the NE and SW walls there were in the brickwork at the height of 0.40-0.50 m. above floor level six holes (visible in the photograph) whose bitumen lining showed the impression of wooden poles, diameter *c.* 0.10 m., the holes in the two walls being directly opposite one another; they came at 0.80 m. and 1.65 m. from the NW end, at 0.40 m. and 1.15 m. from the SE side of the door, and (in the recess) at 0.70 m. and 1.45 m. from the buttress edge.

The pavement had been of bricks overlaid with bitumen, but this was preserved only in the middle of the room; for a space of 2.35 m. from the NW wall and of 1.50 m. from the SE wall it had been pulled up and there remained only earth and loose bricks. Against the SW wall was a brick altar (Fig. 11); the ends of it were broken where the

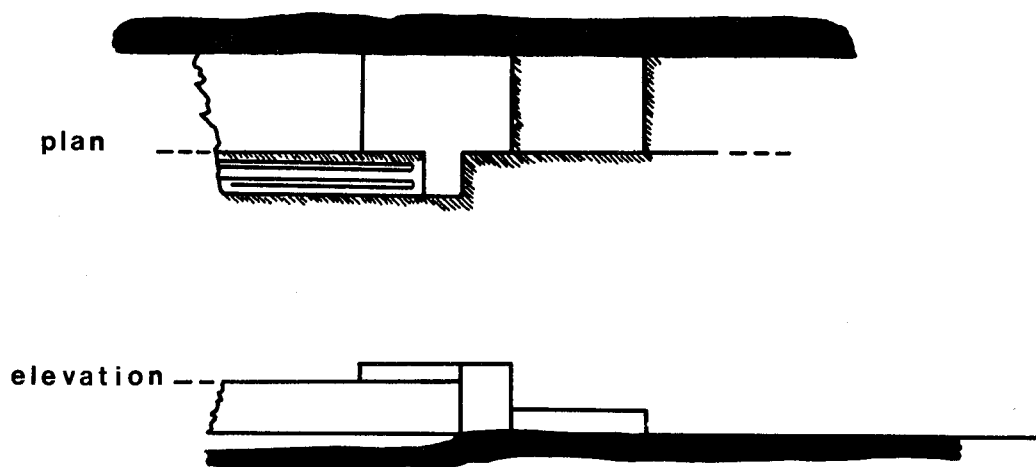


Fig. 11

pavement had been destroyed and there was no means of determining its original length. It was 0.70 m. wide and in front of the door stood to 0.45 m. for a length of 1.00 m.; to the NW of this was a continuation only 0.15 m. high (perhaps originally higher, but denuded), and in front of it there had been brick 'fire-boxes' like those in room 5 of the Dungi mausoleum, of which only a few bricks were left *in situ*. Perhaps connected with these was a projection 0.25 m. deep from the higher part of the altar, from which there ran SE along the altar's front a bench of the same width and 0.35 m. high (actually the pavement here was stepped down 0.10 m., so that the bench was 0.10 m. lower than the altar proper), having its top covered with bitumen in which were two parallel channels for offerings, which could be traced for about 1.50 m. and then broke away with the brickwork of the altar and of the pavement. Beneath this room lay the approach to the tomb vaults, and to clear that we were obliged to remove all that was left of pavement and altar. In the room was half of a stone bowl (U. 16274, Type VIII).

Room 6

The walls were preserved to a height of 2.00 m. maximum and a minimum, in the east corner, of 1.25 m. above threshold level. At about 0.35 m. above threshold level the NE wall was set back some 0.30 m. and the SE wall overhung by about the same amount; the other two walls shewed no such break. It looked as if either there had been a pause in the construction when the walls had reached this height and then a faulty restart, or the wall below this level had mattered less and so had been carelessly built, *i.e.*, the pavement ought to have been at this level. The latter is less probable because the base of the walls had been heavily burnt and the signs of burning came just below as well as just above the faulty courses; also, especially on the NW and SW walls, many of the bricks just below and just above this line had decayed badly through salt action, which was more likely to happen above the pavement than below it. Over the greater part of the room the pavement had gone and there were only scattered bricks; against the SW wall, towards the west corner, it had been deliberately dug through to get at the tomb beneath. In the south corner a patch of pavement of bricks overlaid with bitumen remained; embedded in it was a stone bowl (U. 16299, Type IV) much blackened by fire.

Room 7

The threshold from the courtyard was raised; in front of each reveal was a brick set on edge in bitumen which preserved the imprint of the wooden sill-joist which formed the base of the door frame, a joist 0.08 m. thick. Inside the room the pavement of bricks covered with bitumen was well preserved for a strip 1.30 m. wide along the SE wall; all the rest of the room space seems to have been occupied by a great altar which had been almost completely destroyed when the building was plundered; the last row of bricks in the pavement were tilted up slightly towards the altar and the bitumen on them had run down over their edges, shewing that the altar was not resting on the pavement but was a separate structure. It was clearly composed of different elements. In front of the door in the SW wall there was a strip of heavily bitumened pavement 1.00 m. wide, lying at a somewhat lower level than that along the SE wall, from which it was distinguished by a low step; it did not extend to the NW wall, but between it and the wall was a square metre of clay presumably marking the place of something which had disappeared. On the NE the bitumen level was bounded by a rounded coping of bitumen over clay and bricks set on edge, which ran right up to the SE pavement; beyond the coping was a mass of bitumen in which round-bottomed copper vessels had been placed while it was still soft; the bitumen when hard retained the form of the vessels (Fig. 12) and served as a base in which they could be stood²⁹. There had perhaps been a whole row of pot-stands, but only the two nearest to the SE pavement survived (*v.* Fig. 13); the level to the SW was covered with fragments of bitumen, including pieces of the rolled coping, which came from the offering table; on one bit of the coping there was adhering a very small piece of thin gold foil, judging from which the whole surface of the bitumen must have been gold-plated. Some of the sheet bitumen lying on the ground may have been wall plaster; mixed with it we found a tiny pointed star of thin gold leaf, a curved piece of gold leaf and a similarly-shaped piece of carnelian imitating sun's rays, some corrugated gold leaf, a fragment of agate and a small cube of glass paste for mosaic (U. 16270), all perhaps from the decoration of wall or ceiling.

Along the whole of the NW wall there had originally been a bench of bricks laid over clay, apparently 0.65 m. high and at the SW end 1.25 m. wide, increasing at 0.80 m. from the north corner to 1.50 m. At the SW end this had been entirely destroyed, but its presence was vouched for here by the face of the NW jamb of the door from room 8, which is rough brickwork; at the NE end it is preserved for a distance of 1.50 m. This was built of Bur-Sin bricks, but is independent of the wall; it was originally coated with bitumen; the curved edge of the bitumen along the strip of paving to the SE could be traced for another 2.00 m., so the bench must have been 3.50 m. long and probably ran on to the pot-stands already described, but it may have been stepped down from NE to SW, seeing that the pot-stand area is bounded on the NE by a second rolled coping which implies a low level beyond it; the likelihood of this was increased by the fact that here there were a few bricks at floor level whereas the NE end of the bench had a clay filling which rose higher than that and was overlaid with bricks. Where the front of the bench is recessed,

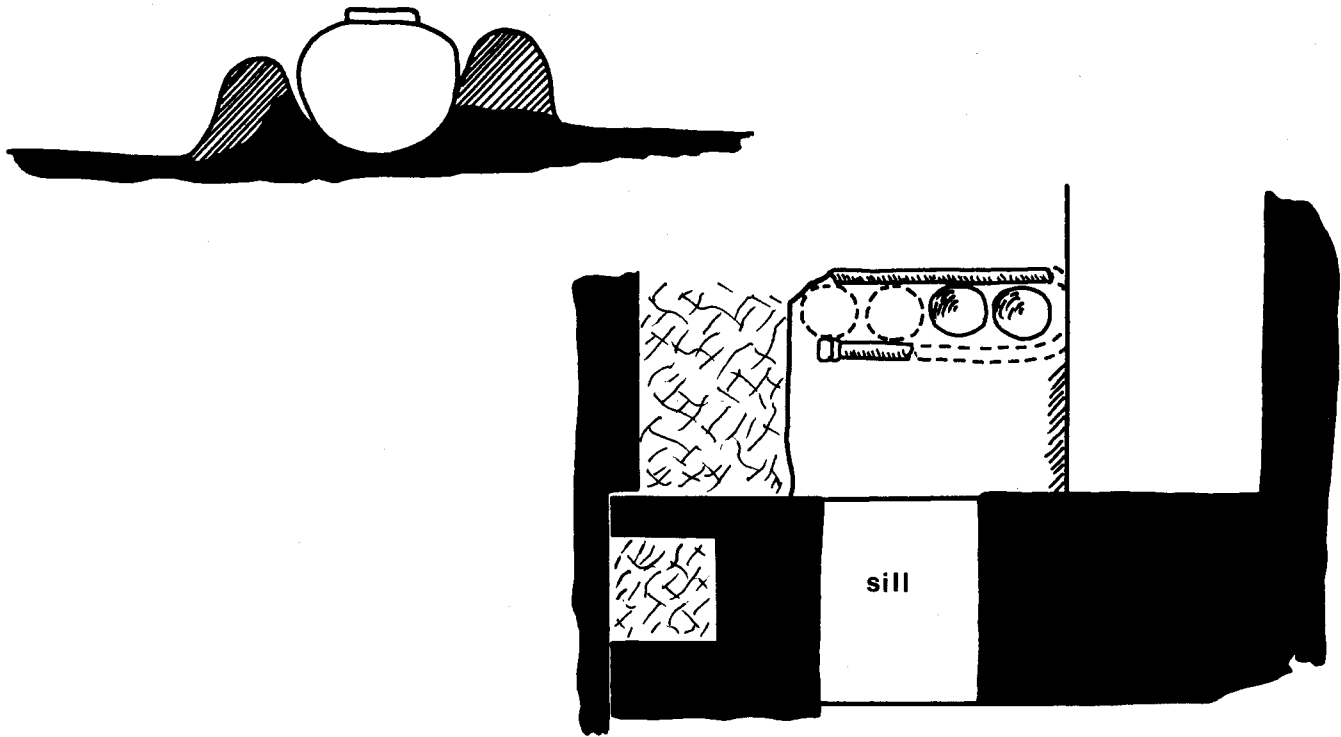


Fig. 12 & Fig. 13

the recessing starts at the third course only, so that in front of the 0.65 m. bench there was a ledge some 0.25 m. above the pavement level; the top of this ledge and its front and the front of the bench above it were all plastered with bitumen. No traces of channels survived, but it may be surmised that the altar was, in general, of the type of that in room 5 of the Dungi mausoleum; the remains, scanty as they are, suggest a restoration such as that in the sketch on Fig. 14.

The NW jamb of the doorway to room 8 is peculiar (Pl. 17b). For its construction the corner of the Dungi buttress had been trimmed back for 0.05 m. and the jamb had been built of burnt bricks in the form of a box going down 1.60 m. below the level of the door threshold; the interior face was rough for the first 0.90 m. and above that was fairly good, but the outer face, which rose to only 0.15 m. above the threshold, was completely rough; it looked as if it had been encased in wood. There is here an obvious parallel to what we have in room 4 of the Dungi mausoleum, where close to the door there is a carefully masked compartment presumably intended for offerings; probably in this case the jamb was solid above and the box contained foundation-deposits which were plundered by the Elamites.

In this room, and in several of the other rooms of the building, there were found clay sling-bolts, suggesting that the defenders of Ur made a last stand inside the royal tomb chapels.

Room 8

Round the walls at 0.18 m. below threshold level runs a broad footing of burnt brick 0.40 m. wide on the SW and SE, 0.15 m. wide on the NE and NW; the central space shews only earth packing and no trace even of a clay

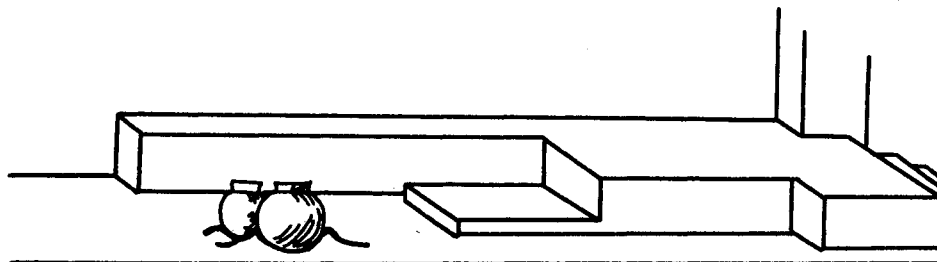


Fig. 14

floor. In the west corner the blocking of the concealed room in the thickness of the Dungi wall had been broken down when the Bur-Sin wall was built, and the narrow aperture left between the new wall and the side of the old vault was patched with remarkably rough brickwork, which in places projected 0.20 m. from the wall face (Pl. 17b); it would seem that it was hidden by panelling or something of the sort.

Room 9

The original bitumen-covered threshold had been overlaid by a flight of four brick steps which led up onto the top of the altar-bench in room 7. There was a mud floor 0.25 m. below the bottom step and 0.45 m. above the offset of the Bur-Sin walls; but against the SW wall was a heaped mass of clean red clay, broken bricks, and slabs of bitumen which probably indicated an original pavement. In the packing below the clay floor (?) was a pot of drab clay, Type X, ht. 0.055 m. The NE wall had been ruined down to 0.35 m. (five courses) above the offset.

Room 10

A few bricks of the pavement remained in position at the NW end; the rest had been pulled up. The room possessed no features of interest.

The approach to the tombs lay under the pavement of room 5 (Pl. 18). For the construction of the tombs an L-shaped excavation had been made corresponding to the rooms 3, 4, 5, and 6 as shewn on the superstructure plan; the area below room 5 formed the stairwell; under rooms 3 and 4 was a chamber divided into two parts communicating by a very wide doorway, and under room 6 was the second chamber; these were built first, and the walls of the superstructure rested on those of the tomb chambers. Taught by the experience of his father, Bur-Sin did not lay his foundations so deeply and there was therefore no need to raise the floors of the chambers to preserve the bodies from damp. Everything is indeed on a smaller scale, but the design is practically that of the Dungi building; the L-shaped layout and the position of the approach is the same, and the stairs are a miniature edition of those in the older structure.

Chamber 1

Underlying rooms 3 and 4, this chamber was a long and narrow room divided into two parts by a wall in which was a corbel-arched doorway (Pl. 19b); this doorway was so wide that the 'wall' was reduced to two shallow jambs, and it is probable that the chamber was really intended to be one and the cross-wall was added merely in order to support the wall of the superstructure, for which the plain vault would have been inadequate; at the same time, the finding loose in the room of a small diorite doorsocket does suggest that a wooden door may have existed.

The pavement was of bricks coated with bitumen. The walls rose vertically to 1.55 m. and then the corbelling started, the roof apex being at 3.45 m.; the roof had sagged a little but was in good condition. Immediately below the first springers was a row of beam holes in the brickwork, two in each wall of the first compartment and five in the second, holes for the two poles side by side which acted as brackets for the centering-beams; in the slope of the vault, at 2.20 m. from the floor, there were smaller holes, three in each side of the first compartment and six in the second, each for a single pole. The door jambs 1.55 m. high and its corbelled arch gave a total height of 2.15 m.; there were holes for the attachment of the wooden door frame and for a lintel above which there was apparently a wooden tympanum.

The blocking of the door was found intact (Pl. 19a); the tomb had been entered from above. The hole through the pavement in the east corner of room 4 of the superstructure had penetrated as far as the chamber, but only two or three bricks of the vaulting had been dislodged and the aperture was not large enough to admit a man; a larger hole had been made through the pavement at the NE end of room 3 and the entry had been effected by this. Evidently the robbers knew that the chamber was a double one, with divisions corresponding to the rooms of the superstructure, and therefore attacked it from both rooms simultaneously; those in room 3 worked faster and entering the tomb announced that it was really all one, whereupon those in room 4 stopped work just as they pierced the vault.

The tomb had been thoroughly plundered. Scattered on the floor were a few bones (no skull) all belonging to one adult male. There were four rough pebble rubbingstones, a fragment of copper which was probably the base of a bowl, and a number of fragments of clay pots which included examples of Types III, IX, XI, and XXII, and unidentifiable pots with combed ornament (Fig. 15). Against the door was a broken ivory rod (U. 16294).

Chamber 2

This chamber (Pl. 20b), underlying room 6, had a pavement of bricks overlaid with bitumen (two bricks of it had been pulled up by the robbers, against the NE wall) and walls 1.60 m. high from floor to the springers of the corbelled vault; the total height was 3.80 m. Immediately below the springers are holes in the brickwork for the two poles of the brackets supporting the centering, five holes in each of the long walls, and on each side there are two

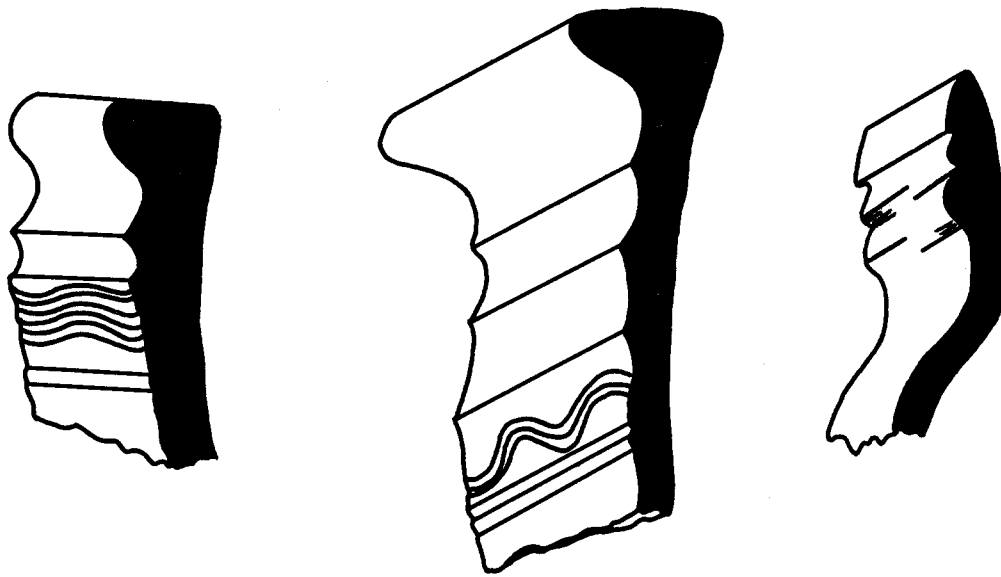


Fig. 15, Fig. 16 & Fig. 17

rows of six smaller holes in the slope of the vault, at 2.45 m. and 3.00 m. respectively above the floor. The door jambs are 1.45 m. high and the total height of the door 2.50 m. (but there is a threshold raised 0.50 m. above the tomb floor, which may possibly be original though it would seem rather to be the solid base of the blocking wall), and in the brickwork there are holes for the attachment of a wooden door frame and lintel and apparently for a solid tympanum. The upper part of the door-blocking had been pulled away by people working from above (the ends of the pavement in room 5 had been destroyed), *i.e.*, by the Elamites, not by any thief at the time of the burial, as was the case in the Dungi tomb, and a breach had also been made through the NW end of the vault. Of bones only a few small fragments were found. Of objects, there were the stem of a black-and-white marble vase bearing an inscription of Ur-Nammu with a dedication to Gilgamesh (U. 16530) and some fragments of a shallow dish in pink limestone. Pottery fragments were fairly numerous and included examples of the carinated bowl Type III, a very large bowl with combed ornament on the side, and the rims of some large jars (Figs. 16, 17).

The Stairwell

(Pls. 18 and 20a) The space at the disposal of the builders was small, with the result that the stairs are awkwardly steep. They were built when the superstructure did not exist and the brickwork went up only to the line of the offset in the walls which distinguishes the older from the later building (*v.* the section, Pl. 55 and Pl. 20b). There had perhaps been a temporary structure above ground with a doorway from the court, the level of which was then 0.25 m. lower than at present, and the threshold of that door formed the top tread of a small flight of stairs. Five treads, each composed of three courses of bricks, led to a small platform — it was really no more than a step — 1.50 m. below, from which further flights branched off to left and right. On the SE, six steps downwards (the first and second of four courses, the rest of three) gave a vertical measure of 1.70 m., ending in a second platform; the lowest step lay inside the recess which was the front of the chamber and was in line with the inner face of its NW door jamb. From the platform, a third flight of steps ran through the doorway of the chamber to end at floor level. The second flight of steps, on the NW of the upper platform, was straight to the tomb door. The space was so restricted that the top step was cut out of the landing (or bottom step) of the first flight (Pl. 18a); this and the second were four courses high, the next five of three courses, the bottom two of five courses; there was a tenth step inside the tomb doorway, but it was low and was buried beneath the brickwork of the blocking wall; this rested on it and came only 0.80 m. from the face of the next rise.

When the superstructure was built on the top of the original wall of the stairwell the position of the door was changed, for some reason, so that the stairs are not central to it — they come inside the NW jamb by 0.30 m. and extended 0.45 m. beyond the SE jamb (Pl. 18a); at the same time the level of the court was raised by 0.25 m., as is shewn by the fact that its existing pavement is flush with the threshold, whereas the jambs go down 0.25 m. below this, and the old top step was heightened by the addition of a fourth course and over it were laid three courses which correspond to the new position of the door, and finally the threshold is set above that, its bricks projecting roughly inside the alinement of the stairs (Pl. 20a). This might perhaps result from a single operation, but that it rather indicates a temporary superstructure replaced by the existing building is suggested by the fact that the superstructure

wall itself shews signs of a break in construction; twelve courses above the offset which marks the completion of the substructure there is a slight setback noticeable in the NW jamb of the doorway to the courtyard³⁰, and it is possible that it results from the incorporation in the permanent building of part of the wall of a temporary chapel.

In the section, Pl. 55, it will be noticed that the construction of the corbelled arch over the doorway of tomb chamber 1 was faulty; the courses slope sharply inwards, and the sag has had to be made good by inserting slithers of brick between the regular courses higher up. This is a general tendency in the corbelled work of the period; it can be seen on Pl. 12a in the case of the larger vaults of the Dungi building, where the tilt is not due to the collapse of the brickwork (though it may have been accentuated by collapse) but is largely original, and when we inserted timbers to reinforce the vaults of the tomb chambers the tilt of the brick courses was found to be very pronounced: it is probably the result of the builders using the centering as a support rather than a guide, and so trying to make the ends of the bricks conform to the slope of the timbers instead of laying the bricks flat and merely bringing their edges up against the wood. This is a fault most natural to masons accustomed to building true arches on a wooden centering. That the true arch was commonly employed we know — it was indeed a regular feature of the private house in the Larsa period — and it is difficult to explain why for the royal tombs the antiquated and comparatively clumsy and costly corbel form was preferred.

B: THE NW MAUSOLEUM

The superstructure is curiously irregular both in its ground-plan and in its materials. The foundations of the SW wall and the courtyard are of bricks 0.28-.29 m. sq. x 0.06-.07 m. thick, with a few bricks 0.32 m. sq. x 0.065-.07 m. thick; in the upper part of the walls the bricks measure 0.35 m. x 0.175 m. x 0.065 m., 0.33 m. sq. x 0.07 m., 0.31-.32 m. sq. x 0.06 m., 0.29 m. sq. (with half bricks 0.29 m. x 0.15 m.) x 0.065-.07 m., and 0.26-.27 m. x 0.135 m. x 0.055-.07 m.; the stamp of Bur-Sin is common, and occurs on bricks of each of the types. The outer walls are fairly well preserved for the most part but are badly ruined on the NE facade; practically the whole of the north corner has gone, leaving little more than the footings, which project 0.30-.35 m. along the NE section in front of the entry. Close to the corner is the main door flanked by buttresses having T-shaped vertical grooves down their centres and three reveals to the door-passage: in front of the NW jamb is a drain, built of brick and bitumen, which runs at an angle to the facade but seems to have no connection with the present building; beyond the SE jamb (Pl. 22a) is another drain of burnt brick and bitumen having a catchment against the face of the foundations; it lies 0.50 m. below the foundation offset and presumably took the drainage from the roof of the building. Beyond this the wall returns to the NE and has a boldly rounded corner (resting on a right-angled foundation), from which it runs on to abut on the wall of the Dungi mausoleum. On the NW side there are two shallow buttresses, and then the line of the wall is set back and after a longer interval than usual comes a third buttress rounded (Pl. 22b) like that in the NE salient; there is then a re-entrant angle and the wall, with three buttresses at regular intervals, continues to the south corner of the building, which is right-angled (Pl. 23a) instead of rounded, and so turns to abut on the SW wall of the Dungi building whose west corner it thus encloses.

Room 1

The walls at the SW end stood to a height of 1.40 m., sinking to 0.80 m. on the SE, while the NE wall was much destroyed. In the main doorway the threshold was preserved, and all round the room against the walls there ran a strip of heavily bitumened pavement over three courses of brick (the foundation offset), but all paving from the middle of the room had been torn up. Against the SE wall were three bricks set on edge leaning against the wall face, in front of them a single brick lying flat and by it one set on edge, bedded in bitumen (Fig. 18); they did not appear accidental but there was nothing to explain them. A terra cotta ring-drain half under the SW wall may have belonged to the building, but it was destroyed below pavement level and therefore its use could not be certain. Between it and the door in the SE wall was a hole which may have contained a doorsocket.

Room 2: the Courtyard

The whole court (Pl. 21b) was paved with bricks thickly coated with bitumen; parts of the pavement against the SE wall and in front of the door of room 4 had been pulled up by the tomb robbers; the NW half, resting on made soil, had sunk considerably: in the centre there was a square base of bricks, one course high, part of which had been destroyed; there remained of it two bricks in position, side by side, thickly coated with bitumen, and in front of them, on the SW side and therefore facing the door of room 4, two bitumen-lined cup-hollows, diam. 0.13 m. depth 0.12 m. (Fig. 19). The SE wall, the outer wall of the Dungi mausoleum, was covered with a plaster 0.15 m.

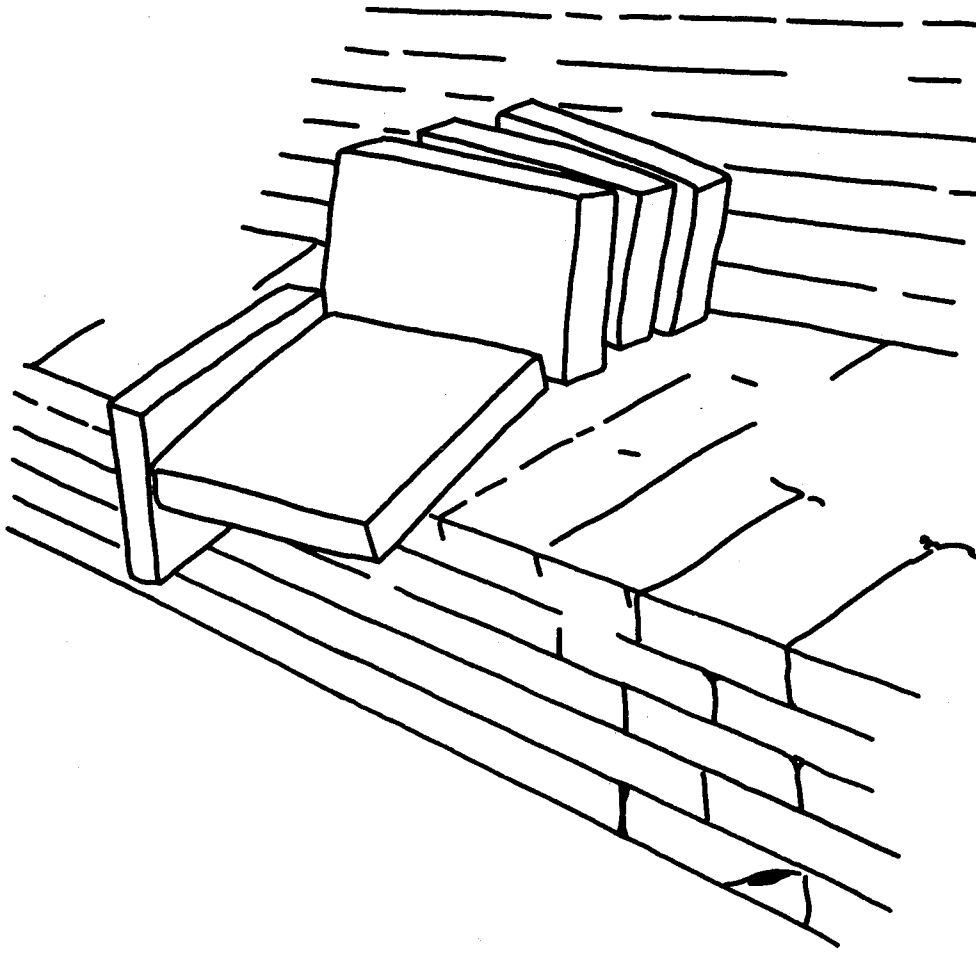


Fig. 18

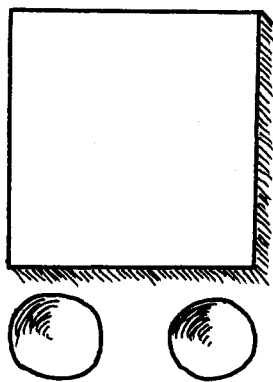


Fig. 19

thick of fine red clay; the plaster was carried down below pavement level, and on the Bur-Sin walls there was no trace of anything of the sort, so it was natural to assume that the plastering was Dungi's work; but as there was none anywhere else on the Dungi walls, even in room 5, where the surface should have been protected from the effects of weather by being inside the later building, it can scarcely be Dungi's and must be attributed to Bur-Sin, but perhaps belongs to a phase of the structure prior to the laying of the pavement.

In the south corner is a brick pedestal at present 0.98 m. high, the shaft 0.60 m. x 0.50 m., standing on a low base 0.85 m. x 0.80 m., both shaft and base smoothly plastered with bitumen. Against the NE wall was a terracotta bath bedded to the pavement with stiff clay; all the upper part was missing, but it seemed to have been a rather deep circular bowl.

In the north corner there lay a slab of breccia, 0.56 m. x 0.28 m., with a smooth flat face and rounded back, oval-topped like a stela, but uninscribed. Near the middle of the court was a ring made of a wide strip of thin gold (U. 17430). Between the altar and the door of room 4, where the pavement was destroyed, there were found in the loose earth numerous pieces (U. 16216) of gold strip mounted in silver (apparently edgings and inlay from a box), a gold roundel (U. 17429), some gold nails and minute gold brads, copper nails with gold heads, and a fluted ball-bead of gold: these must have come from the tomb and been dropped by the robbers who broke up the stolen objects in the courtyard.

Below the pavement was Tomb 3, which had been entered through the roof by means of the hole in the pavement against the SE wall. The walls stand to a maximum height of 1.50 m., but the NE door jamb of room 2 had been destroyed down to 0.95 m. and the bricks removed by men digging into it from above after the site had been buried and was being re-used for later building. The pavement, of bricks covered with bitumen, was intact except for a small patch in front of the door, where the tomb robbers had started to excavate but had desisted on reaching the earth packing. At the SW end of the room the whole of its width is occupied by a flight of brick steps (Pl. 23b). This begins with a wide step only 0.08 m. high, in the south corner, from which six steps of three courses of bricks each, going up to the NW, give a total height of 1.40 m.; the last tread comes directly against the face of the wall, which here stands to 1.50 m., and it is difficult to understand what can have happened thereafter; there is no room for a return of the staircase to the NE, and a door in the thickness of the outer wall is unlikely in itself (although it is true that had there been such no trace of it would remain at the level to which the brickwork is preserved), nor have we any analogy for a staircase recessed into the wall face (*i.e.* returning with the curved buttress to run SE, resting on the inner half of the SW wall) although the extra width given by the buttress would make that constructionally feasible. The stairs are of solid brick, not bonded into the wall³¹ and the treads are thickly overlaid with bitumen. I would suggest that this is not a staircase at all but a stepped altar such as is occasionally represented on the monuments³² but of which we have not elsewhere found actual examples.

Room 4

(Pl. 24a, b). The door jambs in the NE wall had been almost entirely destroyed by men excavating from above to lay the foundations of a brick chamber tomb (a Kassite tomb with barrel vault supported on stilts) which blocked the doorway; the jambs of the SE door also were destroyed almost to floor level. The pavement was of brick overlaid with bitumen. There was a large hole through it at 1.30 m. from the NW wall, and the whole of it, thanks to the sinkage of the roof of the tomb below, was very irregular — against the NE wall it is level with the floor of room 5, then slopes down rapidly and rises again, but even so hits the SW wall three courses of bricks lower than on the NE side, yet the bitumen covering is unbroken, so that it would seem always to have sloped from NE to SW. At 1.60 m. from the SE door there is a single course of bricks rising above floor level, and the bitumen covering is brought up against the edge of them; the line of bricks ran out from the SW wall and there was then a projection of a single brick's width, and at 1.30 m. from the NE wall it returned NW; behind this frontage the pavement had been destroyed. The analogy of other rooms shews that this must be the base of an altar constructed against the SW wall.

Room 5

The walls stand to a height of 2.10 m. above floor level, except on the NW, where the wall is badly ruined. The brick pavement has been seriously damaged, apparently by the tomb robbers, who pulled up two or three courses of bricks but then desisted, probably because an entry was effected more quickly by means of the door; the sinkage of the vault in front of the room door has caused further damage and it is only along the SE and SW walls that the true level is preserved.

Room 6

The SW wall (Pl. 25a) stood to an average height of 1.00 m.; the SE wall was 0.80 m. high at the south corner and disappeared before the east corner; the NW wall was 1.25 m. high at the west corner and 0.35 m. at the north corner; the NE wall had been completely destroyed and only its foundation remained below floor level.

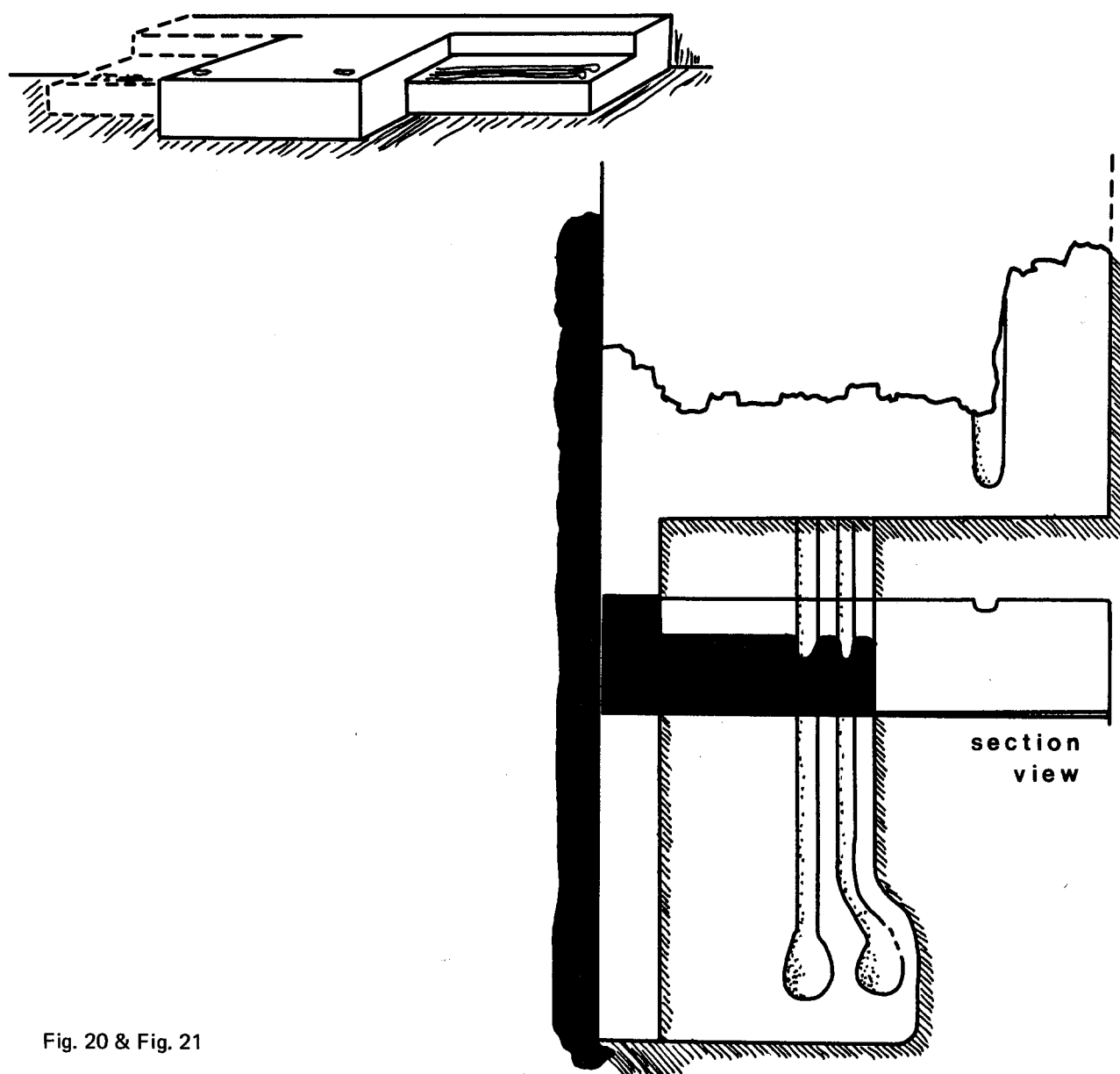


Fig. 20 & Fig. 21

On the threshold was a quantity of burnt wood and the brick faces of the jambs were heavily burnt; amongst the wood ashes were copper nails with large flat heads (diam. 0.035 m.) from the door or the door frame. Inside, against the SE jamb, was the copper shoe (U. 16255) of the door pole (diam. 0.125 m.) still standing upright on a socket made of a brick in which was a pivot hole; it was uninscribed. The pavement was of brick thickly coated with bitumen; it sloped steeply from SE down to NW, owing to the fact that the heavy Bur-sin wall on the NW had shallow foundations and had therefore sunk considerably, whereas the Dungi wall on the SE was too deeply laid to sink; the tomb below the floor must also have been in part responsible. On the SE side of the room, against the corner of the Dungi buttress, there were two bricks set on edge in the bitumen, at right angles to each other, probably a support for some object. Against the NW wall was a brick altar (Pl. 25b); the NE end was broken away, but it was probably originally symmetrical. At 0.85 m. from the west corner there ran along the wall face a brick bench 0.35 m. high, 0.20 m. wide, and 1.60 m. long; then it widened out into a rectangular projection 1.35 m. deep and at least 1.60 m. long (it was broken off at this point); at each of the outer corners of the projection there was a cup-hollow in the bitumen surface, each apparently fed by a very narrow channel, or with the channel connecting them (the front of the altar was in bad condition and the evidence was confused). In the angle between the narrow bench and the projection there was a lower step (0.20 m. high) of bricks covered with bitumen and along the front of this ran two channels of which the inner certainly and the outer probably (it was much destroyed) ended in an elliptical cup-hollow; if the NE end could be symmetrically restored the altar would have the appearance shown in the sketch on Fig. 20; the plan and section of the actual remains are given on Fig. 21. On the pavement in front of the altar was found a haematite weight (U. 16229R).

Room 7

The walls stood to a height of 1.25 m., decreasing to 0.60 m. where the Neo-Babylonian Temenos wall ran across the room; a wall of a Kassite house rested in part on the SW wall and in the doorway came down to 1.00 m. above the Bur-Sin pavement. Against the NW jamb of the door was a brick hinge-socket 0.70 m. below floor level. A bench or footing of bricks covered with bitumen ran along the NE and NW walls and over the rest of the room there was no pavement but a floor of red clay laid over earth and brick rubble; this was original. On the floor, by the NE wall, were the base and some fragments of a large clay storage jar and fragments of large clay tablets, of which one was dated to the reign of Ibi-Sin and contained a list of goods which were possibly offerings to the mortuary chapel; it is probable that the room was a store room for offerings, since this would explain the clay floor as well as the objects found on it.

Tomb chamber 1, lying under room 4

The tomb chamber was very long, low and narrow; the walls were only 1.20 m. high and the apex of the vault 3.10 m.; the NW end of the vault had collapsed (of its own accord; the robbers had entered through the door) (Pl. 27a) but the greater part of it was in good condition (Pl. 26a). Below the springers of the vault there were holes in the brickwork on the average 0.60 m. apart, for the bracket-beams which supported the centering (diam. of holes c. 0.07 m.) and further holes for bonding-beams above. Walls and vault alike were built of bricks 0.32 m. sq. x 0.065-0.07 m. set in bitumen mortar. The pavement was of bricks covered with bitumen; at 2.10 m. from the SE end this stopped and there were two shallow steps leading downwards, and then a clean wall face which made, with the end wall of the tomb chamber, a shaft 1.90 m. across and as wide as the chamber, filled with clean soil; we dug down into this and found nothing.³³ It was possibly the place intended for the coffin, but it is difficult to explain why this should have been put on earth instead of on the brick floor.

Except for a heap of rubble fallen where the vault had collapsed, the floor was remarkably clean, covered only by a few centimetres of light dust. At 2.50 m. from the SE end there were a few bones lying in disorder; they represent the bodies of at least five individuals, all women, and have been subjected to fire after the fleshy parts had decayed³⁴. On the unpaved part of the floor were fragments of a white calcite 'spill-vase' (Type I) and on the pavement were two clay pots of Type XXIX (ht. 0.12 m.) and part of a clay saucer of Type III.

The doorway had a raised bitumen-covered threshold and had been blocked by a wall built with alternate courses of bricks set upright on edge and laid flat; this had been broken through and only against the NW jamb were there a few bricks left in position. The approach to the tomb had been a pit with sloped sides cut down into the soil, rather wider than the door, and that part of the tomb walls which shewed in the pit was built with a good outer face, whereas generally the bricks would have been laid from the inside against the sides of the pit cut for the tomb and the outer face would have been rough. Into this rather narrow and awkward pit the body had to be lowered at the time of burial. Then a few bricks were thrown into the entrance pit and earth above them; then, for the super-structure wall (the SW wall of the courtyard) bricks were roughly laid in mud mortar on the earth (twelve courses at the point where our section on Fig. 22 was taken) and these bricks were carried on to the stepped crown of the

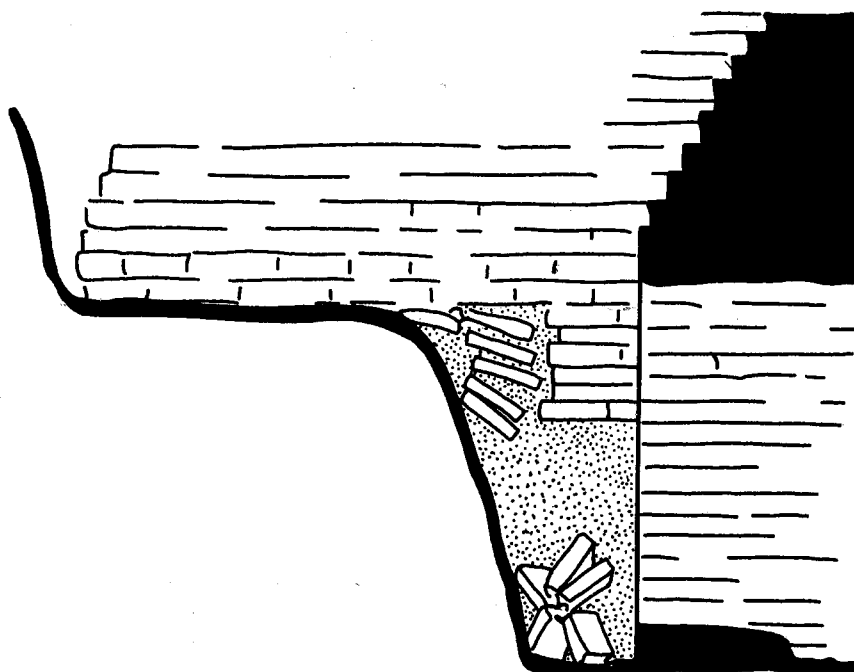


Fig. 22

corbelled vault; on coming near to the ground surface the builders substituted bitumen for mud mortar. Thus the approach to the chamber was further blocked by the wall of the superstructure, and the tomb robbers had been obliged to destroy this in order to effect an entry; the tomb door and the door of room 4 in the superstructure do not coincide, and the foundations of the threshold of the latter are as deep as those of its walls.

The facts prove that the tomb was finished and occupied before the superstructure was built; but the manner in which the foundations of the latter were laid virtually proves that the superstructure was built immediately after the occupation of the tomb; for it is most unlikely that the entrance pit, roughly cut in the soil, would have been left open for any length of time.

Tomb chamber 2, lying under room 6

This was a very small and narrow corbel-vaulted chamber lying immediately below pavement level. It had its door at the SW end, opening on to a rectangular entrance pit cut in the soil, which also served for Tomb chamber 3. Thanks to the narrowness of its span the walls were much higher than usual in proportion to the roof, 2.20 m. to a total of 3.60 m. The SE wall rested on the footing of the Dungi wall and had therefore stood firm; the NW wall, resting on made soil, had sunk, and the subsidence of the much heavier wall of the superstructure had further affected it, so that the chamber as found by us was badly askew. It had been plundered through a hole in the roof, at the NE end, and nothing of any sort was found in it.

Tomb chamber 3, lying beneath the courtyard

This small chamber lay immediately below the pavement and had been broken into from above, by means of a hole against the SE wall of the court. It was completely empty. The poles of the centering, whereon the vault was constructed, had been thickly proofed with bitumen and this, adhering to the brickwork after the decay and disappearance of the wood, preserved the imprint of the timbers and shewed in detail the method of building (v. Pl. 26b). The blocking of the doorway was done with a wall in which courses of bricks set upright on edge alternated with courses of bricks laid flat, and only in the upper part were flat courses regularly used (v. the sectional drawing on Pl. 55). From the inside the tomb robbers had pulled away the upper part of the blocking and had dug into the earth filling the entrance pit beyond it; evidently they had expected to find objects of value placed against the door of the chamber, as was the normal practice with private tombs of the Larsa period, though there only clay vessels were offered.

The NE wall of the courtyard of the superstructure, between the doors of rooms 6 and 7, ran across the earth pit which served as approach to the two tombs 2 and 3, and its foundations, going down to the bottom of that pit, effectually sealed the approach. Consequently both tombs, even No. 3 which so far as its main structure is concerned might have been constructed after the existing 'chapel' merely by digging a pit through the pavement of the court, must, like No. 1, antedate the superstructure.

Some fragments of narrow gold binding (from a box?) found on the pavement a little to the NE of the centre of the courtyard, might have come from Tomb chamber 3, dropped by the robbers.

CHAPTER V

E-ḤUR-SAG, THE 'PALACE' OF UR-NAMMU AND DUNGI

The building occupied the large rectangular projection of the Temenos on its SE side. The area on which it stood was a terrace raised to the level of that of the Gig-Par-Ku of Bur-Sin and therefore nearly a metre above the other buildings on the NE side of the Temenos, *i.e.*, E-nun-mah and the nameless building between it and the Gig-Par-Ku; from the latter it was distinguished by a sloped bank which continued the line of the section of the Temenos wall running under the SE wall of the Gig-Par-Ku. It is likely that in the time of the Third Dynasty the division between the 'palace' area and the rest of the Temenos was more marked, but excavation failed to produce anything other than the plain slope of hard earth; if there was a wall it has completely disappeared; the bank ran close to the NW wall of the 'palace'.

To the NE of it there would seem to have been an open courtyard. A large drain (?) and a well for water were found here, but the well may have been enclosed in one of the mural chambers built along the top of the Temenos wall; it was a fine structure built with radial bricks.

The excavation of the site was begun by Dr. Hall in 1919. He cleared the southern part, which is the best preserved³⁵ and identified it with E-ḥur-sag, the 'House of the Mountain' built by Dungi, perhaps as a royal palace. The work of the Joint Expedition on the site, in 1922-23 and again in 1925-26, explored the other and more ruined parts of the building and threw a measure of doubt on its identification. A description of it will fitly precede the discussion of its character.

The building is a rectangle measuring fifty-nine metres in either direction and is orientated with its corners to the cardinal points of the compass; the corners are rounded and the walls are magnificently constructed with large burnt bricks 0.37 m. sq. x 0.10 m. laid in bitumen mortar; the outer walls, 1.70 m. thick, were relieved by shallow buttresses 3.00 m. wide and 5.10 m. apart. The outer walls rested on a foundation of mud bricks 0.90 m. deep; the inner walls had foundations of two courses of mud bricks.

In the south corner, in the heart of the wall, at 0.15 m. below the bottom course of burnt brick, there was in the mud-brick foundation a box of burnt bricks 0.30 m. x 0.15 m. x 0.50 m. deep internally, the bricks heavily bitumened; a piece of matting dipped in bitumen had been laid over it and above this a single brick served as cover. Inside it there stood a copper foundation-figure of the king carrying a basket (U. 1000, Pl. 47a) which had been wrapped in linen, and at its feet was a steatite tablet (U. 1001); neither was inscribed. A similar box with similar (uninscribed) figure and tablet was found in the mud-brick foundations of the east corner. In the west corner none such was found. The burnt brickwork of the wall, which at the south corner was standing up to a metre and a half in height, gradually decreased until at 13.00 m. from the west corner it disappeared altogether and only the mud-brick foundations could be traced; a few burnt bricks lying on the remains of these at the corner itself might be the remains of a foundation-box. The mud brick sufficed to shew the return of the wall, but after two or three metres it gave out and nothing of the wall was left. At the north corner a small shapeless patch of mud brick might (and judging by its position did) represent the core of the foundations. On the NE side the rounded angle at the east end, where the foundation-deposit was found, established the general position of the wall, and a double return of mud-brick foundations at the end of one of the internal walls defined its inner face. On the SE between the denuded corner and the wall dividing rooms 35 and 25 there were two stretches in which the burnt brickwork of the wall proper was preserved; the final breach here was deliberately made by the cutting of a doorway through the wall during the later period of occupation.

Where the burnt brickwork is preserved there is no original doorway. The entrance of the building cannot have been on the NW, for approach to that side is hindered by the slope of the terrace³⁶; the general plan of the building seems to preclude an entrance on the NE, for that is obviously the back. On the SW however there is a strip of pavement which would seem to have extended outwards as far as the inner mud-brick wall of the chambers along the edge of the Temenos; further, the distance from the west corner to the point where the burnt-brick face of the wall first appears does not allow of buttresses and recesses spaced according to the regular scheme, and therefore the line must have been broken here by some special feature, which can scarcely have been other than a doorway with flanking buttresses such as are shewn on the restored plan. Such a position agrees perfectly with the character of the building.

The ground-plan shews a square divided into two unequal parts by a cross-wall broken by two doorways; the smaller of the two parts is again divided by a cross-wall into two parts having no connection with each other: rooms 1 to 23 form the first part, rooms 24 to 33 and rooms 34 to 41 form the two smaller sections respectively.

As can be seen from the published plan, the whole of the NW part is terribly ruined and has been radically restored. Only in its southern corner were the walls standing above floor level. Over a larger area the burnt-brick pavement was preserved and the gaps in this, with mud brick filling the gaps at a lower level, shewed the course of walls which had themselves disappeared; and in places, *e.g.*, between rooms 7 and 8 and 11, the mud-brick foundations of party walls could be followed even where the bricks of the pavement had been torn up. On the basis of what was actually found one could recognize a resemblance to the NW section of the Gig-Par-Ku of Bur-Sin which justified what would otherwise have been a rash reconstruction.

The (assumed) doorway in the SW wall led into a small and narrow chamber paved, as were all the rooms in the building, with burnt brick: at the NW end of the chamber was a brick-built well on whose edge the party wall may have rested. A door, set towards the SE end of the inner wall, led into a large paved court (2) of which the NW end was completely destroyed. From it a door in the SW wall led into room 18, which continued the line of room 1, and in the SE wall two doors opened into two rooms, 19 and 20, of the range forming the SE limit of the main part of the building. In the NE wall a door close to the east angle led into and through a small room (4) of which all the walls were preserved; for the rest of the NE wall only one short stretch of burnt brickwork survived, but the mud-brick foundations indicated a second doorway (the bricks of the threshold had gone) into room 3; foundations of a cross-wall gave the limits of room 3, but beyond it all traces of walls and of pavement alike had vanished.

At this stage reconstruction became possible. The outside limits of the building on the NW were known; if we supposed a range of chambers along the NW side corresponding exactly to those (rooms 19-23) along the SE side of this section, then the door of room 3 would be exactly central to the court, and beyond room 3 there would be space for another room (5) exactly similar to room 4 and with its door in a corresponding position. This symmetrical arrangement was too striking to be disregarded and the reconstruction was accordingly set down on paper.

The doors through the passage-room (4) — and *ex hypothesi* through room 5 — led into a very large open court of which the pavement was preserved in one place (near the middle) as far as the mud-brick foundations of the back wall; here a doorway led into room 8; beyond this, except for a patch of pavement in room 11, against its SE wall, nothing whatsoever of the original structure was left.

Incomplete though it is, the building is remarkably like the temple in the Gig-Par-Ku (see Pl. 57 section A). The position of the entrance is indeed different, but that is the only serious difference. In each a large forecourt (rooms 2 and A6 respectively) is separated from the outer wall by two narrow chambers; beyond the court two cross-walls enclose a narrow chamber (3 and A5) with a doorway which in one case is simple, in the other is distinguished by elaborate reveals; in the Gig-Par-Ku there is an altar facing this doorway, built against the back wall, and at one end of the room is a drain; in the 'Palace' there is a drain at the SE end of the room and though there is no altar, the fact that the wall has been destroyed to its foundations and the pavement in front of its centre pulled up makes it not impossible that an altar did originally stand here. Side doorways lead, in the Gig-Par-Ku through the altar room and in the (much larger) 'Palace' through subsidiary chambers, into a single narrow room extending across the whole width of the court; from this two doors in each case, one at either end of the room, open into a very large paved court (7 and A11). In the Gig-Par-Ku two doors at the back of the court (A 11) lead into two small chambers through which one passed into a wide and shallow sanctuary (A18), having a subsidiary chamber at either end; in the 'Palace' the one doorway which is preserved suggests — if the symmetrical scheme be followed — a second door towards the NW end of the wall, and that would allow of a reconstruction exactly on the lines of that in the other building.

From this temple-like building two doors led respectively to the two minor complexes, which were of a totally different character. Through room 21 one entered a small room (24), one of a long range of small rooms, and so by a door in its SE wall passed into what was probably an unroofed court (25) having chambers on three of its sides. It was paved, and against the NE wall was a basin built with bricks set on edge. On the SE side two doors led to two rooms (26 and 27), the pavements of which were raised about a metre above that of all the other rooms, and in their doorways were flights of brick steps. This high floor was so reminiscent of the high floor in rooms 6 and 7 of the Dungi mausoleum, under which was the approach to the tombs, that we decided to test it, and a hole was accordingly dug through the pavement of room 26. In the west corner was a terra cotta ring-drain whose intake was a small square hole between the bricks of the pavement; it was therefore original to the room. The pavement consisted of nine courses of bricks set in bitumen, all of one type — the Dungi brick. Under the pavement foundations at the SW end was a drain consisting of a single terra cotta drain cover and under the SE wall foundations was a ruined ring-drain; both of these were older than the building and had no real connection with it. Under the mud-brick foundations of the SE wall were a few courses of a wall of plano-convex mud bricks, and at the NE end, at 2.55 m. below the wall foundations, there was a very solid wall of plano-convex mud bricks which went down for

another 1.75 m.; a circular rubbish pit, 1.30 m. diameter, had been dug into it after the ruin of the building to which it belonged and before the construction of the Third Dynasty 'palace'. There was therefore nothing at all to explain the unusual solidity of the high pavement. Rooms 28 and 29 presented no features of interest (except that the latter was probably an open court) and of the small rooms opening off room 29 the smallest (31) had a drain in its floor and must have been either a lavatory or a bathroom.

The remaining rooms (34-41) form a complex closely resembling that of rooms 24-33. To the court (25), corresponds 37 with two rooms to the SE and two rooms to the NW of it, and to 29 corresponds 36, though here the row of small chambers on the SW side is lacking; here too there are apparently no raised pavements, though room 41 was so completely ruined that it is not possible to assert that its pavement had not once been at a high level; most of the walls, as shewn on the plan, were reduced to their mud-brick foundations and of the outer NE wall no trace was found.

Just as the NW part of the building resembles the Nin-gal shrine at the NW end of the Gig-Par-Ku, so the two sets of chambers 24-33 and 34-41 might be compared with the set of chambers B14-26 which in the Gig-Par-Ku lies SE of its NE half, chambers below which we found the tombs probably of the priests attached to the temple. They are not laid out on the regular plan of the contemporary private house, but they have the appearance of being residential rather than of a religious character, and their duplication must bear directly on their use.

For the chief difficulty about the building is to establish its purpose. The foundation-figures and tablets were uninscribed. One of the bricks of the foundation-box in the east corner bore the stamp of Ur-Nammu and the stock inscription 'who has built the Temple of Nannar'³⁷; of the bricks in the walls, which were uniform in character, a few bore the stamp of Ur-Nammu 'To Nannar his King has Ur-Nammu, king of Ur, built his temple and built the walls of Ur.'³⁸ The walls are therefore the work of Ur-Nammu and the building would seem to be connected with Nannar; it cannot be supposed that this is the great temple of the god, but it should, on this shewing, be one of the religious structures included in his Temenos.

The bricks of the pavement, on the other hand, bear the stamp of Dungi. Clearly in this as in other instances a building started by Ur-Nammu was unfinished at his death and was completed by his son. But the inscription³⁹ states that the king 'has built the E-hur-sag, his beloved house' and would imply that the building was his royal palace. Dungi certainly intended to take to himself the credit for the building, for one of the years of his reign is named as that 'in which the royal E-hur-sag was built'⁴⁰ and all reference to Ur-Nammu is omitted, large as his part in the work had been. This silence makes it possible that Dungi was really usurping his father's building, and that he gave it a new name because he was turning it to a purpose other than that conceived by its founder.

Dr. Hall, who found only the pavement bricks, naturally concluded that the building was Dungi's palace. When, in 1922-23, we found the wall bricks with the Ur-Nammu stamp, and found also beyond the terrace wall on the SE (the Third Dynasty Temenos wall) a drain apparently coming from the high ground to the SW and built with the E-hur-sag bricks of Dungi, I argued that the work was begun by Ur-Nammu and was the temple of Nannar, that he died before it was finished and that Dungi completed it, laying the floors with bricks made for his palace (which presumably he was erecting at the time) and that the palace was likely to have been on the high SW mound. Later excavation proved that on that mound there was no palace, nor has the site of any other building known as E-hur-sag been discovered; further information acquired as to the layout of the Temenos in general makes it certain that this building, lying at its outskirts, as far as possible from the Ziggurat, was not the great Nannar temple; after more work on the site, in 1925-26, I was inclined to revert to Dr. Hall's opinion. I pointed out that the NW section has the plan of a temple, and argued that the temple was the house of the god and that just as its personnel in titles and in functions duplicated that of the royal palace, so the buildings too might be on the same lines, the sanctuary of the one corresponding to the throne-room of the other, the courts serving for worshippers and for the public seeking an audience. On this theory the NW section would comprise the public rooms of the palace, where the royal receptions would be held with the king seated where in a temple the statue of the god would be set (room 10), while the SE section would be the residential part of the palace, divided into two separate wings for the king and for his *harem* respectively. I added in support of this the fact that the doorsocket stones found in the building were without exception uninscribed; we have never found inscribed doorsockets except in a temple and have never found a temple wherein the doorsockets and the foundation-deposits were uniformly uninscribed, so that the lay character of this building might be assumed.

The explanation no longer seems to me satisfactory. Judging from the superstructures of the tombs of Dungi and Bur-Sin, the royal palace was a much closer copy of the private house than are the two SE sections of the E-hur-sag building, and these are, for all their solid construction, too small to meet the requirements of a palace. If the fact that a building looks like a temple does not justify us in regarding it as possibly a palace, it practically obliges us to regard it as a temple, and the SE annexe in that case must be functionally akin to that of the Gig-Par-Ku which it so closely resembles, *i.e.*, must be the residence of the priest or priests. The difficulty then is to identify the temple.

That it formed part of the Temenos of Nannar is certain, and the use of stock bricks with a vaguely general dedication is not unnatural; but within the Temenos subordinate deities were worshipped. I do not know that the phrase 'the beloved house' of Dungi necessarily means his own palace; it might qualify a building whose name (in this instance 'E-ĥur-sag') would for contemporaries sufficiently denote its religious purpose. I would suggest that the Dungi bricks were made for the present building, which is really E-ĥur-sag, but that E-ĥur-sag was a temple. Dr. Hall suggested that a stone foundation-tablet found by him loose in the rubbish SE of the building might have come from it originally. The tablet (UET I, 47) records the building by Ur-Nammu of E-mah, the 'Noble House', the temple of the goddess Ninsun. Even if 'E-mah' be a mere description and not a proper name it would perhaps be rash to identify it with E-ĥur-sag (unless indeed we suppose that Dungi decided to give the building a name of his own), but it might possibly be a part of the E-ĥur-sag building; if the temple was destined to serve the needs of not one but several deities, each having his place in it⁴¹, then the lack of any particular dedication on the foundation-tablets might be more understandable. There is another fact which perhaps might bear upon the question. To the NE of the building was an open court extending as far, apparently, as the Temenos wall, and in this area were two brick-built wells, the further of them, which was possibly included in one of the intramural chambers of the Temenos wall (but no building remains survived near it, and it may have been in the open court) was found to contain a large number of clay dedication-cones of the Larsa period relating to temples dedicated by Warad-Sin and Rim-Sin. They have been published in UET I. No. 127 commemorates Warad-Sin's building of E-dilmunna in honor of Inanna; No. 128, his temple 'the dwelling-house that refreshes his heart', of Ilbaba; No. 131, his restoration of E-temen-ni-gur the Temenos of Nannar, this last being a 'stock' inscription found also at the NW end of the Temenos. The Rim-Sin cones record (No. 138) the enlargement of the E-nin-bi-tum of Ilabrat; No. 139 that of the E-ginabtu of Nannar; No. 140 the building of E-eshbar-zida for Ninsianna; No. 141 that of E-erim-kukud for Nergal; No. 142 that of Ka-li-sud for Tammuz; No. 144 the restoration of a temple of Enlil. The site of none of these temples is known, several of them are those of minor gods, and it is probable that the buildings from whose walls they were taken stood close to the well into which they were thrown by the destroyer. Any of them might have come from 'E-ĥur-sag' itself, and the possibility should not be overlooked that all came from it.

The religious character of the building was supported by Dr. Hall's finding in the ruins fragments of two statues in dolerite, which would be more in keeping with a temple than a palace. One (B.M. 114198, Pl. 49a) gives the cheek and eye of a life-size male figure, fine work of the Third Dynasty; the other (B.M. 114197, Pl. 49b) shows the ear and back of the head of a smaller female figure whose hair would seem to be confined in a net: a small and unimportant fragment from a calcite statue (U. 6942) gives only part of a garment.

The building, overthrown by the Elamites at the end of the Third Dynasty, was restored and used by the Larsa kings. The NW wall of room 29 was razed to the floor and a new wall built farther to the SE with the old material, but the Ur-Nammu bricks were now laid in mud mortar; apart from this no real change of ground-plan could be distinguished. Clay tablets found at floor level—accounts and business documents—were dated to the reigns of Gungunum and Idin-Dagan, and proved that the building was in use in the time of the Isin and Larsa kings. After the sack of Ur in the time of Samsu-iluna the site remained desolate, and shoddy walls built over or between the stumps of the original brickwork only emphasise its degradation; late drains, granaries, and furnaces, the last perhaps for the making of pottery as some potter's stilts were found here, further cut up the site and added to the destruction of the underlying ruins. Tablets however shewed that up to a late date the building enjoyed a religious character; four tablets dated to the tenth year of Shamash-shum-ukin (659-648 B.C.) and to the nineteenth and twentieth years of Ashurbanipal (650-648 B.C.) were wills, legacies, and sales of land, all belonging to a single priestly family. To about the same period belongs a conical stamp seal of steatite (Pl. 49k) while a small copper lion's head (Pl. 49h) goes back to an early period.

The tablets are thus described by Hall⁴²; No. 113926, a list of household furniture belonging to a certain Nabu-shum-ukin (seventh century B.C.); No. 113927, will of Bel-iqbi, witnessed in the court of Sin-balatsu-iqbi, *Sakannaku* or governor of Ur, and dated the 18th of the month Araĥšamna in the tenth year of Shamash-shum-ukin, king of Babylon; No. 113929, certificate that a payment for certain landed property has been completed, and that no action for it can lie, dated 19th year of Ashurbanipal; No. 113928, sale of a legacy specified in the will of Bel-iqbi.

The following cylinder seals were found in the filling: U.7020, U.7021, U.7026; also a fragment of shield-shaped shell inlay, U.6995.

CHAPTER VI

TEMPLES AND SMALL BUILDINGS

THE DIM-TAB-BA TEMPLE OF DUNGI, THE EH SITE,

THE NIN-GISH-ZIDA TEMPLE, THE EN-KI TEMPLE, THE GIG-PAR-KU

THE DIM-TAB-BA TEMPLE OF DUNGI

The temple lay on high ground SE of the south corner of the Third Dynasty Temenos (Pls. 53, 59). From that corner there runs SE a neck of relatively high ground along which was afterwards built the Temenos wall of Nebuchadnezzar; its NE face consists of an archaic terrace wall built, apparently in two steps with sharply sloping rise, of lumps of greenish or red clay bound together with clay mortar; the lumps have the size and appearance of basketfuls. After running parallel with the line of the late Temenos wall (Square W 8) the terrace returns (Square V 8) at right angles towards the NE, then SE again and NE and SE (Square S-T 7) to make a second salient. There was a further return apparently to a point of Squares R-S 3, which we were not able to trace, and then a long stretch running SE through Square P 3 to Square K 3, where the terrace curved back to Square J 4 and could be traced on as far as Square D 3. The curiously irregular line thus given corresponds throughout with the scanty remains of Third Dynasty walling found on the terrace. Just inside the first salient, its position presumably dictated by it, lies the north angle of the Dim-tab-ba temple; apparently an extension of it was built out to the NE to occupy the second salient. On this see the plan of the EH site, Pl. 59a.

Apart from the bridge afforded by the strip of high ground, the temple was separated from the Temenos by a low-lying area; this was proved by excavation against the face of the SE wall of the Third Dynasty Temenos. To the SE of it the high ground broadened out considerably and sloped gently down to the SE; the temple therefore occupied the NE end and probably the highest part of a long mound raised over the ruins of the prehistoric town, actually, so far as we can tell, the site of the earliest settlement at Ur; and since it slants well above the level of the floor of the Temenos on which the Gig-Par-Ku of Nin-gal stood, its position was a commanding one. Most of the building lay under the line chosen for the Neo-Babylonian Temenos wall, and since the site had by that time been much denuded, thanks to its exposed character, and since the foundations of that wall were laid reasonably deep, the wall cuts right through the older ruins and has left no trace of them except where they run out to the NE of it; there is consequently very little of the temple left.

The temple walls were of mud brick throughout. The outer NE wall was extremely solid, about 3.75 m. thick; below its foundations and to the NW of it were found five foundation-boxes of burnt brick, the bricks 0.35 m. square or 0.35 m. x 0.17 m. x 0.09 m., set in bitumen, with covers of burnt and mud bricks bitumen-plastered; each box measured internally 0.37 m. x 0.20 m. x 0.48 m. deep and contained a copper statuette of the normal basket-bearer type standing against the NW side, with a black steatite tablet at its feet; four of the tablets (U. 6157, 6300, 6302, 6304, Pl. 50) and four of the statuettes (U. 6158, 6301, 6303, 6305, Pl. 49c) were inscribed with the dedication of the temple by Dungi to Dim-tab-ba⁴³; the fifth tablet (U. 6968 b), from the box at the NW end, and the statuette (U. 6968a) found with it, were uninscribed.

Each of the four SE boxes was at a junction of a cross-wall with the outer NE wall; the SE cross-wall was solid and may have been an external wall, and the next three were definitely internal. Room 1 was entirely ruined and its SW wall, under the Temenos wall, had disappeared. Room 2 was well preserved, part even of the SW wall remaining, and all the pavement. This was of burnt bricks, most measuring 0.31 m. x 0.20 m. and marked with two fingerprints, like the bricks of the Dungi revetment wall at al 'Ubaid; it seems to be an early Dungi type; with them were a few bricks 0.37 m. square, a regular Ur-Nammu size used by him for the town wall and for the E-hur-sag building. In the NW wall was a doorway marked by the paved threshold (for all signs of the mud-brick wall itself were lost) leading into room 3, where a few pavement bricks remained *in situ*. Immediately below the bricks of the pavement there were found (Pl. 27c) five hollow clay cylinders (U. 6337, Pl. 48c) ht. 0.28 m., diam. 0.18 m., inscribed on the side with the

name and title of Dungi; all were at the SE end of the room; two were at 0.55 m. from the SE wall at 0.30 m. and 1.10 m. from the east corner, one against the wall at 1.00 m. from the south corner, and the other two were half a metre NW of Nos. 2 and 3; each of the last three contained some very small fragments of bones of a small animal, and the fifth had also a fragment of a coarse stone quern; each was set upright on a burnt or mud brick covered with bitumen. The only parallel that we have to this use of cylinders below the pavement is in the great Nannar courtyard⁴⁴ where again they are connected with a Dungi building.

These three rooms are small and the foundation-boxes therefore lie close together; the fifth is at some distance to the NW and although all signs of the walls have vanished it may be assumed that there was to the NW of room 3 a large court. The SE wall of room 1 seems to have run on to the NE beyond the main NE wall of the building and then to have returned SE; but the remains are so fragmentary, merely disconnected bits of wall in which only the size of the bricks justified us in attributing them to Dungi, that nothing can be considered certain. The fragments of brick-work might belong to separate small walls; the main argument in favour of their belonging to the Dim-tab-ba building is that they align with it and not with the Third Dynasty walls farther to the SE. The tombs and drains of a later period have made havoc of this part of the site.

In the ruins of room 3, close to the Temenos wall, there was found a headless statuette very finely carved in diorite (U. 6306, Pl. 47b); on the shoulders is an inscription of Dungi dedicating it to Nannar (UET I, 52); part of a hollowed diorite stand (U. 6276) probably belongs to the figure.

Below the Dungi pavement there was a wall of mud bricks, slightly plano-convex, measuring 0.23 m. x 0.16-0.17 m., the front of which had been cut away by the Nebuchadnezzar Temenos wall; associated with it was a drain with an intake of burnt plano-convex bricks 0.26 m. x 0.185 m. There had been branch walls running to the SW. By this was a fragment of a white calcite vase with remains of a dedication by a daughter of one An-Bu in script of about the time of the First Dynasty of Ur. It may be that Dungi's temple occupies the site of an older building of the same character.

THE EH SITE

Immediately to the SE of the Dim-tab-ba temple (Pl. 59) there were a few tattered remains of walls some of which seemed to be of Third Dynasty date, but they made no intelligible ground-plan and no objects of interest were found in connection with them. All that can be said is that here the Third Dynasty buildings seem to have extended to the NE (into Squares M-Q 4) so as to occupy the whole area of the (prehistoric) terrace whose front here lay in Squares J-R 3. In Square L 8 there was a wide and heavy mass of mud brickwork on which rested a single course of the large 0.37 m. square burnt bricks with the 'town wall' stamp of Ur-Nammu⁴⁵; the direction of the wall, so far as it could be ascertained, agreed with the alignment of the buildings to the SE of it rather than with the Dim-tab-ba temple. I was inclined to regard this as proof that the site was divided by a cross-wall 'which formed an intrinsic part of the layout of the Third Dynasty city', but the view probably gives too much weight to the evidence of the brick-stamp. The inscription is a stock one which could apparently be used on a variety of sites and buildings (*e.g.*, in the E-hur-sag temple) and it is more likely that the wall in question was the enceinte wall of the building to the SE. If that be so, the remains in Squares M-Q 4-10 may have been part of the Dim-tab-ba temple, for the area is scarcely large enough to admit of an independent building; it is true that the walls, or most of them, are differently aligned from those of what is definitely the temple, but that is not a conclusive objection since their direction may have been dictated by that of the heavy boundary wall on the SE. It is perhaps worth noting that there are in connection with these skew walls a number of vertical terracotta 'drains', three of which occur in the Dim-tab-ba temple also; such, as we know, could have a religious significance and were used for offerings to certain gods; about the goddess Dim-tab-ba nothing is known, but a clay label⁴⁶ found in the Gig-Par-Ku, not far away, speaks of one 'Nannar-shagga the scribe, priest of the *apsu* of Nannar, servant of Dim-tab-ba', so that a connection between Dim-tab-ba and the terra-cotta ring *apsu* is possible.

Of the building SE of the boundary wall little remains. Two long walls running WNW by ESE (Squares C-K 6-8), with branches to the NE and with cross-walls at intervals, formed a series of small chambers of the long walls that to the SW seemed to be external—at least there were no branch walls on this side, while branch walls running out from the other three for a short distance to the NNE implied that the main part of the building lay here. The small chambers were originally paved and three of them contained pottery ring-drains; there was also a drain in the west corner of the central court on the NE. For the most part the walls have been ruined down to or below floor level, so that only their foundations remain; the door emplacements therefore cannot be distinguished and the character of the rooms remains uncertain. The room in Square H 7 however retained its burnt-brick pavement, the bricks being

those of Ur-Nammu, and on it were found many tablets dated to the reign of Ibi-Sin; in Squares E 7, F 7, there is again a brick pavement with a raised brick bench running along the side walls, and here the bricks bear the stamp of Bur-Sin, as do those of the enclosing wall; hundreds of tablets of the reign of Ibi-Sin were found on the pavement and on the benches. Unfortunately the brick-stamps both of Ur-Nammu and of his grandson give only their names and titles and say nothing about the building; but the use of royal bricks is quite enough to prove that the building is of a public and probably of a religious nature. The tablets, which cover only a short space of time and are the work of only a few scribes, are all temple records (these rooms with their bench-shelves were presumably the archive chambers) and so confirm the evidence of the stamped bricks.⁴⁷

It is safe therefore to conclude that to the SE of the Dim-tab-ba temple a second temple occupied, in the time of the Third Dynasty, the high ground outside the Temenos. Nothing helps us to identify the deity to whom it was dedicated. It was built by Ur-Nammu and restored or enlarged by Bur-Sin; completely ruined at the time of the Elamite invasion, it was rebuilt by the kings of the Isin Dynasty, but soon after their time, and also⁴⁸ after the sack of Ur by Samsu-iluna, the site was given over to private occupation. Hence the astonishing number of graves and drains which puzzled Taylor when he excavated here in 1854⁴⁹ and which have so cut up the older ruins as to make them almost unintelligible. Probably we should assign to the Third Dynasty, and perhaps to this temple or to that of Dim-tab-ba, the remarkable female head in white marble (U. 6782, UE IV, Pl. 43) which was found, actually in the Larsa debris, at the NW end of the site.

Other objects of the Third Dynasty period found loose in the soil of the EH site and therefore giving no accurate information as to its character may be enumerated here: U. 6001, a stone account-tablet of the 36th year of Dungi, dealing with issues of money, barley, sesame, thread, and dates; U. 6019, a clay cone of Ur-Nammu recording the digging of the 'canal of Ur', (UET I, 50; duplicates have been found at Diqdiqqeh); U. 6029, a fragment of a limestone statue shewing part of a flounced garment; U. 6335, a doorsocket of Gimil-Sin with fragmentary version of the text SAKI p. 200-c; also U. 6784, a dragon's head, cast in bronze, of doubtful date, Pl. 49n.

THE NIN-GISH-ZIDA TEMPLE

Underneath the temple of Nin-gish-zida built by Rim-Sin there were scanty remains which must be attributed to the Third Dynasty, though there are no inscriptions to confirm their authorship. All that we found were two parallel mud-brick walls from which project short piers or jambs, strictly aligned, and between them, equidistant from the two pier faces, the lower part of a column resting on a square base. The column is built of mud bricks specially moulded: circular bricks set one above another form the core, and round them are laid segmental bricks, eight making the complete circle; the column still stands four courses high (Pl. 33b).

It had long been assumed by archaeologists that the column was unknown in Mesopotamia prior to the Hellenistic period. For the early periods this belief has of course been amply disproved by the discovery of mud-brick columns dating to the Uruk period at Warka⁵⁰ and to the Early Dynastic period at Kish⁵¹; al 'Ubaid gave us the metal-clad and mosaic-clad wooden columns of First Dynasty date⁵²; the Third Dynasty column from the Nin-gish-zida temple is a valuable link between those early examples and the moulded 'palm-trunk' columns of Warad-Sin⁵³, and proves the continuity of the tradition in Sumerian architecture.

It is risky to discuss the plan of the building when so little of the plan survives, but it is impossible not to be struck by the fact that whereas we have no other instance in Mesopotamian architecture of a room being divided into two parts by a column set centrally between two piers attached to the side walls, this is a commonplace of palace architecture at Atchana in North Syria, a city which had contacts with Mesopotamia in the Early Dynastic period. Massive mud-brick columns are found at Atchana in that period, and in the 18th century the palace of King Yarim-Lim has the central column between piers, and so too has the 15th century palace of King Niqmepa. The possibility of a connection cannot be disregarded.

THE EN-KI TEMPLE

On the east side of the town, built partly upon the top of the Third Dynasty rampart (Squares LL-MM 54-55), was a temple of En-ki originally built by Bur-Sin, whose brick-inscriptions⁵⁴ occurred freely in the ruins.

A rebuilding by Rim-Sin, and subsequent rebuildings, had wrought such havoc on the Third Dynasty temple that even its ground-plan was indistinguishable; what little did remain will be recorded in the description of the Rim-Sin building in Vol. VII.

THE GIG-PAR-KU

The very large and important temple dedicated to Nin-gal seems to have been founded (or re-founded, since there were underlying remains of First Dynasty date) by Ur-Nammu; no extant walls could be identified as his, but no less than thirteen of his inscribed doorsocket stones were found in the building, and it is unlikely that all had been transported here from a different site, while the fact that Ur-Nammu gives the temple the same name⁵⁵ as it was to bear in later periods proves the case⁵⁶. Ur-Nammu's building was in mud brick and lasted only two generations; then it was replaced by a new building, also in mud brick, put up by his grandson Bur-Sin, whose name appears on the bricks of the pavements and with the name of the temple and the goddess, on a number of doorsocket stones found by us *in situ*⁵⁷. The ground-plan of the temple is perfectly preserved (Pl. 57), although its walls have been razed to the ground, because its next builder, En-an-na-tumma of the Isin Dynasty, used the old foundations throughout, so that his (extant) building is a replica of that of Bur-Sin. The Isin building is fully described in UE VII and the description would for the most part apply also to the Third Dynasty; here only one or two points having special reference to the Third Dynasty need to be put on record. In room 5 the wall of burnt brick facing the entrance was of Bur-Sin's date, the sole example of a burnt-brick wall in the temple of that period; his brick pavements were preserved in the long corridor contrived in the thickness of the NW wall, and in room B 20 where a number of clay tablets of Bur-Sin belonging to the temple archives were found on it. In room C 25, under the Isin pavement-level, there were found remains of votive offerings of which the most interesting was a fragment of a fine granite bowl (U. 6355), bearing an original inscription by Naram-Sin and a later dedication by Me-Enlil, the daughter of Shulgi⁵⁸. Bur-Sin's association with the temple was perpetuated in the Isin age by the chapel (v. UE VII) in room B 7 where there was set up on the bitumen-covered floor an oval-topped limestone stela, at the foot of which lay side by side two slender and finely-cut stelae of light gypsum ('Mosul marble'), face downwards and with their oval tops away from the standing stone (Pl. 34a); in the centre of the front face of the standing stone and on the lower face of each of the prostrate stelae was a roughly-cut inscription, intentionally defaced, giving the name and titles of Bur-Sin and his dedication of the building to Nin-gal. The stones must have been in the Third Dynasty temple, have been defaced by the Elamites when they sacked Ur, and have been rescued and set up in this fashion by the piety of En-an-na-tumma.

The examination of the remains of Bur-Sin's temple gave us some valuable information about methods of construction in early Sumer. The actual procedure was as follows. The site chosen had to be levelled, partly because of the existence of earlier ruins on it, and the best way of doing so was to make of it a low terrace; therefore a retaining wall was first built round the site, and within it, either by the destruction of the old buildings or by bringing in earth from outside, a fresh level was obtained. The surface of this was beaten hard so as to form a regular floor, and the platform, with its surrounding wall and its hard top, became a unity in itself, a sort of podium. On the floor was traced out the plan of the future building, but with this modification, that the walls were considerably thicker than was allowed for in the building design, and this plan was carried up in mud brick to a height of 1.35 m. Then fresh earth was brought in and heaped between the standing walls as high as their tops and rammed down; in other words, the foundations, instead of being sunk in the original soil, were built up above it and the soil subsequently brought up to their level. On these mud-brick foundations the walls proper were constructed, this time with the width allowed for in the architect's plan, and the brick pavements were laid over the rammed earth.

We can now turn to a description given by Ur-bau of Lagash (c. 2350 B.C.) of a temple, E-Ninnu built by him (SAKI 12, a). 'The ground', he says. "to a depth of (?) ells he dug out, its earth like fine stone he . . . (?) and like fine metal (silver) he . . . (?) with fire. In accordance with its proportions a great area he laid out, therein brought he its earth back again, the base (US) laid he therein. Thereover a substructure ten ells high built he: over the substructure the E-Ninnu whose name is "Imgi shineth" he built to a height of thirty ells.'

Clearly there is at least a measure of agreement between the description and our observations. The walls of the temple proper rest on a built substructure (*ki-sa-a*) whose height is one-third that of the superstructure (a valuable hint for any reconstruction of our temple), and the *ki-sa-a* is built upon an US which on our showing is the beaten floor of the platform; the space measured out for the platform, before it was filled up with earth and brought to a level, Ur-bau calls the *ki-dagal-la*; from evidence obtained elsewhere in the excavations we may say that the *ki-dagal-la* when walled and filled became the *temen* in the secondary sense of the work. The real difficulty comes

with the opening clauses of the description. The verbs used here in connection with the dug-out earth in other contexts imply some rite of purification by fire, and on that analogy the present text would mean that Ur-bau dug out the whole area, burned the earth so as to refine it like silver, and spread it again over the site — and at Ur we have found cases of early floors made of a red clay whose colour might possibly be due to burning. On the other hand the texts where purification is meant do not give the phrase 'like fine stone' and the verb here might be translated 'he hardened'; the mere burning of earth does not harden it but on the contrary renders it light and friable, so that the comparison with stone would seem altogether out of place; could not Ur-bau be referring to the making of bricks, their moulding and hardening in the sun (the sun-dried brick as a substitute for building stone), and their subsequent firing in the kiln? It is true that there are regular terms for brick-making which are not employed here, but if, as the similes of 'fine stone' and 'fine metal' suggest, he is employing poetical language to describe a commonplace act, then Ur-bau's text agrees remarkably with what we have found to be the methods of Bur-Sin. He first digs out earth, either from the whole of the proposed site or, more probably, from a trench all round it, which would take the foundations of the platform's retaining wall; this earth, mixed with water, is moulded into bricks which, duly fired, are used to build the wall, and so the *ki-dagal-la* is complete, ready for the earth to be brought in and the level surface of the UŠ to be laid. Such an explanation does not exclude any purification of the earth filling (indeed, it is possible that the two phrases in the text are alternative, not complementary, and that while some of the dug-out soil was employed for brick-making the rest was purified and used for filling-in), but where the meaning of a text is doubtful we must give due weight to any discoveries in the field which can possibly throw light upon it.⁵⁹

Of the objects found in the ruins of the Gig-Par-Ku we must attribute to the Third Dynasty the very fine female head (U. 6444, UE IV, Pl. 43) and U. 6409, a fragment from the stela of Ur-Nammu (Pl. 45b).

CHAPTER VII

E-NUN-MAḪ: GENERAL DESCRIPTION

Of all the buildings excavated at Ur, with the single exception of the Ziggurat, E-nun-maḪ has the longest and the most consistent history. Apart from such objects as clay tablets found in its ruins which merely prove that the temple was in use at a certain time, we possess actual building records of no less than thirteen rulers who either rebuilt or restored it. That its foundation goes back behind the Third Dynasty of Ur is certain, for fragments of walls and pavements in plano-convex brick (Pl. 30a) prove the fact, but of the character of that original structure nothing can be said. Ur-Nammu was responsible for the temple in its existing form; he built it in mud brick, or at any rate made much use of that material, and his work was added to and probably completed by his son Dungi. Bur-Sin replaced with burnt brick the mud-brick walls of his grandfather and Gimil-Sin added further details. The temple was completely overthrown by the Elamites on the occasion of the downfall of Ibi-Sin and under the Isin Dynasty was rebuilt by Gimil-ilishu, who faithfully followed the lines of the Third Dynasty ground-plan. Ishme-Dagan, Nur-Adad, and Sin-idinnam all in turn undertook repairs of its structure and Kudur-Mabug seems to have done some more radical restoration, but his building was destroyed by the Babylonians in the time of Samsu-iluna. It was probably restored after a fashion not much later, but the first actual record of its re-establishment is that of Kuri-Galzu; the Kassite ruler still kept to the original plan, but added a few new features. His building was repaired, without any noticeable alterations, by Marduk-nadin-aḫḫe in the 11th century B.C. Nebuchadnezzar was the first to tamper seriously with the ancient ground-plan; his reconstruction involved a complete change of character corresponding to a change of ritual in the temple services, and in the temple as he left it the old E-nun-maḪ is barely recognisable. Nabonidus repaired but does not seem to have modified his predecessor's work. Finally we find, above the Nabonidus level, remains of a further reconstruction which we can attribute only to Cyrus of Persia.

Obviously it is difficult to assign the existing ruins to any one date and impossible to distribute the description of them between different volumes of this series in accordance with a strict chronological scheme; the remains of no one period give a consistent and complete plan, and a vast amount of repetition would be required to make those of successive periods comprehensible. Since the building preserved down to the Neo-Babylonian age the character given to it by Ur-Nammu it is best to deal in this volume, under the heading of the Third Dynasty, with the original structure and all its many reconstructions prior to the Neo-Babylonian; and since Nebuchadnezzar's work resulted in the transformation of the building, that phase can fitly be reserved for Volume IX of this series.

The building was an almost exact square measuring some 57.00 m. in either direction; its angles were, as usual, orientated to the cardinal points of the compass. It was surrounded by a wall 2.70 m. thick strengthened by double buttresses, of which there were five on each side, and the area thus enclosed was raised to form a platform about 2.00 m. above the level of the ground outside; this wall is fairly well preserved on the NE (v. Pls. 28b., 29b), has suffered a good deal, and is partly masked by subsequent additions in the SE (Pl. 29a), could be traced only by its foundations on the SW, where the building has been remodelled, and on the NW it has been completely eradicated by a drain of Nebuchadnezzar. There is a doorway in the SE wall which, however, would seem to have led only into two small chambers having no communication with the rest of the building. In view of the denudation of the walls, which here do not rise above floor level, it is not possible to assert definitely that such communication never existed, but the facts that the wall between rooms 17 and 18 is continuous whereas in almost every other case the doorways can be distinguished even at this level (rooms 8, 9, and 10 are the sole exceptions), and that no hinge-box or doorsocket stone was found here, make the theory of a door hazardous. Probably the real entrance to the building was in the NW front.

Rather to the NW of the centre of the platform rises the sanctuary, a rectangle measuring 22.80 m. x 16.80 m., its outer walls relieved by simple shallow buttresses, with a single door in the middle of its SE side. It is a unit complete in itself, separated by a passage from all the other rooms inside the building. The door leads into a wide and shallow lobby, behind and on either side of which lie four chambers, all deep and narrow, two being side by side

behind the lobby with their doors in its NW wall, one along either extremity of the building with doors in the NE and SW walls of the lobby respectively. The sanctuary is therefore symmetrically divided into two parts, each consisting of two rooms. In the Nebuchadnezzar reconstruction wherein we have for the first time the details of the rooms preserved (the lines of the sanctuary building are unchanged), this parallelism is maintained in the furnishing; in rooms 4 and 5 similar altars occupy identical positions and rooms 3 and 6 are alike simply paved; it is reasonable to suppose that in the earlier periods, for which contemporary evidence is lacking, the two pairs of chambers resembled one another not less closely. The arrangement of the sanctuary for a doubling of the ritual observed in it would agree with the dedication of the building to two divinities, or at least to its use for the joint worship of Nannar and Nin-gal.

There are no open courts in the temple, such as are usual. The whole space between the boundary wall and the passage which surrounds the sanctuary is occupied by storerooms. It follows that there can have been no public rites celebrated here; on the contrary, the plan of the building manifestly aims at securing for the sanctuary the greatest possible degree of privacy, and the rooms of the sanctuary itself are so small that only the officiating priests could have attended the services in them⁶⁰. The seclusion of the ritual chambers, their difficulty of access, and the secret nature of the ritual are quite consistent with the double worship; the married quarters of the god may with even better reason than his sole dwelling-place be kept apart from the world.

That the long chambers surrounding the sanctuary were storerooms can for most at least be safely asserted; not only have they the normal proportions of magazines, but the tablets found in them bear ample testimony to their use; most of them deal with temple revenues and the receipt or issue of temple stores. In room 10 however there were tablets which mentioned the *sal-me* priestesses, and it is possible that some of these lower hierodules were housed within the precincts of E-nun-mah; but if so, the public rites connected with them must have taken place elsewhere, for here there could have been no passers-by, nor was there space for the rows of women whom Herodotus describes as paraded for prostitution in the temple courts of Babylon.

In the inscriptions of Sin-idinnam and Kudur-Mabug⁶¹ the building is called Ga-Nun-Mah 'the great and noble abode of treasure', 'the house of silver and gold'; Kuri-Galzu⁶² gives it what is probably its full title, E-ga-nun-mah, which is used also by Marduk-nadin-ahhe⁶³. Nur-Adad⁶⁴ calls it E-nun-mah, as does Warad-Sin⁶⁵. Nabonidus⁶⁶ calls it E-nun-mah, 'the strong-room' or 'the house of plenty'; and whereas the older dedications speak of Nannar only, Nabonidus builds it 'for Nin-gal his lady'. As a painstaking if not pedantic antiquary, Nabonidus is not likely to have introduced any innovation in so important a matter as the dedication of an ancient temple; the fact that he speaks of Nin-gal justifies us in holding that from the earliest time, while Nannar was master of his house E-nun-mah, he shared it with his wife precisely as the actual arrangement of the ruins would seem to imply⁶⁷. The description of the building as a 'strong-room' or 'noble abode of treasure' is a not unnatural comment on the prominence given in the plan to the storerooms and magazines which take up so much of its area; it does not at all conflict with the fact that it was essentially a temple. It is true that the plan is very different from that of the typical temple of Neo-Babylonian times, but that analogy cannot be expected to hold good for a structure dating back to the Third Dynasty of Ur. The design of the sanctuary as a self-contained unit isolated in the middle of the temple complex has at Ur a parallel in the temple of En-ki built by Bur-Sin and restored by Rim-Sin of Larsa⁶⁸; taken by itself, the sanctuary, with its deep and narrow shrine-rooms, is not anomalous, apart from the duplication which the worship of the two deities made necessary. It is unfortunate that the NW end of the building has been completely destroyed and can be restored only conjecturally: I have suggested (v. Pl. 53) a main entrance central to the facade, which is consistent with the character of the temple if taken by itself; but it will be observed that there is a gateway in the SE wall of the great Nannar courtyard, and it is quite possible that the entry of E-nun-mah fronted on this and that there was a closer connection between the two buildings than appears on the published plan. The courtyard with its range of storerooms could also have been termed a 'Ga-nun-mah', a treasure-house, and since both alike belonged to the Moon-god it is possible that while the great magazines of the courtyard housed the more bulky offerings brought as tribute to Nannar, the more precious objects were safeguarded in the chambers of the 'strong-room' E-nun-mah, and that a common register served for both buildings. The evidence of the tablets found on the two sites would be not inconsistent with such a view.

The temple has been so often destroyed and so thoroughly rebuilt that little of the work of any one author survives. Very often the workmen engaged on restoration pulled down the whole of the existing walls to their foundations, or if the brickwork was in tolerably good condition would leave one or two of its courses as a foundation for their own work and as a guide for the new bricklayers; consequently a wall as now standing may represent with almost every successive course a fresh reign (Pl. 31a), or on the other hand a late wall may rest immediately on the mud-brick foundations originally laid by Ur-Nammu.

Actually, of Ur-Nammu's work there remains very little more than the mud-brick foundations, together with some of his doorsocket stones re-used by later builders; only in the outer NE wall, a drain solidly constructed with burnt bricks and bitumen (Pl. 30b) was incorporated by Bur-Sin in his wall of burnt brick and continued in use

throughout the building's history. Bur-Sin's outer wall is still in one place standing as much as ten courses high; his inner walls are seldom represented by more than two courses of burnt brick, but of the two courses of mud brick laid by him as a foundation a good deal is preserved even where the burnt brick has vanished. Gimil-Sin is represented by doorsockets which, however, give the name of E-mu-ri-a-na-ba-ag and may have been brought in from the neighbouring building by some later restorer; it is in any case improbable that he did much work here. After the destruction by the Elamites the temple had to be completely rebuilt; doorsockets of Gimil-Ilishu and bricks and dedication-cones of Nur-Adad and of Sin-idinnam testify to the activities of the earlier Isin and Larsa rulers, and a loose brick of En-an-na-tumma, daughter of Ishme-Dagan, may mean that a certain amount of reconstruction was done in the reign of Gungunum, who is well represented on the tablets found in the ruins. It is difficult to understand why their repairs should have proved of so temporary a nature, but Kudur-Mabug expressly states that the temple was in ruins in his time, and he certainly embarked on a very comprehensive scheme of rebuilding. Most of the extant walls contain bricks of Kudur-Mabug and his dedication-cones are fairly numerous; moreover, there are certain features which originate with him. To the SW of E-nun-mah lay a Third Dynasty temple⁶⁹ E-mu-ri-a-na; Kudur-Mabug now united the two. He razed the massive SW wall of E-nun-mah and upon its ruins built a new and thinner party-wall with branch walls running out to the SW. The photograph on Pl. 31b shews a section of the SW wall with the Larsa brickwork resting upon the remains of the Third Dynasty building; the line of the later wall has been bent almost to the form of an arch, owing to the carelessness of the masons, who laid their bricks over a loose mass of discarded tablets; in the lowest of the courses there is a stamped brick of Kudur-Mabug⁷⁰ while the tablets (U. 2582,2586-89,2593,2601-03,2615,2623,2626-29,2660,2680,2681,2686-2690,2696-2700,2703-4,2712-13,3051-53), many of which belong to the same year, are nearly all dated between the 7th and the 15th years of Gungunum. They are account tablets of the temple, to which they refer as Ga-nun-mah⁷¹, and a number of them are signed by the same official, one Ba-sha-ilishu, receipts for offerings, mostly agricultural produce, brought to the shrine, or vouchers for issues from its stores. With the tablets there was a copper sword, U. 2592. This means that the ruin of the building described in Kudur-Mabug's dedication-cones had been so complete that even the archives of comparatively recent date had been scattered. It is not easy to see why or when this occurred; there was no foreign invasion of Ur during the eight years between the reigns of Sin-idinnam and Kudur-Mabug, and one can only attribute the disaster to an accident such as a fire, of which we found no evidence at all. The destruction of Kudur-Mabug's building by the Babylonian troops of Samsu-iluna is, on the other hand, in keeping with what then happened to the city generally; the residential quarters were laid waste, as is shewn by the dates of the tablets found in the houses, and the temples were burnt, as in the case of the Gig-Par-Ku where dated documents found in the ashes on its floor gave a continuous record which ended with the very year of the Babylonian king's victory. It is with this violent overthrow that we must associate the mass of broken *ex votos* which formed a bedding for the pavements of Kuri-Galzu's chambers. Below the floors of rooms 10 to 13 there lay hundreds of fragments of stone vases, a few of which were decorated with carvings in relief, and many of which bore inscriptions, the dedications of various kings, ranging from Sargon of Akkad to Rim-Sin, the last of the Larsa rulers. The offerings of the Agade kings must be connected with an E-nun-mah more ancient than that of Ur-Nammu, a building perhaps represented by the lower courses of mud-brick construction which, e.g., in the NE wall, intervene between the ruins of the plano-convex brick wall and the Third Dynasty foundations; they prove the existence of such a temple but do not help to establish the authorship of the existing remains. The fragments illustrate the extent to which the treasures of the Sumerian temples were museums of antiquities⁷². Together with the stone vases there were found examples of inlay in shell and faience which came either from the walls of the building or from its furniture; the shield-shaped pieces of faience are particularly interesting because they reproduce on a much larger scale the lapis-lazuli and agate pieces which in Dungi's mausoleum were inset in sheets of gold (v. Pl. 46e); these larger examples were fixed individually to their background, which may have been the actual mud plaster of the walls.

There is no evidence of any reconstruction of the temple after its overthrow by Samsu-iluna until the time of Kuri-Galzu. It is most unlikely that the site lay desolate throughout that long interval, and the absence of any tangible signs of earlier Kassite work is probably due to the thoroughness with which Kuri-Galzu prepared the ground for his own building. But he kept faithfully to the old lines; the exact position of some of the doors was slightly modified, a decorative buttress was added against the SE wall, really as a jamb for the door of E-mu-ri-a-na-ba-ag, but there were no radical changes. Stamped bricks found *in situ* and several doorsocket stones bear witness to his work, and in most places where there is burnt brickwork surviving, some of it is due to Kuri-Galzu. Of Marduk-nadin-ahhe we have three inscribed door sockets, all from the sanctuary block; nothing in the walls can be identified as his. In the filling of room 6 there was a single brick of the Assyrian governor Sin-balatsu-iqbi. The inscription states that he 'built anew E-lugal-galga-si-sa, the beloved house' of Nannar;⁷³ but whether this is another name for E-nun-mah coined or borrowed by Sin-balatsu-iqbi or whether the text refers to another building and the brick is here by chance, there is nothing to tell; there is at any rate no reason to suppose that the Assyrian altered in any way the ancient temple.

CHAPTER VIII

E-NUN-MAH: DETAILED DESCRIPTION

The Outer Walls

The NW wall, together with the north and west corners, has completely disappeared, destroyed by the great drain of Nebuchadnezzar which runs at a low level along the line where the wall must have been.

The NE wall

At the north end of the wall we cleared a pit which had been dug here by Taylor and laid bare a piece of pavement described by him. It was of kiln-fired plano-convex bricks (Pl. 30a) with two deep finger-impressions as frogs; it ran up against a wall, now standing 0.80 m. high, of plano-convex mud bricks which had apparently been used while still damp and were set in mud mortar of the same quality and colour as themselves; the whole formed a mass so uniform that we failed to distinguish the individual bricks and get their measurements. This method of 'green wall building', *i.e.*, of building with bricks not yet properly dried by the sun, is said to have certain advantages and is occasionally used by Arabs today. The plano-convex wall lies immediately below that of the Third Dynasty, which follows its line exactly; it would therefore seem that the pavement was exterior⁷⁴ and that the wall was the outside wall of a building exactly like that of the Third Dynasty, *i.e.*, that the latter is not a new foundation but a reconstruction on the original model of a much older temple.

On top of the plano-convex brick come two courses of mud bricks of blackish grey colour and then five courses of lighter grey mud bricks 0.23 m. x 0.15 m. x 0.075 m.; the two types would seem to be of different dates and are not quite in the same alinement. The wall face is plain, with no buttresses, but towards the north end (between the first and second buttresses of the burnt-brick superstructure) there is a vertical drain-shaft which is incorporated in the wall but projects beyond its face and has at its foot a stepped 'apron'; it is of burnt bricks set in bitumen mortar, and many of the bricks bear the stamp of Ur-Nammu (Pl. 30b). This must mean that the five courses of grey brick are also due to Ur-Nammu and that the wall as a whole was of mud brick. Above Ur-Nammu's work run two courses of mud bricks slightly reddish in tint, on which could be distinguished the stamp of Bur-Sin; these two courses, found over the greater part of the building, were a foundation for Bur-Sin's burnt-brick construction. In the second buttress, three courses of burnt brick at the north angle and one course along the front are of Bur-Sin (one brick at the north end bears his stamp). In the third buttress there are in the middle, at the base of the burnt brick, some bricks slightly projecting and not quite in alinement with those above, laid in mud, which are possibly older than Bur-Sin, whose bricks occur immediately above; in the recesses no Third Dynasty burnt brick survived. The existing wall has heavy buttresses with a double salient; the front of them is flush with the face of the mud-brick wall below; the actual wall line is accordingly set back. Only mud mortar is used. At the north end we dug into the wall from above; the topmost two courses were of Nabonidus, then seven courses of Kudur-Mabug, then the Bur-Sin mud brick; in the latter were disturbed remains of a burnt-brick foundation-box, empty, but shewing traces of copper sulphate in the soil which filled it. In the second and third buttresses (Pl. 31a) there is a noticeable break above the Bur-Sin bricks, the next course being set either a little back or a little forward from them; no stamped bricks were found here *in situ* but many of the fallen bricks had the name of Kudur-Mabug, and the measurements of those in the wall agreed with those. As a result of pressure from the inside, probably after the inner chambers had been filled with earth and the floor level raised by Nebuchadnezzar, the outer wall had given and leaned forward in a curve (Pl. 31a) which was purely accidental.

In the east corner the brickwork of the NE wall had been pulled up by plunderers looking for the foundation-deposit; the mud brickwork was disturbed in the upper courses, and in the loose rubbish which filled the hole was found a tablet dated to the first year of Gimil-Sin; tablets were found also against the wall face 1.00 m. below the level of the foundation. Since the burnt-brick wall starts 1.50 m. above the plano-convex brick pavement, there had been a rise in level of that amount between the Early Dynastic and the Third Dynasty periods, and the presence of Third Dynasty objects against the mud brick can be due only to disturbance, possibly at the time of the Elamite invasion. In what remained of the burnt brickwork the facing-bricks were of Kudur-Mabug and the core of the wall, which was of brick rubble, contained broken bricks of Ur-Nammu and of Bur-Sin; the hole made to get at the

foundation-deposit began below the Kudur-Mabug building, which was undisturbed.

Judging from appearances, the Kudur-Mabug wall had been deliberately razed to its present level (which agreed with the Kuri-Galzu level in the interior) and what now remains had served as a foundation for the Kassite work. Here there were found remains of mud-brick construction, and in the south corner of the outer wall such came immediately above burnt-brick courses of Kuri-Galzu; I concluded that in the Kassite reconstruction the walls were of mud brick on burnt-brick foundations, the latter being newly laid where necessary but the older brickwork sometimes being utilized without addition. It is however possible that the mud bricks, which were too weathered to identify, may have belonged to the Neo-Babylonian reconstruction and that Kuri-Galzu made a more liberal use of burnt bricks than I was inclined to allow.

The SE wall

The SE wall was very much ruined and in its centre all burnt-brick courses had disappeared. The cross-walls that abut on the SE wall and divide the 'Sacred Way' are of Kuri-Galzu; they rest on the pavement and are therefore an addition made by Kuri-Galzu for which there was no precedent in the original ground-plan. In the south corner most of the burnt brickwork bore the stamp of Kudur-Mabug, but in the uppermost surviving course was one brick of Kuri-Galzu and the bottom course was of bricks of Third Dynasty type set in bitumen, probably of Bur-Sin. At 0.75 m. below this there were in the mud brickwork remains of a burnt-brick foundation-box. The grooved buttress on the SE wall at its juncture with the (original) SW wall is an addition by Kuri-Galzu; its foundations are at pavement level and its lower courses merely abut on the main wall (Kudur-Mabug's work); it is incorporated with the wall only in its upper courses. The addition is connected with the building of the new temple E-mu-ri-a-na-ba-ag between E-nun-maḥ and Dublāl-maḥ; it serves as a door jamb for the new entrance; at the same time, Kuri-Galzu razed to floor level the SW wall of E-nun-maḥ and rebuilt it as a thin party wall without buttresses (Pl. 31b). The original wall therefore survives only below floor level and, even so, its face has suffered severely so that the two buttresses at the SE end were difficult to identify. The NW end of the wall was completely destroyed together with the NW outer wall.

The existing remains consist of a rectangular sanctuary block comprising rooms 2, 3, 4, 5, and 6 separated by a corridor (1) which runs all round it from the chambers which occupy the rest of the building's area; the latter form a solid range to the SE of the corridor, long narrow rooms lying NW x SE, and on either side of the sanctuary block are two chambers similarly disposed. The entrance must have been on the NW; the sanctuary was entered from the SE by way of the corridor.

In the corridor (1) there are no remains of any ancient pavement. In the NE section there is a line of mud brick across the passage continuing the line of the NW wall of the sanctuary, so that there may have been a doorway here, but no trace of burnt brickwork remains and the burnt brickwork of the angle of the sanctuary shews a true face. At a late period the SE end was blocked by a wall containing a doorway, the lowest course of whose brickwork corresponds to the fifth course of burnt brick in the side walls; the bricks, unstamped, looked rather like those of Kudur-Mabug, but if so they were re-used and the doorway is not likely to be older than Neo-Babylonian. The bricks in the side walls, 0.335 m. square x 0.08 m., bear a Kuri-Galzu stamp. In the SE section no sign was found of a cross-wall at the NE end shutting off a small room such as does occur at the SW end, but it is quite possible that such existed. In the SW section the SW wall was represented by the mud-brick foundations only.

The burnt-brick walls of the sanctuary were relieved by shallow buttresses and the bricks were laid in bitumen mortar; the mud-brick walls below were plain, without buttresses. In the NW wall were stamped bricks of Ur-Nammu, Kudur-Mabug, and Kuri-Galzu (the last 0.32 m. x 0.31 m. x 0.075 m.). Immediately below the lowest course of the mud brick of the SW wall, at its west end, was a plain bowl of white calcite, U 416, perhaps a foundation-deposit. Two broken mud bricks with the stamp of Bur-Sin were found in the SW part of the passage, probably coming from its destroyed SW wall; a fragment of a cone of Warad-Sin had no significance. Also there were found a broken copper drill (U. 410); the upper part of a limestone statue (U. 137, Pl. 46a) (found in the higher filling, but not of very late date); a fragment of a white calcite vase (U. 108) of Royal cemetery Type 91a; a miniature clay goblet, Type VII; a fragment of lapis-lazuli inlay perhaps representing hair (U. 139), and of an incised clay plaque (U. 366). There were also a number of clay tablets; all Sumerian accounts except for one Neo-Babylonian letter (U. 599)⁷⁵ which lay at a higher level.

Room 2

In the west corner there was in the core of the wall a brick with the Kudur-Mabug stamp; it was possibly re-used but is more probably original and dates the lower part of the wall to the Larsa period. The floor had disappeared, owing to the fact that the Neo-Babylonian floor had been laid at the same level in this as in the other rooms of the sanctuary. The room had been partly cleared by Taylor and had suffered severely from exposure since then.

Under the Neo-Babylonian pavement, against the inner side of the entrance door, there was a doorsocket stone of Marduk-nadin-ahhe.⁷⁶ Loose in the lower earth filling there were found a large oval blue paste pendant (U. 8335), an object like a spoon-bowl of white steatite (U. 8336), tablets (U. 534-6), and a crescent-shaped amulet of red pebble (U. 8334).

Rooms 4, 5, 6, 7, 8

In rooms 4, 5, and 6 the pavements had disappeared. The Neo-Babylonian walls were built with mud mortar, and rested on the stumps of the older wall (Kudur-Mabug) built with bitumen mortar, of which generally there survived four courses. The Neo-Babylonian pavement (two courses) rested on a layer of light rubbish, below which was a surface of beaten mud which might have been an actual floor but might have been only the bedding for a brick pavement; below this was a layer of mixed earth and broken brick which went down to the level of the bottom of the burnt-brick wall; then came a light-coloured layer of burnt-brick rubble, the builders' rubbish dating from the time of the wall's construction, and below that a filling of dark reddish sandy soil. The ordinary rule in good building is for the pavement bricks to be laid against the third course (or the fourth) of bricks in the wall; here therefore it is obvious that no trace of the early pavements would survive. They must have been above dark floor-like level of mud, and since the pavement level remained fairly constant throughout the building's history from the beginning until Nebuchadnezzar's reconstruction, the pavement of each period was pulled up to be replaced by its successor.

The upper mud bricks of the walls measure 0.35 m. square x 0.08 m. and are of a dark slate colour.

In room 5 there was found against the door a socket-stone of Marduk-nadin-ahhe. In the filling below floor level were found a few small mixed beads, some fragments of plain ivory, a stamp seal of red marble (U. 7915), a stamp seal of grey calcite (U. 7916, UE X. 16), another calcite stamp seal (U. 7917, UE X. 17), and a large agate bead (U. 7918); also a number of inscribed tablets,⁷⁷ mostly fragments of large account tablets, a few small business tablets, and part of a multiplication table (U. 8811-12).

In room 6 against the door from the entrance chamber there was an inscribed socket-stone of Marduk-nadin-ahhe.⁷⁸ In the lower filling of the chamber were an E-temen-ni-il cone of Ur-Nammu, a small boss of electrum framed in gold foil (U. 8851), and a few inscribed tablets like those in room 5; also a box-lid (?) of ivory decorated with a rosette (U. 7903), and a fragment of a cylinder seal (U. 7681). A cone and a brick of Kudur-Mabug (U. 7817, 7820) and a brick of Sin-balatsu-iqbi (U. 7824) were also found.

In room 7 were tablets and tablet fragments U. 585-9, 599, 600, 972, 974, 975.

In the filling of Room 8 were found five inscribed tablet fragments (U. 592, 597, 719).

Room 9

The inner walls are all built over mud brick. Of the burnt-brick walls there remain on the NW one course, on the SW four courses, on the SE seven courses, bricks 0.335 m. x 0.33 m. x 0.08 m.; mud bricks measure 0.33 m. square x 0.08 m. and there is a little rubbish between the two materials. Along the top of the SW wall runs a thinner and much ruined wall of mixed bricks, probably Neo-Babylonian; in the north corner the mud brickwork has been cut away to a clean end and a new angle of burnt brick inserted. Against the SW wall is a terracotta ring-drain (rings 0.27 m. high, diameter 0.40 m.) for the setting of which the mud-brick wall face has been cut back; the top of the drain is broken below the footings of the burnt-brick wall, so that its date cannot be judged by its level. By it were found a number of minute crystal and pebble beads and a few larger paste and stone beads (U. 152-53).

In the filling were found a clay tumbler (Type VI), half of a bead of black obsidian inscribed "(Ur-Nam) mu king of Ur" (U. 404), part of a stone vase lid with rosette and border pattern originally inlaid (U. 406), a miniature cup roughly made of drab clay (Type VII), and a number of clay tablets, these are contracts and two of them are dated respectively to the 7th and 9th years of Bur-Sin (U. 186,433) and one to the reign of Gungunum of Larsa (U. 3007); others were U. 338, 339, 340, 364, 365, 396, 399, 400, 425, 426, 441-446, 715.

Room 10

The NW wall at its north end was broken by a late (Nebuchadnezzar) drain. Against the SW wall was also a terracotta ring-drain, of older date. A floor of beaten earth 0.10-0.15 m. thick ran over the whole room, its top flush with the third course of burnt bricks in the wall, which was of Kuri-Galzu; it is more likely that the earth is the bedding for a brick pavement since removed than an actual floor surface. Immediately below the packed earth was a deposit of broken stone vases and sea shells, the bottom of the layer flush with the bottom of the burnt-brick wall foundations. Amongst the vase fragments were a lid of dark grey steatite decorated with incised double circles (U. 173), two with dedications by Ur-Nammu (U. 246,252), one with a dedication by Rimush (U. 263), one by Dungi (U. 269), and one by a priest of Nannar (U. 256). There were also a granite pick-head (U. 194); part of a stone hammer-head (U. 196); and numerous pieces of inlay, long pieces of white shell (U. 177) and shield-shaped pieces of faience (U. 225); further examples of both these types occurred in rooms 11, 12, and 13. In the north corner

were some clay tablets (U. 170, 171) of Third Dynasty date mentioning the *sal-me* priestesses.

Room 11

Against the corner of the SW door jamb, below all floor levels, there was found *in situ* a diorite doorsocket of Ur-Nammu (U. 423); also against the NW wall, on the level of the bottom of the burnt-brick wall, was a voussoir brick 0.40 m. x 0.17 m. x 0.07 m., lying loose. Over the whole room was a floor level (or pavement foundation) of beaten earth 0.10-0.15 m. thick immediately below which, in a well-defined stratum, were very many fragments of stone vases, a few large sea shells, many large flint nodules, a piece of a limestone seat, pebble rubbingstones and roughly squared or oval grindstones of sandstone conglomerate or loose-grained diorite; in the south corner were two (broken) clay vases of Type XXIII and with the stone fragments were other clay vases of Types II, XVIII, and XXIV. A fine model pick-head in granite (U. 195) and a number of loose beads (U. 199, 200) were in the debris layer, as also were pieces of inlay similar to those described under room 10, and others of white shell representing locks of animal hair (U. 192) such as are used for the goat statue from the Royal Cemetery,⁷⁹ a small shapeless piece of copper with an iron peg running through it, the feet of a small statue (U. 309), and a large number of clay tablets, all of Third Dynasty or Larsa date (U. 189, 205) — one was dated to the 17th year of Rim-Sin (U. 379).

The fragments lay thickest in the middle and at the NW end of the room; at the SE end there were very few, and the earth 'floor' above them was unbroken. In the SW wall stamped bricks of Kudur-Mabug occurred below the earth 'floor', so that the latter, and the objects below it, should have been put there at a later date. This agrees with the inscriptional evidence. Some of the stone vase fragments were decorated (*e.g.*, U. 281, 886, 996); others, *ex votos* from the temple, bore inscriptions some of which gave no names (U. 266, 268, 275, 276, 277, 278, 279, 281, 283, 285, 289, 880, 881, 882, 890, 908), while others gave the names of deities, *e.g.*, Nannar (U. 288), Nin-azag-nun-na (U. 287), or of private individuals, a priest of Nannar (U. 256, 271) or a patesi of Ud-Nin-Ki (U. 274), but more gave the names of kings who range in date from the Dynasty of Agade to that of Larsa. The earliest signed piece gives the name possibly of Sargon (U. 221); several that of Rimush (U. 206, 231, 232, 251); of Ur-Nammu (U. 208, 209, 249, 267, 270); of Dungi (U. 248, 280, a finely decorated and inlaid fragment U. 254); of Gimil-Sin (U. 247); of Ibi-Sin (U. 261); of Ishme-Dagan (U. 262); and of Rim-Sin (U. 223)⁸⁰. It is therefore safe to assume that the destruction of the sacred treasures dated from the sack of Ur by the troops of Samsu-iluna⁸¹; the fragments were piously buried under the new pavement laid down when the temple was restored.

Room 12

In the NE wall, in the second course from the bottom, is a stamped brick of Kuri-Galzu *in situ*; the lowest course is of bricks c. 0.33 m. square x 0.085 m. set in bitumen; these should be Bur-Sin. The second (Kuri-Galzu) course overhangs slightly, the bricks measure 0.0335 m., and there is no bitumen. Above the fourth course the mortar is thicker than usual and the fifth course again overhangs slightly; the bricks are a mixture of sizes, 0.28-0.29 m. predominating, with some 0.33-0.34 m. square, and a good many broken examples — this is the Neo-Babylonian wall. By the doorway in the NW wall, against the western jamb, was a diorite socket-stone of Ur-Nammu with the remains of the brick hinge-box standing five courses high (the top of it level with the fourth course of wall bricks). Across the doorway runs a single course of (broken) bricks forming a threshold flush with the sixth course of wall bricks. Against the northern jamb was a second socket-stone of limestone, uninscribed, its top 0.28 m. below the bottom of the burnt brick; probably it was the older of the two and the Ur-Nammu stone would seem to have been re-used in the Kuri-Galzu reconstruction. Across the room extended a 'floor' of beaten earth similar to that in rooms 10 and 11; below it were found fragments of stone vases, but not very many (*e.g.*, U. 405, 883, 884, 887, 892), and a number of clay tablets (U. 537-39, 731-36).

Room 13

Against the western jamb of the door in the NW wall (Pl. 32a) was a diorite socket-stone of Gimil-ilishu (U. 420; UET I, 100) which had been inscribed for the rebuilding of Dublāl-maḥ and has been re-used here probably by Kuri-Galzu. Part of the brick hinge-box survives as high as the fourth course of wall bricks (Pl. 32a) and the top of the stone is 0.30 m. below the mud floor level. In the doorway, on the level of the sixth course of wall bricks, there is a mud threshold which has been re-whitewashed several times; it is only 0.05 m. below the Nebuchadnezzar mud-brick step, and it does not seem to connect with the mud floor which extends over the room. The latter comes halfway up the fourth course of wall bricks, 0.40 m. above the top of the mud-brick foundations, and is of clean rammed brick earth 0.15 m. thick; below it is a layer of earth, broken bricks, ashes, etc., containing quantities of stone vase fragments, two steatite foundation-tablets (U. 219-20) of which the inscription has been intentionally defaced, a clay foundation-cone of Kudur-Mabug (U. 217, UET I, 123), four stone plumb-bobs (U. 235), part of a clay incense burner decorated with incised dot-filled triangles (U. 238), a gold lunate earring (U. 215), and a few

beads (U. 218); here, too, were a number of clay tablets, one (U. 433) of the 9th year of Bur-Sin, and others, all fragmentary (U. 166, 387, 397, 635, 706-07).

Room 14

(See Pl. 32b) Except at the NW end of the room virtually nothing of the burnt-brick wall survived. Against the western jamb of the door in the NW wall was a doorsocket stone, uninscribed, for the insertion of which the mud-brick wall has been cut back; part of the brick hinge-box remains and the mud floor can be traced running above the bricks of the box, from which fact one can conclude that the socket-stone belongs to the Kassite restoration. The mud floor, flush with the middle of the fourth course of wall bricks, was much destroyed; at the NW end there were traces of a brick pavement above it, for which it may have served as a foundation. There was a brick threshold across the doorway, and against the northern jamb a brick with a hole through it had been used as an impost for the door frame. Tablets found here included one dated in the 7th year of Gungunum of Larsa (U. 318).

Room 15

A cone of Nur-Adad (U. 327) was found against the NW wall, five courses below the top of the mud-brick wall. A good piece of stone inlay (U. 307), and some fragmentary tablets (U. 742) were found.

Room 17

There was a 'floor' of beaten earth flush with the lowest course of burnt brick; below it was found a clay cone of Nur-Adad. The doorway in the NW wall was confined to the burnt-brick construction and the mud brick is carried straight across the width of the chamber; but it is possible that there was in the early period a doorway above this foundation. At the SE end, where there is a doorway leading out to the 'Sacred Way', the remains are intricate; there are signs of an older doorway not in the same position as the later. In the photograph on Pl. 33a the letters denote the following: A-A are the mud-brick walls of the second period (Bur-Sin) and of Ur-Nammu; B is an uninscribed doorsocket belonging to the earlier door; C is part of the burnt-brick hinge-box associated with the stone; D is the broken edge of a pavement, apparently Third Dynasty; E is a doorsocket stone of Ur-Nammu (U. 422), re-used in the later doorway; F is the hinge-box of that stone; G-G are the jambs of the later doorway; of them the three lowest courses are of Kudur-Mabug and those above are of Kuri-Galzu; H is part of the threshold of the same door; I is the pavement of Nebuchadnezzar's court. The lines of the earlier doorway cannot be traced because the walls of that period have been razed, but the fact that there is pavement above the uninscribed socket-stone, running back over the mud brick, implies that there was here an opening with a threshold; the paving bricks here do not lie parallel with the wall and it may be that there was a drain through the doorway, running at an angle, which deflected the pavement. When the older socket was in use the wall line must have been set farther back, for the existing burnt brick comes right over it and would interfere with any pole set up on the socket; the hinge-box also goes right under the Larsa wall. Over the rest of the room there was no pavement, but on the level of the line of the bricks marked D in the photograph there is a distinct change in the filling; below it there is fairly clean brick earth, above it mixed soil and brick rubble. The pavement is necessarily older than Kudur-Mabug and the bricks are of Third Dynasty type. The brick marked H, coming at the end of the later door threshold, projects inwards from the wall face and has in its top a rounded depression; it must be an impost for the door. The threshold is actually lower than the foundation of the burnt-brick wall, and it is possible therefore that it represents not Kudur-Mabug but one of the earlier Isin or Larsa builders such as Nur-Adad; on the other hand the re-used doorsocket of Ur-Nammu, though it may at one time have been associated with the Larsa doorway, was certainly still in use in the Kuri-Galzu building. Tablets found were U. 376-80, 427-30, 451, 524, 547, 550, 590, 720.

Room 19

There were found here some lumps of molten bronze in one of which could be distinguished a broken axe-head; obviously scrap metal was being melted down for re-use. A few tablets also were found.

Room 20

In this room a brick of Ishme-dagan was found in the filling below the level of the burnt-brick walls; a fair number of similar bricks were found in rooms 21 and 22. On the level of the fifth course of burnt brick in the SW wall was a heavy stratum of ashes and rubbish resting on a floor of beaten earth 0.30 m. thick; underneath the floor were many clay tablets (U. 315, 323, 341-44); the earliest was dated to the 40th year of Dungi, one to the reign of Gimil-ilishu, one to the 25th year of Gungunum of Larsa, and one to the 2nd year of Abi-sare.

Room 21

Against the NW jamb of the door in the NE wall there was a doorsocket of diorite with a damaged inscription of Kuri-Galzu (U. 900); a few broken tablets were found (U. 388, 395).

Room 22

Against the NW jamb of the door in the NE wall, enclosed in its hinge-box, was a doorsocket of Gimil-Sin (U. 838, UET I, 80). In the filling was found a broken mud brick with the stamp of Kudur-Mabug and also in the filling was a very large inscribed stone duck-weight (U. 808). A doorsocket of Kuri-Galzu (U. 950) was not *in situ*, nor was a fragment of a clay cone of Nur-Adad (U. 335). On a fragmentary vessel of limestone was a dedication by Sin- . . . - uballit (U. 873). The tablets were U. 739, 740.

To the NW of rooms 23 and 24 all traces of the building had disappeared and a shaft sunk between those rooms and the Nebuchadnezzar drain failed to find even the foundations of walls. Below the level of the drain came hard-packed brick earth, artificially rammed, in which (at depth 2.00 m.) was found a late carnelian cylinder seal (U. 775, UE X, 611), proving that the layer was relatively late. From 2.20 m. to 3.20 m. was sand, and then a floor of grey clay thinly overlaid with white plaster, this connecting with First Dynasty of Ur levels found farther to the west. Below this was mixed soil going down to 3.80 m. and then clean sandy soil to 5.30 m. In the top levels SE of the drain and not disturbed by its construction were found a fragment of an inscribed diorite vessel (U. 874, unintelligible), a fragment of a small inscribed stone macehead (U. 985), and a considerable number of clay tablets (U. 381-86, 389-93, 540, 541, 737, 926-37, 951, 966-68, 979-81, 987) and seal impressions, the former including examples dated to the 3rd year of Gimil-Sin, the 6th year of Gungunum, the 2nd year of Abi-sare, the 22nd year of Sumu-ilum, and to the reign of Samsu-iluna; one seal impression was that of A-ab-ba, son of Enannatum, priest of Nannar, perhaps the Enannatum who built the Gig-Par-Ku in the reign of Gungunum.

A certain number of objects were found either against the walls of the building, at a low level, or in the rubbish which overlay its ruins. A roughly made cup of reddish-drab clay with a pierced base (Type IV) seemed to belong to the Kuri-Galzu stratum; stone vase fragments with inscriptions (fragmentary) of Rimush (U. 1167) and Dungi (U. 296) and of an unknown dedicator, an inscribed fragment of a statue in diorite (U. 744), a fragment in dolerite of a wig (?) for application to a statue (U. 176), a shell amulet in the form of a demon's head (U. 233), cylinder seals (U. 167 decayed; U. 234, UE X, No. 217; and U. 790), a plumb-bob (U. 835), seal impressions (*e.g.*, U. 574-84, 3255), and tablets, complete or fragmentary, including examples dated to the 8th year of Bur-Sin and the 2nd year of Abi-sare (U. 373, 724).

The Sacred Way

To the SE of E-nun-maḥ ran, in the Larsa period, a broad paved way which led from the Temenos wall on the NE through a double gateway into the courtyard of Dublal-maḥ on the SW; it was bordered on the SE by another religious building of which there remains little more than the buttressed NW wall and the stumps of a few cross-walls, the greater part of the interior having been denuded. At the NE end there is no pavement left; where it is preserved the occurrence of a few stamped bricks of Kudur-Mabug justifies the attribution of the work to him, but presumably there had been paving here in the time of the Third Dynasty (a brick of Bur-Sin occurs in the second gateway pavement). Two sets of cross-walls forming double gateways divide the Sacred Way into a succession of open courts; these walls abut on that of E-nun-maḥ but are bonded in to the boundary wall of the temple to the SE. The outer NW wall is more solid than the rest and is dignified by external buttresses; it aligns with the NE wall of the temple to the SE of it. The foundations of the cross-walls are shallow; the three lowest courses are better built than the upper and are probably due to Kudur-Mabug; in the SW wall of the second doorway there is a stamped brick of Kuri-Galzu which should identify the six upper courses as his, and a second of his bricks was in the upper part of the inner wall of the NE gateway; the inscription records the restoration of E-gish-shir-gal. It is noticeable that the outer wall of this NE gateway was originally plain and the buttresses were added at the time of Kuri-Galzu's reconstruction. At a much later period the door passages were blocked, but it is possible that the rough brickwork found lying across them was really only the raising of their thresholds to correspond to a general rise of floor level; there are remains of rough paving a little above the level of the Kuri-Galzu wall bases, and there were traces also of a clay floor 0.50 m. above the Kudur-Mabug pavement, in connection with which was a roughly made surface drain running through the SW gateway; a patch of brick pavement at the same level was found in the SE end of the outer gate-chamber.

In the outer gate-chamber, NW of the entry passage, there was no paving, but the space was occupied by a platform consisting of three courses of mud brick with burnt brick above; SE of the passage there was a bench against the NE wall; judging by their level, which agreed with that of the re-facing of the south corner buttress, platform and bench are the work of Kuri-Galzu. Above the platform in the NW guard-chamber there was a heavy deposit of burnt wood, the remains of beams and planks which undoubtedly formed the roof; the double doorways therefore were roofed and the deep recesses at either side of them can be called guard-chambers. Under the burnt wood were found two copper runnels, troughs rectangular in section, 0.055 m. high, and 0.055 m. wide, and 1.20 m. long, originally encased in wood, which were probably roof gutters.

The next court was paved throughout with Kudur-Mabug bricks. At 0.80 m. above it was a floor of beaten mud

which ran right over the temple wall along the SE of the Sacred Way and across its branch walls; that temple therefore was destroyed by the time the mud floor was laid down. Then came a layer of water-laid soil and rubbish. At 1.30 m. above the pavement was a second mud floor, once with a white lime surface, on which rested a layer of burnt ashes; it was apparently Neo-Babylonian.

Through the passage of the second double doorway there ran, in the Kudur-Mabug pavement, a covered drain which communicated with a vertical ring-drain going down to a sump pit below the central court; at 0.60 m. below the pavement there were remains of an older brick pavement, presumably of the Third Dynasty, in which also was a covered drain emptying into the same pit.

In the north corner of the central court was found a small fragment (U. 305) of the stela of Ur-Nammu shewing the top of a ladder with the feet of a workman on it — part of the scene of the building of the Ziggurat (v. Pl. 45 and p. 80). With it there was another fragment of limestone relief (U. 304) giving the figure of a man milking a cow; it does not, apparently, belong to the same stela though it is similar in style and may well be of the same date (Pl. 45f). Against the outer wall of E-nun-mah, in the NE door recess or guard-chamber, there lay in the burnt wood stratum a copper spade blade (U. 190). Other objects found in the Sacred Way were as follows: the blade (broken) of a cast bronze adze (U. 226) found in the second guard-chamber; a wig (U. 512), carved in silhouette in black stone for an inlay figure, a delicate piece of work 0.035 m. high, found near the drain in the central court; a whetstone of coarse limestone (U. 513); a shell eye for inlay in a small statue; a black steatite spindle whorl; a lump of red ochre paint; clay pots of types V and XXVIII; a white marble gaming-piece (U. 604); and a number of tablets. Amongst the latter were specimens dated to the reigns of Ibi-Sin, Gungunum, Sumu-ilum (11th year), and Kashtiliash (4th year). A large hoard of tablets dated to the reigns of Gimil-ilishu and Ishme-Dagan was found close to the outer face of the SW wall of E-nun-mah (U. 118, 336-37, 346-63).

CHAPTER IX

E-GISH-SHIR-GAL: THE TEMENOS OF UR

The Ziggurat with its separate terrace crowded with buildings, and the great Nannar courtyard, both described in Volume V of this series, E-nun-mah and E-hur-sag, described in the foregoing pages, the Gig-Par-Ku founded by Bur-Sin and rebuilt by Enannatum (see UE VII), Dublal-mah (see UE VIII), and another large building now completely destroyed, formed the complex of religious structures dedicated to the service of Nannar; they stood apart from the other buildings of the city and the area which they occupied was known as E-gish-shir-gal, the Temenos of the Moon-god. It is probable that from very early times the Temenos was thus distinguished and surrounded by a wall; certainly this was the case from the beginning of the Third Dynasty until the final desertion of the city; for the greater part of that time the lines of the Temenos remained the same, and it was only in the Neo-Babylonian period that they were seriously modified. The changes made by Nebuchadnezzar were indeed so radical that the description of his Temenos can be left over for Volume IX of this series. The remains of the earlier periods are so partial and so intricately connected one with another that the description, to be intelligible, must deal with all at once, for only in the light of Larsa and Kassite rebuildings can the character of the Third Dynasty work be made clear, and the former would be meaningless if taken apart from the original structure of which they are but new editions.

Ur-Nammu's Temenos consisted of a rectangle measuring some 250.00 m. by 200.00 m. lying NW by SE, from the SE side of which projects a smaller rectangle some 75.00 m. by 95.00 m., whose NE front continued that of the main enclosure; this SE annexe was destined to include the E-hur-sag building. E-hur-sag, E-nun-mah, and the Gig-Par-Ku were on the same level, a platform raised some 4.50 m. above the level of the town outside to the NE and NW of the Temenos; the Ziggurat rose from its own higher terrace, the Nannar courtyard was sunk about 1.00 m. below the E-nun-mah level; but while the terracing was in part accidental, due to the fact that Ur-Nammu's buildings overlay the ruins of many older temples, there would seem to have been a deliberate intention to emphasise the dignity of the Moon-god's enclosure by raising it above the buildings nearby. Only on the south, where had been the oldest settlement of Ur, the piled ruins of antiquity rose higher than the Sacred Area; the temple of Dim-tab-ba and the houses to the south and east of it actually looked down on the Temenos; but on all other sides it was the Temenos wall that dominated the city.

Standing in relation to the walled town much as the keep of a mediaeval fortress stood to the outer bailey, the Temenos, a natural focus for the ultimate defence of Ur in time of war, was enclosed by massive fortifications. The remains of these are the subject of the present chapter.

The platform of Ur-Nammu's Temenos was contained by a heavy wall of mud bricks (0.23 m. x 0.15 m. x c. 0.09 m.) faced with burnt bricks, the face sharply battered and relieved by shallow buttresses. This rose to the level of the platform floor; where buildings rose directly from the wall's edge, as was the case along the SW side with the Ziggurat terrace and the Gig-Par-Ku temple, there was no need to carry the wall up higher; where it enclosed an open space it was capped by, apparently, a double wall of mud brick enclosing intramural chambers; they would be magazines for military stores, and their flat roofs would afford a vantage ground for the troops of the defence.

It is only on the SE front of the E-hur-sag salient that the wall is at all well preserved. The burnt-brick facing is in good condition and stands to a height of 1.50 m.; the bricks bear no stamp but are characteristic of the Third Dynasty. Along its top runs a wall of mud bricks which are not those of Ur-Nammu but belong to one of the Larsa kings; it is however fairly safe to assume that they would be but a reconstruction following on the lines of older work. Cross-walls shew that there were intramural chambers of which the NW wall has disappeared, and one of them would seem to have enclosed the well described above on p. 36. Outside the wall there was a roadway or open space the surface of which lay 1.50 m. below the level of the platform; under it run two brick-built drains or conduits (they are built with bitumen mortar and the inside is proofed with bitumen) leading from SW to NE; one is of Dungi, the bricks bearing the E-hur-sag stamp, and the other of Bur-Sin; both were broken away at either end and their connections were not traced. Both ends of the wall itself also are broken away. At the NE end it was followed as far as the foundations of Nebuchadnezzar's Temenos wall, which here lie very deep, and there it stopped, apparently destroyed by the Neo-Babylonian builders. At the SW end it had been deliberately destroyed and there remained of it only a heap of loose and broken bricks — here the object had been not the clearing

away of ruins to accommodate a new construction but the dismantling of the Temenos defences. The angles of the salient therefore were lost, but it is evident that the SW breach marked the angle and that the wall from here ran NW just outside the line of the SW wall of E-*hur-sag*; it was excavated only against the west corner of that building, but this was enough to establish its direction. From here it turned again SW to include the Gig-Par-Ku.

The SE wall of the Gig-Par-Ku rested on a solid mass of mud brickwork, the bricks being those of Ur-Nammu, which ran out from the wall's face for a distance of 8.00 m. and ended in a slightly battered vertical face which went down for a depth of 3.00 m. From the platform edge the rubbish lying against the brickwork ran down at a violent angle; it contained numerous fragments of burnt bricks of the Larsa period (bricks from the wall of En-an-na-tumma's temple) which proved that as late as the close of the Larsa period, when that temple was destroyed, the front of the platform was still exposed and the low-lying area at its foot was still open. But the mud-brick wall (Pl. 38a) was not what we should expect of the Temenos wall of the Third Dynasty and in fact, although it was unbroken, it did not boast of a true face; there was over it a thick mud plaster, but the surface of this was rough and unfinished and the face instead of being a uniform slope from top to base was at two points stepped out, each time by about ten centimetres, so that the wall face as a whole gave an angle much sharper than that of its three separate sections. It was quite clear that there had originally been a casing of burnt brick which had been removed; only so could we account for the present appearance of the mud brickwork. The horizontal steps in the latter were intended to afford better support to the burnt-brick skin, and if the latter were slightly thicker at the base than at the top and were provided with buttresses it would reproduce exactly the well-preserved length of wall SE of E-*hur-sag*. That it was the core of the Third Dynasty Temenos wall admitted of no doubt; its character, its position, and the levels inside and outside it, made that certain; but here, as in several other cases, Ur-Nammu's work had been used as a brick-quarry by later builders⁸² and only his mud bricks remained *in situ*.

The south angle of this mud-brick core could not be found, but to the NE it was followed partly by cross-trenches and partly by continuous excavation until a little beyond the east corner of the Gig-Par-Ku there was found running out from it at right angles a very heavy wall of Third Dynasty mud brick capped with the foundations of a wall, also very thick, constructed with burnt bricks of the Larsa period; the foundations started at platform level and were stepped sharply down to the SE. Beyond this, to the NE, there was shapeless mud brickwork for a space of 11.00 m. and then a second return to the SE, this being the wall of the E-*hur-sag* salient, again capped with Larsa foundations of burnt brick, also stepped down to the SE by the cutting away of the mud bricks; the remains here were very rough and fragmentary and there was no true wall face. That we have here the re-entrant angle of the salient is certain, for it comes right up against the SW wall of E-*hur-sag*; outside the latter there ran a narrow terrace, 7.20 m. wide, which was really the top of the Temenos wall, and this was paved with burnt bricks of Dungi, many of which were found in position. The outer projecting wall, parallel to this branch of the Temenos wall, is not so easy to explain. The space between them was largely filled with mud brickwork, and behind it, on the top of the platform wall and for a little distance back onto the platform, there were Larsa burnt bricks which appeared to belong to the foundation of some structure whose outlines had been completely lost. I imagine that we have here an entrance to the Temenos. That there was an entrance on the SE side is made not unlikely by the existence of a gateway in a not dissimilar position in the Temenos wall of Nebuchadnezzar; there could not have been an entrance farther to the SW, as there the wall of the Gig-Par-Ku rises directly from the top of the wall, and yet the SE doorway of the Gig-Par-Ku does seem to require a gateway in the Temenos wall not too far away. There was no entrance on the SE side of the E-*hur-sag* salient, so that this space between the two buildings appears the only place available. Any entrance would have to be in the form of a staircase or a ramp, in view of the difference of levels inside and outside the Temenos, and the stepping-down of the Larsa burnt-brick foundations suggests that this is the balustrade wall of such; the burnt brick foundations on the wall top might be those of a doorway; from the door a paved terrace, bordered by the breastwork which must have crowned the Temenos wall, led to the left to the entrance of the Gig-Par-Ku and to the right to that of E-*hur-sag*, while a central path may have led almost straight to the Ka-gal-mah⁸³ which was the gateway of the Ziggurat terrace.

The SW wall of the Third Dynasty Temenos was found at three points. Towards the SE end of the Gig-Par-Ku there is in the enclosing wall of that temple a vertical drain, built by Ur-Nammu, by which the water from the roof of the building was carried away; at the bottom of the shaft there was an opening below which was an 'apron' of burnt bricks and bitumen leading to a horizontal channel along which the water would run to, presumably, another vertical shaft in the wall of the Temenos. Unfortunately that wall had here been cut into by a great pit sunk from a (later) higher level, a pit in the sides of which were contrived the furnaces of some industrial works, and both drain and wall face had disappeared. We were however able to trace outwards from the foundation of Bur-Sin's temple wall the mass of characteristic Ur-Nammu mud brick whereon it was based, until this fell away in a rough slope which gave not indeed the true face but the approximate line of the Temenos wall front. Between the Gig-Par-Ku and the Ziggurat terrace, a cross-cut laid bare a very badly ruined platform of Ur-Nammu's mud bricks, which again fell away in a rough slope having no true face and no remains of its burnt-brick revetment. Beyond the line of the NW side of the Ziggurat

terrace, deeper digging than could be done below the SW face of the Ziggurat itself gave us the west corner of the Temenos wall. Again, its Third Dynasty burnt-brick revetment had disappeared, but behind the Larsa face of burnt brick the mud brickwork mass of Ur-Nammu was unmistakable, and its battered front carried on precisely the line already traced from the south corner of the Gig-Par-Ku.

The wall of the Gig-Par-Ku rose almost directly from the top of the sloped face of the Temenos wall; the latter was really no more than a rampart, the wall proper being that of the temple, and the narrow platform dividing them was presumably here, as against the E-*hur-sag* temple, a brick-paved open passage. But between the top of the sloped Temenos wall and the foot of the Ziggurat there is a space of about twenty-two metres width, in which no remains of Third Dynasty work were found. On the other hand, we do know that in the Kassite period the chambered wall of the Ziggurat terrace, eleven metres wide, ran along through this area, its front some sixteen metres from the foot of the Ziggurat; also, Kuri-Galzu's wall was but a reconstruction on virtually identical lines of the earlier Larsa system⁸⁴; an internal staircase at the west corner shewed that the flat roofs of the intramural chambers made a defensive platform along the wall top, accessible from the Ziggurat terrace. It is fairly safe to assume that the same arrangement held good in the period of the Third Dynasty. Between this supposed terrace wall and the front of the wall of the Temenos there was still a space of something between five and eight metres⁸⁵, which would seem to be too much for the simple passageway such as we have against the E-*hur-sag* temple; perhaps therefore, there was here a parapet wall or breastwork along the edge of the sloped retaining wall of the Temenos.

The western corner of the Temenos enclosure is marked by a re-entrant angle. The burnt-brick face of Ur-Nammu's wall had been removed and replaced by a revetment of Larsa bricks, but the mud-brick core remained and there could be no doubt but that the later form was a faithful reproduction of the earlier. This was indeed the case for the whole of the NW wall; little but the core of the Third Dynasty structure survived, but there was enough to shew that later builders had followed the same lines. The full description of the later work will be given in the appropriate volumes of this series, but since it is only in the light of that later work that Ur-Nammu's building can be understood, the combined plan is published here (Pl. 61) and a few words of description are necessary.

What we have is a range of chambered buildings occupying the greater part of the front of a lower terrace outside the terrace of the Ziggurat and separated from the wall of the Ziggurat terrace by a passage some five metres wide. The range is divided into five sections, marked A to E on the plan. From the re-entrant west angle of the Temenos enclosure, Section A shows two rows of chambers separated by a narrow corridor; the outer row is set back 3.00 m. from the Temenos wall proper, which is of Larsa brickwork, whereas all the chamber walls are Kassite; scanty remains at the NE end indicate that in the Larsa period there had been buildings here but on a different plan. Section B is distinguished from Section A by having buttresses on the exterior faces of its SW and NW walls; it was therefore a separate entity. In the Kassite period the chamber system of Section A is continued across this building, but in the Larsa period it had contained only three rooms whose axis runs in the reverse direction, from NW to SE. Section C, set back 3.00 m. from the frontage line of the two former sections, has a plain front wall but external buttresses on its SW and NE walls, *i.e.*, it was a separate unit with Sections B and D abutting on it but constructionally distinct; all its internal walls are of Larsa date. Section D (the whole of the interior of which is Kassite only) continues the frontage of Section C against which it abuts; its NE wall is relieved by buttresses and is the end wall of the long salient formed by Sections A-D; the Temenos wall here is set back 13.00 m. and runs in a straight line to a point just beyond the north corner of the great Court of Nannar, showing a buttressed face throughout.

In Section A the mud-brick core of Ur-Nammu's Temenos Wall was found behind the Larsa burnt brickwork of the re-entrant western angle; otherwise there was nothing. This was because we were not prepared to destroy the well-preserved Kassite chambers occupying the site and therefore did not dig down to the Third Dynasty level where, at most, a mud-brick surface would have rewarded us; there was therefore a gap of over 80.00 m. and then, under the Larsa chambers of Section B, the Third Dynasty work recurred, a mass of mud brickwork whose surface sloped down irregularly to the NW. This brickwork came right up against the Larsa retaining wall of the NW front and had obviously been trimmed back for that revetment to be added, but not a great deal need have been cut away and the Third Dynasty frontage was probably much the same as that of the Larsa restoration. It is likely that on the fall of the Third Dynasty the Elamites dismantled the inner fortifications (which is what the Temenos wall can fairly be called) by pulling away all the burnt-brick facing, and it was that that had to be restored by the Larsa kings. But their efforts were mainly directed against the front of the wall line, and in the angle between Sections A and B there is evidence of this, for on the SW side of Section B Ur-Nammu's burnt-brick facing is preserved to a height of over two metres at the back corner, sloping away to nothing at the front. There is a well-built foundation with double offset (Pl. 34b) from which rises the wall proper relieved with shallow buttresses, quite in the style of the Ziggurat. In the next section, C, came the set-back in the Larsa (and probably in the Third Dynasty) building, and the unbuttressed facade wall of this is continued by that of Section D running NE. Here, beyond the later burnt-brick facing, there is the same mass of mud brick which in front is weathered or cut to a pronounced slope but has its back face well preserved (Pl. 35). The mud bricks measure on the average 0.24 m. x 0.16 m. x 0.08 m., a normal Third Dynasty measurement, and the

manner in which they are laid is curious and typical of Ur-Nammu's construction, being found also in the Ziggurats both of Ur⁸⁶ and of Warka: there is a course of bricks laid flat as stretchers, then one of headers set on edge—vertically, not sloped herringbone fashion—, a horizontal course, another course of headers on edge, and above this six courses laid horizontally. The total width of the wall is approximately 8.00 m. the back face being well preserved under the Kassite rooms D 1 and D 3, but its top surface and any buildings that may have stood upon it had been completely swept away.

Where Section D sets back to the Section E frontage line the burnt-brick face of Ur-Nammu's Temenos Wall was again preserved below the Kassite brickwork which followed its line. It consists (Pl. 36a) of a foundation of seven brick courses, plain, unrelieved by buttresses and projecting 0.25 m. beyond the true wall face; the wall rising from this foundation is relieved by buttresses 2.25 m. wide and 0.18 m. deep and is built with a batter not so pronounced as that of the mud-brick wall of the Ziggurat terrace but apparently the same as that of the Ziggurat itself. The bricks are reddish in colour and measure 0.32-.33 m. square; no brick-stamps were found, but in colour and size the bricks are identical with those bearing the Ur-Nammu stamp which form the casing of his well on the SE side of the Ziggurat Terrace⁸⁷, they are the same also as those in the battered and buttressed wall along the SE side of the E-*hur-sag* salient. The wall turned again to the NE, its front now concealed behind the later revetments of Larsa and Kassite times (Pl. 36b). The latter, and presumably therefore the Ur-Nammu wall also, made a fresh angle just beyond the north corner of the great Nannar Court, an angle which we took to be the north corner of the Temenos.

Between the sloped and buttressed wall which supported the raised terrace of Ur-Nammu's Ziggurat⁸⁸ and the outer edge of his Temenos Wall, the distance was about 25.00 m. While there is every reason to think that an open path ran along the foot of the Upper Terrace wall, it is equally probable that on the other side of the path there was a range of buildings more or less corresponding to those of the Larsa and Kassite periods. That analogy is indeed rendered virtually certain by the offsets in the frontage which are reproduced in the Larsa buildings and can be explained only in the light of them. The outstanding feature of the Larsa buildings is this: Section C has buttresses on its SW and NE walls, and since such are peculiar to external walls these must have been visible, rising above the buildings which abut on them. But those buildings, Sections B and D, also have buttresses, Section B on its outer SW wall⁸⁹, and Section D on its outer NE wall; these therefore were external walls rising above the abutting buildings, where such existed, as they seem to have done in the case of Section A⁹⁰. Along Sections A and E there were presumably walls with intramural chambers such as I have assumed for the line SW of the Ziggurat; Sections B and D rose higher, being probably of two storeys, and Section C was the site of a yet higher building; it is tempting to suggest that this was a gate-tower giving access from outside to the Lower Terrace of the Temenos and thence, by the great gateway which Warad-Sin elaborated into a fort⁹¹, to the Ziggurat terrace.

For the NE wall of the Temenos we have very little to show. Section E of the NW wall ended, as has been said, in an angle assumed to be the corner of the Temenos, but beyond this point we found nothing. It is of course possible that there was here a re-entrant angle like that at the west corner and that the true corner lies somewhat farther to the NE, but it is more likely that this is itself the corner. A line from here drawn at right angles just clears the facade of the great Nannar courtyard, whose wall would therefore rise directly from the lip of the Temenos wall, as was the case with the walls of E-*hur-sag*, the Gig-Par-Ku, and the SW wall of the Ziggurat terrace while E-*nun-mah* would be set slightly back from it, as was the SE wall of E-*hur-sag*; a very slight deflection of the line would bring it to the point where the SE wall of the E-*hur-sag* salient of the Temenos has been broken away, presumably at or close to the east corner of the enclosure. The deflection in the line might well be caused by a Third Dynasty gateway corresponding in position to the "Cyrus Gate" in the Temenos wall of Nebuchadnezzar, but the evidence for this was distressingly scanty.

The whole area within the Temenos between the Gig-Par-Ku and the "Cyrus Gate" in the Neo-Babylonian periphery was terribly denuded; over the greater part of it there remained nothing whatsoever of the Third Dynasty. Just inside the "Cyrus Gate", in Squares Y 37-38, Z 37-38, excavation did bring to light certain ruins, but they were so incoherent and of so many periods that it is impossible to unravel their meaning and all, except the prehistoric, will here be described together.

Inside the gateway and parallel with the Neo-Babylonian wall line there was a stretch about 40.00 m. long of mud-brick walling. It was 2.50 m. thick, built of mud bricks 0.32 m. square; on its NE face were three buttresses of which the central one was small and shallow and those at the ends, which may have been corner buttresses, larger and with a greater salient; so far as preserved it was symmetrical, but it was impossible to say whether or not it had originally run further in either direction. It had no branch walls, and the two thinner walls which crossed its line at an angle were not connected with it but were older and had been cut away for its construction. Judging from the character of its brickwork and its relation to the Neo-Babylonian Temenos wall, it may well be the work of Sin-balatsu-iqbi and perhaps part of a Temenos wall constructed by him; on the NW side of the Temenos we find traces of what seems to be a Temenos wall of Sin-balatsu-iqbi lying just inside the line of Nebuchadnezzar's wall. The two cross-walls already mentioned did not appear to be much older than the wall which had destroyed them.

Behind and on the line of this wall, in Square Z 38, there were scanty remains of houses of which no more could be said than that they were apparently Kassite; they had paved floors and wall foundations of burnt brick, but the ruins were too disconnected to afford a ground-plan. They too had been destroyed by the Assyrian (?) wall.

In Squares Y-Z 37 there remained a short section of a wall whose orientation agreed with that neither of the Assyrian (?) wall nor of the Kassite houses. It was 3.50 m. thick, built with outer skins of burnt bricks and a mud and rubble core; only the foundation courses survived and of them most of the face had disappeared, especially on the NE side, so that its original character could not be fairly judged, but here at least the burnt bricks employed were of mixed types and many of them were broken. Since none of the bricks were definitely late in date it seemed safest to attribute the wall to the Larsa period; the method of building is common to that and to the Kassite age, but in favour of the earlier date is the orientation, which agrees with that of the Third Dynasty building and not with the Kassite in the immediate neighbourhood (namely, the houses in Square Z 38) although it would fit with the Kassite remains in Square Y 38.

To the SW of this come walls of the Third Dynasty. In Square Y 37 there are shewn on the ground-plan (Pl. 53) two parallel walls close to one another; of them the NE wall is that of the building proper, the SW apparently a retaining wall only.

In the middle of the square (Y 37) there was a pit filled with rubbish; its SE side was cut in the hard soil and was irregular in line but fairly perpendicular; its NE side was a wall of burnt bricks 0.35 m. square or 0.35 m. x 0.17 m. x 0.09 m., some bearing the stamp of Dungi, set in bitumen, laid on edge with the flat sides parallel to the wall face or piled in rows leaning one against another (v. Pl. 37b); only in one spot (seen in the photograph on the left) was there a sort of pillar of regularly-laid brickwork. The whole wall, standing 2.50 m. high, was below ground level and was either a foundation or a retaining wall. At the NW end it was broken away and no further trace of it could be found; at the SE end it also was broken away (by a late ring-drain) but it would seem to have connected originally with the similarly-built containing wall of the neighbouring tank. There was no proof of any superstructure.

The pit to the SW had been filled with brick and pottery rubbish, loose material contrasting strongly with the hard firm soil around; in the east corner a mass of broken brick and clay had been deposited and apparently rammed together so as to form a kind of 'apron' protecting the angle. The rubbish was all of Third Dynasty type, not later, and it was heaped against the brickwork of the retaining wall. Two ring-drains sunk in it were of later date.

The other Third Dynasty wall, to the NE, rested on the soil held up by the peculiar revetment just described, and it was the SW wall of a building of which everything else has been destroyed. This is proved by the fact that the wall is slightly battered and is provided with shallow buttresses on its SW face, which must therefore be the outside, and by cross-walls running from it to the NE; it is of burnt bricks 0.35-.36 m. square set in bitumen. Owing to the loose nature of the ground on which it is built, the wall is provided with unusually elaborate foundations. On the SW side there is a projecting foundation course flush with the buttress face, and 0.30 m. below this a second offset of 0.40 m.; below that again are four courses set in mud mortar, each of which is stepped back from that above it. On the NE side the foundations are stepped forward so as to give a total projection of 1.40 m. A section cut through the soil explained the reason for this. Below the surface there is a belt of crumbled bitumen and brick rubbish which dips from the edge of the foundations but thereafter runs almost horizontal; underneath this are alternate strata of brick rubbish and then earth and black ashes sloped at a violent angle and running under the wall, and at about 1.40 m. below the foundations there are horizontal strata of water-sodden mud which connect with the substratum of the pit on the SW side of the retaining wall. Clearly there had been here something in the nature of a wadi cut by flood action. A barrier had been thrown across it, of earth and clay, and the SW face of the bank had been revetted with burnt bricks and bitumen to prevent further erosion (Pl. 37b); from the top of the bank, earth, ashes, etc. had been tilted into the hollow on the NE until it was levelled, and while the SW wall of the new building had been erected on the bank itself the building as a whole had rested on the made soil.

At the NW end the wall had been completely destroyed; at the SE end two late ring-drains had obliterated the wall proper and although its foundations could be traced a little further they too soon gave out; it is however reasonable to suppose that some shallow foundations in Third Dynasty mud bricks 0.25 m. x 0.17 m. x 0.075 m. on the NE lip of the tank, which aline with it and then turn slightly and can be followed into Square Z 37, really belong to it. The start of a cross-wall running NE is the only other feature that survives.

To the SE of the retaining wall is a large bitumen-lined tank; it is nearly rectangular, 6.60 m. x 3.70 m., with shallow buttresses on its longer sides, an exit channel at floor level in the east corner, and in the north corner a square projection which from analogy with other tanks we can identify as the base of a flight of steps⁹². The SE and SW walls are 1.20-1.40 m. thick, of burnt bricks set in bitumen, the bricks in many cases bearing the stamp of Dungi, and against the inner face of each is a mud plaster 0.50-0.80 m. thick coated with bitumen; the NW wall is 1.60 m. thick, of brick throughout, and the NE wall shews no trace of brickwork at all behind the heavy plaster. In

the east corner the walls are destroyed to foundation level and the exit channel could not be traced further. On the SW and NW sides against the good brickwork of the outer wall face there are bricks set on edge, the broad faces outwards, as in the retaining wall to the NW. To the SE of the tank and partly resting on its rim were the remains of a building in (Third Dynasty) mud bricks, 0.25 m. x 0.17 m. x 0.075 m., three sides of a small chamber and the start of a second to the SW of it; the NE wall seemed to have been cut away by the wall of similar mud bricks which runs along the NE rim of the tank, but it is possible that it was really incorporated in it; that that wall is contemporary seems to be shewn not only by the dimensions of its bricks but by the fact that its deflection from the line of the burnt-brick wall in Square Y 37 brings it into better agreement with the NE (skew) side of the tank.

In Square Y 37 there was a corner of a room with mud-brick walls and mud floor resting on the hard ground beyond the wadi or pit filled with rubbish; judging by its bricks it may have been of the Third Dynasty. In Square Y 38 there were other wall remains in mud brick (0.27 m. x 0.18 m. x 0.09 m.) which align with the Third Dynasty ruins but must be assigned to the Larsa period. They were too fragmentary to be of interest. To the SW of them were burnt-brick walls of the Kassite age, also incomprehensible, and some Neo-Babylonian ruins.

Scanty as the Third Dynasty remains are they are not altogether without interest. The existence of the tank probably implies the presence in its immediate neighbourhood of a large and important building the drain-water from whose roof the tank was intended to receive. The tank lay against the SW wall of this building, and perhaps in a corner, for there would seem to have been a wing projecting beyond it on the SE. The whole area sloped down to the NE, and while the higher ground represents the denuded platform of the Temenos, the low ground (its level now raised by detritus from the Temenos) is the lower platform of the town; the slope, in other words, represents the drop from the inside to the outside of the Temenos. This natural configuration should mean that the building of which we have the outer SW wall only cannot have been of any great breadth, for (a), it would have in that case projected unduly far beyond the main line of the Temenos as suggested by the slope and by the position of its north corner and (b), the made soil filling the water-channel was not a sound foundation. It seems to me most likely that the building was connected with the Temenos wall of Ur-Nammu and very likely that it was simply a double wall (of which the NE element has disappeared) enclosing intramural chambers. Further, the water-course is most likely to have followed the line of a pre-Third Dynasty street running at right angles to the wall line, and this would suggest a gate. As it is certain that the double wall which crowned Ur-Nammu's Temenos wall was of mud brick, the use of burnt brick here by Dungi must mean that this was an important point in the line; and when we find that there was a gate here in the late Temenos wall it is difficult to avoid the conclusion that we have here the remains of a gateway constructed by Dungi in completion of his father's work. Even the presence of the tank might support this conclusion, in view of the fact that the Gig-Par-Ku tanks are alongside the main entrance of the temple, but however the case be urged it cannot be said that the actual ruins help us at all to understand the character of a Third Dynasty gateway.

CHAPTER X

THE CITY WALL: GENERAL DESCRIPTION

The contour map of the site of Ur makes quite clear the general disposition of the city. The town proper is represented by a compact cluster of mounds the outer edges of which correspond fairly closely to the line of its walls. The river Euphrates ran against the SW side; a canal, marked today by a deep depression, practically encircled it on the NE. Beyond this, scattered mounds represent suburban quarters which had been continuously inhabited and had therefore risen on the ruins of successive buildings to a more or less considerable height; but the whole of the flat land also seems to have been built over more or less densely at one time or another. We have excavated house ruins lying on the far side of the old bed of the Euphrates, seven hundred metres west of the Ziggurat; and seventeen hundred metres east of the Ziggurat, beyond the modern railway, the low ground of Diqdiqqeh was found to contain the remains not only of houses but of an important royal building of the Larsa period.

The total area covered by the town was therefore very large, but the nucleus of all this was the old city lying between the river and the canal. This was the walled city. In outline it is an irregular oval of which the longer axis lies almost exactly north by south, twelve hundred metres long by about eight hundred metres wide; in the northern half of it lies the Temenos enclosure, and the rest of the area was crowded with smaller temples, business premises, and private dwellings. Within the walls the ground level was very irregular, the highest mounds rising fourteen metres above the plain, the lowest patches as much as six or eight metres. This could only mean that while the first primitive settlements probably occupied natural hillocks separated by low ground at plain level, yet by the time that the village developed into a walled town, certainly by the time when Ur-Nammu fortified his capital, the whole space within the walls was a high platform dominating its surroundings. In part the rise in level was natural, the result of the decay of buildings and the construction of others over their ruins; in part it was due to artificial terracing, of which we find abundant proof. But there was no attempt at uniformity: each important building occupied its own terrace; in the case of the private houses we find their foundations stepped up and down the slopes of the old ruin-mounds⁹³ and each individual house-plot was levelled independently of its neighbours.

Before any excavation was attempted therefore the general line of the walls was beyond doubt. In various places we had found burnt bricks of Ur-Nammu, large bricks 0.37 m. square x 0.10 m. thick, (also some 0.345 m. square x 0.09 m. thick) which according to the inscription stamped upon them⁹⁴ were specially moulded for the construction of the city wall. The defences,⁹⁵ overthrown by the Elamites, were necessarily repaired by the kings of Isin and Larsa; Gungunum claims to have restored the great city gate⁹⁶ and Libit-Ishtar 'renewed the place of Ur'⁹⁷, by which phrase he probably intends the wall of the city; Warad-Sin undertook a fresh reconstruction, apparently in the tenth year of his reign⁹⁸. But as to the character of a Sumerian city wall nothing at all was known, and no expedition had so far ventured on the heavy task of clearing the circuit of the defences of any of the ancient sites. At Ur this task seemed to be imposed upon us, but at the same time it was necessary to obtain the desired results without the cost that would have been entailed by the excavation of a wall whose length is about three kilometres; the only practicable course was to make sections of it at frequent intervals and to attempt proper excavation only where that was shewn to be of use. The most promising part of the walls was on the NE, where the mound stood to a height of ten metres above the plain; here the top of the wall was cleared for a considerable distance (from Square GG 29 to Square MM 38) and then, farther to the south, where the line was constantly cut by torrent-channels, cross-cuts only were made, though the outer face was followed consistently for the reach between Squares MM 60 and II 65. The next considerable excavation was in the West Harbour, whose moles were cleared, and after a section which was proved by cross-trenches alone, a further long stretch, between Squares J 32 and S 23, was followed with only one small break; the outlines of the North Harbour were traced by cross-trenches with tolerable accuracy. The details of this work are given in Chapter XI; the results may be summarised here.

They were, on the whole, disappointing, for the defences were much more ruined than surface appearances had led us to hope; no gates could be found, and of the great ramparts built by Ur-Nammu and his successors in that burnt brick which gave to them the likeness of 'a yellow mountain' not a vestige remained; at the same time, there was disclosed a work whose magnitude could not but excite admiration and we could get a clear idea of what were

the defences of Ur at least in the time of its decadence.

Where so little is left, it would be impossible to preserve chronological distinctions to the extent of reserving for treatment in separate volumes of our series the ruins of different dates, from which a picture of the wall has to be built up. In the detailed notes, therefore, all the remains found in each trench or excavation are described impartially, and here the description will not be confined to the Third Dynasty defences.

Ur-Nammu's wall consisted of two elements, a massive rampart of mud brick which was the retaining wall of the city platform and the revetment of the banks of river and canal, and running along the top of this the burnt-brick battlement or wall proper.

To many people the fact that the rampart, whose foot was washed by water, was of mud brick only may suggest a shoddy building. The truth is very different. We are accustomed enough to earthworks as defences, and to earth embankments to contain rivers of flood waters, and no one would object that such are inadequate to their purpose. The rampart of Ur was of the same character, but instead of being formed of piled earth it was laboriously built with mud bricks set in mud mortar (Pl. 39a), a much more solid and lasting material. The light sandy soil of Sumer is ill adapted to earthworks and the high-piled banks of the Euphrates need constant attention in floodtime; this colossal wall of mud brick endured almost as long as Ur. The front of it sloped steeply, after the fashion of an earthwork; the back also was sloped; the height, where it is best preserved, is eight metres, and its top is broad and flat; the width across its base varied from about seventeen to twenty-nine metres. Occasionally, e.g., in Squares KK-NN 36-39, this width is greatly exceeded and solid mud brick can be traced back for over fifty metres; here there was on the rampart some particularly massive building, and one can legitimately suspect the presence of a gate, although of its superstructure nothing whatever remains. In Squares LL-MM 34-35, a square fortress-like building of Kassite date lies outside the main line of the rampart and also may have been connected with a gateway. Occasionally too (Squares OO 46-49), there projects down the slope of the rampart's face a building of burnt brick, the interior of which was filled in solidly, at least to a certain height; these I should conjecture to be sally ports. Similarly there are places, as against the north face of the Enki temple in Square MM 54, where a lane comes right up onto the top of the rampart and, so far as can be seen, there was no wall blocking the end of it; these openings in the lines of defence may have been paths leading to ferries which plied the canal. But for the most part there ran along the flat top of the mud-brick rampart, in the Larsa period probably and in the Kassite period certainly, a row of houses and temples whose blank outer walls joined and made a continuous battlement. On the western or river side of the town the house remains are very scanty and the possibility of many buildings having disappeared and left no trace of themselves must not be overlooked; but it can scarcely be a coincidence that in almost every case where burnt-brick walls were found they lay some 10.00-16.00 m. back from the weathered edge of the slope; it would seem that a wide manoeuvring ground was left in front of the battlement. On the east side of the town the interval between the edge of the rampart and the buildings on it was much smaller; perhaps the principles of defence required on this side were different.

The majority of the houses excavated on the wall line were of Kassite date, but they shewed signs of constant repair and rebuilding, and under most of them were found Larsa burials, implying that their foundation went back to the Larsa period. In some of the ruins there were found numbers of clay sling-bolts, and it is natural to conclude that householders along the wall were obliged to keep stores of ammunition against the event of an attack; probably the manning of the walls also was the duty of those resident on their line. In the house wall foundations of the Larsa period there are more bricks bearing royal stamps than are usually to be found in private buildings; the bricks are re-used or, if new, have nothing to do with the structures in which they occur, but are surplus material left on the contractor's hands after the completion of the public work for which they were moulded. Such re-used bricks may be found anywhere, but here their number does suggest the possibility that the conditions attaching the houses on the wall were peculiar, e.g., that the building of them was entrusted to government contractors. It is on the face of it unlikely that buildings, even private houses, which formed an essential part of the city's defences, should be left entirely to private initiative, or that the top of the royal rampart should be unconditionally at the disposal of anyone who chose to build there; there must have been some supervision at least, and it is more probable that the government built the houses and leased them to persons who would be responsible for the wall's defence.⁹⁹

The large but completely ruined building in Square JJ 34 was really a royal building, the work of Kuri-Galzu. All that remains of it is a long passage divided by buttresses — perhaps gateways — into at least three chambers which have no side entrances to the NW, where there is a wall about 8.00 m. thick, and only one on the SE leading into a large chamber whose outlines have been obliterated by the foundations of a Neo-Babylonian structure in mud brick; like the Kassite fort below (Squares LL 34-NN35), whose precise authorship is doubtful, this may have been connected with the main eastern gate of the city. The other royal buildings, the temples of Enki (Squares MM 34-35) and Nin-Ezen (Square U 60) have no military importance except insofar as they, like the private houses, stand on the rampart and help to make up the line of the battlements.

In one place (Square NN 39) there seems to have been, as early as the Larsa period, damage done to the face

of the rampart which called for serious repairs, and in front of the mud brickwork of the Third Dynasty we find a revetment part of which was in burnt bricks. The burnt-brick construction was local, and on the north gave place to mud brick, but was found again in Square MM 42 and had perhaps been continuous between the two points. But here there are buildings projecting beyond the main line and stepped down the rampart, so that the revetment may envisage a peculiar need; if the building rose directly from the edge of the rampart, a burnt-brick foundation would indeed be necessary and would of course be carried down the slope. In the Neo-Babylonian period more extensive repairs were needed and a heavy revetment in mud brick is found in various places, *e.g.*, in Square NN 39, outside the Larsa addition, and in Squares JJ-MM 60-63 (see Pl. 40b) as well as in the West Harbour; it was a wall about 4.40 m. thick, built of the large mud bricks characteristic of the late period, and at the back of it there were rectangular projections to key it in to the rubbish which separated it from the face of the original Third Dynasty rampart. To the same period belong foundations in Squares LL 38-39 which seem to be those of a great tower whose lower part was of solid brickwork; the ruins already mentioned in Squares JJ-KK 35; and others, certainly connected with the defences, in Squares FF 27-GG 28, scanty though the Neo-Babylonian remains are, they are sufficiently spaced out along the wall line to shew that a great deal of work was done in that period. Buildings on the wall were more exposed than most to the effects of weather and it is not surprising that mud-brick buildings should have been completely denuded away; when therefore we find revetments and buildings of considerable size constructed with bricks whose measurements shew them to be later than the Assyrian period¹⁰⁰, it is natural to associate the repairs to the town wall with the construction of a new wall for the Temenos, and to assign both to the same ruler, Nebuchadnezzar. The theory would further explain why the site of the Nin-Ezen temple was at this time shifted farther inland; the old temple on the rampart was in utter disrepair and Nebuchadnezzar, instead of rebuilding it on the same site, put up a new temple on its northern limits; by so doing he would have been enabled to carry his new fortifications in an unbroken line instead of having them interrupted by the temple.¹⁰¹

Not the least interesting feature of the defences is that they enclose two harbours, one on the east side of the city, opening out of the river Euphrates, and one at its northern end. The existence of these was fairly obvious before excavation began (see the contour plan) but it was not easy, even by excavation, to establish their details. The western harbour was enclosed by a mole which was really a continuation of the normal rampart except for the fact that the southern mole, for the short distance for which it ran across the dry river bank, was built as a wall with vertical faces instead of sloped; as soon as it reached the water's edge the sloped embankment started again. The entrance to the basin was 9.00 m. wide, lying towards the southern end of the harbour front; beyond it the north mole, strengthened by a late revetment, ran on in a straight line to join the angle of the rampart beyond the harbour's limit. The basin itself was more or less rectangular and measured about 105.00 m. in either direction. The buildings seem to have stood well back from the water's edge (at least, we found no traces of buildings close to the water) and from where they started the ground sloped up steeply, the houses being stepped into the sides of the mounds formed of the ruins of the older town; the ground between the houses and the basin seems to have been flat (except on the north side, where the existing remains shew a slope), and on top of the abutment of the southern mole we found remains of burnt-brick paving which suggest that the quays may all have been paved. Superficial cuts gave us the line of the basin's edge as a weathered slope of mud; but a deep excavation (in Square S 47) at the back of the harbour shewed a sloped but properly built lining of mud brick which rested on a projecting foundation of burnt brickwork, and quantities of loose burnt bricks lying in front of this and evidently fallen from it suggested that the mud brickwork had originally been faced with burnt brick perhaps for its entire height. At a late period the mouth of the harbour was closed by a wall of mud brick joining the ends of the moles; the basin, already badly silted up, became dry and was in time filled with drift sand, but this occurred too late for any buildings to be erected on the harbour site.

The northern harbour was larger, irregular in shape, and different in construction. Instead of a mud-brick rampart, the mole was a real bank of mud artificially constructed and, judging by appearances, the mud of which the bank was built was obtained by excavation or by dredging from the harbour basin. It is quite possible that originally there was here a wide expanse of low-lying sodden ground forming the apex of the island which was the city; certainly the mounds on the southwest slope down very abruptly to this low patch, and those on the southeast though less steep are still pronounced (see the contour plan, Pl. 60), but to the north the nine-metre and lower contours disregard the inlet of the harbour site and there is even a slight rise of level corresponding to its mouth; all this seems to indicate a low and level area but not an actual bay opening from the river and with its bottom below water level. In any case the basin must have been largely artificial.

From the high mound which forms the northern point of the residential quarter (Square R 25), the straight line of the built rampart was continued by a mud bank with gently shelving sides which were reinforced by a thick coating of mud into which were inserted fragments of pottery, a method still used in Iraq. A breach in the bank formed the harbour entrance, and the bank was carried on and then twice turned at an angle so as to take the shape of a truncated triangle and return to hit the high mound along which ran the northeast section of the town wall.

From the first angle however there was a branch of the bank running apparently northwest for a distance of some 50.00 m., apparently an outer work of the harbour which we did not follow further; outside the line again, in Square AA 18, there was an independent bank, similarly constructed with mud and reinforced with potsherds, on which had been a (late) building in mud brick. There was no sign of building on the moles themselves. The fact does not constitute evidence, for it is fairly certain that none could have survived. The top of the bank was, before excavation, perfectly clear, a line of grey mud covered with fragments of pottery running across the level sand and absolutely flush with it; it had been denuded by wind action to that general level, and the great quantity of pottery on it was the result of that denudation which had pulverised and removed the mud but left the heavy sherds *in situ*. The banks had been higher, and if the tops of them have gone, then *a fortiori* any buildings on them would have gone also. A glance at the ground-plan will make it obvious that there were buildings and that the town wall was continued round the harbour basin; nobody would have been at pains to build the whole wall and then have left this huge breach at its northern end; the mud bank, some 30.00 m. wide, is amply wide enough to act as base for the wall proper, and one must imagine the harbour enclosed by fortifications similar to those of the rest of the town's circuit.

On the land side the limits of the basin were not easy to fix. Near the east corner a perfectly good bank ran underneath the Neo-Babylonian palace building, this proving that by the time of Nabonidus the harbour had either shrunk considerably or dried up altogether. On the southeast (in Squares V-X 26) its approximate line was traced, but only a mud slope was found, from which the ground ran steeply uphill to the foundations of (late) buildings in Squares S 26, U 27-V 28. Judging by the contours, there would seem to have been a canal running from the back of the North Harbour (about Square Y 27) in a straight line to Square EE 42 where it turned to pass southeast of the Neo-Babylonian Temenos, again in a straight line, and to issue through the town wall in Square S 58; here the rampart was found to turn inwards so that its sloped face on the south looked northwest; a cut made in the wadi to the north of this produced only drift sand and light rubbish down to a depth of 3.50 m. The canal was not otherwise tested, but its course is marked by a deep valley passing between high mounds, and although the detritus from those has silted up some of its bed to a height of two metres, that seems to be the natural result of the weathering of the ruins, and it is difficult to account for the long and regular depression by any theory other than that of a canal running through the heart of the city. The sharp angle of the bank in the east corner of the North Harbour may well mark the entrance of the canal.

CHAPTER XI

THE CITY WALL: DETAILED DESCRIPTION

Squares GG 29 – JJ 33

The long high mound here was entirely occupied by private house ruins of Larsa and Kassite date, built closely together so that their outer NE walls formed a continuous line which was, at those dates, the real wall of the city. All traces of Third Dynasty burnt brickwork had disappeared, but underlying the houses there was the core of the mud-brick rampart of Ur-Nammu. Since the sloped front of that rampart had twice been revetted with later mud brick, it was possible to strip away these accretions and expose the original face, the lower part of which was tolerably well preserved (Pl. 38b). The rampart was of mud brick, built up against the side of the mound of the old town, which had been cut back to a vertical face to accommodate the building; the front sloped at an angle of, approximately, forty-five degrees (0.52 m. in 1.00 m.); it measured 15.00 m. wide at the base and was standing to a height of 8.40 m., but had been considerably cut or weathered down, and its original height must have been about 10.00 m. In Squares II 32 – JJ 33 the houses came to an end against a solid structure with a back wall of burnt brick (Larsa date) having very deep foundations, (they went down 3.10 m. below the neighbouring house foundations) which formed a SW projection inside the line of the rampart (Pl. 38b). Since behind the burnt brick there was mud-brick packing indistinguishable from that of the rampart, it would seem that the projection was original and that some sort of official building connected with the defences stood here in the Third Dynasty period. From this point the mound fell away (in Square KK 33), and apart from some Late Babylonian interior walls nothing was found until we came to the Kassite fort.

Square MM 34

A cut against the NE face of the fort shewed that it was built on the edge of the canal wall, and the foundations of its NE wall could not be distinguished from the substance of the latter. The rampart was of the normal grey mud brick whose sloped face, although badly weathered, could easily be recognised because there lay over it a rubbish stratum of bright red (burnt) brick-earth mixed with fragments of broken bricks. The face of the wall had a batter of 1.50 m. horizontal in 2.00 m. vertical (but allowance should be made for the weathering of the upper part), and there was then a flat terrace about 2.00 m. wide, below which the face ran down with an (apparently) gentler slope of 2.00 m. horizontal in 1.60 m. vertical; the soil against this lower face was lumpy and cracked like the dry mud of a river-bank, and at the bottom there was clearly stratified mud sediment; this therefore was the edge of the canal bed.

Square MM 36

The revetment wall of the canal shewed a broken face with a batter of approximately 2.50 m. horizontal in 3.20 m. vertical, but this was partly due to weathering, and the foot, where the true surface was preserved, gave a slope of 65 in 100. The soil against the face was mostly brick rubbish and broken pottery, but below this was a dry water-laid mud. Along the top of the mud brick, 3.00 m. above water level as given by the mud deposit, there ran a line of burnt bricks (0.29 m. x 0.175 m., together with some 0.33 m. square) giving a present wall width of 0.70 m., but as the back does not make a true face, the wall may have been much thicker or may have had a backing of mud brick. It would seem to be the footing of a parapet wall at low level.

Squares MM 36-37

Set back from the revetment wall was a solid mud-brick wall which had been faced with burnt brick (only two or three courses remained and there was mud brick above, but not coming quite to the front). It is only an isolated fragment, breached at the SE end, and at the NW end broken away by a brick-lined well which has been made from a higher and later level; but it aligns with and is certainly a continuation of the wall farther to the SE (in Squares MM 37 – NN 39), and it is almost certainly a continuation of the re-entrant wall in Squares LL 35-36, though the return which joined them has disappeared (Pl. 39a).

In front of the wall is a burnt-brick pavement which slopes down at a violent angle to the NW and NE; it seems to be later than the wall. The pavement is 2.50 m. wide. Beyond it and 1.25 m. higher up in the soil there were two

Neo-Babylonian walls of mud bricks 0.32 m. sq. running NW x SE, parallel and 5.50 m. apart, the inner wall 1.40 m. thick and the outer 1.00 m. thick; they enclosed a long trough-like kiln, brick-lined, 0.70 m. wide, which had been roofed with a vault whose springers start at 0.55 m. above floor level. The channel was full of ashes of light wood and the soil around was reddened by heat, but the bricks were not at all vitrified, so that the heat would not have been excessive. There was nothing to shew for what the kiln was used, but the fact of its being here can only mean that in the Neo-Babylonian period the defences were in disrepair, or lay further back. Dug into the kiln ruins were many coffins of the Persian period.

Square KK 37

There were here ruins of a small house apparently of the Larsa period (there were actually two periods represented by different floor levels and patching of the walls, but they need not involve any long lapse of time). The building was unimportant in itself; the floors roughly paved with burnt brick, the walls built with three or four courses of burnt brick and mud brick above. Its interest lay in the fact that it was built against the back of the rampart and therefore gave its dimensions. The floor of the NE chamber was stepped up against the footings of the rampart, 0.50 m. above the general level; its NE wall was the mud-brick rampart the face of which was masked by a single course of bricks; and its SE wall, where there was a salient from the line of the rampart, had a face of burnt brick three courses thick backed against the Third Dynasty mud brick. At this point, therefore, the rampart had a thickness of 55.00 m. from the back line of the salient to the burnt-brick wall and of 71.00 m. to the outer edge of the mud-brick revetment. Behind the house the rampart rose another 1.10 m., and on the top of it were remains of poor quality burnt-brick construction, probably house remains. Two Persian coffins lying flush with the modern surface, and a ring-drain in the NE room of the house also rising to modern ground level shewed that there had been much denudation.

Square LL 38

Here again the back of the rampart was found. The mud-brick core of the rampart was traced back from its front in Square NN 38 and found to be continuous; the mud bricks are reddish-grey in colour, 0.27 m. x 0.15-0.16 m. x 0.075-0.08 m., so that we have to do with a Larsa reconstruction. The back of the rampart was faced with burnt bricks, 0.27-0.29 m. x 0.17-0.19 m. x 0.09 m., of typical Larsa appearance, and was battered and buttressed; the buttress had a projection of 0.65 m.; its foundations started three courses above those of the wall proper; after five courses it was stepped back 0.20 m., and after four more courses burnt brick gave place to mud brick. NW of the buttress the burnt-brick face (four courses high and two bricks thick) was found to rest on mud brick which, with a much weathered face, sloped out for a distance of 1.40 m. and to a depth of 1.80 m.; it was impossible to say whether it had originally had a vertical or a battered face.

By the 7th century B.C. the wall was ruined to its present level and was buried beneath sloping strata of ashes, potsherds, and broken brick. On the mound so formed there was then built a massive tower of mud bricks (0.32 m. x 0.16 m. x 0.11 m.) which overlapped the old work on the city side. What was found was only the SW end of the solid foundations; the original measurements NE x SW could not be fixed.¹⁰² SE of the 'tower' the Larsa mud-brick rampart could be traced for a short distance, but its back face was hopelessly weathered and was soon lost.

Squares MM 37 – NN 39

In the SE half of Square MM 37 the outer face of the rampart was again found. It is obviously the continuation of the section described above (Squares MM 36-37) and has in front of it remains of the same sloped pavement; but there seems to have been a salient or buttress between the two sections, now destroyed. The existing buttress at the NW end had a projection of 0.85 m.; from it the wall footings are stepped down to the SE, shewing an original slope of the ground surface. The burnt bricks of the wall face are mostly 0.34 m. x 0.08 m. (a Kassite measurement) with some of 0.29 m. x 0.19 m. x 0.08 m. and one 0.52 m. square x 0.08 m. — these probably re-used. Pavement bricks are mixed, 0.36 m. square, 0.34 m. square, and 0.25 m. x 0.15 m. A second buttress is composed of two parts; the NW half was of mud brick with a burnt-brick face, 1.50 m. wide, abutting on one of solid burnt brickwork 1.20 m. wide; the NE face was much destroyed. The wall face then ran straight and in Square MM 38 was set back, and there ran out from it what seemed to be a wall rather than a buttress; after a breach exposing the mud-brick core, the burnt brick face shewed another buttress and then, in Square LL 38, a straight stretch, the wall built of two types of brick, 0.36-0.37 m. sq. x 0.085 m. and 0.29 m. x 0.19 m. x 0.08 m. with a single example of 0.34 m. square x 0.10 m., set in bitumen. Then came a very definite wall, 1.45 m. thick, running out to the NE for 4.10 m., after which it returned NW to enclose a chamber with a high-lying brick pavement of which the greater part was destroyed; beyond the chamber the main wall was of the same two types of bricks, but mud mortar was used instead of bitumen. This ended abruptly after 2.80 m. and mud brick took the place of burnt brick; flush with the face of the mud-brick wall was a vertical drain-shaft built of burnt bricks 0.29 m. x 0.19 m. x 0.08 m. set in bitumen,

(Square NN 39). From the foot of the shaft a channel of burnt bricks (0.29 m. x 0.19 m. and 0.26 m. x 0.17 m.) set in mud mortar slopes down to the NE, and parallel with it on the SE is a wall of similar mixed bricks (Pl. 39b). Like the main wall, these projections rested on the mud-brick mass of the lower rampart. Where the drain-channel ended, there were the remains of a burnt-brick revetment shewing two buttresses and a straight stretch with twelve courses of bricks 0.25-0.26 m. x 0.17 m. x 0.075 m. which, to the NW, was replaced by mud brick. In front of this was a second revetment or *kisu* of mud bricks 0.33 m. square x 0.10 m., keyed into the rubbish against the face of the first revetment by projecting slabs of rough limestone and by rectangular keys of brickwork in which burnt as well as crude bricks were used; the outer face of the second *kisu*, which was probably of burnt bricks, had been completely destroyed. The Third Dynasty mud brick seems to stop short at the inner revetment.

Square NN 40

Here, on the line of the inner revetment in Square NN 39 was found the much-weathered sloped face of the mud-brick rampart; it was traced to a depth of 2.00 m.; a trench cut back from it shewed continuous mud brick for a distance of 34.00 m.

Square MM 42

A short length of burnt-brick facing to the mud-brick rampart, bricks 0.25-0.26 m. x 0.17 m. x 0.09 m., the front battered. It was broken away on the SE where there had been a salient of which only the mud-brick core remained. Behind the salient was a small room in the wall thickness with a mud floor strewn with ashes 0.80 m. below the top level of the existing rampart; its back wall (SW) is battered and built against the higher mud brick, so that at this point the rampart was stepped down to the SE and NE. The SE wall of the room is an addition, not bonded to the NE and SW walls; beyond it to the SE there is another step-down of 0.80 m. in the mud-brick mass which runs at this level to the wall of the next building.

Squares MM 42-43

A small building on the mud rampart, its floors 1.60 m. below the top level as given in Square MM 42; the building occupies a little wadi, a breach in the general wall line, which must reflect original conditions. Its SE wall (with eight courses of burnt brick and mud brick above) acts as a retaining wall for the next stretch of mud brickwork whose present top is 2.00 m. above the house floors. The NE wall of the house has perished, but remains of the burnt-brick pavement give its position. The bricks in the SE wall measure 0.29 m. x 0.19 m. x 0.085 m., those in the NW wall (twelve courses) 0.26-0.27 m. x 0.175 m. x 0.08 m.; those in the interior walls are mixed, although the walls are bonded. It looks as if the house lay at the side of a street cutting through the ramparts and giving access to the canal. Below the floor were a vaulted brick tomb and several other burials.

Square MM 43

A wall of burnt brick running NE x SW with strongly battered face holds up the higher mud-brick mass to the SE of it: the cross-walls between this and the wall of the house last described seem to have been added to block what may have been a lane, and there is solid filling between them. The NE facing of the rampart is also strongly battered, in burnt brick; it breaks away where there was a salient of which part remains, (it is picked up again in Square NN 44); the salient was solid mud brick of the grey colour of the revetment added to the canal front in Square OO 44.

Square OO 44

At 3.50 m. beyond the front of this salient was found the edge of the original canal wall, much weathered; to the face of it had been added a *kisu* or revetment 4.00 m. thick of grey mud bricks 0.32 m. square x 0.10 m., with rectangular projections at the back to key it into the rubbish; the face was steeply sloped, giving a height of 2.00 m. in 0.50 m. horizontal; at 2.00 m. below its top, the soil in front of it was dry cracked mud deposited by water action. Along the edge of this revetment had been built a solid structure in mud bricks 0.35 m. square x 0.10 m. Both revetment and superstructure must be Neo-Babylonian. To the SE of it, in Square NN 44, was a low wall of mud bricks 0.26 m. x 0.165 m. x 0.08 m., of a warm drab colour, which must belong to the old parapet wall.

Squares OO 46-47

There was here a definite salient coming right out to the edge of the canal bank. The building was of burnt brick resting on the mud brick of the rampart, but lay low, being cut down into it (Pl. 40a); digging in front of the rampart produced water-laid mud 2.00 m. below the level on which the building stood. Walls were of burnt bricks 0.25 m. x 0.16 m. x 0.08 m. and were 0.85 m. thick, unusually thick for house walls; pavements were of bricks 0.23 m. x 0.15 m.; immediately behind the SW wall the mud-brick core of the rampart stood 0.70 m. higher than

the interior floors and from this ran back solid, rising steadily for another 2.30 m.; the mud brick stood high against the NW and SE walls also, and the building was definitely cut back into the rampart. It consisted of a series of small rooms facing on the water front, shewing no resemblance to the normal house plan; the side walls seem to have been prolonged to the water front so as to enclose a paved court onto which the rooms opened.

Squares MM 48, 50

Here the line was broken by a wadi cut deep into the soil; on either side of it, on the higher ground, there were scanty house remains which continued to give an approximate line for the back of the rampart, but no trace of its frontage could be found.

Square NN 51

There were a few house remains of which one room was cut back into the back slope of the mud-brick rampart, the solid mass of which could be traced eastwards for its full width, but gave no true outer face. It was much disturbed by intrusive larnax burials of Neo-Babylonian and Persian date. Close to the surface there ran over it at a transverse angle the foundations (four courses) of a Neo-Babylonian wall of mud bricks 0.32 m. square, with wide mortar joints.

Square MM 53

A patch of burnt brickwork of Larsa type in approximate alinement with the SE wall of the Rim-Sin temple of En-ki gave the main frontage; in front of it was the slope of the lower part of the mud-brick revetment running down to the canal.

Square MM 54

At the back of the rampart was the corner of a small building which was separated by a narrow lane from Rim-Sin's En-ki temple. Against the NW corner of the temple, there ran across the street the stump of an older wall which was buried when the temple was in use, although it lay much higher in the soil than the temple foundations; therefore the lane ran uphill from the water; the house foundations also, resting on made soil, lie high, shewing a rise of ground level from the line of the existing wadi. The SE wall of the temple is shallow, resting on the mud-brick mass of the rampart, and the NE and SW walls have their foundations stepped down inland. To the SE of the temple the weathered glacis of the old rampart was traced to the water line.

Squares MM 56, LL 57

The house wall continuing that of the temple was of burnt bricks 0.27 m. x 0.19 m., together with a few of 0.29 m. x 0.20 m. x 0.085 m., and rested directly on the mud brick of the rampart. Where it broke away there was in front of it, 2.40 m. distant, a heavy wall of mud bricks 0.24 m. x 0.15 m. x 0.09 m. (a Third Dynasty measurement) running at a slight angle; its outer face had been weathered away, and digging in front of it produced solid mud brick sloping downwards, but no true face.

Squares LL 59, MM 59

In Square LL 59 very fragmentary remains of walling in burnt and mud brick carried on approximately the front line and then broke away. In front of this, in Square MM 59, a wall of mud bricks 0.34 m. square x 0.11 m. (possibly Kassite, but more probably Neo-Babylonian) ran along the edge of the original canal wall. The latter was much weathered and now gave a slope of 30 in 100; it was cleared to a depth of 2.70 m. In front of this again was a later revetment or *kisu* about 4.40 m. thick, built of mud bricks 0.34-0.37 m. square (the most common 0.34 m. square x 0.11 m.). This *kisu* was separated from the old face by 1.20 m. of rubbish; at the back of it were rectangular projections to key it into the rubbish filling (Pl. 40b). The front of the *kisu* was irregular and perhaps originally curved; in Square LL 61 our trenches, following its line, gave us again the old wall of bricks 0.25 m. x 0.16-0.17 m.; this was cleared (in Square MM 60) down to a depth of 2.80 m. and was then followed by shallower digging to Square JJ 64.

Square II 63

Here we cleared a small house lying immediately behind the rampart for which its back wall acted as a retaining wall; from this to the front line as established by the work done in Square JJ 64 the width of the rampart was 23.00 m. The building was presumably a private house, but it did not conform to the normal house plan. Its walls, 0.60 m. thick, were of burnt bricks 0.25 m. x 0.17 m. x 0.075 m., up to a height of 1.50 m. for the outer and 1.00 m. for the inner walls, above which mud brick was used. The floors were brick-paved and under the floor of the main room was an unusually large corbelled brick tomb, plundered from above. The north end of the building had perished.

Squares JJ 64, II 65

The outer lip of the mud-brick canal wall was followed by a continuous trench which gave the line of the defences; there was no vestige left of the burnt-brick buildings behind. A cross-cut into the upper rubble of the mud-brick core produced, in the surface soil, a number of clay sling-bolts and ballista-balls. From this point onwards the line was followed by a series of cross-cuts made at intervals; surface conditions shewed that nothing in the way of buildings could be expected and the lower element of the mud-brick rampart was the only thing to be traced.

Squares GG 66, FF 66, DD 65, CC 65, 66

In Square GG 66 the mud brickwork shewed a good sloped face. In the surface soil behind it were found many more ballista-balls. In Square FF 66 the sloping face was well preserved; behind it the solid mud-brick core was found to have a thickness of about 29.00 m. In Square DD 65 the wall face was much weathered but none the less distinct, running down in a slope broken by milder gradients; a surface trench traced the solid core back for 29.00 m. In Squares CC 65, 66 the face was good and towards the bottom became almost vertical; the core was traced back for 20.00 m.

Square BB 64

Behind the rampart, fixing its inner limits, was a building, now very ruinous, shoddily built with mixed burnt bricks of every sort; it possessed no interest whatsoever. From its south wall, which acted as a retaining wall for the rampart, the core of the latter was followed for 29.00 m. when (in Square AA 65) it sloped down to the water at a gentle angle of 1 in 10 (this may be due to weathering; the top of the wall lay under 1.50 m. of drift sand and we excavated only for 0.70 m. below this; but the face was good and the individual bricks distinct).

Squares Z 64, X 63, W 62

The sloping face of the wall in Square Z 64 was much weathered but distinct; the core was traced back for 16.00 m. In Square X 63 the face was good; the top of the wall rose to surface level, was 0.70 m. deep at the lip and then sloped steeply to a depth of 1.70 m., the bottom of our excavation. In Square W 62 the face, though badly weathered, was distinct and was traced down for 1.70 m.

Squares U 61, 60, T 60

In front of the Nin-Ezen temple, whose outer wall formed the battlement, the mud-brick rampart was terribly weathered and its slope was broken up into a series of irregular steps; in Square U 61 still more destruction had been caused by a number of small furnaces or kilns of burnt brick which had been cut down into it in the Persian period; the line here was completely obliterated.

Square T 59

From the corner of the temple its frontage line was carried on by a wall of burnt bricks (mixed types) 1.25 m. thick, which rested on the mud-brick of the rampart; 6.00 m. in front of it the edge of the sloped face was found in two spots.

Square S 58

The rampart edge was found and followed; it took a sharp turn to the NE, so that the slope faced NW; although it was much weathered the change of direction was clear. Against it had been built a later revetment or *kisu* of mud bricks, grey in colour and apparently large (too weathered for accurate measurements), and at the same time burnt bricks 0.32 m. square had been laid along the old lip, either as a pavement or as the foundation of a building (very few of them were *in situ*). The angle given by this short stretch of frontage agrees with the present contours of the site, the line of sloped brickwork running along the south side of the broad and deep wadi which crosses the town area. It suggests a canal running through the heart of the city. A cut made in the middle of the wadi bed produced nothing but drift sand; a cut halfway up the slope on its north bank shewed drift sand to a depth of 1.90 m. and thereafter light rubbish, ashes, etc. sloping sharply down to the south; we dug to a depth of 3.50 m. and were still in light rubbish.

Square P 56

A trench on the north side of the wadi mouth produced the top of the mud-brick rampart. The sloping face was cut about beyond recognition, but the distinction between its solid brickwork and the mixed rubbish piled against it was clear. From the edge the top was traced back for 10.00 m., when it was interrupted by a hole filled with rubble, behind which the wall top reappeared again.

Square P 53

The top of the rampart was followed until it dipped down with a rough but unmistakable face against which was drift sand with mixed rubbish and pottery below.

Square P 52

The top of the wall was followed to its lip. At the south side of our trench the face was badly cut about, but on the north its surface was preserved and could be followed easily; it was true and smooth, with a batter of 45 in 70; from a metre below the modern surface all the soil against its face was light rubbish with a plentiful admixture of pottery. The wall front ran not straight but in a curve calculated to take it to the start of the harbour mole.

Squares O 51 – N 48

The West Harbour. The curved wall was here well preserved; the face had a batter of 50 horizontal in 70 vertical; it was of solid mud brick with sand and mixed rubbish against it. Along the top ran a rough paving of burnt brick across which, 7.00 m. back, ran a surface drain parallel to the wall. A few late (Persian) graves had been dug into the wall top and seemed to be associated with some scanty remains of building at the north end. The sloped front abutted on a wall, 9.00 m. thick, of mud bricks 0.35 m. square, with a vertical outer face which ran NNW; this seemed to be the start of the harbour mole where it passed over dry ground. At the back of the wall there were traces of mud brick and then the soil sloped down sharply to the north; below the rubble here there was clean sand at 2.70 m. below the wall top. In Square O 50, the character of the wall suddenly changed and its face, instead of being vertical, was battered with a slope of 50 horizontal in 60 vertical; here presumably it was washed by the water of the harbour mouth. Then the battered face turned inwards at right angles, and at 9.10 m. beyond, there was found another wall end with sloped face, and the wall continued in the same line. The gap was certainly the entrance. It was entirely blocked with mud brickwork very similar to that of the wall itself, but the bricks were of a slightly different colour and were laid at odd angles; though the distinction was none too easy to make, it was there, and the later work can only mean that in time the harbour was abandoned and its mouth blocked by a wall joining the ends of the two moles.

Squares O 49, N 48

The north mole proper was built of mud bricks 0.35 m. square and had a vertical face. At the top it was only 2.00 m. wide and the back face was steeply sloped into the harbour basin. Against its front face, separated from it by a gap 0.40 m. wide filled with broken burnt bricks and rubble, there is a second wall 8.00 m. wide with a battered outer face. It was impossible to say quite what had happened here, but the most probable explanation is that the inner wall is the older, that its face had become badly weathered, and that it was cut back for the new revetment to be added to it.

Squares O-R 49

The sloping face of the revetment wall of the harbour basin was found just below the modern surface; it was of good mud brick with clean drift sand against its face, for 2.00 m. down. The slope gave a rise of 1.00 m. in 1.10 m., but whether this was original or not could not be told.

Square R 49

The cut shewed the same sloping face of mud brick, the only difference being that there was here more rubbish mixed with the covering sand.

Square S 47

It was evident here that the wall face was much perished. At the top the total width of the brickwork was only 2.00 m.; at 3.70 m. depth the total width was 8.00 m., so gradual was the slope. Below the mud brick were three courses of burnt-brick foundation. Against the wall face there was drift sand down to 3.00 m., then a band of brick rubbish and whole bricks which lay along the wall face and ran out from it; and 4.10 m. clean sand began again and went down to 6.00 m., getting gradually harder, with a mixture of potsherds in the deeper levels which seemed to be water-laid. Some at least of the bricks lying in front of the wall had fallen from it, and it looks as if there had been here a facing of burnt bricks standing to a considerable height.

Square T 49

Here we cleared the outer walls of the houses standing nearest to the harbour basin; the NW wall was practically parallel with the line of the waterside and from it a lane ran steeply uphill. As the contours shew, the ground shelved steeply all round the harbour and the houses were terraced up the slopes; thus the EM group of Larsa houses is high

above the harbour and the buildings along the SW of the group have perished with the denudation of the slope.

Square O 45

A trench cut near the top of the mound produced a stretch of very heavy walling built with mud bricks (made with an unusually large admixture of chopped straw) 0.36 m. square and 0.10-0.13 m. thick (five courses have a height of 0.63 m.). In front of it was found part of a clay dedication-cone (U. 15651) recording the building by Warad-Sin¹⁰³ of a temple to Inanna, named E-Dilmunna. The wall rested on made soil. A trench cut downhill from it produced late coffins and some mud brick but nothing in the nature of a rampart within 1.70 m. from the modern surface. It was therefore indecisive, but the side of the basin must have been approximately where it is placed on the plan. It did come to light in Square N 46, where, at 1.20 m. below the surface sand, a short stretch of the face was quite well preserved; it was vertical, and lined up approximately with the shapeless mass in the last trench.

Squares N 47-46, M 46

The remains here were not easy to understand. Immediately below the surface in Squares N 47-46 was a wall of mud bricks 0.32 m. square, running NW x SE with the beginning of a branch to the NE; only the NE face was found. In the angle was a shallow drain, and to the NW of it a mass of mud brickwork (bricks 0.30 m. square) which on the SE had its foundations stepped forward and going down for 2.00 m.; it lined up with the fragment in the NE half of Square N 46 and seemed to be the face of the inner harbour wall. In Squares M-N 46 we found what appeared to be the end or back of the same wall, and at 1.40 m. from it a wall which ran at right angles to it: the eastern corner of this was in Square N 46 and it ran SW, interrupted by a breach, for some 10.00 m. into Square M 46 and then returned NW, the corner being distinguished by a buttress on the SW face. The face was vertical and against it were light ash, broken pottery, and mixed soil to a depth of 2.50 m. This return gives us again the outer face of the town rampart. SE of it there was no brickwork but a flat mud platform across which ran an open drain of burnt bricks and bitumen; on the line of the return of the wall, the drain stopped and the platform fell away into a steep slope of hard mud, against the face of which was drift sand; it was presumably a mud 'apron' masking the start of the mole.

Squares M 45, N 44

In Square M 45 was a mass of mud brickwork with a more-or-less vertical face; but this was accidental: more brickwork was found beyond it and the original face was at least 5.00 m. to the SW. Into the top of this a rough hearth had been cut. At 16.50 m. behind the face (in Square N 44) there were burnt-brick walls (mixed bricks, 0.26 m. and 0.23 m. long) which rested on solid mud brick (bricks 0.32 m. square) and had mud brickwork rising to a higher level behind them; the buildings, whatever they were, seemed to be on and not behind the rampart.

Squares L 43, M 43

The face of the rampart was found in very fair condition, although the upper part of it was weathered into a series of steps; against it was much burnt-brick rubble in strata sloping sharply downwards. The top of the brickwork was traced inland for 16.50 m., and at that point there were on it very scanty remains of the burnt-brick frontage.

Square K 41

The front of the rampart was clear, a mass of pottery and brick rubble lying against the face of the mud brickwork, which sloped sharply, giving 10 vertical in 30 horizontal; but the actual face had perished and the line it gave was not true to the direction of the wall. The top of the rampart was traced back inland and at 17.60 m. from the edge there was a line of burnt bricks which may give the frontage, but behind them the solid mud brickwork continued, and rose at least 1.50 m. above the level of the supposed burnt-brick foundations. In Square K 40 also, only the core of the rampart remained; its front sloped sharply down with rubbish piled against it, and this more or less on the true line; but there was no real face. A trench cut alongside this, in the same square, again failed to find a true face, but the broken surface of the mud brick with drift sand against it was unmistakable. At 16.50 m. behind it were scanty traces of burnt brickwork resting on the mud brick.

Square J 38

The face of the rampart had perished. Overlying it was mud brickwork of a later type (bricks 0.32 m. square) whose foundations, resting on the sloped front of the old wall at 1.60 m. below the modern surface, shew a vertical face with a definite corner at the SE end. At 19.10 m. behind it are scanty remains of a building in burnt brick, but, since there is in front of it a pot burial which was probably inside a room, the wall cannot give the frontage of the building, which must have been nearer to the rampart edge.

Square J 36

The face of the rampart was well preserved and was nearly vertical, its slope being only 1 in 10; there was pottery and light rubbish against the face. The wall top was traced back to the summit of the mound but no remains of buildings on it were found.

Square I 34

The trench shewed solid mud brick sloping sharply at its eastern end, but no true face.

Square I 32

A torrent bed coming from the west corner of the Ziggurat had destroyed most traces. The core of the rampart however could be identified and from here we followed the line of its badly weathered edge continuously to Square N 27. The work produced a very wavy line, for the wall, being so pronouncedly sloped, the top of it lay further forward where the destruction was greater; further back it stood relatively high; probably it should be restored as straight in spite of appearances. The work done by us was superficial, but was tested at intervals by cutting into the brickwork; this was necessary in view of the decomposed character of the surface.

Square K 31

Here a trench was driven back over the rampart core, which was denuded and flattened by water action; solid mud brick however was found and at about 16.00 m. from the edge, in Square K 32, cross-cuts gave traces of buildings in burnt brick; similar traces were found at the same distance from the edge in Square K 31. In Square L 30 there were remains of burnt-brick construction only 7.00 m. back from the apparent edge.

Square M 29

A sharp setback is probably accidental, the rampart here being much denuded by a torrent channel. In Square N 27 the line was completely lost, for a deep wadi running down from the great Nannar courtyard had eroded the soil and destroyed everything to plain level. Some mud brick lying outside the true line might have been from a *kisu*. That there was a salient here was shewn by the return curve of the rampart where it was found again in Square O 25. This new line was followed and in Square P 25 deeper excavation laid bare the face of the rampart, much weathered but unmistakable, the individual bricks being perfectly distinct. Against it there lay near the surface a sloping bed of decomposed mud brick, and below this strata of ashes and light rubbish (down to 1.60 m.) also steeply sloped. From this point the existing remains ran in a hollow curve as far as Square R 23, but the whole of it seemed to be due to weathering and the original line is more likely to have been straight. At this point the rampart was not of the usual mud brick; it was a real bank of clean hard mud with a very gentle slope (1 in 5); the upper part was agglomerate, but at about 2.00 m. below the surface a cut into it shewed laminations as of water-laid deposit, and it seemed likely that a considerable amount of alluvium had been heaped against the original face, which was probably much steeper. At 13.00 m. back from the edge there was no trace of any building in burnt brick. In Square S 22 this bank came to a rounded end which sloped at much the same angle. In Square T 22, after a 20.00 m. interval, it began again and could be traced running in a straight line to Square W 19. Here the surface indications were very clear, for there ran across the flat low plain a bank of dark mud 1.50 m. high and about 30.00 m. wide, the top of which was covered with clinkered brick. Digging into this we found that it was an artificial bank of which the core was mud while the top (originally) and the sides were built of a regular ballast of broken bricks, clinkers from brick kilns, and potsherds which lay in sloped strata and had evidently been tipped over the sides from the top of the bank; the greater proportion of the same materials on the surface was due to denudation. A good deal of similar ballast was mixed with the mud of the core. Numerous cuts and trenches in Squares T 21 and U 20 proved the bank face at different points and established its character as described above.

Squares W 19, X 18

There seemed to be here a branch bank running for at least 50.00 m. out to the NW, but only the NE face of it could be traced; that face however was very good, with clinkered reinforcement and clean sand lying against it. From Square X 18 to Square Z 19 we followed the bank by means of a continuous trench, and although its line was somewhat irregular it was still perfectly consistent; the section shewed a sloping face liberally reinforced with clinkers and potsherds, against which lay drift sand; at 3.00 m. depth the sand gave place to flat water-laid mud. In Squares Z — AA 18 to the north of the bank and 133.00 m. from it, there rose above the level of the plain an isolated mound also of mud littered with brick clinkers; a cut driven across this shewed a sloping face similar to that of the mole (the slope was 6 in 10) with clean sand against it; on the top there were traces of mud-brick walls. The mud bank was evidently the mole protecting the harbour which lay behind it, now represented by a flat expanse of sand. A trench was dug from the top of the mole back into the harbour. In Square Y 20 (at the north

end of the square) was a slope of clean mud which in section shewed no deposit laminations but was uniform throughout, and looked as if it had been dredged up from the bottom of the harbour and heaped against the back of the mole; it was quite different from the reinforced mud of the mole's face. From this a flat mud surface stretched back under the sand; in Square Y 22 this lay 0.80 m. down and a section of it shewed very fine horizontal strata of water-laid mud. This is much too close to the modern surface to have been deposited by the water of the ancient harbour and it can only be due to drainage water from the ruin-mounds to the south, which collected here in the low-lying area and, held up by the barrier of the old mole, remained stagnant and deposited the dirt brought down from the ruins. We did not dig deeply enough to find the harbour bottom.

Squares AA-BB 19

From the back of the clinkered ridge in Square AA 19, a band of dark soil, cutting across the sand, ran straight back to the corner of the town wall in Square CC 25. In Square BB 19 the original ridge continued, but from the point where the southern ridge had branched off its character changed and the bank was of plain mud with no pottery or building refuse; then it came to a sudden end, with a face sloping down steeply to the NE and drift sand against it. This point where the mole ends so abruptly lines up, apparently, with the edge of the canal bed as traced in Squares FF 25 to II 27.

Squares BB 25, AA 25

The long bank of dark grey mud was so clearly marked that excavation on its line did not seem to be required, but where it abutted on the high ground at its south end, in Square BB 25, a cut was made and produced the inner face of the mole, a good bank of hard mud looking WSW; following this, we found that it turned sharply to the southwest. There was a breach and then it appeared again on the west edge of the same square and thereafter, in Square AA 25, turned again at right angles and, running almost due south, disappeared under the wall of the great Neo-Babylonian palace.

Squares V-X 26

Here, following surface indications, we dug a trench along what was evidently the bank of the harbour on the town side. From the present ground level it sloped down at an angle of 1 in 2; the substance of the bank is the ordinary debris of the town platform, and the makers of the harbour had evidently cut this back to make the pool; but it is revetted with a thick mud plaster freely mixed with fragments of pottery and broken brick, and larger fragments seem to have been pushed separately into the plaster while it was being applied. Our workmen professed to recognise in this a normal and practical method of strengthening a canal bank.

The line given was irregular but unmistakable; against the sloping front there was only clean drift sand to the depth to which our work was carried (1.00 m. from the surface), so that it was easy to follow. That the irregularity was accidental was shewn by the fact that where the worst set-back occurred the mud and pottery revetment was missing and the inner filling exposed, proving that the curve was due to a breach in the original bank. In the NW corner of Square V 26, the bank turned and followed the foot of the modern slope in a direction which would bring it approximately to the point in the NW wall where the mud brick of the rampart proper was replaced by the mud bank.

A number of trenches were dug high up in the mound whose foot was followed by the harbour bank. In Square V 27 a wall of mud bricks (0.32 m. x 0.16 m. x 0.11 m.) was found 40.00 m. back from the harbour front; in front of it were remains of a pavement of mud brick laid over rubbish. In Square U 27 was a wall of bricks of the same size with a projecting buttress; from the buttress face there was solid brickwork stretching back for 16.50 m. In front of it the ground, hard rubbish, overlaid with a floor of mud brick, sloped gently down towards the harbour, still preserved for a distance of 24.00 m. A small pit sunk in Square U 26 failed to find the continuation of this floor and exposed only a mass of loose burnt bricks (0.29 m. x 0.16 m. x 0.075 m. and 0.32 m. square x 0.06 m.) which had been set in bitumen mortar. A trench in Squares S 26-27 shewed in Square 26 a mud-brick wall 19.20 m. wide, behind which there were no further signs of building. A pit in Square R 25 shewed the solid mud brick of the west wall of the city, with a sloped back (slope 1.50 m. in 4.00 m.), with the rubbish filling against it.

From the east mole of the harbour the wall was tested by cross-trenches up the high ground in Square GG 29. Squares CC-DD 26 shewed the solid mud brick of the rampart ending in a face which was broken but not far from the true line. A cut to the east of this gave only a silt level.

Square EE 26

At the west end of the trench the rampart was found in fairly good condition with a nearly vertical face; in front of it was a level of water-laid mud.

Square FF 27

The wall shewed a good face, nearly vertical. At 9.00 m. behind it on the (late) glacis of the core there was a wall 1.00 m. thick of mud bricks 0.32 m. square x 0.11 m., Neo-Babylonian, presumably part of the Neo-Babylonian defences.

Square GG 28

The wall face was much destroyed and weathered into a succession of steps; its solid brickwork was traced back to the Neo-Babylonian wall already found in Square FF 27.

The flat bed of silt in front of the foot of the wall, stretching across the low wadi shewn by the contours, was clearly the bed of the old canal. Trenches cut across it found, some 50.00 m. to the east, a dip in the level which when followed proved to be a definite bank (Squares FF 25 to II 27) outlining a stream bed. Obviously in the late period the old canal had shrunk and a narrow channel had taken the place of the original broad stream separating the walled city from its eastern suburbs.

CHAPTER XII

THE STELA OF UR-NAMMU

Fragmentary as it is, the Stela of Ur-Nammu is none the less the most important sculptural monument found in the course of the Ur excavations. The surviving pieces were scattered over a considerable area close to or actually on the Ziggurat terrace^{104a}. Most of them were found lying on the Kassite brick pavement to the SW of the shrine E-dublal-mah, inside or just in front of the doorway that leads from the Dublal-mah courtyard to the 'Sacred Way' running between the Gig-Par-Ku and the enceinte wall of the Ziggurat terrace. Many fragments were found in the Dublal-mah courtyard near the Kassite well-head, but the majority of these were plain bits of limestone, and the few with carved or worked surfaces were small and relatively unimportant. A few pieces were found in E-dublal-mah itself, in room 17 of the Kuri-Galzu building, two near the east corner of the shrine. On the other hand, one important fragment, U. 18526, lay underneath the brick pavement of the Kuri-Galzu temple of Nin-gal on the SE side of the Ziggurat terrace, and two fragments had been used as the bases for impost-boxes in room 2 of the Kassite range of intramural chambers on the SW side of the Ziggurat terrace^{104b}. These last two cases definitely prove that the stela was broken up before Kuri-Galzu started on his building programme, and it is therefore natural to assume that it had been smashed by the Elamites at the time when they sacked Ur — they would surely not have left it intact. But as against this we have the difficulty that the majority of the fragments lay exposed on a Kassite pavement and could only have come there at the time of the destruction of the Kassite buildings. The bits from the impost-boxes, giving the upper part of a divine headdress and of a 'tree', fitted not only together but also with fragments from the 'gateway' group to make up the main fragment, U. 2761, of the upper registers of the obverse; from this it follows that that group also resulted from destruction wrought before the building, and therefore long before the overthrow, of Kuri-Galzu's temples. What has to be explained is not so much the date of the breaking of the stela as the reason for the freshly broken bits of it being found on a pavement which was in use centuries after the stela had been smashed. I can only suggest that just as some fragments were used in the chambers NW of the Ziggurat and as bedding for the pavement of the Nin-gal temple, so others may have been used, more freely, in the upper part of the Kassite Dublal-mah building for some constructional purposes, and were only thrown down and re-broken when the Kassite building was destroyed.

In any case, the find-spot of the fragments cannot be invoked as evidence for the original position of the stela. It is true that in the Dublal-mah courtyard, under the south corner of the (late) podium, there was a large brick base of Ur-Nammu which so far as shape and size go would have served admirably as a base for the stela, but there is nothing to connect the two¹⁰⁵, and the fact that a few fragments lay close to it was purely fortuitous.

The stela was carved on both sides of a single slab of limestone. A fragment from the upper part, U. 3266, preserves both faces and also, as Legrain was the first to observe, a worked surface above, which is gently curved and gives the rounded outline of the top of the stela. A number of fragments fitting together (U. 2761) shew that the carving was arranged in horizontal registers. The same fragment has a true joint with the long triangular piece U. 3264 and gives the total width of the stone towards the top; actually the sides sloped slightly, so that the width is 1.54 m. at the base and 1.50 m. just below the rounded top. Fragment U. 3264 preserves both faces of the slab and gives a thickness of 0.36 m. as against the 0.30 m. of U. 3266; it is probable that the stone was thicker at the base than at the top, but the difference would seem to be exaggerated by the decomposition of the limestone in the second register, where the laminations gaped considerably. The stone was originally of good quality, fine-grained and consistent, and many of the fragments of the obverse have well resisted the effects of time and exposure; but towards the back the material has suffered badly, the stone is soft and laminated and the laminations tend to flake away, while the inequality of the texture causes frequent pitting of the surface, with the result that the reliefs of the reverse are much perished. It is true that some fragments of the obverse, e.g., U. 3266, are badly weathered, but in assigning a fragment to one side or the other of the stela its comparative conservation is an argument to which a certain amount of weight must attach.

Nearly all the fragments were found in the season 1924-25, and since at that time the Baghdad Museum possessed no facilities for dealing with or exhibiting a monument of such size and in such condition, the Iraq Government relinquished them all, and all were subsequently allotted to Philadelphia. All the larger pieces were

incorporated in a restoration carried out in the University Museum under the supervision of Dr. Legrain, who was responsible also for their publication^{106a}. In the season 1932-33 there was found another large fragment, U. 18526, which also was relinquished by the Iraq Government to Philadelphia, in order that as much as possible of the monument might be re-assembled, but it was too late for it to be inserted in the restoration at that time^{106b}.

The total height of the stela as restored is 3.05 m., divided into five registers having the same dimensions on the two faces; but as Legrain has pointed out to me these measurements are at best approximate only. In the top register (on both sides) the figures are half as large again as in the other registers¹⁰⁷, and he estimates the original height of the register at 0.82 m. *i.e.*, twice that of the others, whereas in the restoration it is made to measure slightly more than a metre. According to Legrain again, the third register on the obverse ought to have its lower section increased by 0.55 m.; the fragment showing the head of a basket-carrier (at the right hand end of the building scene Pl. 43b) has at least eight courses of bricks above the level of the man's head, and more space is required for his body than is allowed for by the present position of the lower plinth. On the reverse the third register ought to be correspondingly heightened (by lowering the whole fragment U. 3265), because as now reconstructed it does not afford room for the head of the figure seated on the high throne at the left end¹⁰⁸. Fortunately, while the associated fragments U. 2761 give us the proper sequence of the three upper registers of the obverse, the large fragment U. 3265 gives for the reverse the sequence of the three lower registers, and the second register on the reverse is guaranteed by the fact that the relief occurs on the back of the fragment showing the offering to Nin-gal in the second register of the obverse; on both faces there was the same broad plinth separating registers 4 and 5, though on the obverse this is plain whereas on the reverse it bears the 'canal' inscription; the essential changes therefore in the University Museum reconstruction involve simply the shortening of the top register (with corresponding improvement to the unnaturally elongated figure of Ur-Nammu) and the lowering of the fragment U. 3265 by something like half a metre, the broad plinth on the obverse being brought down to the same extent. In this way, the proportions of the registers on the two faces will remain identical, but on the obverse registers 3 and 4 are divided not by a plinth but by the natural line of the top of the building, and really form together one scene. The total height of the monument will then be about 3.30 m.¹⁰⁹.

I publish on Pl. 41 the Legrain reconstruction. As can be seen from the photographs of the several fragments published on the following plates it includes a little restoration; it requires modification on the lines already described; it is admittedly incomplete, and some minor fragments have been inset arbitrarily simply in order to keep them in their context; but at least it puts the fragments into perspective and enables us to visualise the monument as a whole; it is therefore more than justified.

The following account of the fragments, arranged in the order of the registers, is based on Legrain's MSS catalogue, with further comments of my own.

Top register, obverse, U. 3266, Pl. 42

The main isolated fragment gives, for each face, the upper part of the figure of the king standing in the attitude of adoration with the left hand raised to his lips and the right arm extended; the hand is missing. Above and in front of the king is the figure of a flying angel, wearing the divine cap with a single pair of horns, dressed in a long close-fitting tunic of crinkled cloth which passes over the left shoulder and leaves the right breast bare, who with outstretched arms holds between her hands a vase wherefrom two streams of water fall to the ground; in the same scene on the reverse there survives the tip of a 'tree' like that in the second register. The rounded top of the fragment proves that this is the uppermost register of the monument. The upper part of the fragment U. 2761 (Pl. 42) gives a shrine-like throne on which is seated a figure wearing the flounced 'kaunakes' garment and holding an infant, of which only the two feet survive (repaired in the Philadelphia restoration). The scale of the figure shows that it must be associated with the large-size figure of Ur-Nammu on U. 3266, and the argument is confirmed by the fact of there being in front of the feet of the seated figure the ends of the streams of water pouring from the vase held by the angel. A large divine hat and an arm with a stream of water behind the wrist (Pl. 45c) have been restored as belonging to the seated figure; the cap rightly, in view of its scale, but by no possible distortion of the body can the arm of the seated figure be brought so far forward as to get the water stream in line between the vase held by the angel and the water in front of the figure's foot; the arm is unquestionably the right arm of the missing figure of Ur-Nammu which stood back to back with that of which we have the upper part. Actually, on either face of the fragment U. 3266 there is immediately behind the king's shoulders a rough protuberance of the stone which gives the outline of the shoulders of a precisely similar figure facing in the opposite direction. It is quite certain that in this as in other scenes there was a strict parallelism and that the subject was repeated on either side of the centre of the relief; on the right, Ur-Nammu makes his offerings to a goddess holding an infant, on the left he must have been making his offerings to a god — the latter has disappeared, even the throne platform of the Philadelphia reconstruction being unsupported by material evidence, and only a single hand being, on the score of size, attributable to him.

On either face there is, directly above the king's head, a protuberance of the stone the fragmentary outline of

which is sufficient to identify it as a crescent carved in relief. One point of the crescent is given by a small isolated fragment, and others give two points of a star and the ends of rays of light conventionally rendered; in type it resembles a crescent and star on a stela of Ur-Nammu bearing an inscription in honour of Utu-hegal¹¹⁰. In the Philadelphia restoration it is larger and clumsier than it should be, and the details of the star are arbitrary; but it was large, and by its size would seem to dominate not one register only but the entire stela, consecrating all its scenes to the Moon God. It is indeed noticeable that in registers 2 and 3 a figure marked by its four-horned crown as being a major deity is accompanied by none of the familiar symbols that identify the great gods; the obvious explanation is that the symbol appears once and for all at the head of the stela, so that the divine figures represented below can be none other than Nannar and Nin-gal.¹¹¹

It is curious that whereas in the second register of the obverse Nannar is at the right-hand end of the scene and Nin-gal at the left-hand end, in the top register the positions of the two deities are reversed. Legrain suggests that the child seated sideways on the lap of Nin-gal in the top register might possibly be Dungi, the heir to the throne, shewn here as the foster-child of the Moon Goddess. Dungi was of course the recipient of divine honours, and if the stela was dedicated not by Ur-Nammu himself but, as Legrain is inclined to hold, in his honour by one of his successors, then the insistence on the superhuman quality of Dungi would be perfectly logical — “la religion et l’histoire s’enchaînent et font de la grande stèle un monument loyaliste intéressant.” If the right-hand end of the slab is to be regarded as the place of honour, then the presence of Dungi might account for Nin-gal occupying that position — she guarantees the royal succession. In any case, the order is reversed in register 2, and the change does seem to call for explanation. It is worth pointing out that whereas the whole Temenos of Ur, and the Ziggurat terrace in especial, were sacred to the Moon God and Goddess, yet, as one faced the Ziggurat, the particular shrine of Nannar lay to the right of the staged tower and the temple of Nin-gal to the left; if the stela as originally set up was orientated on the same lines as the Ziggurat, then the ordering of the second register might be justified by topographical exactitude.

Second Register, obverse, Fragments U. 3264 and U. 2761; Plates 42 and 43a.

On the left is the seated figure of Nin-gal; in front of her the king (headless) stands and pours a libation into a tall vase containing clusters of grapes and palm leaves¹¹²; behind him is the assistant goddess with her hands uplifted in prayer. At the right-hand end of the fragment U. 3264 comes the body of an exactly similar assistant goddess facing in the opposite direction and a little bit of the body of the king — as has already been said, the tip of the fragment makes a true joint with U. 2761 on which the feet and skirt of the king’s figure are preserved. On the latter fragment we have, on the right, the seated figure of Nannar (complete) and in front of him the tall vase containing the date clusters and palm leaves; the upper part of the king’s figure is missing, but there remains the top of the vase which he held, pouring his libation; there are therefore two precisely parallel scenes in which Ur-Nammu makes his offering to Nin-gal and to Nannar respectively. The only difference is that, while Nin-gal is empty-handed, Nannar holds in his left hand a builder’s adze and in his outstretched right a straight rod and a coil from which hangs a loosely looped end; these can be none other than the measuring-rod and line of the architect¹¹³, his gesture obviously implying an order to Ur-Nammu to build him a house; the relief illustrates just such a vision of the night as Gudea recounts in his cylinder text¹¹⁴, and the order so given leads aptly to the following register.

On the Philadelphia restoration the heads of the ‘assistant’ goddesses have been restored from those of the flying angels in the top register, whom they resemble in the matter of costume; the result is almost exactly the figure on the Gudea stela¹¹⁵, which also represents a patron goddess in the attitude of adoration. The heads of the royal figures have been taken from that in the third register.

Registers 3 — 4 obverse, Plate 43a, b

Only the right-hand top corner is well preserved, the rest being represented by a few small fragments whose position can only be surmised. The subject is none the less evident, and it is also clear that the two registers form a single scene, the normal plinth between them being replaced by a horizontal ledge which marks the top of the masonry under construction: the scene is the building of a temple — presumably the Ziggurat of Ur, which was by far the most important of Ur-Nammu’s constructional works.

At the top, on the right, there remain the upper parts of three figures. The central figure is that of Ur-Nammu who comes upon the scene carrying on his shoulder the tools of the builder — adze, basket, fork or compasses (?), etc. One may suppose that he is about to lay the foundation-stone of the building which, in obedience to the god’s order, he is setting up. Behind him comes a clean-shaven priest who helps him to bear the weight of the tools. In front of him we have the head and hand of a god wearing the four-horned crown; undoubtedly this is Nannar, and undoubtedly too he was seated, not standing like the king.¹¹⁶ The Moon God is not likely to come on foot to supervise the work of building, but he might well be enthroned above it. The fragment on Pl. 44d, which in the Philadelphia restoration has been inserted at the left-hand end of this register and should, judging by the condition of its

surface, belong to the obverse of the stela, giving as it does a naked priest-figure holding a fly-whisk, might be in place immediately in front of the god. The material for the lower part of the scene is clearly given on Pl. 43b. The essential feature is the background of squared brickwork against which various small fragments give the feet of two men and the foot of a ladder coming immediately above the broad plinth, the head and arms of a workman carrying a basket, one arm of a man in a similar attitude with a minute bit of the body of another behind him (this may be the same man as that of whom we have the head), the top of the ladder with a man's foot above, and fragments shewing the top course of masonry with on it the feet and legs of two men facing left. The arrangement of these fragments in the Philadelphia reconstruction is purely arbitrary, but there is no doubt as to the scene represented: it is the actual building of the house of Nannar.

Register 5, obverse

Of this there remains only a single head of a man facing right and, just below the plinth, two curved points which I originally took to be the horns of cattle, but they may as well, or better, be the tips of crescents set up on poles such as we have in the second register of the reverse.

Register 1, reverse

The only fragment found, U. 3266 reverse, Pl. 42a, gives no more than one flying angel together with the upper part of the figure of Ur-Nammu, of whom the head has been (intentionally?) defaced; traces of the crescent moon above and of the second figure of the king are discernible.

Register 2, reverse

The only fragment, U. 3264 reverse, Pl. 44a, is the back of the scene of the worship of Nin-gal on the second register of the obverse. As it lay in the ground, the Nin-gal scene was uppermost, and although it was tolerably well preserved the lower part of the stone was found to be in such condition that it was impossible to lift the block in one piece — had that been attempted the whole of the relief on the lower face would have fallen away in flakes and powder. It was necessary to saw off the top face of the stone *in situ* and then to consolidate the lower half as much as possible before turning it over and treating its carved surface; in this way we salvaged what we could, but a good deal of the relief had perished completely.

At the left-hand end of the fragment, about in the middle of the register, there is a scene of animal sacrifice. A bull has been thrown to the ground and lies prone¹¹⁷. One man grips its forelegs while setting his foot on the beast's chin, and another man, stooping over the victim, has cut it open to examine the liver for omens. To the right of this group there is the figure of a man facing right and holding the headless body of a goat; he grasps the hind leg and the neck much as a man holds a water-skin, and from the neck a stream of blood pours out onto the ground. In front of him is a smaller figure, standing on a square base; the upper part of the body has perished but the hands are left holding what seems to be a double flute¹¹⁸. He seems to be nude, whereas the other three men wear a fringed loin-cloth reaching to the knees, girt about with a broad belt and supported by a strap passing over the left shoulder, and they have knives stuck into their belts; they appear to be clean-shaven, unlike the bearded workmen of the building scene, though the stone is too badly weathered for this detail to be quite certain; as Legrain says, they are probably priests in their working clothes. The rest of the scene, at the right-hand end of the fragment, is terribly defaced. First, on a square base, there are poles decorated with crescents which Legrain thinks may have surrounded a ritual figure; beyond this again there are the legs of a man advancing to the left and what seems to be the foreleg of an animal (a bull ?) advancing in the same direction; ¹¹⁹ an apparent trellis pattern at the top of the fragment might possibly be the wall of a byre; but this is purely conjectural.

Register 3, reverse, U. 3265, Pl. 44c, top

At the extreme left¹²⁰ there was a figure seated on a throne raised on a high square base; of the figure only the feet and the bottom of the skirt remain. In front of this is a figure in a long garment (the head too much damaged for it to be seen whether he was bearded or clean-shaven), who faces right and holds the end of a cord which is made fast round the arms of a figure (nude, or wearing a short kilt) in front of him; a man with his arms thus bound behind his back can only be a prisoner of war.

The rest of the scene is missing, but *v.* below, Fragment U. 18526.

Register 4, reverse, U. 3265, Pl. 44c, middle

Two bearded men, stripped to the waist and wearing long skirts open down the front and secured by belts, are beating an enormous drum. The drum, nearly the height of a man, seems to have metal disks like castanets round its edge, unless indeed these are merely the studs which fasten the skin to its frame. To the right of the drummers there are remains of a third figure, apparently that of a man clapping his hands. Fragments of a second drum show that the

scene was duplicated to the right-hand end of the register, and two detached heads of men with short curly hair and beards may be those of the drummers as in the Philadelphia reconstruction. Of the centre of the composition nothing at all remains.

Below this scene comes the broad plinth, 0.22 m. wide, which appears on either face of the slab, but on this face instead of being plain bears the two-column inscription (UET I, 44b) recording the work done by Ur-Nammu on the canals of Ur.

Register 5, reverse, U. 3328, Pl. 44c, bottom

The main fragment at the extreme left-hand edge of the stone shows a priest, clean-shaven but wearing a cloak which passes over his left shoulder and under his right arm, raising both hands in front of his face in the attitude of worship. In front of him, also facing right, is a figure of which the outline is preserved from the knees upwards but most of the detail has been effaced by the decay of the stone; it is a man of taller stature, apparently bearded and wearing a turban and long-skirted garment (the effect of naked legs given by the photograph is due to a crack in the limestone), who seems to be holding some (missing) object to his breast with both hands; in front of him is a tall and slender rectangular altar¹²¹. On the far side of the altar stands another draped figure — the head, shoulders, and feet lost — who is holding in both hands a tall tumbler-shaped vase from which he must be about to pour a libation. A separate fragment, which however, can be accurately placed because it bears part of the canal text, shows the battered head of this last figure and, behind it, the top of one of the 'palms' which, in the second register of the obverse, are set together with date clusters in the libation vases; it has been restored in Philadelphia. The upper part of a fourth figure, U. 6409, Pl. 44g, seen in the Philadelphia reconstruction, has been placed here arbitrarily.

We have here a scene of sacrifice (probably duplicated in the left-hand half of the register) in which Ur-Nammu himself is again taking part. Legrain suggests that the man to the right of the altar is making his offering before a statue of the king — a theory which seems to involve the further assumption that the height of the king's figure is due to his standing on a low pedestal. Personally I do not believe that the king would represent himself as actually deified and receiving worship; it is far more likely that this is no statue but Ur-Nammu in person assisting at the rite, though not himself pouring the libation, just as in other and earlier reliefs we see the person who is politically the most important looking on while the ritual act is performed by a priest¹²².

U. 18526, Pl. 44b

This important fragment was found in 1932, after the reconstruction of the other pieces had been completed in the University Museum. On the right of the fragment can be seen the feet and bottom of the flounced skirt and part of the horned headdress of a seated god whose throne is set upon a high, stepped base. In front of him a small nude figure, a priest or temple attendant, stands holding in his right hand a folded cloth, while with his left he wields a fly-whisk the tip of which brushes the god's headdress. On a lower step behind him, a clean-shaven priest wearing a long-skirted robe also carries a folded cloth over his left arm; he faces towards the left (the opposite direction to the god and his attendant) holding out his hands to a man with curly hair and short beard who, since his head is at a much lower level, seems to have been standing on a yet lower step. Of this figure only the head, shoulder, and left arm are preserved; he is stooping and carries a large burden the nature of which is not quite certain; Legrain believes it to be "a dead body whose head rests upon the man's shoulder; he supports the trunk with his left hand while his right arm (the hand is visible) must have been about its middle." Above the scene there remains the plinth dividing it from the upper register, and at the left-hand end of this there are traces (belonging to that upper register) which Legrain interprets as a stream of water.

When the fragment was found my impression was that it belonged to the third register of the obverse and went far towards completing the upper half of the building scene; in that case there would have been in it two deities, Nannar and Nin-gal, seated one in front of the other, *i.e.*, intended to be side by side, and the steps would have been the top of the unfinished building; further, a different interpretation would have to be found for the load carried by the stooping man. But it is difficult to see how both this fragment and the small fragments showing men's feet on the top of the masonry could be accommodated to the space available in the register, and Legrain is positive that it belongs to the reverse of the slab and notes that its grain, surface and composition all agree with that; in his opinion it comes from the right-hand end of the third register and "forms a striking parallel to the prisoner scene" at the other end. Unfortunately, owing to the monument's having been reconstructed, it was not possible to find a true joint with the much-damaged fragment U. 3264, so that the attribution cannot be said to be proved, but the parallelism which is so marked a feature of the other registers is a strong argument in its favour and it must, I think, be accepted. Perhaps the main objection is that, on this theory, the prisoners of war are actually slaughtered in front of the god and their dead bodies brought to him as offerings, a rite for which it would be hard to find literary support; but the identification of the man's burden as a dead body is not certain (though it does seem plausible) and a different explanation might evade the difficulty.

U. 304, Pl. 45f.

This relief fragment was found in the Dub-lal-mah courtyard together with two small fragments from the fourth register of the obverse of the stela (the top of the ladder and a bit showing squared brickwork); it represents a man squatting and milking a cow from behind, and behind him is the foreleg of, apparently, another cow. The treatment of the hair and beard is very much that of the workmen in the building scene, and the short belted kilt also is similar, but the subject, which is identical with that on the frieze of A-anni-padda's temple at al'Ubaid¹²³ does not seem to accord well with those on Ur-Nammu's stela, and the texture of the stone as affected by exposure is not the same. Legrain says "it may or may not belong"; if it does, it must be part of the lowest register, for below the normal plinth at the base of the scene there is a large plain projection which could be none other than the tenon fixing the stone into its socket, and the only place for it would be the lowest register on the obverse (on which I thought I could detect the tips of the horns of cattle).

Terribly mutilated though it is, the Stela of Ur-Nammu is by far the most important piece of sculpture in stone whereby we can judge the art of the Third Dynasty. As a royal monument commemorating the piety and the success of the dynasty's founder, it was presumably entrusted to one of the best sculptors of the time and represents both in inspiration and in technique the best art of the period. It was of course made to order, that is, the artist was not at liberty to choose his subject: that was imposed upon him and he was responsible only for the manner of its representation. Clearly the idea was to record the main achievements of the king. Pride of place is taken by the works of irrigation which had brought prosperity to the fields; the top registers on either side of the stone and the long inscription on the reverse do justice to this subject. Associated with this is the scene of libation when Ur-Nammu receives the order to construct the Ziggurat, and the double register below is a fitting record of the king's activities as a builder. The third register on the reverse, with its defile of prisoners, must stand for foreign conquest, one of those wars concerning which Ur-Nammu's extant annals are silent, though they have been his means to power: victory in war may have been the theme of the 'drummers' register also. The boast of a Sumerian king was that he had honoured the gods, had defeated his enemies, had secured equal justice for his subjects, and had dug canals. Three of these claims are illustrated unmistakably upon the stela — the honouring of the gods not only by the scene of the building of the Ziggurat but also by the three scenes dealing with libation and sacrifice; but if it be the case, as we may fairly suppose it is, that the stela merely gives pictorial form to the conventional boast, there yet remains the king's claim to Justice.

I am indebted to Mr. Sidney Smith for the following explanation. The objects held out by Nannar to Ur-Nammu in the second register (obverse) are, quite definitely, the measuring-rod and line used by architects or builders, and when in the next register we have the scene of the building of the Ziggurat it is natural, and probably correct, to connect the two and to interpret the god's gesture, as I have done, as an order for the Ziggurat to be built. But those objects must be capable at the same time of a much wider symbolism, because elsewhere they appear as ordinary attributes of the god where there is no association with any architectural activities; the most outstanding instance of this is on the Hammurabi Code, where the context is exclusively legal — Shamash holds the rod and line while he dictates to the king the 'decrees of equity'. Now the measuring-rod is a natural symbol of justice, of 'fair measure', for it is the standard whereby things have to be judged; and the coiled cord is that which the builder stretches between two fixed points so as to get a straight line — it is for 'straight dealing', the standard of rectitude. That is why Shamash holds them to introduce the famous Code; in precisely the same way Ur-Nammu accepts from the hands of Nannar the commission to deal out equal justice to his subjects. Read literally the picture tells how the king was inspired to build his huge tower; but the symbolic value of those tools in the hands of a god was familiar enough to the Sumerians for them not to lose the royal claim to fair measure and straight dealing.

Symbolism is indeed paramount throughout the whole series of reliefs. Thus, the names of the canals dug by the king are recorded in writing, there being no other way of recording them; but the top registers on both faces of the stela are the pictorial comment on the written word; the king, by his offering, prays for the fertility of the soil which the canals were intended to secure, but it is the angels who pour the life-giving streams upon the earth — the canals were the means, but the end is in the hands of the gods. In the second register again the king makes his libation over the fruits of the earth as he receives the order to build; even so Gudea¹²⁴ set to work to build the temple of Nin-gir-su because the annual rise of the rivers had failed and the fields were desolate; even so Ur-Nammu himself¹²⁵ says that because he had built the temple of Nannar he 'had saved the vegetables in the garden plot and had brought back to Ur the ships of Magan' — irrigation had been restored and the canals were again navigable. The good works are interdependent and a single symbol may stand for more than one, may have a double meaning; the stela, obviously, is meant to celebrate the virtues and the successes of Ur-Nammu, but it must imply, in a form which everyone could readily understand, that in the end all was due to the blessing of the Moon God.

The subject therefore — the royal claim — was fixed and conventional; for the symbolism to be readily understood it also had to be conventional and familiar. At first sight one might be struck by the combination in a single monument of such traditional formalism as characterises the second register of the obverse with the pictorial composition of the building scene; of the extreme symbolism that pervades that same second register with the frankly ob-

jective realism of the slaughter scene on the reverse; of the dry schematic treatment of dates and palm in the scenes of libation with the bold fancy of the downward-flying angels. One might suppose that here an original imagination had infused new life into conventions inherited from the past, that the creative spirit of the Third Dynasty was opening up a new phase of Sumerian art. So little has been preserved to us of Third Dynasty art that even the scanty remains of so important a sculptural monument as this are apt to strike us as unusual and therefore novel, and when the Stela of Ur-Nammu was first discovered it was only too easy to exaggerate its originality. In point of fact it is in originality that the stela is most lacking.

That which would seem to be the most daring invention, the figures of the flying angels, is exactly paralleled on a monument of Gudea, a holy-water basin found at Tello¹²⁶ and though that is the only other known example of the type we can be sure that it was not unfamiliar to the Sumerians. As regards the rest of the stela it is interesting to compare with it the very fragmentary remains of the great Stela of Gudea discovered at Tello¹²⁷ and to see—as even those few scraps allow us to see—how closely the Third Dynasty sculptor reproduces the work of his predecessor. The scene with the drummers is clearly identical in both monuments. It is obvious that in the Gudea stela the top register was on a larger scale as in that of Ur-Nammu¹²⁸. On the Gudea stela there seems to have been a scene of building precisely like that on the Ur monument¹²⁹: there are scenes of libation (Tello p. 294, Fig. 7); there are processions of priests carrying emblems on poles which probably explain the (missing) bottom register on the obverse of our slab; and as regards the details, we find on the older sculpture the same varieties of type, the long-bearded god, the clean-shaven priest, the workman with short beard and curly hair, a figure of a minor goddess (Tello p. 285, Fig. 2) almost identical with that behind Ur-Nammu in the great libation scene. Gudea with his turban and his name inscribed on his skirt (Tello Pl. X, 3) is, except for being clean-shaven, a complete prototype of Ur-Nammu. Admirable as the Ur stela is, it strikes no new note, but is the last of a series wherein every detail, it would seem, had become stereotyped and every bit of symbolism had been consecrated by custom; for all its perfection of technique it is emphatically a work of the decadence.

CHAPTER XIII

THE POTTERY

The pottery that could be assigned to the Third Dynasty was invariably unpainted and, apart from an occasional instance of simple comb-drawn straight or waved bands, undecorated. On some examples of Types XI and XII there was a haematitic wash, unburnished, and Types XIX - XXIII presented a reasonably good engobage surface. But the pottery in general was strictly utilitarian and inclined to be coarse and heavy. It should be noted that all came from temples or from royal palaces or tombs (we found no graves or domestic buildings which could be safely attributed to the Third Dynasty) and such do not necessarily give a fair picture of the pottery of the period, for gods and kings alike employ tableware of richer material than clay. But nowhere in any Third Dynasty level did we find any evidence to shew that any finer wares were in use at the time. It is the rule rather than the exception that in days of national wealth and prosperity the potter's art falls into disrepute and, his clientele being confined to the kitchen and the hovel, the quality of his work deteriorates¹³⁰; this may well have been the case at Ur under the kings of the Third Dynasty.

Twenty-eight types in all were found. Of these (v. Pls. 51, 52) Types I, VIII, XII, XIII, XIV, XVI, XVII, XX, XXI, XXVI were found in the tomb-chambers of the Dungi mausoleum, Types III, X, XI, XXII in the chambers of the SE mausoleum of Bur-Sin; all these therefore are very accurately dated. The other types were all found in the Third Dynasty level of the rooms of E-nun-mah, but their dating is less close because the temple is contemporary with the whole dynasty¹³¹.

Types VII, XVI, XXIII, and XXIV are peculiar to the Third Dynasty in the sense that at Ur they have not been recorded as coming in any other horizon. Types III, IV, V, VIII, XI, XII, XIII, XV, XVIII, XX, XXII, XXVI, and XXVIII, are all Sargonid types, some of them originating in the Early Dynastic period but running on through that of Sargon¹³² and Types VI and IX are each represented by a single example found in Early Dynastic graves and by none in Sargonid graves. Of these, V, XI, XV, XVIII, and XX occur in the Larsa period also, and Types I, II, X, XIV, and XVII are common in the Larsa period but are not known before the Third Dynasty, so may be regarded as Third Dynasty originals inherited by Larsa. Broadly speaking therefore, there is no characteristically 'Third Dynasty' pottery; the wares used in the period were not, for the most part, used exclusively in that period but were common to it and to the age either preceding or following it. We may be able to assign individual pots to the Third Dynasty by their occurrence in Third Dynasty buildings, but it would be very hazardous to assign a building to the Third Dynasty on the evidence of the pottery found in it.

CATALOGUE

With the Catalogue for this volume, Sir Leonard Woolley included the following introduction:

"There are listed here the more important objects of the Third Dynasty date mentioned in the text of Volumes V and VI, together with others of that date which, having been found loose in the soil and divorced from any definite context, are not otherwise recorded. I have omitted the clay vessels, for which (since all are plain) a reference to the Type-sheets is sufficient identification, and have dealt very briefly with the cylinder seals, most of which are published in Volume X, and with the inscriptions, which have appeared in UET I; in both cases cross-references are given. On the other hand I have included a few inscribed objects not of Third Dynasty date which were found in Third Dynasty buildings and are quoted in the text as being of interest for the building's history.

"Capital letters in round brackets show to which Museum each object was allotted; where the Museums have supplied their own registration or catalogue numbers these are added; thus (B) = Baghdad, with registration number IM; (L. BM) = London, British Museum; and (P) = Philadelphia, with registration number CBS."

The feeling of the Publication Committee, however, is that a complete record of the finds is essential for the construction of the evidence and for the convenience of the researcher. Therefore, every U number appearing in the text (rather than only selected numbers) should also appear in the catalogue. Thus, the field catalogue entry for each of those numbers has been inserted; to distinguish between the author's selected catalogue and these additional insertions, items from the former are preceded by an asterisk. The field catalogue entry is given in full except for the tablets; as these latter are currently being studied and published, the tentative and often incorrect translations in the field catalogue have been omitted and publication references added. Spellings of Sumerian words where given have been left as presented by the author.

It will be noted that there are many inconsistencies in the way locations are given. This is due to the fact that in some cases the Grid Square (see Plan, Pls. 53 and 61) is used, in others the popular name. For example, T.T.B. 16-17 is part of E-nun-mah, P.D. is the Great Nannar Courtyard.

A special problem arises with the designations of room numbers in E-nun-mah. In several instances (U. 195, 246, 256, 263, 296, 406, 599, 7903) there is a conflict or other discrepancy between Woolley's text and the catalogue. In each instance, the Woolley's text location is given in the catalogue, followed by the location given in the original field catalogue in parentheses. In a number of other instances the text gives the locations using room numbers as assigned by Woolley while the catalogue gives the original coded field location (e.g. T.T.B. 17). While clearly some reasoned correlation between the two exists, it is not entirely certain what the complete correspondence for all numbers is, or why some changes appear to have been made. For that reason, again, we have listed the text location first, followed by the field location (in parentheses) as given in the original field catalogue. Where Woolley's text fails to mention catalogued items specifically under his various room descriptions, those items appear in the catalogue as originally given with only their field location designations. The resulting report thus leaves some unanswered questions of provenience but at the present time there seems no way to resolve the problem further.

- *U.97 Cup of rough reddish clay, Type IV, a hole pierced through the base. Ht. 0.05 m., diam. 0.052 m., base 0.034 m. From E-nun-mah, probably Kuri-Galzu level.
- U.108 Vase, fragment, alabaster. Diam. across top 0.075 m. E-nun-mah, corridor, (T.T.B. 7). p. 49.
- U. 118 Tablet found with hoard in T.T.B., probably astronomical. p. 54.
- *U.137 Statue, fragment, white limestone; the head, left shoulder, and most of left arm preserved; the eyes were originally inlaid. Apparently a female figure, the hair dressed in a heavy roll across the forehead,

the top of the head smooth, traces of long locks on the shoulders; no sign of drapery. The surface and softer parts of the stone are much decayed and the character of the work has suffered greatly. Ht. of head 0.08 m., total ht. 0.18 m. E-nun-mah, room 1. p. 49, Pl. 46a. (P.CBS.14966)

- *U.139 Inlay, fragment, lapis lazuli, with deep and shallow transverse grooves possibly representing hair. 0.04 m. x 0.02 m. E-nun-mah, room 1. p. 49. (B.IM.307)
- *U.152 Beads, of translucent red pebble, small barrels, 25 in all. Found scattered in E-nun-mah, room 9, near the drain. p. 50. (B.IM.79)
- U.153 Beads, minute, of transparent white glass and opaque glass paste; 7 beads to 1 centimetre. Near drain against wall of room 13, T.T.B., some loose, some in small pot base. p. 50.
- U.164 Tablet, baked clay, inscribed contract, reign of Ishme-Dagan. T.T.B.
- U.165 Tablet, baked clay, inscribed account tablet dated in reign of Ishme-Dagan. UET I, No. 217, UET V, No. 281. T.T.B.
- U.166 Tablet, fragment, unbaked clay, inscribed and with seal impressions. T.T.B., room 13, below a pavement, in room filling. p. 52.
- U.167 Cylinder seal, white crystalline marble, burnt, poor condition. Subject: seated god right; before him an altar, then two standing figures left and remains of column of inscription. E-nun-mah, room 22. (T.T.B.). p. 53.
- U.170 Tablet, unbaked clay, inscribed, account tablet, dated. UET II. With stone bowls, in E-nun-mah, room 10, (T.T.B.16). p. 51.
- U.171 Tablet, fragment, clay, inscribed, account. With pieces of stone vases in E-nun-mah, room 10. (T.T.B.16). p. 51
- *U.173 Vase lid, fragments, dark grey steatite, decorated with incised double concentric circles having dot centres. Diam. 0.12 m. E-nun-mah, room 10. p. 50.
- *U.176 Wig of statue (?), dolerite, fragment; convex surface with wavy lines probably representing hair. 0.07 m. x 0.04 m. E-nun-mah, room 22. Cf. U.512, Pl. 49p. p. 53 (P.CBS.14959)
- *U.177 Inlay, shell; 12 pieces. The front is smooth, in the back are drill holes showing traces of the copper wire used for attachment. L. 0.128 m. E-nun-mah, room 10, below the Kuri-Galzu floor level. p. 50. (P.CBS.15294)
- *U.182 Saucer, reddish clay, Type II, roughly made. Ht. 0.035 m., diam. 0.11 m. E-nun-mah, room 11, rather above the layer of stone vase fragments.
- *U.183 Vase, greenish drab clay, Type XXIV, upper part missing. Ht. 0.08 m., diam. 0.065 m. E-nun-mah, room 11, Kassite level.
- *U.184 Tumbler, coarse reddish clay, Type VI, miniature. Ht. 0.05 m., diam. 0.07 m. E-nun-mah, room 7, on the level of the Kudur-Mabug foundations.
- U.186 Tablet, unbaked clay. Inscribed, contract tablet, dated in the 7th year of Bur-Sin I. E-nun-mah, room 9 (T.T.B.13). p. 50.
- U.188 Cone, fragment, clay, inscription of Kudur-Mabug. UET I, No. 123. T.T.B.17 with broken stone vases.
- U.189 Tablets, fragments, unbaked clay. E-nun-mah, room 11. (T.T.B. in stratum of broken stone vases). p. 51.

- *U.190 Spade blade, copper, wrought metal; the socket made by bending the copper round the wooden shaft. L. 0.205 m., w. 0.08 m. Found in the NE double gateway across the Sacred Way by E-nun-mah. p. 54.
- *U.192 Inlay, leaf-shaped, shell pieces with engraved lines parallel to the edges; they represent locks of hair and were used for incrustation on statues to render the fleece *kaunakes* skirt. U.192E consists of three such locks cut out of a single bit of shell. Up to 0.085 m. long and 0.02 m. wide. E-nun-mah, rooms 11 and 13, below the Kuri-Galzu floor level. p. 51. (L.BM.116546-49)
- *U.193 Goblet, drab clay, Type VII, miniature. Ht. 0.07 m., diam. 0.045 m. E-nun-mah, passage, room 1.
- *U.194 Pick-head fragment, model, granite; a ceremonial or votive object. It is socketed and has one pointed end, the other end broken. Present L. 0.13 m., ht. 0.04 m. E-nun-mah, room 10, below the Kuri-Galzu floor level. p. 50. (P.CBS.14960)
- *U.195 Pick-head fragment, model, granite; both points missing; socketed type with curved blades. Probably a ceremonial or votive object. L. 0.17 m., ht. 0.055 m. E-nun-mah, room 11 (room 10), below the Kuri-Galzu floor level. p. 51. (L.BM.116462)
- *U.196 Hammer-head, fragment, model, granite; only part of the hammer face, wedge-shaped, surviving. Probably a ceremonial or votive object. Ht. 0.09 m., w. 0.035 m. E-nun-mah, room 10, below the Kuri-Galzu floor level. p. 50. (P.CBS.14962)
- *U.199 Beads, 18 balls of opaque glass paste and 6 balls or barrels of black-and-white paste imitation agates. Found scattered in the N. corner of room 11, E-nun-mah, on the level of the stone fragments. p. 51. (B.IM.94)
- *U.200 Beads, carnelian, paste, and crystal, mixed types. Found scattered in the floor packing of room 11, E-nun-mah, on the level of but not near the stone vase fragments. p. 51. (B.IM.95)
- U.205 Tablet, clay, account. E-nun-mah, room 11. (T.T.B. 17, level of broken stone vases). p.51.
- *U.206 Mace-head, calcite, with inscription of Rimush. Decorated with rope moulding in relief. UET I, No. 10, UE IV, SAKI, p. 162(c). Ht. 0.19 m., diam. 0.21 m. E-nun-mah, room 11, below the Kuri-Galzu floor level. p. 51. (P.CBS.14933)
- *U.208 Mace-head, marble, with inscription of Ur-Nammu. UET I, No. 32. E-nun-mah, room 11, below the Kuri-Galzu floor level. p. 51. (B)
- *U.209 Cone, fragment, stone, with inscription of Ur-Nammu. UET I, No. 48. H. 0.09 m., base diam. 0.095 m., rim diam. 0.05 m. E-nun-mah, room 11. p. 51. (P.CBS.14938)
- U.212 Cone, clay. UET I, No. 123.
- *U.215 Earring, gold, small lunate type. Diam. 0.015 m. E-nun-mah, room 13. p. 51. (B)
- U.217 Cone, clay, upper part, with most of text preserved. Inscription of Kudur-Mabug. UET I, No. 123. E-nun-mah, room 13. (T.T.B.19, NE corner below rammed mud floor of first brick building). p. 51.
- *U.218 Beads, 5 balls of opaque glass paste, white with narrow bands of light yellow imitating agate; a similar drop pendant and 8 small barrels of red pebble. Found scattered in E-nun-mah, room 13. p. 52. (L.BM.115684)
- *U.219 Tablet, dark greenish-grey steatite, inscribed on one side. E-nun-mah, room 13, below the Kuri-Galzu floor level. p. 51. (B.IM.1)

- *U.220 Tablet, fragment, dark steatite, inscribed on both sides. UET VIII 1:41. E-nun-mah, room 13, below the Kuri-Galzu floor level. p. 51. (L.BM.116452)
- *U.221 Mace-head, green quartz, with inscription of Sargon (?). UET I, No. 6, and UE IV. Ht. 0.095 m., w. 0.09 m. E-nun-mah, room 11. (T.T.B.19 below mud floor). p. 51. (P.CBS.14936)
- *U.222 Tablet, Steatite, with inscription of Dungi. UET I, No. 58. E-nun-mah, room 19, below the Kuri-Galzu floor level. (B)
- *U.223 Tablet, dark steatite. Inscribed on both flat face and rounded back. E-nun-mah, room 11. (T.T.B. 19 below mud floor). p. 51.
- *U.225 Inlay, blue faience much bleached, shield-shaped pieces; each having at the back two holes for attachment by copper wires. 0.054 m. x 0.033 m. E-nun-mah, rooms 10, 11, 12, below the Kuri-Galzu floor level. p. 50. (L.BM.116534)
- U.226 Adze blade, bronze, socket missing. L. 0.115 m., w. 0.07 m. T.T.B., passage or recess against outer wall S.S. p. 54.
- *U.231 Bowl, fragments (4), dark steatite. On the outside, mythological scenes carved in relief: two-headed monster holding the horns of an ibex, other figure fighting a serpentine beast, a lion, scorpions, fish, etc. On the inside an inscription of Rimush. UET I, No. 9, and UE IV, Pl.36. Original ht. c. 0.15 m., diam. 0.19 m. E-nun-mah, room 11, below Kuri-Galzu floor level. p. 51. (L.BM. 116455)
- *U.232 Bowl, fragments (3), limestone, with inscription. On the outside, carved in relief, a seated goddess, 2 children, a standing god, and 5 figures of adorants. UET I, No. 7, and UE IV, Pl.36. Original ht. c. 0.11 m., diam. 0.19 m., E-nun-mah, room 11. p. 51. (L.BM. 116432)
- U.233 Amulet, shell, demon's head. T.T.B.22, p. 53.
- *U.234 Cylinder seal, dark steatite. Two men fighting lions; poor scratchy work. UE X, No.217. L. 0.021 m., diam. 0.009 m. From E-nun-mah, room 22, doubtful level. p. 53. (B.IM.101)
- *U.235 Plumb-bobs (4), stone, two pierced transversely, two from the top to the side. E-nun-mah, room 13. p. 51. (B.IM.310)
- *U.238 Incense-burner (?), dark clay box-shaped fragment with incised decoration of inverted dot-filled triangles. H. c. 0.07 m., l. 0.10 m. E-nun-mah, room 13. p. 51. (P.CBS.15227)
- *U.244-245 Vase fragments, stone, with inscriptions of En-anni-padda, son of Ur-Bau. UET I, No. 25 and UE IV. L. 0.13 m., w. 0.10 m., th. 0.22 m. E-nun-mah. See U.273 (L.BM.116445, 116457).
- *U.246 Vase fragment, limestone, with inscription of Ur-Nammu. L. 0.085 m., w. 0.073 m., ht. 0.025 m. E-nun-mah, room 10 (room 11). p. 50 (P.CBS.14939)
- *U.247 Mace-head, fragment, calcite with inscription for Gimil-Sin. UET I, No. 83. E-nun-mah, room 11. p. 51. (L.BM.116429)
- *U.248 Vase fragment, calcite, with inscription of Dungi. UET I, No. 57. E-nun-mah, room 11. p. 51. (L.BM.116430)
- U.249 Limestone fragment, votive inscription, probably a duplicate of that on the stone cone of Ur-Nammu. Joined to U.270. UET I, No.48. L. 0.085 m., w. 0.065 m., th. 0.018 m. E-nun-mah, room 11. (Under pavement, T.T.B.16-17) p. 51.
- *U.251 Vase fragments, calcite with inscription of Rimush. UET I, No.8 and UE IV. L. 0.095 m., w. 0.06 m., th. 0.025 m. U.253 is part of same vase from same location. E-nun-mah, room 11, p. 51. (L.BM.116435)

- U.252 Vase fragment, alabaster, inscribed, dedicated by Ur-Nammu. L. 0.055 m., w. 0.06 m., th. 0.01 m. Under pavement, T.T.B.16-17. p. 50. (P.CBS.14943)
- *U.253 Vase fragment, stone. Inscribed by Rimush of Agade. UET I, No. 8. L. 0.11 m., w. 0.085 m., th. 0.025 m. Under pavement T.T.B.16-17. See also U.251.
- *U.254 Vase fragment calcite, with inscription of the daughter of Dungi. UET I, No. 51. E-nun-mah, room 11. p. 51. (L.BM.116442)
- U.255 Jar fragment, alabaster, inscribed. L. 0.08 m., w. 0.05 m., th. 0.012 m. UET VIII 1:39. Under pavement, T.T.B.16-17. (L.BM.116438)
- *U.256 Vase fragment, calcite, with dedication by a priest of Nannar. L. 0.095 m., w. 0.075 m. E-nun-mah, room 11. pp. 50, 51. (P.CBS.14947)
- *U.257 Vase fragment, calcite, with inscription of Dungi. UET I, No. 57. L. 0.095 m., w. 0.09 m. E-nun-mah. (L.BM.116430)
- *U.258 Vase fragments, calcite, with inscription of Lugal-Kisal-si. UET I, No. 3, and UE IV. L. 0.13 m., w. 0.055 m. E-nun-mah. (L.BM.116439)
- *U.260 Vase fragment, calcite, with inscription of Dungi. UET I, No. 57. L. 0.055 m., w. 0.06 m., th. 0.01 m. E-nun-mah. (L.BM.116430)
- *U.261 Vase fragment, calcite, with inscription of Ibi-Sin. UET I, No. 99. L. 0.04 m., w. 0.07 m., th. 0.01 m. E-nun-mah, room 11. p. 51. (P.CBS.14970)
- *U.262 Bowl fragment, stone, with inscription for Ishme-Dagan. UET I, No. 101. L. 0.14 m., w. 0.04 m., th. 0.01 m. E-nun-mah, room 11. p. 51. (P.CBS.14948)
- *U.263 Vase fragment, calcite, with inscription of Rimush (duplicate of U.206, UET I, No. 10). UE IV. L. 0.06 m., w. 0.10 m., th. 0.02 m. E-nun-mah, room 10 (room 11, below the Kuri-Galzu floor). p. 50. (L.BM.116436)
- U.266 Vase fragment, alabaster, rudely inscribed, only first sign of three lines remain. L. 0.08 m., w. 0.08 m., th. 0.03 m. E-nun-mah, room 11. (Under pavement, T.T.B.16-17). p. 51.
- *U.267 Mace-head fragment, calcite, with inscription of Ur-Nammu. UET I, No. 49. Ht. 0.095 m., w. 0.115 m., th. 0.045 m. E-nun-mah, room 11. p. 51. (L.BM.116433)
- U.268 Bowl fragment, large, alabaster, last line of a dedication. L. 0.11 m., w. 0.14 m., th. 0.015 m. E-nun-mah, room 11. (Under pavement, T.T.B.16-17.) p. 51.
- *U.269 Vase fragment, calcite, inscribed with the name and titles of Dungi. L. 0.045 m., w. 0.035 m., th. 0.01 m. E-nun-mah, room 10 (room 11). p. 50. (P.CBS.14944)
- U.270 Dish fragment, stone, beginning of last two lines of a dedication. Joined to U.249. UET I, No. 48. L. 0.055 m., w. 0.05 m., th. of rim 0.015 m. E-nun-mah, room 11 (under pavement, T.T.B.16-17). p. 51.
- *U.271 Dish fragment, calcite, with a dedication by a priest of Nannar "thy son." L. 0.10 m., w. 0.10 m., th. 0.02 m. E-nun-mah, room 11. p. 51. (P.CBS.14941)
- *U.272 Vase fragment, calcite, with inscription of Lugal-Kisal-si around the shoulder. UET I, No. 4, and UE IV. E-nun-mah. (L.BM.116431)
- *U.273 Vase fragment, calcite, with inscription of En-anni-padda, son of Ur-Bau. UET I, No. 25, and UE IV. L. 0.07 m., w. 0.065 m., th. 0.01 m. E-nun-mah. See U.244, U.245. (L.BM.116446)

- *U.274 Vase fragment, burnt calcite, with a dedication by a *patesi* of Ud-nun-ki. L. 0.05 m., w. 0.04 m., th. 0.01 m. UET VIII 1:52. E-nun-mah, room 11. p. 51. (L.BM. 116444)
- U.275 Bowl fragment, alabaster, inscribed in rude manner. L. 0.04 m., w. 0.06 m., th. 0.015 m. E-nun-mah, room 11. (Under pavement, T.T.B.16-17.) p. 51.
- U.276 Jar fragment, alabaster; fragment of one sign remains. L. 0.12 m., w. 0.07 m., th. 0.017 m. E-nun-mah, room 11. (Under pavement, T.T.B.16-17.) p. 51.
- U.277 Stone fragment, only traces of an inscription remain. L. 0.05 m., w. 0.025 m., th. 0.02 m. E-nun-mah, room 11. (Under pavement, T.T.B.16-17.) p. 51.
- U.278 Vase or jar fragment, stone; fragment of one sign. L. 0.08 m., w. 0.05 m., th. 0.022 m. Under pavement, T.T.B.16-17. p. 51.
- U.279 Bowl fragment, alabaster, beginning of second line of royal inscription. L. 0.035 m., w. 0.045 m., th. 0.015 m. E-nun-mah, room 11. (Under pavement, T.T.B.16-17.) p. 51.
- *U.280 Vase fragment, black steatite, originally inlaid on side and bottom with small discs of shell of which two pieces remain; above the base-ring an inscription beginning "Dungi, the mighty man, king . . .," 0.03 m. x 0.06 m. UET VIII 1:26. E-nun-mah, room 11. p. 51. (L.BM.116448)
- *U.281 Vase fragment, dark steatite, originally inlaid; part of an inscription. 0.045 m. x 0.035 m., th. 0.05 m. UET VIII 1:27. E-nun-mah, room 11. p. 51. (L.BM.116447)
- *U.283 Vase fragment, steatite, decorated with incised concentric circles; on the base the ends of lines of an inscription. L. 0.06 m., w. 0.06 m., th. 0.05 m. UET VIII 2:42. E-nun-mah, room 11. p. 51. (P.CBS.14952)
- *U.285 Vessel (or mace-head) fragment, white marble, inscribed in early characters with part of a dedication. 0.035 m. x 0.045 m. UET VIII 1:5. E-nun-mah, room 11. p. 51. (L.BM.116443)
- *U.287 Vase fragment, white calcite, inscribed with a dedication. L. 0.055 m., w. 0.055 m., th. 0.015 m. E-nun-mah, room 11. p. 51. (P.CBS.14946)
- *U.288 Vase fragment, white calcite, with the end of first 3 lines of a dedication to Nannar. L. 0.072 m., w. 0.035 m., th. 0.008 m. E-nun-mah, room 11. p. 51. (P.CBS.14945)
- U.289 Vase fragment, black stone, last sign of a last line of dedication. L. 0.057 m., w. 0.025 m., th. 0.007 m. E-nun-mah, room 11. (Under pavement, T.T.B.16-17.) p. 51.
- *U.296 Vase rim fragment, calcite, inscribed with the titles of Dungi. L. 0.13 m., w. 0.065 m. UET VIII 1:22. E-nun-mah, room 22 (room 12). p. 53. (L.BM.116441)
- *U.304 Relief fragment, limestone. Ht. 0.20 m., w. 0.40 m. Found in the NW guard-chamber of the gateway from the Dublal-mah courtyard to the Sacred Way. pp. 54, 80. Pl. 45-f. (B.IM.117)
- U.305 Ur-Nammu stela, white limestone fragment. Wall against which top of a ladder rests; above, the feet of a man. T.T.B: 4 with U. 304 Chapter XII, pp. 76-78, Pl. 43b. (P.CBS.15326)
- *U.307 Relief fragment, marble, for incrustation, a wing with feathers. Ht. 0.115 m., w. 0.07 m. E-nun-mah, room 15. p. 52. Pl. 49g. (L.BM.116463)
- *U.309 Statuette, feet and base, dark steatite; through the base there are horizontal holes for attachment. Ht. 0.055 m., w. 0.06 m. E-nun-mah, room 11. p. 51. (B.IM.119)

- U.315-318, 323 Tablets. U.315, UET I, No. 218; U.318, UET V, No. 743. T.T.B. 20. p. 52. U.318, E-nun-mah, room 14 (T.T.B. 20)
- U.325 Cone base, inscribed. Duplicate of U.188. L. 0.11 m., w. 0.11 m., th. 0.045 m. UET I, No. 123. T.T.B. 3A.
- U.327, 330, 333, 335 Cones, clay, fragmentary. U.333 UET I, No. 12. Cf. SAKI, p. 208, 4. E-nun-mah, pp. 52-53.
- U.336-337 Tablets, fragments, clay. U.337, UET V, No. 854. T.T.B.2. p. 54
- U.338-340 Tablet fragments. T.T.B. 9. p. 50.
- U.341-344 Tablets. T.T.B. 20. p. 52.
- U.346-363 Tablets. U.346, 349, 360, UET I, Nos. 218, 219, 217. T.T.B. 2. p. 54.
- U.364-365 Tablets. T.T.B. 9. p. 50.
- U.366 Plaque fragment, unbaked clay. On the smooth surface is a lightly incised sketch of the hind legs and tail of a lion. L. 0.055 m., ht. 0.045 m. Found low down in the passage, room 1, of E-nun-mah. p. 49, Pl. 49j. (L.BM.116533)
- U.373 Tablet fragment. T.T.B. 22, NE side. p. 53.
- U.376-380 Tablets. T.T.B. 17. U.379 E-nun-mah, room 11. p. 52.
- U.381-386 Tablets. E-nun-mah, room 22. (T.T.B. 26.) p. 53.
- U.387 Tablet fragments. E-nun-mah, room 13. (T.T.B. 19.) p. 52.
- U.388 Tablet fragments. T.T.B. 21. p. 52.
- U.389-390 Tablet fragments. E-nun-mah, room 22. (T.T.B. 26.) p. 53.
- U.391 Clay fragment, probably of jar sealing, with seal impressions showing crosses, animals, etc. L. 0.065 m., w. 0.045 m. E-nun-mah, room 22. (T.T.B.26.) p. 53.
- U.392-393 Tablet fragments. E-nun-mah, room 22. (T.T.B.26.) p. 53.
- U.395 Tablet fragments. T.T.B. 21. p. 52.
- U.396 Tablets. T.T.B. 9. p. 50.
- U.397 Tablet fragments. E-nun-mah, room 13. (T.T.B. 19.) p. 52.
- U.398-400 Tablets. T.T.B. 9. p. 50.
- *U.404 Bead, half of a large ball of black obsidian inscribed "(Ur-Nam) mu . . . king of Ur." Diam. 0.023 m. E-nun-mah, room 9. p. 50.
- *U.405 Vase lid, grey steatite, with (broken) knob handle. Round the rim a row of incised circles. Diam. 0.07 m. E-nun-mah, room 12. p. 51. Pl. 49-l. (P.CBS.14953)
- *U.406 Vase lid fragment, white calcite. In the centre was a rosette with inlaid petals, round the rim a band of inlaid liver-pattern motifs; inlay missing. Diam. 0.08 m. E-nun-mah, room 9 (room 7). p. 50, Pl. 49m. (B.IM.127)

- *U.410 Drill, copper, the shaft square in section, the butt broadened but now shapeless, the point missing. L. 0.125 m., diam. 0.004 m. E-nun-mah, passage, room 1. p. 49. (B.IM.129)
- *U.416 Bowl, white calcite, Type IX, the rim chipped. Ht. 0.05 m., diam. 0.12 m. Found in E-nun-mah passage, room 1, under the foundations of the SW mud-brick wall, perhaps a foundation deposit. p. 49, Pl. 51. (B.IM.129)
- U.420 Hinge socket, basalt, of Gimil-ilishu. L. 0.50 m., ht. 0.22 m. UET I, No. 100. E-nun-mah, room 13. (T.T.B. 7, east side chamber; stone re-used in Persian period and found in position in connection with Persian doorway.) p. 51. (P.CBS.15324)
- U.422 Hinge socket, basalt, of Ur-Nammu. E-nun-mah, room 17. (T.T.B. 23, later door at SE end, in position.) p. 52. (P.CBS.15323)
- U.423 Hinge socket, basalt, of Ur-Nammu. L. 0.45 m., ht. 0.20 m. T.T.B. 17, in position. p. 51.
- U.425-426 Tablets, dated. T.T.B. 9. p. 50.
- U.427-430 Tablet fragments. T.T.B. 17. p. 52.
- U.432 Tablet fragments. T.T.B. 13.
- U.433 Tablet, dated 9th year of Bur-Sin I. E-nun-mah, room 9. (T.T.B. 13.) p. 50, 52.
- *U.439 Vase fragment, white calcite, inscribed with a fragmentary dedication probably of Rimush, *cf.* UET I, No. 10. L. 0.06 m., w. 0.06 m., th. 0.025 m. E-nun-mah, loose in filling. (P.CBS.14934)
- U.441 Tablet, accounts on obverse, dated at bottom of 4th column reverse (date illegible). Same find as U.339. T.T.B. 9. p. 50.
- U.442-444 Tablet fragments. T.T.B. 9. p. 50.
- U.445 Cone fragment, ends of 13 lines, unidentified. L. 0.08 m., w. 0.06 m. E-nun-mah, room 9, (T.W.). p. 50.
- U.446 Tablet. T.T.B. 9. p. 50.
- U.451 Tablet fragments. T.T.B. 17. p. 52.
- *U.512 Inlay, black steatite, in form of a wig, the hair rendered by incised wavy lines. Ht. 0.035 m. Found in the central court of the Sacred Way, near the drain. p. 54, Pl. 49p. See also U.176. (B.IM.314)
- *U.513 Whetstone, coarse limestone, pierced. L. 0.065 m. Found in the Sacred Way. p. 54, Pl. 49o.
- *U.516 Inlay eye for a small statue, of white shell with a hole for a pupil of another material. L. 0.016 m. Found in the Sacred Way.
- *U.523 Vase fragment, obsidian, inscribed with a dedication to Bau. L. 0.045 m., w. 0.02 m., th. 0.008 m. UET VIII 1:18. E-nun-mah, above room 14. (L.BM.116450)
- U.524 Tablet, dated. T.T.B. 17. p. 52.
- U.534 Tablet, dated, *cf.* SAKI 235 (1). T.T.B. 2. p. 50.
- U.535 Tablet fragment. E-nun-mah, room 2. (T.T.B. SS.) p. 50.
- U.536 Tablet fragment, dated. T.T.B. 2. p. 50.

- U.537-539 Tablet fragments (28). U.539 with seal impressions. E-nun-mah, room 12. p. 51.
- U.540-541 Tablets, accounts. E-nun-mah, room 22. (T.T.B. 26.) p. 53.
- U.547-550 Tablets, accounts. T.T.B. 17. p. 52.
- U.574 Seal impression on clay fragment, shewing figure of worshipper being introduced and four-line inscription. L. 0.03 m., w. 0.045 m. E-nun-mah, room 22. (T.T.B.) p. 53.
- U.575 Jar sealing (?), clay fragment, with two seal impressions. One shews 5-line inscription, the other four lines, broken. L. 0.07 m., w. 0.045 m. E-nun-mah, room 22. (T.T.B.) p. 53.
- U.576 Seal impression on clay fragment, with 3-line inscription, standing figures either side. Duplicate of U.582. L. 0.04 m., w. 0.03 m. E-nun-mah, room 22. (T.T.B.) p. 53.
- U.577 Jar or bottle sealing fragment, seal impression shewing portions of 4-line inscription. L. 0.025 m., w. 0.03 m. E-nun-mah, room 22. (T.T.B.) p. 53.
- U.578 Jar sealing fragment, stamped with a round seal shewing winged composite figure. L. 0.03 m., w. 0.055 m. E-nun-mah, room 22. (T.T.B.) p. 53.
- U.579 Seal impression on clay fragment shewing misproportioned standing figure and the legs of another figure advancing toward him. L. 0.035 m., w. 0.02 m. E-nun-mah, room 22. (T.T.B.) p. 53.
- U.580 Seal impression on clay fragment shewing a figure resembling Amurru and a standing figure behind. L. 0.025 m., w. 0.02 m. E-nun-mah, room 22. (T.T.B.) p. 53.
- U.581 Seal impression on clay fragment, standing divine figure with 3-line inscription. L. 0.05 m., w. 0.025 m. E-nun-mah, room 22. (T.T.B.) p. 53.
- U.582 Seal impression on clay fragment shewing portions of 3-line inscription, duplicate of U.576, and another impression with standing figure and 2 lines of a broken inscription. L. 0.025 m., w. 0.015 m. E-nun-mah, room 22. (T.T.B.) p. 53.
- U.583 Seal impression on clay fragment shewing part of a divine figure with left arm raised, right arm perhaps hanging down right side. L. 0.03 m., w. 0.02 m. E-nun-mah, room 22. (T.T.B.) p. 53.
- U.584 Seal impressions (2) on clay fragment, shewing from left to right a goddess with both arms held up in adoration, and a figure like that of Amurru. L. 0.02 m., w. 0.045 m. E-nun-mah, room 22. (T.T.B.) p. 53.
- U.585-589 Tablet fragments, accounts. T.T.B. 7. p. 50.
- U.590 Tablet fragment, T.T.B. 17. p. 52.
- U.592 Tablet fragments. E-nun-mah, room 8. (T.T.B. 14) p. 50.
- U.596 Tablet fragment. T.T.B. 20.
- U.597 Tablet, dated in the reign of Gun (gunum). T.T.B. 8. p. 50.
- U.599-600 Tablets. E-nun-mah, corridor 1. (T.T.B. 7) p. 49, 50.
- *U.604 Gaming-piece, white marble, conical, the base chipped. Ht. 0.024 m., diam. 0.024 m. Found in the Sacred Way. p. 54, Pl. 49q. (B.IM.316)
- U.635,706, 707 Tablets, fragments. E-nun-mah, room 13. (T.T.B. 19.) p. 52.

- U.711 Tablet fragment. T.T.B. 12.
U.715 Tablet. T.T.B. 9. p. 50.
- U.719 Tablet. T.T.B. 8. p. 50.
- U.720 Tablet. T.T.B. 17. p. 52.
- U.724 Tablet, dated. E-nun-mah, room 22. (T.T.B.) p. 53.
- U.731-732 Tablets, fragments. U.732 dated to 7th year of Bur-sin I. T.T.B. 12. p. 51.
- U.733 Clay fragment with two seal impressions. L. 0.04 m., w. 0.05 m. T.T.B. 12. p. 51.
- U.734 Clay fragment with seal impression of (Im)-gur-Sin, son of Ur-Ninsun, servant of Lugal-banda. Duplicate U.739. L. 0.03 m., w. 0.06 m. T.T.B. 12. p. 51.
- U.735 Clay fragment, shewing part of one figure from seal impression. L. 0.04 m., w. 0.015 m. T.T.B. 12. p. 51.
- U.736 Seal impression fragment, shewing bust of one figure. L. 0.035 m., w. 0.02 m. T.T.B. 12. p. 51.
- U.737 Tablet, dated 14th year of Suma-ilum, king of Larsa. E-nun-mah, room 22. (T.T.B. 26.) p. 53.
- U.738 Tablets. T.T.B. 22.
- U.739 Seal impression on clay fragment, shewing divine figure standing before altar, 3-line inscription; also a second impression shewing bottom of standing figures. Duplicate of U.734. L. 0.06 m., w. 0.05 m. T.T.B. 22. p. 53.
- U.740 Seal impressions on clay fragment. The first shews one complete standing figure and one partly broken figure, and one line of a broken inscription. The second has a 3-line inscription. L. 0.05 m., w. 0.025 m. T.T.B. 22. p. 53.
- U.742 Tablet fragments. E-nun-mah, room 15. (T.T.B. 22). p. 52.
- U.743 Seal impression fragment. L. 0.03 m., w. 0.04 m. T.T.B. 15.
- *U.744 Statue fragment, diorite, probably from the shoulder, shewing the end of a single-column inscription of a king of Ur. 0.05 m. x 0.05 m. Found by the west corner of E-nun-mah, room 22. p. 53.
- *U.775 Cylinder seal, carnelian; an archer in a chariot, driving right, shoots at a kneeling archer, left. Assyrian style. L. 0.025 m. UE X, No. 611. From the west corner of E-nun-mah, room 22, 1.40 m. below the foundations of the Nebuchadnezzar drain. p. 53. (P.CBS.15248)
- *U.787 Statue head, white limestone, the top of the head broken off at the forehead, the nose and chin damaged; eyes were inlaid. The face is a mask, hollow behind, intended to be affixed to a figure in another material. Ht. 0.04 m. Found by NW limit of E-nun-mah, near the Nebuchadnezzar drain, low in the filling. (L.BM.116461)
- *U.790 Cylinder seal, black steatite, a man fighting an animal, traces of a column of inscription. L. 0.014 m. From the west corner of E-nun-mah, room 22. p. 53, Pl. 49c. (B.IM.251)
- *U.808 Duck-weight, basalt, cracked by fire and part missing, inscribed on wing "thirty true minas." Ht. 0.20 m., l. c. 0.27 m., w. 0.21 m. E-nun-mah, room 22. p. 53, Fn. (P.CBS.15325)
- *U.835 Plumb-bob, dark brown stone, pierced from top and side with two holes which meet. L. 0.035 m., diam. 0.02 m. From the west corner of E-nun-mah, room 22. p. 53, Pl. 50a. (B.IM.324)

- U.838 Hinge-stone, basalt, in bad condition, inscribed with the name of Gimilsin. L. 0.47 m., w. 0.44 m., ht. 0.23 m. E-nun-mah, room 22. UET I, No. 80 (*in situ* in brick doorbox in T.T.B. 31.) W. corner. p. 53. (L.BM.116416)
- *U.858 Vase, white calcite, Type I, restored from fragments, incomplete. Ht. 0.128 m., diam. at rim 0.085 m. From E-nun-mah, room 11. (L.BM.116466)
- *U.859 Vase, white calcite, Type I, restored from fragments. Ht. 0.115 m., diam. 0.045 m. From E-nun-mah, room 12. (P.CBS.14983)
- *U.860 Vase, white calcite, Type II, restored from fragments, incomplete. Ht. 0.125 m., diam. 0.089 m. From E-nun-mah, room 12. (P.CBS.14984)
- *U.861-870 Cones of Kudur-mabug, clay, large, duplicates of UET I, No. 123. Found against the SW wall of E-nun-mah. See U.188.
- *U.873 Vase, fragment, limestone, with dedication to Nin-gal. 0.055 x 0.075 m. From E-nun-mah, room 22. p. 53. (P.CBS.14949)
- U.874 Vessel fragment; diorite, ends of 4 lines of a longer inscription. L. 0.10 m., w. 0.06 m. UET VIII 1:8. E-nun-mah, room 22. (T.T.B.) p. 53. (L.BM.116453)
- U.880 Bowl fragment, pink-veined calcite, Type II, with remains of a dedication. Ht. of bowl 0.07 m. From E-nun-mah, room 11. p. 51. (P.CBS.14942)
- *U.881 Vase fragment, white calcite, Type II, with remains of a dedication to Nin-(gal?), 0.09 m. x 0.04 m. UET VIII 1:50. E-nun-mah, room 11. p. 51, Pl. 51. (L.BM.116440)
- U.882 Vase fragment, white calcite, Type III, inscribed with remains of dedication. 0.075 m. x 0.02 m. E-nun-mah, room 11. p. 51, Pl. 51.
- *U.883 Vase fragment, white calcite, Type II. Ht. 0.13 m., diam. 0.08 m. E-nun-mah, room 12. p. 51. (L.BM.116467)
- *U.884 Cup fragment, white calcite, Type V. Ht. 0.08 m. E-nun-mah, room 12. p. 51, Pl. 51. (P.CBS.14969)
- *U.886 Vase lid (?) fragment, of white calcite on which is carved in relief the hindquarters of a bull lying down left. L. 0.06 m., w. 0.08 m. E-nun-mah, room 11. p. 51.
- *U.887 Vase fragments, white calcite, Type II. Ht. 0.23 m., diam. 0.17 m. E-nun-mah, room 12. p. 51. (P.CBS.14985)
- U.890 Bowl fragment, alabaster, with remains of projecting solid handle on one side, remains of inscription. Ht. 0.045 m., diam. 0.095 m. E-nun-mah, room 11. (T.T.B.16-17). p. 51.
- *U.892 Bowl fragments, calcite with deeply coloured veins, Type VI. Ht. 0.055 m., diam. 0.155 m. E-nun-mah, room 12. p. 51, Pl. 51. (L.BM.116475)
- *U.900 Doorsocket, diorite, in bad condition, with inscription of Kuri-Galzu. L. 0.50 m., w. 0.40 m., ht. 0.22 m. E-nun-mah, room 21. p. 52.
- *U.908 Vase fragment, white calcite, with remains of a Third Dynasty royal dedication. Ht. 0.088 m., diam. 0.05 m. UET VIII L:42. E-nun-mah, room 11. p. 51. (L.BM.116437)
- *U.919-920 Cones, dedication, fragments, of Kudur-Mabug, text duplicate of UET I, No. 123. Found against the SW wall of E-nun-mah.

- U.924-925 Tablet fragments. T.T.B. W. side, above rooms 33 and 34.
- U.926 Tag label, small fragments, 2-line inscription and seal impression with 3-line inscription, an animal figure. Same seal as U.928. 0.02 m. x 0.02 m. E-nun-mah, room 22. (T.T.B. W.) p. 53.
- U.927 Seal impression on clay fragments. A figure resembling the god Amurru behind a female deity. 0.035 m. x 0.02 m. E-nun-mah, room 22. (T.T.B. W.) p. 53.
- U.928 Tag label, small fragment; same seal impression as U.926. 0.025 m. x 0.025 m. E-nun-mah, room 22. (T.T.B. W.) p. 53.
- U.929 Tag label or stopper?, small, fragment. Fragments of 2-line inscription on side: on top, seal impression shewing two large figures, one holding a dagger and a small figure between in attitude of surrender. 0.015 m. x 0.015 m. E-nun-mah, room 22. (T.T.B. W.) p. 53.
- U.930-937 Tablets. T.T.B. W. p. 53. U.931, E-nun-mah, room 22 (T.T.B.W.)
- U.950 Hinge-stone, basalt, with inscription of Kuri-Galzu. L. 0.43 m., w. 0.40 m., ht. 0.25 m. (*in situ* against N. jamb of NE doorway in T.T.B. 31.) p. 53. (P.CBS.15322)
- U.951, 964 Tablet fragments. E-nun-mah, room 22. p. 53. T.T.B.W.
966, 967
- U.968 Clay envelope, fragment, with inscription and seal impression on one side. E-nun-mah, room 22. (T.T.B.W.) p. 53.
- U.972 Tablet. T.T.B. 7. p. 50.
- U.974-975 Mud brick fragments, with portion of Bur-Sin inscription. T.T.B. 7. p. 50.
- U.979-980 Tablet fragments. E-nun-mah, room 22. (T.T.B.W.) p. 53.
- U.981 Clay fragment, with seal impression, shewing standing human figure holding an animal by the tail, and 2-line inscription. 0.035 m. x 0.03 m. E-nun-mah, room 22. (T.T.B.W.) p. 53.
- U.985 Macehead fragment, small, stone, with 3-line inscription. E-nun-mah, room 22. 0.045 m. x 0.04 m. (T.T.B.W.) p. 55.
- U.987 Tag label, circular, 5-line inscription. D. 0.035 m. E-nun-mah, room 22. (T.T.B.W.) p. 53.
- U.996 Bowl, grey steatite, broken, hemispherical, with short spout square in section and pierced; on the rim, diagonal incised stripes, below a row of compass-drawn incised circles. Ht. 0.07 m., diam. 0.15 m. E-nun-mah, room 11. p. 51. (B.IM.293) (L.BM.116464)
- *U.1000 Figure, Kanephoros, bronze, uninscribed. Ht. 0.26 m. Found in brick foundation box under the south corner of E-hursag. p. 367 Pl. 47a. (B)
- *U.1001 Tablet, steatite, rectangular, one side flat, one convex, uninscribed. 0.08 m. x 0.05 m. Found with U.1000. p. 36. (B)
- *U.1165 Gate socket, diorite, with inscription of Bur-Sin, UET I, No. 71. Found re-used in the Neo-Babylonian gateway abutting on the SW side of the Ziggurat close to its south corner. (P.CBS.15885)
- *U.1167 Vase, white calcite, fragment from the rim, remains of a dedication by Rimush. 0.03 m. x 0.25 m. UET VIII 2:41. E-nun-mah, room 22. p. 53. (L.BM.117148)

- *U.1190 Duck-weight fragment, diorite; originally of 30 minas; on one side of the neck a crescent moon in low relief; on the other, part of a dedication for the life of a Third Dynasty king. UET I, No. 84. 0.22 m. x 0.17 m. x 0.148 m. Found in the gateway by the south corner of the Ziggurat. (B)
- *U.1327 Statue, diorite, fragment from the head, life size, probably of a king of the Third Dynasty, remains of an inscription above the hair over the right side of the forehead. 0.175 m. x 0.095 m. From the filling of the great courtyard of Nannar.
- *U.1351 Cone fragment, clay. 0.073 m. x 0.04 m. x 0.026 m. Duplicate of UET I, No. 131; UET VIII 2:27.
- U.1353 Gold leaf, thin, cut into the form of a bull's leg and hoof, presumably for incrustation. L. 0.016 m. Found in the filling of the great Nannar court. Pl. 50b. (B.IM.669)
- *U.1359 Amulet, shell, in the form of a clenched fist. L. 0.016 m. From the great Nannar court. Pl. 50c. (B.IM.674)
- *U.1361 Drill, copper. L. 0.052 m. From the great Nannar court. Pl. 50d. (L.BM.116972)
- *U.1362 Drill, copper. L. 0.064 m. From the great Nannar court. (P.CBS. 15756)
- *U.1455 Vase, fragment from the rim, mottled black and white with remains of an inscription. UET VIII 2:8. See UET I, No. 25. 0.061 m. x 0.034 m. From the debris against the NE face of the Ziggurat. See U.18224. (L.BM.117146)
- *U.1584 Model boats, copper, cf. U.17945. L. 0.08 m., w. 0.02 m. Found against the NE face of the Ziggurat. A-B (See UE V, p. 111). (P.CBS.15754-55)
- *U.2561 Pigment case fragment, white calcite, burnt and distorted, with drilled receptacles in which blue and yellow paints remain. Found under the Kudur-Mabug wall, with tablets of Gungunum, SW side of E-nun-mah. (L.BM.119079)
- U.2582 Tablets. E-nun-mah, room 34 below curved arch. p. 47.
- *U.2592 Sword, copper, with tang. L. 0.75 m., w. 0.10 m. Found with Gungunum tablets under the Kudur-Mabug SW wall of E-nun-mah, p. 47, Pl. 50f.
- U.2601-2603 Tablets. E-nun-mah, room 34, below curved arch. p. 47.
- *U.2605 Pottery fragment, buff ware, with incised fragmentary drawing of a seated animal. Date uncertain. Found in the great Nannar court. Pl. 50e. (B.IM.899)
- U.2615 Tablet fragment. E-nun-mah, room 34, below arched wall. p. 47.
- U.2623 Label, clay. Same mentioned in temple pay-list U.2603. E-nun-mah, room 34 below arched wall. p. 49.
- U.2626-2627, 2629 Tablets, E-nun-mah, room 34, below arched wall. p. 47.
- U.2628 Label, clay. Time of Gungunu? Hole pierced through to attach on bundle. E-nun-mah, room 34, below arched wall. p. 47.
- *U.2634 Cone, clay, of Sumu-ilum. UET I, No. 114. Found on the NW side of the Ziggurat terrace. (L.BM.119028)
- *U.2650 Impression on clay of cylinder seal of Ama-ab-gi wife of Shesh-kalla; scene of a seated goddess and a standing worshipper. Found in the SE angle of the great Nannar court.

- U.2660, 2680-81, 2686-90, 2696-2700 Tablets. U.2700, UET III, No. 1079. E-nun-mah, room 34, below arched wall. p. 47.
- U.2701 Cone of Ur-Engur, fragment. Cf. U.2520. Diqdiqqeh. UET I, No. 50 (L.BM.119029)
- U.2702 Tablet fragment. UET III, 94. Inside E. corner of great Nannar court. p. 47.
- U.2703-2704, 2712, 2713 Tablets. E-nun-mah, room 34, below arched wall. p. 47.
- U.2761 Ur-Nammu stela, white limestone fragments. (A) Division between registers, one foot of top register and top of tree in lower register; (B) Same, with part of throne in top register and god's headdress in lower; (C) 2nd foot and part of skirt and throne of top register figure; (D) Part of throne of top register; (E) Lower part of headdress of god (2nd register) and hair; (F) Rest of god from 2nd register seated on throne before conventional tree into which king is pouring libation (this connects with U.3264A). Third register, upper parts of three figures: minor deity, king carrying mason's tools, attendant. (A) and (B) from L4 PDW. (C) from ES. Chapter XII, pp. 76, 77, Pls. 42d, 43a. (P.CBS.16676)
- U.2801 Cone, clay, of Kudur-Mabug UET I, No. 122. E.S.7. (L.BM.119022)
- U.2882 Brick of Kudur-Mabug. 0.34 m. x 0.34 m. x 0.075 m. E-nun-mah, room 34, arched wall. See U.7820. (P.CBS.16476 and P.CBS.16550)
- U.3007 Tablets. Dated in Gungunu of Larsa. T.T.B. 9, p. 50.
- U.3026 Stylus, bronze, with one angular and one oval point. L. 0.095 m. Found on the Ziggurat terrace.
- *U.3032 Door-socket, diorite, of Ur-Nammu, text as SAKI p. 186 (a). From the Nin-gal temple on the Ziggurat platform. (B.IM.1007)
- *U.3037 Door-socket, diorite, of Bur-Sin, cf. UET I, No. 67. From the Nin-gal temple on the Ziggurat platform, room 6. (B.IM.1008)
- U.3051 Tablet fragment. E-nun-mah, room 25, below arched wall. p. 47.
- U.3052-3053 Tablet fragments. E-nun-mah, room 35, below arched wall. p. 47.
- *U.3125 Bead, gold, with bitumen core, spherical. Diam. 0.015 m. From the Nin-gal temple on the Ziggurat platform, room 5. (B)
- *U.3140 Staple, copper. L. 0.095 m. Found on the upper pavement of the Nin-gal temple on the Ziggurat platform. (L.BM.119105)
- U.3209 Ur-Nammu stela, white limestone fragment. Breast of man with flounced dress, holding circlet in right hand, left arm raised. E.S.B. Chapter XII, Pl. 44 f. (P.CBS.16676)
- U.3215 Ur-Nammu stela, white limestone fragment with inscription on standing figure dressed in long fringed shawl. (Joins U.3264, U.2661). UET I, 44a. Courtyard in front of Dublal. Chapter XII, Pl. 43a (top register). (P.CBS.16676)
- *U.3246 Mould, stone, for making a ball bead. Diam. 0.05 m. From the Nin-gal temple on the Ziggurat platform.

- *U.3253 Statue head, small, diorite, young male, clean-shaven and beardless, broken off at base of skull. Ht. 0.088 m. From the Nin-gal temple on the Ziggurat platform, room 5. Pl. 45 g, h (B.IM.1082)
- U.3255 Seal impression, on fragment of black clay. Early Sumerian. Before 3000 B.C. T.T.B. 22. p. 53.
- *U.3261 Door-socket, diorite, of Ur-Nammu, text as in SAKI p. 186 (a). From the Nin-gal temple on the Ziggurat platform, room 6. (B.IM.1087)
- *U.3262 Beads, carnelian (very roughly cut), crystal, agate, one amethyst and one pebble. Found together in a cache below the Sin-balatsu-iqbi pavement of the Nin-gal temple on the Ziggurat platform, room 2. (B.IM.1088)
- U.3264 Ur-Nammu stela, white limestone fragments. Obverse, 3 fragments. Largest shows a seated goddess facing conventional tree and king pouring libation with attendant behind. A fourth figure faces right toward another scene in same register, fitting fragment (F) of U.2761. Reverse, scene representing slaughter of animals for sacrifice. Filling of Lower Courtyard L.L. Chapter XII, pp. 77, 78, (obverse) Pls. 42c, 43a; (reverse) 44a. (P.CBS.16676)
- U.3265 Ur-Nammu stela, white limestone fragments. Largest shows two men beating a drum; above, the lower part of a seated god with priest (?) and captives (?) before him. Drum and two fragments inscribed. UET I, 44b. Courtyard L.L. Chapter XII, pp. 78-79, Pl. 44c (upper two registers). (P.CBS.16676)
- U.3266 Ur-Nammu stela, white limestone fragments. Obverse and reverse shew king standing and flying angel pouring water. Filling of Lower Courtyard L.L. Chapter XII, pp. 76, 79, Pl. 42a,b. (P.CBS.16676)
- *U.3295 Crescent, pink marble, bored for the insertion of a wooden shaft. Ht. 0.044 m., w. 0.062 m. UE IX, p. 112, Pl. 34. From the Nin-gal temple or the Ziggurat platform, room 8. (L.BM.119070)
- U.3328 Ur-Nammu stela, white limestone fragment shewing part of figure holding up libation cup before an altar, behind a nude figure supported by a priest in attitude of devotion. Filling of Lower Courtyard L.L. Chapter XII, Pl. 44c (lower register). (P. CBS. 16676)
- U.3329 Ur-Nammu stela, white limestone fragments representing building scene. Filling of Lower Courtyard L.L. Chapter XII, cf. Pl. 43b. (P.CBS. 16676)
- U.3330 Ur-Nammu stela, white limestone fragments with details of figures, dress, stone surface, etc. Lower Courtyard filling L.L. Chapter XII, cf. Pls. 43 A and B. (P.CBS.16676)
- *U.3340 Mould, clay, for making a scaraboid bead. Diam. 0.04 m. UE IX, p. 112, Pl. 31. From the Nin-gal temple on the Ziggurat platform. (L.BM.119084)
- *U.3346 Ring, rock crystal, plain. Diam. 0.026 m., th. 0.002 m. From room at the back of the Nin-gal temple on the Ziggurat platform. (B.IM.1120)
- *U.3349 Macehead, white limestone, pear-shaped, plain. Ht. 0.058 m., diam. 0.058 m. From a room at the back of the Nin-gal temple on the Ziggurat platform. (B.IM.1122)
- *U.6001 Tablet, black steatite, pierced, inscribed. Dated to the 36th year of Dungi. Found loose in the soil, EH site. p. 42. (B.IM.1159)
- *U.6019 Foundation cone, clay, of Ur-Nammu, recording the digging of the 'Canal of Ur'. Cf. UET I, No. 45. Found loose in the upper soil of the EH site. p. 42. (P.CBS.16231)
- *U.6029 Statue fragment, white limestone, part of a flounced and pleated skirt only. 0.10 m. x 0.10 m. Found loose in the upper soil of the EH site. p. 42, Pl. 50g. (B.IM.1161)

- *U.6157 Tablet, black steatite, inscribed with the dedication by Dungi of the Dim-tab-ba temple. UET I, No. 59. Found *in situ* in a foundation-box below the wall of the temple. See U.6300, 6302, 6304. p. 40, Pl. 48a. (L.BM.118560)
- *U.6158 Statue, copper, of Dungi as Kanephoros. On the skirt is the dedication-inscription of the Dim-tab-ba temple. Ht. 0.235 m. Found with U.6157 in the foundation-box below the wall of the temple. See U.6301, U.6303, U.6305. p. 40. (B.IM.1376)
- *U.6276 Statue pedestal, fragment, diorite, rounded in front and plain; probably belonging to statue of Dungi (U.6306), *q.v.* Ht. 0.075 m. Found close to the statue U.6306 on the EH site in the ruins of the Dim-tab-ba temple. p. 41. (B.IM.1172)
- *U.6300, 6302, 6304 Foundation tablets, black steatite, of Dungi. UET I, No. 59. From the Dim-tab-ba temple, cf. U.6157. p. 40 (P.CBS.16217; B.IM.1157, 1158)
- U.6301, 6303, 6305 Statues, copper, of Dungi as Kanephoros, from the Dim-tab-ba temple, cf. U.6158. Ht. of U.6301 and U.6303, 0.245 m.; Ht. of U.6305, 0.236 m. p. 40, Pl. 47c. (U.6305, P.CBS.16216)
- *U.6306 Statue, diorite, of Dungi, the head missing. Standing; hands clasped. The king wears a fringed shawl which passes over his left shoulder and is wrapped round his waist; on the back is an inscription. UET I, No. 52. Ht. 0.26 m. Found in the ruins of the Dim-tab-ba temple, EH site, sq. T/10. See U.6276. p. 41, Pl. 47b. (B.IM.1173)
- *U.6307 Foundation cone, clay, of Ur-Nammu, recording the digging of the 'canal of Ur'; cf. U.6019. Found loose in the soil, EH site.
- *U.6335 Door-socket, diorite, of Gimil-Sin. Fragment of last six lines. cf. SAKI, p. 200 (c). From the EH site. p. 42. (B.IM.1146)
- *U.6337a, b, c Clay cylinders, open at both ends, on each of which is the inscription of Dungi as SAKI, p. 190 (a). Ht. c. 0.31 m., diam. c. 0.21 m. Found below the pavement of the Dim-tab-ba temple. p. 40, Pls. 27c, 48c. (P.CBS.16525; B.IM.1259; L.BM.118729-30)
- U.6355 Cup, black and white granite of Naram-Sin. K.P.I.7. p. 43.
- U.6409 Ur-Nammu stela, white limestone fragment. Male figure wearing cloak, right arm bent at elbow, forearm extended. KPS. Chapter XII, pp. 44, 79, Pl. 44g. (P.CBS.16676)
- U.6444 Head of female, fragment, black diorite, left eye and left side of forehead mutilated. Hair represented by fine wavy parallel lines and done up in a chignon, overhanging loop at the back as in the diorite statue of Ur-Bau. UE IV, p. 171, Pl. 43. KP. p. 41. (L.BM.118564)
- U.6587 Ur-Nammu stela, white limestone fragment. Upper portion of frieze shewing right tip of crescent, upper part of angel's headdress, and tip and flat end of star rays to left. Reused later as a door-socket. Lying on west side of courtyard of Dublal. Chapter XII, Pl. 41 a. (P.CBS.16676)
- U.6782 Head of Ningal (?) White alabaster, eyes inlaid in lapis lazuli. UE IV. p. 52, Pl. 43. Ht. 0.092 m. EH, loose in soil. p. 42. (P.CBS.16228)
- *U.6784 Head of dragon, copper, broken off at the neck. L. of head 0.03 m., ht. 0.045 m. Loose in the soil of the EH site. p. 42, Pl. 49n. (L.BM.118629)
- *U.6942 Statue, fragment, white calcite, flounced drapery only. From E-hursag. p. 39. (B.IM.1164).
- *U.6968 Figure, copper, of Dungi as Kanephoros, cf. U.6157. Found with an uninscribed steatite tablet in foundation-box below the Dim-tab-ba temple. p. 40. (Tablet P.CBS.16218; the figure, P.CBS.16219)

- *U.6995 Inlay, shell fragment, shield-shaped, with a shield-shaped hole in the center for second inlay. EH site. L. 0.033 m. p. 39, Pl. 50j. (B.IM.1424)
- *U.7020 Cylinder seal, black steatite, Gilgamesh and Enkidu fighting rampant lion, traces of inscription. L. 0.018 m., diam. 0.009 m. E-hursag. p. 39, Pl. 49. (B.IM.1501)
- *U.7021 Cylinder seal, black steatite, Gilgamesh and Enkidu attacking a rampant lion; inscribed, Lu-Nin-shubur. L. 0.017 m., diam. 0.008 m. UE X, No. 212. E-hursag. p. 39. (B.IM.1509)
- *U.7026 Cylinder seal, black steatite, much worn, apparently Gilgamesh and Enkidu fighting a winged dragon. L. 0.024 m. (incomplete), diam. 0.01 m. E-hursag. p. 39. (L.BM.118693)
- U.7681 Cylinder seal fragment, white marble, rampant lion, rampant bull, attacked by hero with feathered headdress. Ht. 0.032 m., diam. 0.02 m. Under Nebuchadnezzar floor of E-nun-mah, room 6. p. 50. (L.BM.120531)
- U.7817 Clay cone of Kudur-mabug. See U.2801. E-nun-mah, loose, room 6, p. 50.
- U.7820 Brick, Kudur-mabug, see U.2882, but half breadth. 0.034 m. x 0.17 m. x 0.075 m. E-nun-mah, loose, room 6. p. 50.
- U.7824 Brick. Sinbalatsu-iqbi. See U.3136. 0.26 m. x 0.26 m. x 0.075 m. E-nun-mah, loose, room 6. p. 50.
- *U.7825 Duck-weight, diorite, inscribed with name of Dungi and weight "5 mana." From room at south corner of the Ziggurat terrace. Pl. 48b.
- *U.7903 Box lid, ivory, circular, convex above with an engraved line border and 12-petalled central rosette; rabbetted below to fit the box. Diam. 0.045 m. E-nun-mah, room 6 (in the filling of room 5 or 6). p. 50. (B.IM.3616)
- *U.7915 Stamp seal, reddish marble, circular, convex above, with whorl design on the flat side. Diam. 0.029 m. E-nun-mah, room 5. Pl. 49d. (L.BM.120575)
- *U.7916 Stamp seal, grey calcite, hemispherical, crude animal (?) design. L. 0.04 m., w. 0.028 m. UE IV and UE X, No. 16. E-nun-mah, room 5. p. 50. (P.CBS.16906)
- U.7917 Stamp seal, flat, greyish calcite, hemispherical, animal (?) design. UE IV and UE X, No. 17. E-nun-mah, room 5 with U.7915-7918. Diam. 0.028 m. ht. 0.015 m. p. 50. (P.CBS.16905)
- *U.7918 Bead, agate, date-shaped. L. 0.045 m. E-nun-mah, room 5. p. 50 (B.IM.3624)
- *U.8334 Amulet, reddish pebble, crescent-shaped, flat with rounded edges. 0.07 m. x 0.053 m. E-nun-mah, room 2. p. 50, Pl. 50 l. (B.IM.3805)
- *U.8335 Pendant, blue paste (imitation lapis lazuli), flat. 0.044 m. x 0.038 m. E-nun-mah, room 2. p. 50. (P.CBS.16764)
- *U.8336 Spoon-bowl (?), white steatite, the handle missing; bowl slightly concave inside, strongly convex outside. L. 0.064 m., w. 0.036 m. E-nun-mah, room 2. p. 50. (L.BM.120900)
- U.8811 Tablets. 8812, UET V, No. 561. Under pavement of E-nun-mah, room 5. p. 50
8812
- *U.8851 Box or brooch-centre; disk of electrum, convex, framed in a ring of thin sheet gold on which is a row of beading in relief; damaged. Diam. 0.016 m. E-nun-mah, room 6, below the Neo-Babylonian pavement but of uncertain date. p. 50. (B.IM.4076)

- U.15651 Cone fragment, clay, of Warad-Sin. T. 56. p. 71.
- *U.16170 Mace-head, white calcite, fragment; carved in relief, a serpent with a forked tongue. Diam. 0.046 m. From the filling of the Dungi mausoleum. (P.31-43-176)
- *U.16216 Gold mountings from a box (?) 12 fragments of narrow strip gold mounted on silver rods at the back of which are short pegs for attachment; the gold is apparently soldered to the silver, but the edges are also turned back over it for better holding. L. from 0.02 m. to 0.05 m. Uniform width 0.002 m. With them, 2 nails of plain gold, 4 minute gold brads, and 10 copper nails with gold heads; also a few fragments of plain gold foil. Found on the pavement of the courtyard of Bur-Sin's NW mausoleum. p. 32. (L.BM.128588)
- *U.16229 Weight, bar-shaped, black haematite. L. 0.049 m., diam. 0.009 m., weight 8.576 grs. (One shekel, nominal weight 8.416 grs.) From the NW mausoleum of Bur-Sin, room 6. p. 33. (P.31-43-106)
- *U.16231 Mace-head, white limestone, pear-shaped with design in low relief. Ht. 0.073 m., diam. 0.048 m. Found loose in the lower filling of the NW Bur-Sin mausoleum. Pl. 50 m. (B.IM.20526)
- *U.16243 Staples, copper (2), with remains of wooden beams or poles running through them. L. 0.28 m., ht. 0.12 m. Found in a hole in the pavement of room 4 in Dungi's mausoleum. p. 11, Pl. 50h.
- *U.16244 Nails, copper, with gold heads, Diam. 0.010 m. and 0.015 m. From room 5 of Dungi mausoleum. p. 11. (B.IM.9546)
- *U.16246 Weights (2) of steatite: (a) long ovoid, 0.035 m. x 0.006 m., weight 2.75 grs. (one minette, nominal 2.805 grs.); (b) lentoid, 0.019 m. x 0.007 m., weight 1.728 grs. (?half minette, nominal 1.4025 grs). Found with 2 copper scale-pans, diam 0.041 m., a copper chisel, l. 0.057 m., a copper ring, and a hollow ribbed gold bead. Room 8 of the Dungi mausoleum.
- *U.16255 Copper shoe, of the hinge-post of a door; cup-shaped, broken; the nails which fixed it to the pole protrude in the interior. Diam. 0.125 m. Bur-Sin NW mausoleum, room 6, p. 33. (L.BM.128589)
- U.16256 Gold leaf. Crumpled-up fragments of thin gold sheets, obviously torn off some object and bundled together for removal. Not found quite on the threshold but just above it amongst the fallen bricks, so that it is not certain at all that it actually belonged to the doorway. B.C., doorway of room (?) leading to courtyard. p. 9.
- *U.16257 Inlay, gold and lapis lazuli; a piece of fairly heavy sheet gold cut into an open-work pattern in which are set small shield-shaped pieces of lapis lazuli; most of these were found in their original positions. Greatest dimensions 0.105 m. x 0.05 m. Dungi mausoleum, Room 8. The fragment lay face downward on the threshold of the doorway and may have been part of the decorations of the door itself or of the wall of the room. cf. U.18358, pp. 3, 13, Pl. 46e. (B.IM.9532)
- *U.16258
a and b Sheet gold, gold nails, and brads. (a) Piece of corrugated gold foil. 0.018 m. x 0.016 m.; some pieces of plain sheet gold, some small round-headed gold nails and some minute gold brads. (b) Lozenge-shaped piece of sheet gold with rough repousse decoration, curved and originally attached by two large gold nails to a wooden core; L. 0.039 m. All found together on the threshold of the door of room 4, Dungi mausoleum. p. 9. Pl. 50k, n.
- *U.16265 Hammer-head, diorite, L. 0.085 m. Dungi's mausoleum, room 3. p. 10. Pl. 50p. (P.31-43-267)
- *U.16266 Adze, grey diorite. 0.07 m. x 0.056 m. Dungi mausoleum, room 3. p. 10, Pl. 50t. (P.31-43-282)
- *U.16267 Grinder, black stone, conical, the under surface polished by use. Ht. 0.065 m. Dungi mausoleum, room 3. p. 10, Pl. 50o.
- *U.16268 A A set of weights, steatite, fire-blackened and cracked, mostly imperfect. (a) ovoid, 0.074 m. x 0.04 m.,

weight 165.37 grs.; (b) long ovoid, 0.11 m. x 0.04 m., weight 174.45 grs.; (c) lentoid, 0.087 m. x 0.036 m.; (d) lentoid, 0.103 m. x 0.041 m.; (e) long lentoid, 0.128 m. x 0.037 m.; (f) fragment, 0.076 m., 0.041 m., with three incised strokes on side. Dungi mausoleum, room 12. p. 10. (P.31-43-265 and 35-1-399 to 404)

- *U.16268 B Pounders, stone, 3 worked tools as on Pl. 50s and a number of natural pebbles of hard stone; several of them have been used for hammering gold, of which traces remain on the pounding face. Most of them are discoloured and split by fire, owing to the burning of the building. Dungi's mausoleum, room 3. (P.31-43-265) (B.IM.20693) (L.BM.128445-47 and 128586-87)
- *U.16269 Cylinder seal, hematite, inscribed. L. 0.025 m., diam. 0.015 m. Dungi mausoleum, room 3. p. 10.
- *U.16270 Inlay fragments, gold, lapis lazuli, and carnelian. A six-pointed gold star and 2 sun's rays of gold and carnelian. L. 0.017 m., diam. 0.008 m. From Bur-Sin's SE mausoleum, room 9. Shield-shaped piece of agate inlay from room 4, Dungi mausoleum. Corrugated gold leaf, agate strips and square glass-paste tesserae from room 7, Bur-Sin SE mausoleum. pp. 11, 14, 26.
- U.16271 Sling-bolt, clay, blackened by fire. B.C., Dungi mausoleum, room 12. p. 10.
- *U.16272 Mace-head fragment, marble, inscribed. Dungi mausoleum, room 3. pp. 3, 10. (P.31-43-252)
- U.16273 Bowl fragment, limestone. Ht. 0.085 m., d. 0.160 m., diam. of base 0.10 m. B.C., Dungi room floor level. p. 10.
- *U.16274 Bowl fragment, limestone, Type VIII. Ht. 0.09 m., diam. 0.095 m. Bur-Sin SE mausoleum, room 5. p. 26, Pl. 51.
- *U.16292 A-B Statue fragments, diorite, two clasped hands (A) and part of the base with the toes of the left foot (B); scale about life-size and both pieces possibly from the same figure. Found against the outer face of the enclosing wall of Dungi's mausoleum, NE front. Pl. 46 b, c. (L.BM.128583-84)
- *U.16293 Model pick-head, stone, originally hafted in wood, of which traces remained. L. 0.22 m. Dungi mausoleum, room 9. p. 14, Fig. 4. (P.31-43-373)
- *U.16294 Rod, ivory, circular in section and tapered; both ends missing. Actual L. 0.16 m., diam. 0.02 m. diminishing to 0.01 m. In the SE mausoleum of Bur-Sin, against the door of the tomb under room 4. p. 28.
- *U.16298 Inlay, faience originally blue-glazed, and shell (?) now burnt black, pear-shaped pieces, L. 0.105 m. Dungi mausoleum, room 1. p. 9. (B.IM.9762)
- *U.16299 Bowl, basic diorite, Type IV, a heavy and coarse example. Ht. 0.115 m., diam. 0.075 m. Bur-Sin SE mausoleum, room 6 (on the pavement). p. 26, Pl. 51. (L.BM.128585)
- *U.16334 Mace-head, black steatite, with grooves down the sides for the thong that attached it to the staff. Ht. 0.055 m. Loose in the filling of Dungi's mausoleum. Pl. 50q. (P.31-43-278)
- U.16409 Whetstone, black stone, with small hole for suspension. L. 0.275 m., w. 0.06 m. B.C., Dungi mausoleum, room 8. p. 15.
- *U.16431 Bowl fragments, white calcite, Type VII. Inside the SE tomb chamber of Dungi's mausoleum. p. 19, Pl. 51. (B.IM.18752)
- *U.16432 Vase fragments, white calcite. Type I. Inside the SE tomb chamber of Dungi's mausoleum. p. 19, Pl. 51. (B.IM.20653)
- *U.16530 Base of pedestal vase, grey and white marble, inscribed with a dedication to Gilgamesh by Ur-Nammu. Diam. 0.08 m., ht. 0.165 m. From tomb chamber 2 of Bur-Sin's SE mausoleum, p. 29. (B.IM.14322)

- *U.16539 Bowl fragments, white calcite, with an inscription of Dungi. From the courtyard of Dungi's mausoleum. p. 10. (B.IM.9425)
- *U.16556 Cylinder seal; inscribed. L. 0.026 m., diam. 0.008 m. From the filling of Dungi's mausoleum. Pl. 49f. (B.IM.143385)
- *U.17429 Roundel, gold, decorated with a whorl pattern whose outlines are inlaid in silver. Diam. 0.02 m. From the courtyard of Bur-Sin's NW mausoleum. p. 32, Pl. 50r.
- *U.17430 Ring, gold, a narrow strip of rather heavy metal bent into a hoop. Diam. 0.022 m. From the courtyard of Bur-Sin's NW mausoleum. p. 32. (B.IM.9548)
- *U.17602 Statue fragment, white limestone, only the back of the head preserved; the hair is combed back from the top of the head, confined above the neck by a heavy fillet or tress of hair, and falls in a solid chignon on the shoulders. Ht. 0.125 m. Found close to the north corner of the Ziggurat at about IIIrd Dynasty level. (B.IM.32685)
- *U.17608 Dagger, copper, broken. L. 0.275 m., w. 0.05 m. Found NW of the Ziggurat, IIIrd Dynasty level. (B.IM.32684)
- *U.17624 Sheet of gold, thin metal used to plate some object; only the top edge is preserved, the rest being torn. Near the bottom of the fragment is the top left corner of a panel which contained an inscription, the signs impressed. Greatest measurements, 0.12 m. x 0.09 m. Found under the foundations of the Larsa building (the 'kitchen') at the north corner of the Ziggurat platform.
- *U.17673 Cube of yellow carnelian, like a die but with no numbers on the faces. 0.017 m. Found 2.50 m. below the offset of the SW outer wall of Bur-Sin's NW mausoleum. (B.IM.9527)
- *U.17831 Door-socket, diorite, of Ur-Nammu, text as in SAKI, p. 186 (a). Found re-used in the Larsa range of chambers along the NW side of the Ziggurat terrace.
- *U.17891 Beads, ball, various sizes, blue-glazed frit; the glaze of most of them has perished. Found against the outer SW wall of Dungi's mausoleum. (p.32-40-245; L.BM.123181)
- *U.17945 Miniature copper objects, crescent moons, boats and staves. Found below the Larsa pavement of the chamber on the first stage of the Ziggurat. UE V, p. 111. See also U.1584. (P.32-40-152, 153, 154)
- *U.18222 Sculpture fragment, diorite, right shoulder, upper arm, and right breast of a male figure carved in the round, about 1/3 life-size; he wears a closely fitting shirt which passes straight across the front of the body and under the arm-pit. Good work of about the IIIrd Dynasty. Found behind the Neo-Babylonian 'Boat Shrine' on the Ziggurat terrace, in a thin stratum of brick rubble overlying the 1st Dynasty remains. Pl. 46d. (B.IM.16701)
- *U.18224 Vase fragment, mottled black and white marble, probably belonging to U.1455, q.v.; traces of inscription. Found behind the Neo-Babylonian 'Boat Shrine' on the Ziggurat terrace in a thin stratum of brick rubble overlying the 1st Dynasty remains. (B.IM.16700)
- *U.18232 Vase fragments, white calcite with deeply-coloured veins; part of an inscription. Found scattered behind the Neo-Babylonian 'Boat Shrine' on the Ziggurat terrace and to the SE of it, about 0.30 m. above the 1st Dynasty floor level. UE IV, 188. (L.BM. 124348)
- *U.18260 Inlay fragments; shell; incised on the flat surface is an imbricated pattern outlined by double lines; the central row of 'scales' is cut in intaglio and filled in with red paste. Pieces 0.049 m. x 0.029 m., 0.04 m. x 0.028 m., 0.022 m. x 0.029 m. Found in the stone-filled pit or altar-foundation below the 'Boat Shrine' on the Ziggurat terrace. UE IV, Pl. 44. (B.IM.16510-13)

- *U.18356 Cat's eye fragment, inscribed across the middle and round the edge; less than half of the stone preserved; original diameter c. 0.02 m. Found in the Kuri-Galzu temple of Nin-gal on the Ziggurat terrace. (B.IM.16504)
- *U.18358 Sheet gold fragment, very thin metal cut into an open-work pattern to be inlaid with small shield-shaped stones arranged in rows; cf. U.16257. L. 0.075 m., w. 0.025 m. Found in the circular pit made for the re-building of the well on the Ziggurat terrace, just above the layer of Kuri-Galzu's burnt bricks. (B.IM.16471)
- *U.18525 Door-socket, diorite, of Ur-Nammu, text as in SAKI, p. 186 (a). Found *in situ* (re-used) in the main entrance of Kuri-Galzu's temple of Nin-gal on the Ziggurat terrace. (B.IM.37728)
- U.18526 Ur-Nammu stela, white limestone fragment. Right, seated god facing left on throne, faced by a naked priest with fly whisk. An elongated figure holding a fold of cloth, and one additional figure (head, one arm, part of shoulder). In the brick pavement of Kuri-Galzu's Nin-gal temple, front court. Chapter XII, p. 79, Pl. 44b. (P.CBS.16676)
- *U.18584 Duck-weight, hematite, weight 685 grains. L. 0.042 m. Found in Ur-Nammu's cistern near the wall on the Ziggurat terrace. (B.IM.16503)
- *U.18585 Weights, set of nine: (1) diorite, pierced, 413 grains; (2) hematite, 130 grains, (shekel); (3) hematite, 64 grains (half shekel); (4) hematite, 65 grains (half shekel); (5) steatite, 37 grains; (6) steatite, 7 grains; (7) steatite, 10 grains; (8) hematite, 78 grains; (9) shaped as a plano-convex bead, white calcite, perhaps not a weight, 315 grains. All found with U.18584 in the Ur-Nammu cistern.

FOOTNOTES

CHAPTER I

Footnote Number	Page		Footnote Number	Page	
1	1	Whether the name should be read as Dungi or as Shulgi is still in doubt (v. Gadd in UET I, No. 51). Here I retain the earlier and more familiar reading.	8	2	custom already practiced by ordinary citizens or was establishing a precedent which they afterwards adapted to the private house.
2	1	On this see UE II, p. 212 and the cemetery plan on Pl. 274.	9	2	The feature of (two) rooms having their floors at a higher level than the rest does however re-appear in E-hursag (v. <i>infra</i> p. 37 and rooms 26 and 27 on the plan, Pl. 56), a building of which we are uncertain whether it was a palace or a temple; the rooms lie at the back of the 'private' quarter and are approached, like those in the mausoleum, by flights of brick steps. The close link between house, palace, and temple must always be borne in mind. That the raised floor in the Dungi building was not an accident resulting merely from the construction of the tombs underneath is shown by the fact that the corresponding rooms in E-hursag were proved by excavation to have no tombs underneath.
3	1	See p. 20.			
4	2	For an exceptional use of cement mortar see p. 4.			
5	2	In the SW wall there is in the centre of each buttress at 2.65 m. above the footing a circular hole, diam. 0.12 m.; in the central buttress at 2.75 m. up, there are two rectangular apertures 0.20 m. wide and three bricks high, going back for 0.35 m. and clearly meant to receive baulk-ends (v. Pl. 1b).			
6	2	On the SW the outer face of the tomb-chamber wall and of that of the stairwell are not continuous, though bonded together; thus the tomb-chamber wall gives a footing parallel with the wall of the superstructure and projecting 0.40 m. beyond it and 0.15 m. beyond its buttresses; the stairwell wall projects 0.90 m. at its SE end but is not parallel, so that at the junction of the Bur-Sin building the offset is reduced to 0.55 m.	10	3	At a later time the brick pavement was overlaid with a clay floor.
			11	3	See UE VII.
			12	3	e.g., UET I, No. 169.
			13	4	It has been suggested that it was originally a tomb meant for the bodies of soldiers set as a guard at the side entrance; the theory of course assumes that the customs which marked a royal burial in Early Dynastic times persisted into the Third Dynasty.
7	2	Residential housing is discussed in UE VII.			
8	2	The comparison is with houses of the Larsa period (v. U E VII), when the custom of burying the members of the household beneath the house was universal. We have no examples of that custom that can be dated to the Third Dynasty, for houses of the Third Dynasty have not yet been excavated, but we do know that there was no such custom in the Sargonid period, for at Ur we found a large Sargonid cemetery not connected with any house site (v. U E IV) and at Tell Asmar the Chicago Oriental Institute found numerous Sargonid houses and there were no tombs beneath their floors (OIC); the custom would therefore seem to have been introduced at about the time of the Third Dynasty. The date is important, for the change in burial customs implies a modification of religious beliefs which is likely to have been induced by social and political conditions; and, again, it would be interesting to know whether in planning his mausoleum (whether for himself or for his father) Dungi was following a	14	4	Stephen Langdon, 1927, <i>Babylonian Penitential Psalms</i> , Oxford Editions of Cuneiform Texts, vol. VI, p. 55, 1.15, p. 56, 1.19. Paris, P. Geuthner.
			15	4	F. Thureau-Dangin, 1913, "Notes Assyriologiques", <i>R Assyriol.</i> Vol. X, p. 97: "Celui qui fait brûler l'huile; si cette étymologie est exacte, le nom de l'héritier chez les Sumeriens pourrait être en rapport avec quelque rite de la religion familiale."
			16	4	UE I, Pl. XXVIII
			17	4	UE IV, Pl. 38, U.17832, and cf. Bruno Meissner, 1925, <i>Babylonien und Assyrien</i> , vol. II, Abb. 13, etc. Heidleberg, C. Winter.
			18	5	In the case of the small tomb 2 in the NW building of Bur-Sin the imprint of the centering beams was perfectly preserved in the bitumen on the roof; v. Pl. 26 b. When we excavated the chambers we found that the vaults were in a very dangerous condition, thanks partly to the crowns of the vaults having been broken by the robbers, partly

Footnote Number	Page		Footnote Number	Page	
18	5	to the fact that the dry bitumen had lost all its adhesive qualities and there was nothing to hold the bricks together. Before therefore the earth filling could be removed, the brick-work had to be secured by the insertion of new timbering, which was done little by little as the work progressed; we availed ourselves of the original beam holes and in some cases at least (e.g., on Pl. 11a), the modern timbering must be a fairly faithful reproduction of the old.	31	32	argument against there having been any doorway or continuation of the steps in the upper part of the wall which has now disappeared.
			32	32	e.g. on the Sargonid relief, UE IV, Pl. 93.
			33	34	The apparent shaft cannot have been made by the tomb robbers for of about 150 bricks required for its paving none were found in the tomb and they would not have been carried away; the few loose bricks in the neighbourhood had fallen from the roof. The soil, clean above, was mixed below, containing fragments of bone and pottery, but the latter were of types earlier than the Third Dynasty.
19	7	The fact that two types of bricks are used successively in the lower filling and a third type above pavement level suggests that the blocking was done <i>pari passu</i> with the filling of the shaft.	34	34	Sir Arthur Keith in UE II, p. 408.
20	7	A full description of these is given in UE VII.			
21	7	Though this was in itself an argument; had all the earth been dug out and replaced time after time a certain amount of rubbish from the mixed upper strata would have been thrown in with the clean soil.			
22	8	"Self-immolation" might express better than 'sacrifice' the idea underlying the royal funeral rite.			
CHAPTER II					
23	10	A fragment of a large clay jar inscribed before baking with a measure of capacity lay above the floor and probably had no connection with the building.	35	36	H.R. Hall, 1919, "Recent Excavations of the British Museum at Tell el-Mukayyar", <i>Proc. Soc. Ant.</i> , vol. 32, p. 25.
24	12	'Jus', which is freely employed in modern buildings in Iraq, is made with kiln-burnt gypsum.	36	36	Unless we imagine a flight of steps leading up to a gate in a tower salient; in that case room 14 ought, by analogy, to have been the entrance-lobby. But such a reconstruction is overbold and leaves out of account the fact of the pavement against the SW wall.
25	12	The bond here as in the SW wall is more apparent than constructional; only the front part of the angle bricks was cut away, and the new brick was trimmed to fit against this.	37	38	SAKI, p. 187 (a).
26	17	So Sir Arthur Keith, UE II, p. 408.	38	38	SAKI, p. 187 (b).
27	20	For Jamdat-Nasr pottery types see UE IV.	39	38	SAKI, p. 191 (b).
			40	38	SAKI, p. 229.6.
			41	39	As we find in the Neo-Babylonian temple of Nin-gal on the Ziggurat platform; v. UE V, p. 33.
			42	39	H.R. Hall, 1930, <i>A Season's Work at Ur</i> , Methuen, London, p. 165.
CHAPTER III					
28	22	We have no stamped bricks of Gimil-Sin or Ibi-Sin, so their brick standards cannot be invoked to support the argument.	43	40	UET I, No. 59.
CHAPTER IV					
29	26	The vessels were not found, but the imprint of them was clear (minimum diameters 0.25 m. and 0.30 m.) and the copper sulphate adhering to the bitumen shewed the metal of which they had been made.	44	41	UE V, p. 77.
30	30	It can be seen in all the walls of room 5; the beam holes come either on it or one course above it, and they too seem to imply a fresh beginning; v. p. 25 and Pl. 17a.	45	41	SAKI, p. 187 (b).
31	32	The fact that they are an addition, built after the room walls were complete, is a further	46	41	UET I. No. 60.
			47	42	For dated examples see UET III, Nos. 205, 260, 261, 548, 702, 856, 1056, 1103, 1244, 1338, 1402, 1498 and 1575. These give so many names both of gods and of temples (e.g., E-Ninmar (KI), E-Nin-ezen-la, E-Ningal, E-Ninkununna, E-hur-sag), that nothing can be derived from them regarding the identity of the building in which they were found; the archive would seem to have been shared by more than one temple, and the temple or temples in question probably contained various chapels dedicated to subordinate gods. Bur-Sin's bench is shown in Pl. 28a.
			48	42	The Larsa ruins are dealt with in UE VII.
			49	42	Taylor, J.E., 1855, "Notes on the Ruins of Muqeyar", <i>JRAS</i> vol. 15, pp. 260-276.
			50	42	A. Nöldeke et al. 1932, <i>Abhandlungen der Preussischen Akademie der Wissenschaften</i> , Phil-Hist. Klasse Nr. 6. Tal. 8. Berlin.

Footnote Number	Page		Footnote Number	Page	
51	42	Ernest J.H. Mackay, 1929, <i>A Summer Palace and the "A" Cemetery at Kish, Anthropology Memoirs</i> vol. 1, no. 2, Pl. XXVI, 2. Chicago, Field Museum.	73	47	UE I, No. 170.
52	42	UE I, Pls. XXVI, XXXIV.	74	48	CHAPTER VIII
53	42	UE V, Pl. 29b.	75	49	Cf. the burnt-brick pavement around the temple at al 'Ubaid, UE I, Pl. XXIII(2).
54	42	SAKI, 196, b and c.	76	50	UET IV, No. 165.
55	43	UET I, No. 35.	77	50	UET I, No. 306.
56	43	One of the doorsockets (UET I, No. 38) is an exception; it does not give the name of the building and the goddess is called Nin-e-gal; this may well be a case of a stone being brought from another temple and re-used, but it is also possible that Nin-e-gal had a chapel in the Gig-Par-Ku, just as we find a number of gods associated with the worship of Nin-gal in the temple on the Ziggurat terrace of Sin-balatsu-iqbi (UE V, p. 33).	78	50	UET III, Nos. 371, 1465.
57	43	UET I, No. 67.	79	51	UET I, No. 306.
58	43	UET I, No. 24.	80	51	UE II, Pl. 87.
59	44	"The Excavations at Ur, 1925-26", <i>Ant. J.</i> , Vol. VI, No. 4 (1926) p. 367-368.	81	51	All the above are published in UET I.
		CHAPTER VII		51	For a parallel case see the Gig-Par-Ku of Ningal, UE VII.
60	46	In the Nebuchadnezzar edition the space is further lessened by the rooms 4 and 5 being subdivided by a screen into what one might call 'chancel' and 'nave'.			CHAPTER IX
61	46	UET I, Nos. 117, 123, and SAKI, p. 210.	82	56	As on the NW side of the Ziggurat terrace, and on the third stage of the Ziggurat itself.
62	46	UET I, No. 162-63.	83	56	i.e., the Dub-lal-mah of later times.
63	46	UET I, No. 306.	84	57	UE V, Pls. 70 and 72.
64	46	SAKI, p. 208, 4.	85	57	In the absence of material evidence no accurate measurements are possible.
65	46	SAKI, p. 210, 6a.	86	58	v. UE V, p. 113, fig. 10.
66	46	UET I, no. 189. Cf. Stephen Langdon, 1912, <i>Die neubabylonischen Königsinschriften</i> , p. 296, no. 14. Leipzig, J.C. Hinrichs.	87	58	v. UE V, p. 32.
67	46	It is possible that Nabonidus in restoring the temple was annulling the innovations made by Nebuchadnezzar and reverting to the old tradition; his insistence upon Nin-gal may be due to her part in the building having been too lightly regarded by Nebuchadnezzar.	88	58	v. UE V, Pl. 15.
68	46	Described in Volume VII of this series.	89	58	The NW wall also is buttressed, as described above, but the size and spacing of the buttresses, in the Larsa period at any rate, is quite abnormal and requires a different explanation.
69	49	The Third Dynasty date depends on the socket-stones of Gimil-Sin quoted above on p. 47; the actual ruins are not of that period and it is possible that the term in Gimil-Sin's inscription refers to a subdivision of E-nun-mah and that Kudur-Mabug was the first to make a separate building so called.	90	58	We have, as I have said, no concrete evidence for these, and it is even possible that the Third Dynasty mud brickwork behind the re-entrant angle at the west corner belongs to a projecting feature, after which the real wall-line was set back so as to correspond to Section E, Section B then forming a salient; but the later analogies are altogether against this.
70	47	U. 2882, SAKI p. 210.6 (Arad-Sin) a.	91	58	UE V, Pl. 29 and 31.
71	47	Some refer to the archives proper, the Ga-dubba, or E-dubba.	92	59	See the Ur-Nammu cistern on the Ziggurat platform, UE V, p. 33, and the tanks against the entrance of the Gig-Par-Ku, UE VII.
72	47	This is a fact which seriously complicates the question of dating temple hoards by the date of the temple in which they are found; individual objects may be many centuries older than the building in which they were housed, and the finding of a number of objects in the same hoard does not prove them to be contemporary.			CHAPTER X
			93	61	This is most marked on the SW slope running up from the harbour, and in the EM group of houses described in UE VII.
			94	61	SAKI, p. 187 (d). cf. SAKI, p. 235 (a). Ibi-Sin restored the wall, making it 'like a yellow mountain.'
			95	61	UET I, No. 291.
			96	61	UET I, No. 265; but this may refer to the temple Dublal-mah under its old name.
			97	61	UET I, No. 295.
			98	61	SAKI, p. 213 (b) and UET I, No. 252.

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|------------------|------|--|------------------|------|---|
| 99 | 62 | So the grant of land for the building of New College, Oxford, contains a provision whereby the College undertakes the repair and the defence of that part of the city wall which encloses it. | 106 ^b | 76 | to the present location of the stela in the gallery it has been impossible to obtain a photograph of the reverse as it now appears. For a recent discussion of the problem of reconstruction see Ann L. Perkins, "Narration in Babylonian Art", <i>American Journal of Archaeology</i> , vol. 61, no. 1 (1957): pp. 54-62. |
| 100 | 63 | Sin-balatsu-iqbi's bricks are smaller than Nebuchadnezzar's and the joints between them are small, whereas in Nebuchadnezzar's buildings the bricks are laid widely apart and the mortar bedding also is very thick. | 107 | 76 | It is this difference of scale that justified Legrain in attributing to the top register a horned cap and an arm and hand which have no material contacts but are bigger than anything in the lower registers, and in excluding from it the fragment of drapery bearing the name of Ur-Nammu which I had originally attributed to the standing figure of the king in that register (v. Pl. 43 a), whereas it is now assigned to the figure of the royal mason in the third register. |
| 101 | 63 | In the same way he dismantled the SW wall of the Gig-Par-Ku in order to keep a straight line for his Temenos wall. | | | |
| CHAPTER XI | | | | | |
| 102 | 66 | That it was only a foundation was clearly shewn by the construction on the SE face. The lowest 7 courses ran at right angles to the SW face; the next 3 courses were set back 0.35 m. at the corner but ran askew so that at 6.40 m. from the corner they were flush with the lower brickwork; the upper courses were set back again 0.35 m. at the corner but after 7.50 m. were overhanging the lower brickwork by 0.20 m. | 108 | 76 | So Legrain, "Le parallélisme au revers n'a pu être gardé que par une supercherie, en diminuant de cette même quantité le troisième registre." |
| | | | 109 | 76 | In my preliminary publication <i>Ant. J. V</i> , p. 358, I exaggerated the height, believing that the scenes were more numerous than in fact they were. |
| | | | 110 | 77 | U.3173; UET I, no. 31, and UE IV p. 170. |
| 103 | 71 | UET I, No. 127. | 111 | 77 | Leon Legrain, 1927, "The Stela of the Flying Angels", <i>The Museum Journal</i> (U. of Pa.), vol. XVIII, no. 1, is puzzled by the omission of the symbols and suggests that the god in the second register may be Ea, the great builder. I cannot accept this. |
| CHAPTER XII | | | | | |
| 104 ^a | 75 | Editorial note: Numbered fragments assigned to the stela (Pls. 41-45) are catalogued as follows: U. 305 (Pl. 43b), U. 2761 (Pls. 42d, 43a), U. 3209 (Pl. 44f), U. 3215 (Pl. 43a, top center figure), U. 3328 (Pl. 44c, lower register), U. 3264 (Pls. 42c, 43a, 44a), U. 3265 (Pl. 44c, upper two registers), U. 3266 (Pl. 42a,b), U. 6409 (Pl. 44g), U. 6587 (Pl. 41a, top), and U. 18526 (Pl. 44b). Two groups of fragments have field numbers in the catalogue but are not separately described: U. 3329 (cf. Pl. 43b) and U. 3330 (cf. Pls. 43 A and B). | 112 | 77 | So Legrain (1927), with whom I agree. Sir Ernest A. Wallis Budge, 1925, <i>Babylonian Life and History</i> , The Religious Tract Society, London, p. 250, argues that it is some grain-producing plant and adds "those who have seen wheat growing in Mesopotamia. . . cannot fail to see in this plant on the Ur-Nammu stela a colossal ear of wheat." To my mind that identification is impossible, and certainly the normal Sumerian representation of wheat is totally different. |
| 104 ^b | 75 | UE V, p. 49. It is possible that the impost-boxes belonged originally to the Larsa period and were re-used in Kuri-Galzu's building, but this is not so likely. | 113 | 77 | cf. Ezekiel xl: 3 and Zachariah ii:1. |
| | | | 114 | 77 | SAKI, Gudea, Cylinder A3, 4, 14. |
| | | | 115 | 77 | Gaston Cros, 1910, <i>Nouvelles fouilles de Tello</i> , Pl. IX, 2, Paris, E. Leroux. |
| 105 | 75 | The orientation of the base was quite different to that of any of the Third Dynasty buildings nearby: v. the plan, Pl. 53. In the Kassite period it was flush with and incorporated in the brick pavement of the court and was partly hidden by the podium of the shrine. | 116 | 77 | I originally assumed that this was the patron god of Ur-Nammu and that he was simply leading the king onto the scene of labour; Leon Legrain, 1927, "The Stela of the Flying Angels", <i>The Museum Journal</i> (U. of Pa.), vol. XVIII, no. 1, p. 86, agreed with this, and so did C.J. Gadd (1929, <i>The History and Monuments of Ur</i> , Chatto and Windus, London, p. 136), though he suggested that Ur-Nammu was being led into the presence of Nannar, i.e., that the Moon god had been represented further along in the same register. Sir Ernest A. Wallis Budge (1925, <i>Babylonian Life and History</i> , p. 249) says "behind the seated figure of the god we see the king Ur-Nammu carrying. . . the tools" and this view is surely correct. |
| 106 ^a | 76 | Leon Legrain, 1927, "The Stela of the Flying Angels", <i>The Museum Journal</i> (U. of Pa.), vol. XVIII, no. 1, p. 74; Leon Legrain, 1933, "Restauration de la stèle d'Ur-Nammu", <i>R Assyriol.</i> vol. XXX, no. 3, pp. 111-115. | | | |
| 106 ^b | 76 | Editorial note: Some years later the conjectural second drum in register 4, reverse, was removed and this piece inserted. Some changes in the placement of small fragments were also made, all on the stela reverse, but no record of the reasoning behind these changes has been found. Unfortunately, due | 117 | 78 | Presumably held down by a rope passed around his neck and through a ring fixed in the floor like that actually found <i>in situ</i> in |

Footnote Number	Page		Footnote Number	Page	
117	78	the pavement of the Gig-Park-Ku kitchen (<i>Ant J</i> VI, Pl. xlix, and UE VII). The system is still in use amongst the Jews for the ritual killing of cattle.	121	79	each side crudely carved reliefs of birds and human figures. Since on the stela the priest on the right is pouring a libation we can safely conclude that the upright shaft there had also a cup-like hollow to receive the liquid.
118	78	I originally took this instrument to be a flail, which is often a divine attribute, and supposed that the goat's blood was being poured out in honour of a statue of a god set on the square base. Dr. Campbell Thompson was of the opinion that the 'goat' was nothing more than the water-skin which it appeared to be; the man pouring out water stood for the irrigation of the fields and the figure on the pedestal was not a statue but a man holding a hoe, who might be symbolical of seed-time. Against this view it must be urged that the 'goat' has its hoofs still attached to its legs, which would not be the case with a water-skin, and that a man would not stand on a pedestal to use a hoe. Against my own view the objection is that a god would not be represented as nude, nor would the legs of a statue be carved separately in the round. Legrain rightly emphasises the small scale of the figure on the pedestal and suggests that what it holds is a double flute; a musician might well be youthful (and therefore small) and naked, and on terracottas the player on the double flute is regularly represented as standing on a square pedestal (cf. Leon Legrain, 1930, <i>Terra-Cottas from Nippur</i> , Publications of the Babylonian Section of the University Museum Vol. XVI, Pl. XVI, No. 92). Legrain agrees with me that the other figure is a priest engaged in the sacrifice of a goat, a pendant to the scene of bull sacrifice alongside.	122	79	cf. UE IV, U. 6831, Pl. 39; U. 6612, Pl. 44.
			123	80	UE I, Pl. XXI.
			124	80	SAKI, Gudea, Cylinder A, I, 4.
			125	80	UET I, no. 50.
			126	81	Bruno Meissner, 1921, "Das Weihbecken des Gudea an Ningirsu," in <i>Alt-orientalische Texte und Untersuchungen</i> II, 2/3, Leiden.
			127	81	Gaston Cros, 1910, <i>Nouvelles fouilles de Tello</i> , Pls. IX, X. Paris, E. Leroux.
			128	81	For this compare also the Berlin fragment of a Gudea stela, Eduard Meyer, 1906, <i>Sumerier und Semiten, in Babylonien</i> . Taf. XII. Königl. Akademie der wissenschaften, Berlin.
			129	81	Gaston Cros, 1910, <i>Nouvelles fouilles de Tello</i> , Pl. X, 6. Paris, E. Leroux. Cros (p. 292) describes the figures above as captives and sees an axe in the object below their feet; I would remark that this object comes on what would be the plinth dividing the two scenes, if those had been separate, but nothing does ever encroach on the plinth; consequently, we have here two parts of a single scene which must be interpreted in the light of the Ur stela - the ledge on which the prisoners stand is the top of a half finished building, the object against it is a ladder, the captives must presumably be engaged in the building operations.
119	78	The exact position of this fragment is not quite certain.			
120	78	So far as the existing relief goes, there does seem to be room for a standing figure behind the throne, but the surface of the stone is so perished that no sign of anything of the sort survives; but the possibility of there having been such an attendant must be noted.			
121	79	Its nature is satisfactorily explained by a discovery made in the Par-sag chapel of Larsa date, described in UE VII. In the chapel courtyard there was a rectangular limestone shaft 0.74 m. high and 0.20 m. square having a cup-like hollow in its top and high up on	130	82	This of course does not apply to glazed pottery or to porcelain; but of such there is no question here.
			131	82	But their attribution to the Third Dynasty is assured by the facts that the temple was newly founded by Ur-Nammu and was completely destroyed at the end of Ibi-Sin's reign.
			132	82	UE II, p. 513.

CHAPTER XIII

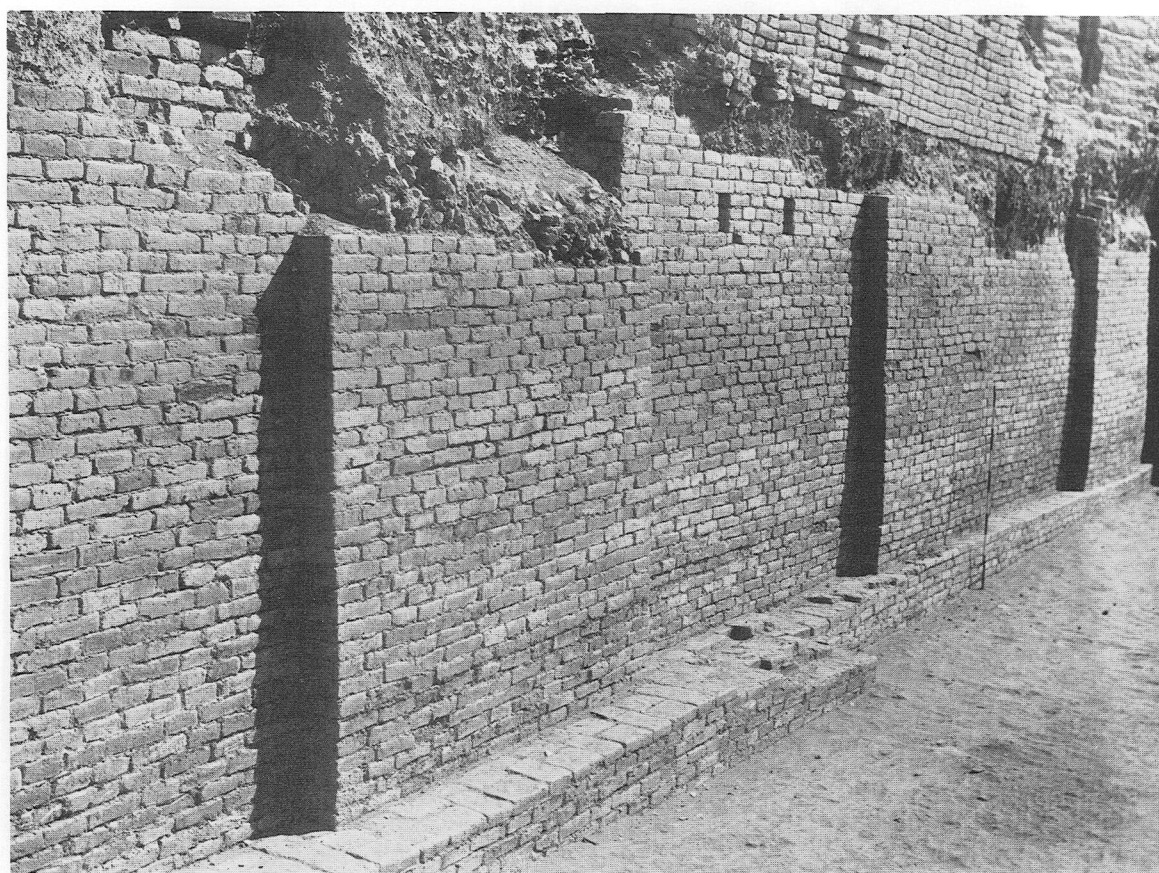
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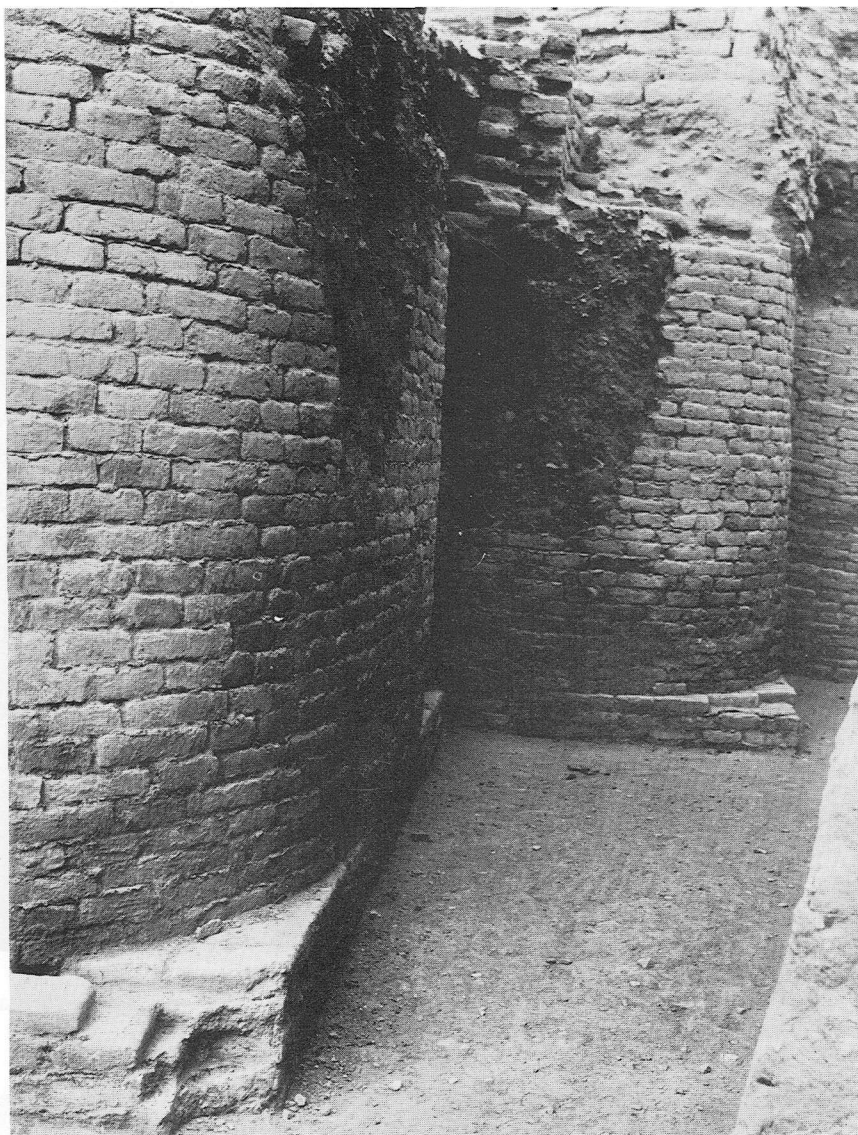
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(a) The SW wall seen from the Royal Cemetery area. Above it (A) Kassite house walls; (B) Nebuchadnezzar's Temenos Wall. (p. 1)



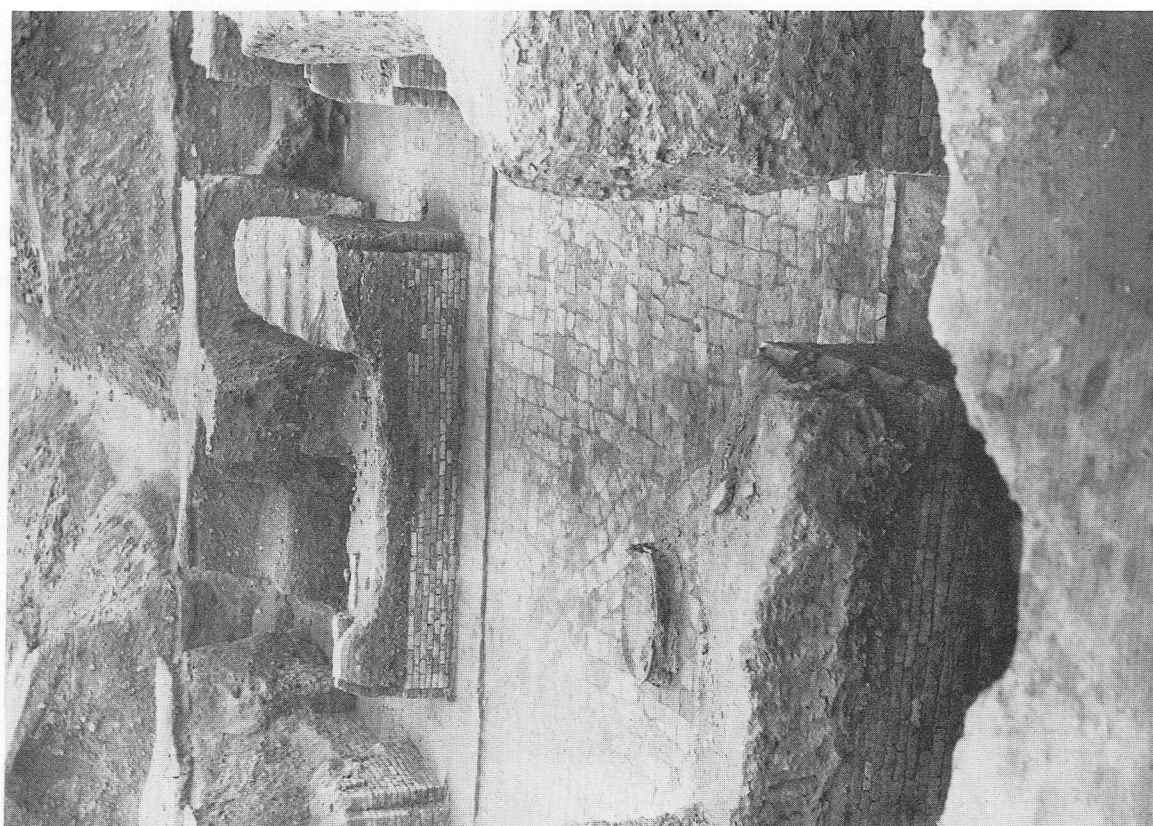
(b) The SW wall, looking SE. (p. 2 and footnote 5)



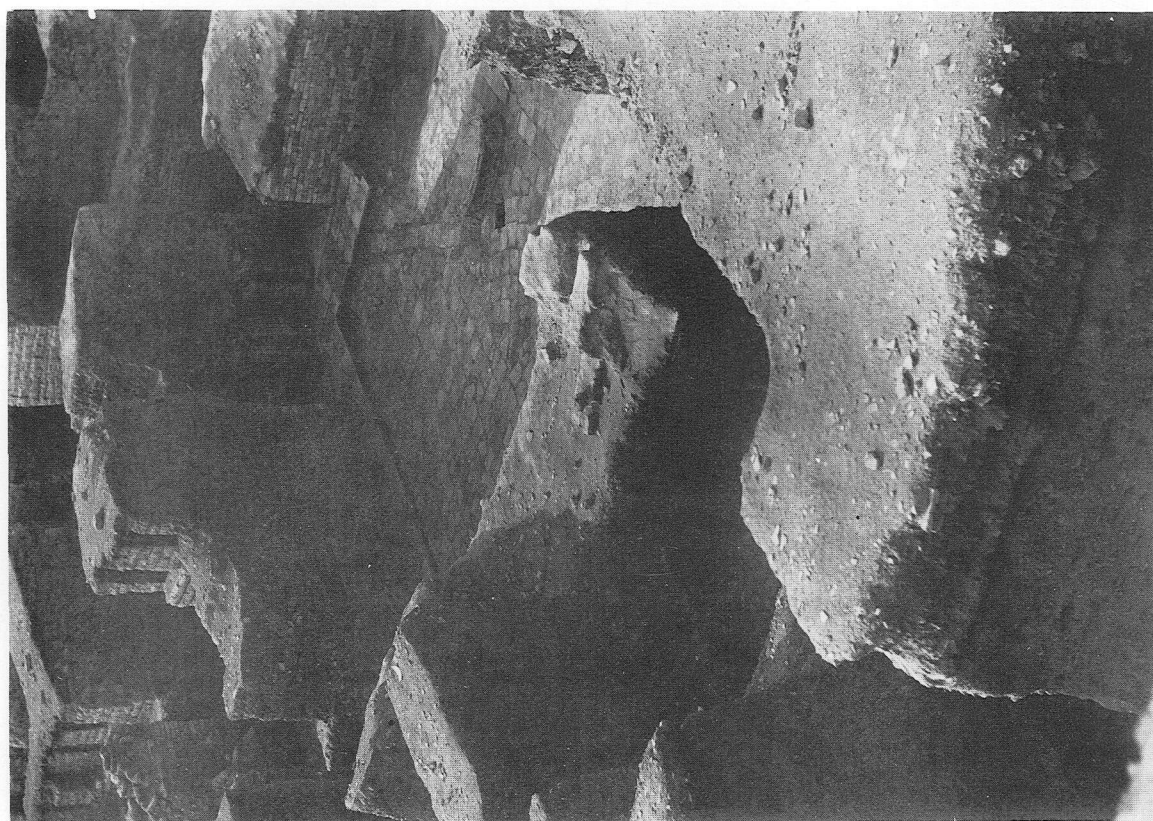
(a) Rounded brickwork corners at the south end. (p. 2)



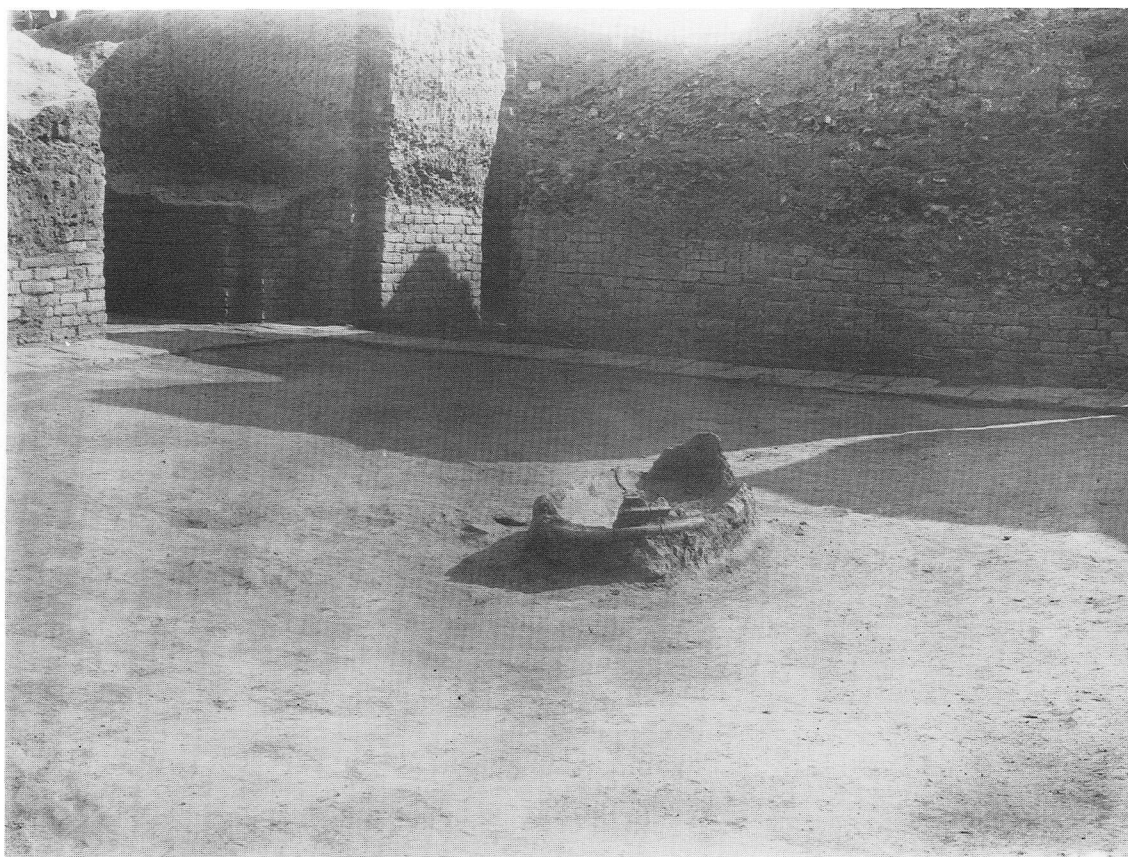
(b) Bricks stacked for use in the building. (p. 1)



(a) View of the courtyard from above, shewing the doorways of rooms 9 and 1.



(b) View of the courtyard from above, shewing the doorways of rooms 4 and 5.



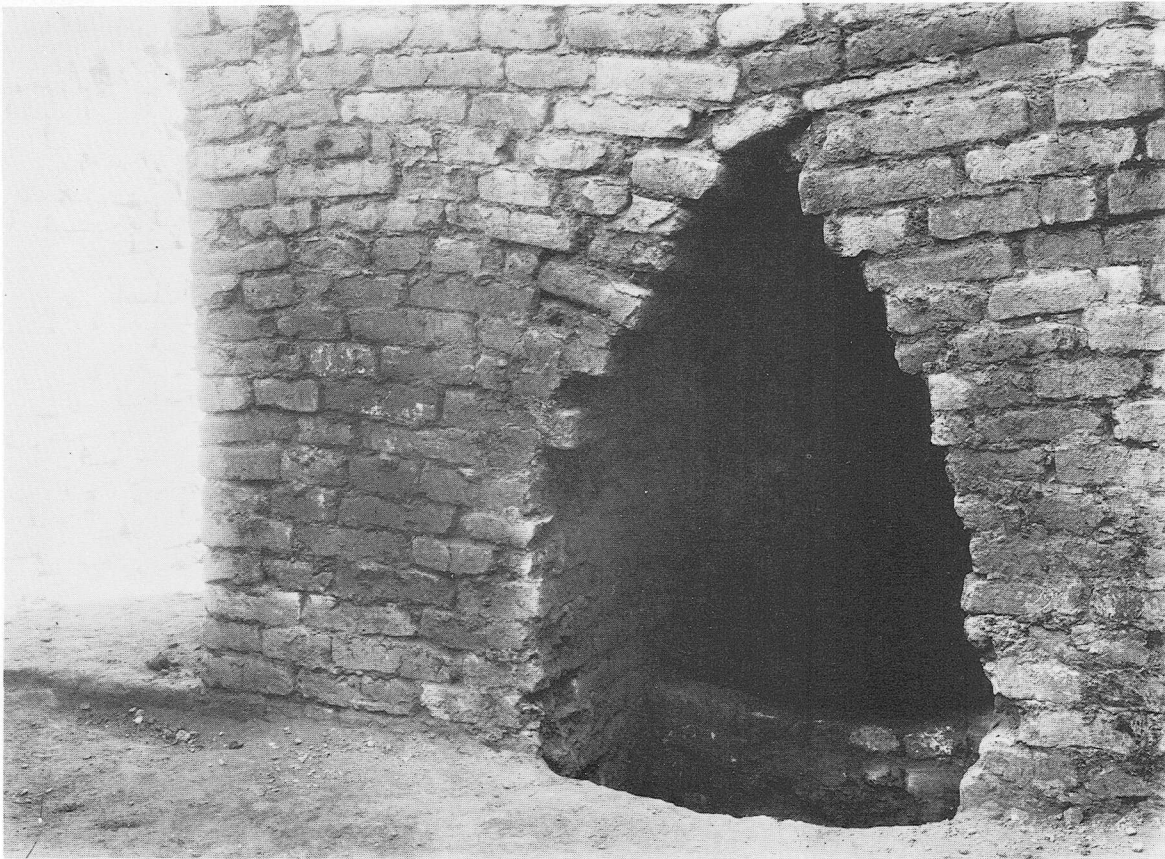
(a) The courtyard: looking east to the doors of rooms 1 and 3. (p. 9)



(b) The courtyard: looking west to the doors of rooms 6 and 7. (pp. 3,9)



(a) The courtyard: looking NW, with the doors of rooms 7 and 8. (p. 9)



(b) Room 4: the foundation—deposit chamber (?) in the SE wall. (pp. 4,10)



(a) Room 5: the incense hearths and ruined altar at the NW end. (pp. 4,11)



(b) Room 5: the offering benches and libation channels along the SW and SE walls. (pp. 4,11)



(a) Room 6: the stepped entrance from the courtyard, shewing an altar on the left and a pedestal on the right. (pp. 3, 4, 9, 11)



(b) Room 8: seen from the courtyard door; remains of an altar in the foreground, in the background the door to room 10. (pp. 4, 13)



(a) Room 7: the blocking of the old doorway leading to the tomb chamber. (pp. 4, 12)



(b) Room 7: the doorway leading to Room 11, shewing the collapsed brickwork of its blocking. (p. 12)



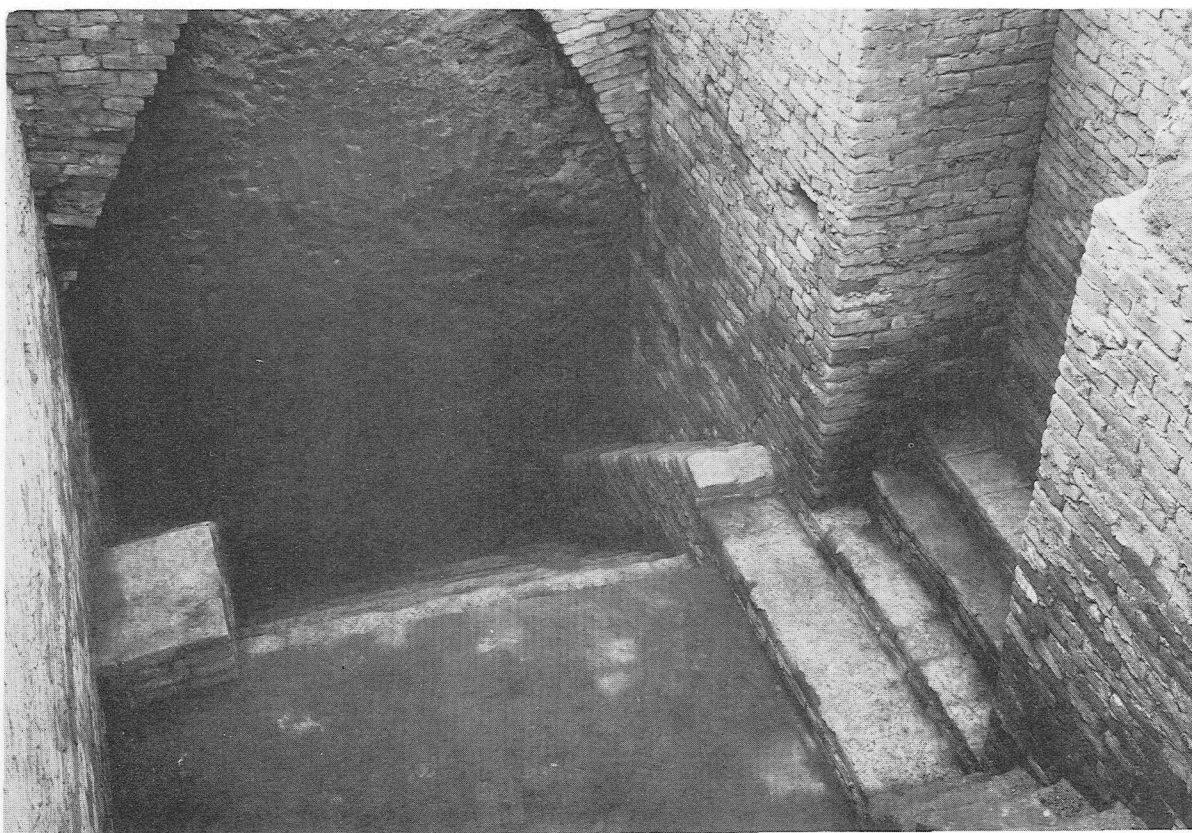
(a) Room 11: the steps in the doorway leading to Room 12. On the left, the old doorway to Room 7, the blocking partly removed by tomb robbers; in the foreground, the hole in the pavement made by the robbers. (pp. 7, 14, 15)



(b) The blocking of the doorway from Room 7 to the Tomb-shaft, seen from the shaft, *i.e.*, below the floor of Room 6. (pp. 5, 12)



(a) The Tomb shaft: the landing, seen from the blocked doorway, with the stairs descending to left and right. (pp. 5, 15)



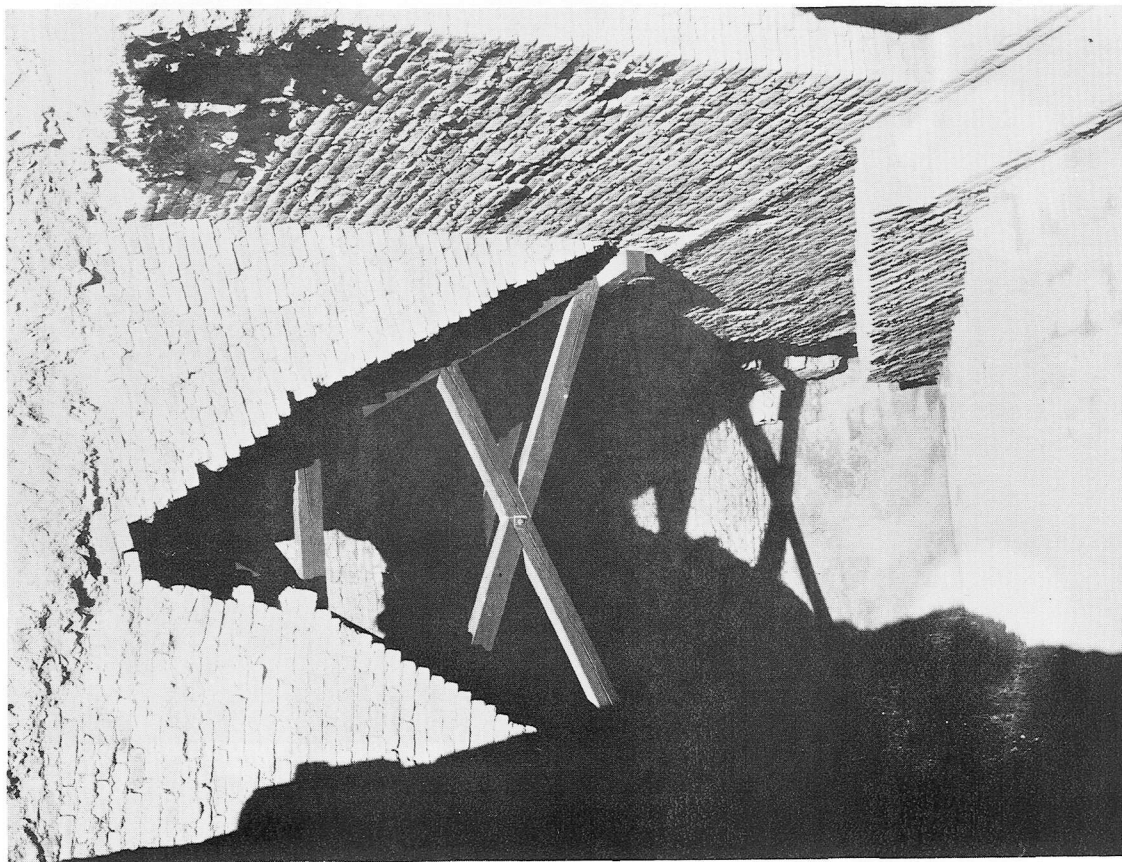
(b) The Tomb shaft: the entrance, landing and stairs leading to the NW chamber; the corbel vault still blocked with the original earth filling. (pp. 5, 15, 16)



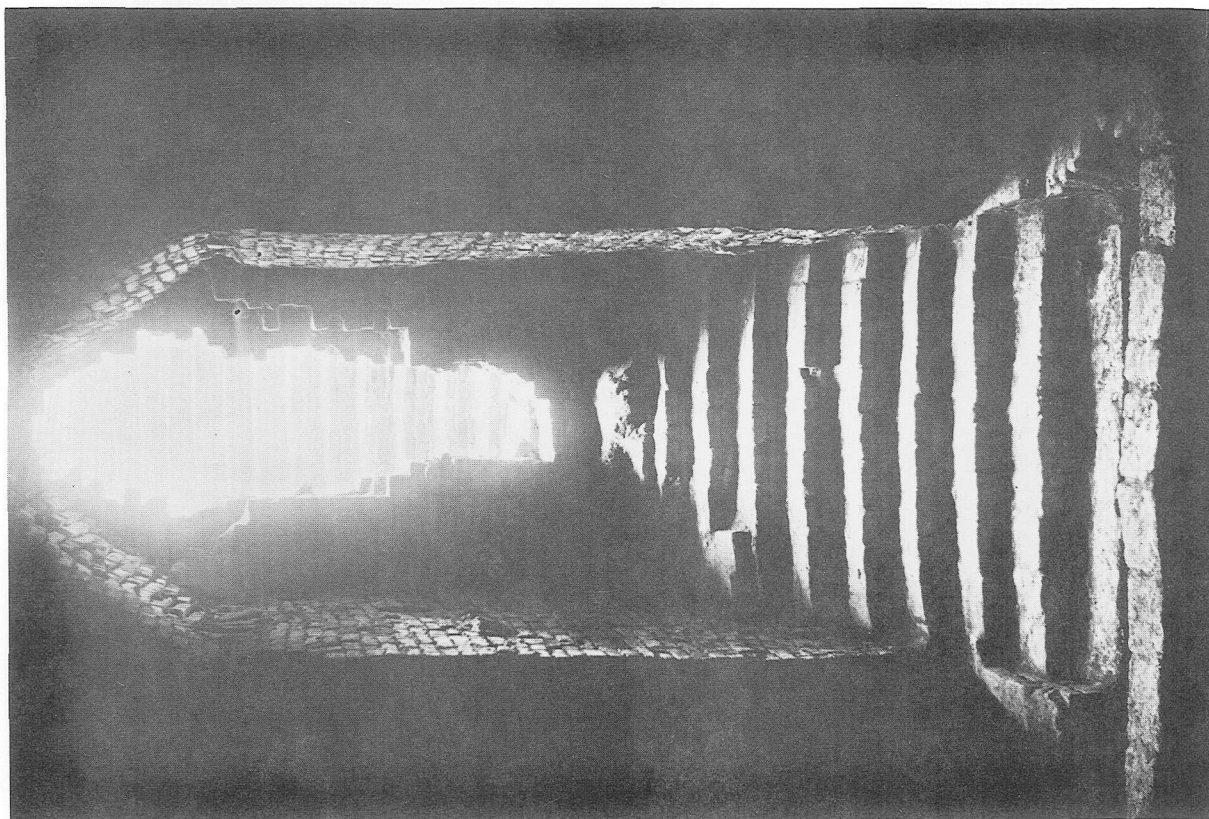
(a) The Tomb shaft: the NW flight of stairs seen from below. (p. 15)



(b) The SE tomb chamber: the blocking of the doorway. (pp. 7, 19)

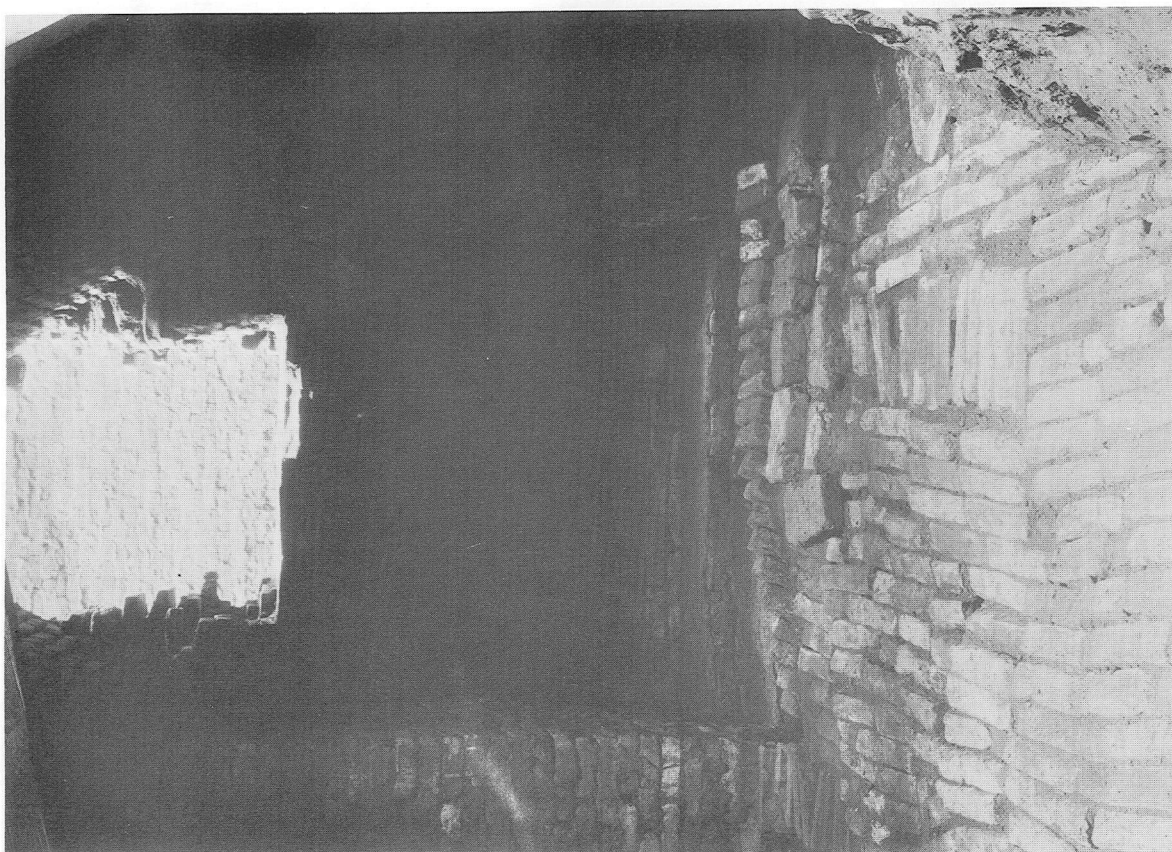


(a) The vault over the NW stair-flight: the earth filling removed and the corbelled brickwork supported by timber centering; the chamber door can be seen on the right. (pp. 5, 30)

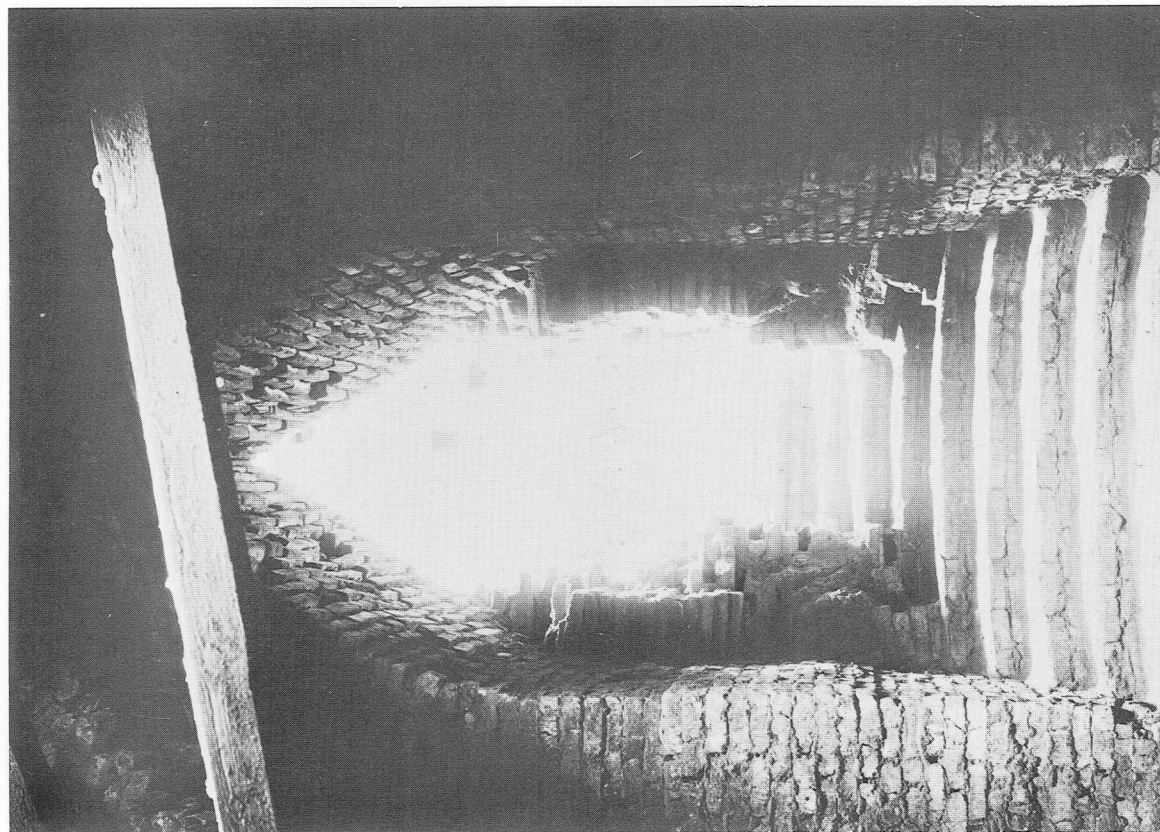


(b) The SE tomb chamber: the entrance and stairs seen from the inside after the partial removal of the door-blocking. (pp. 5, 18)

THE DUNGI MAUSOLEUM

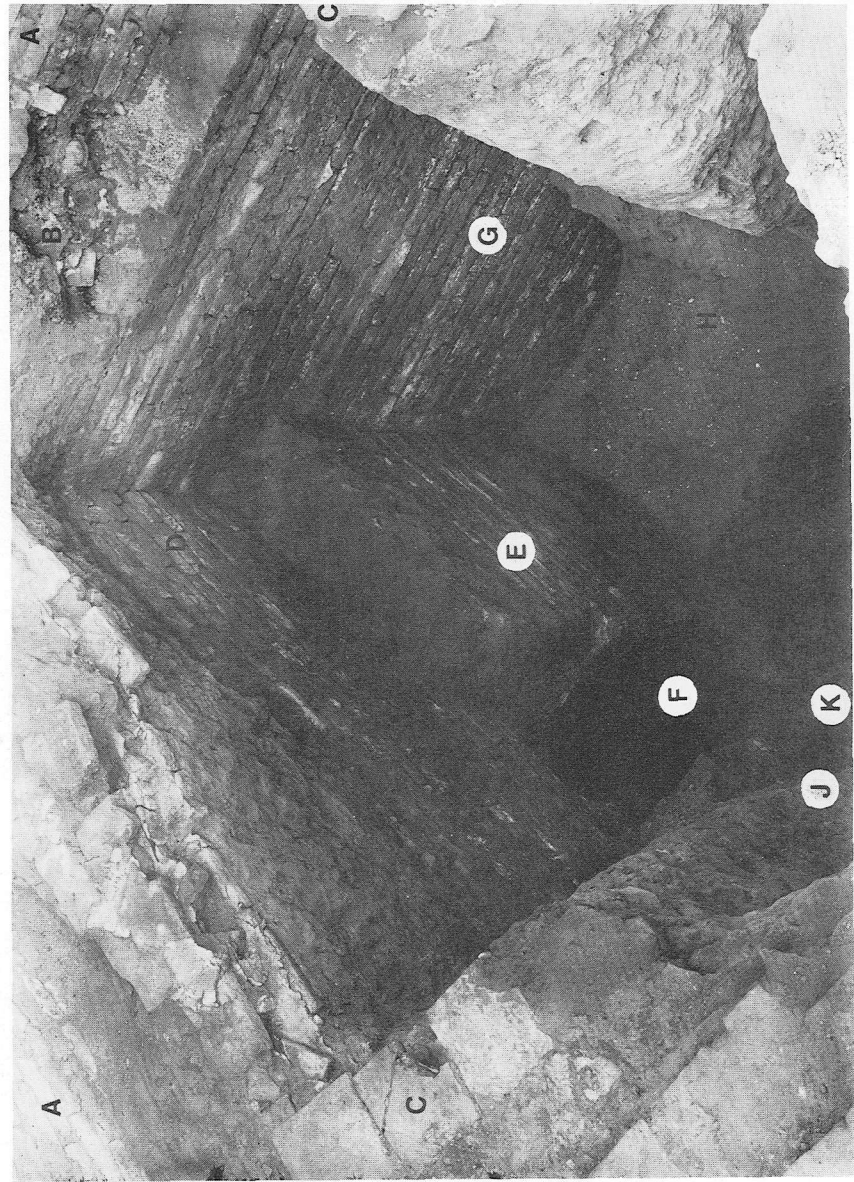


(a) The NW tomb chamber from the inside: most of the door-blocking *in situ*; over the floor is the brick dry-course, and some of the mud-brick packing laid above this is visible on the right of the photograph. (pp. 6, 7, 17)



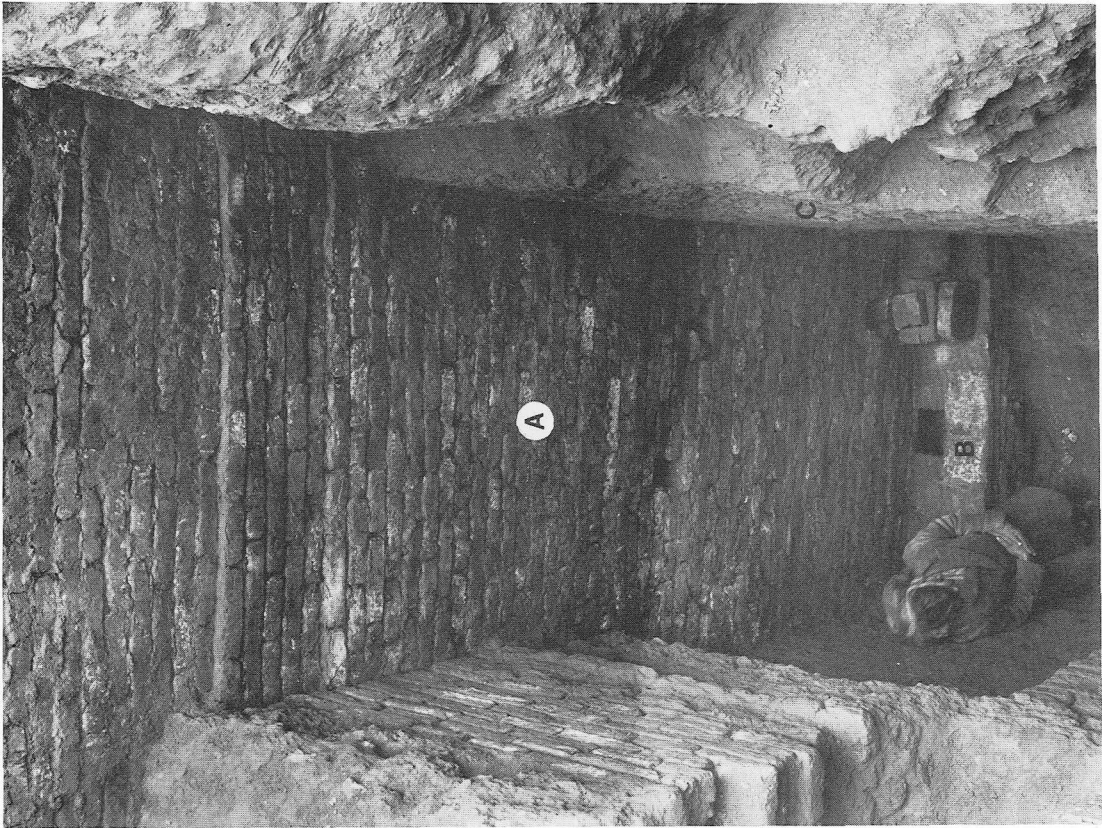
(b) The NW tomb chamber from the inside: the door-blocking and the secondary floor removed. (pp. 6, 18)

THE DUNGI MAUSOLEUM



(a) The substructure below Room 7:
(p. 20)

- A-A, the superstructure walls;
- B, blocked doorway to Room 11;
- C,C, Dungī pavement;
- D, foundation of superstructure walls;
- E, L-shaped burnt-brick wall;
- F, breach in L-shaped wall made by tomb robbers;
- G, outer face of tomb-chamber wall;
- H, mud-brick packing;
- J, junction with mud-brick wall;
- K, mud-brick wall.



(b) The substructure below Room 7, the
NW side of the pit (pp. 5, 20):

- A, outer face of tomb-chamber wall;
- B, foundations, with beam-hole;
- C, mud-brick wall.



(a) The outer SW wall, with the south corner. (p. 24)



(b) The Entrance. (p. 24)



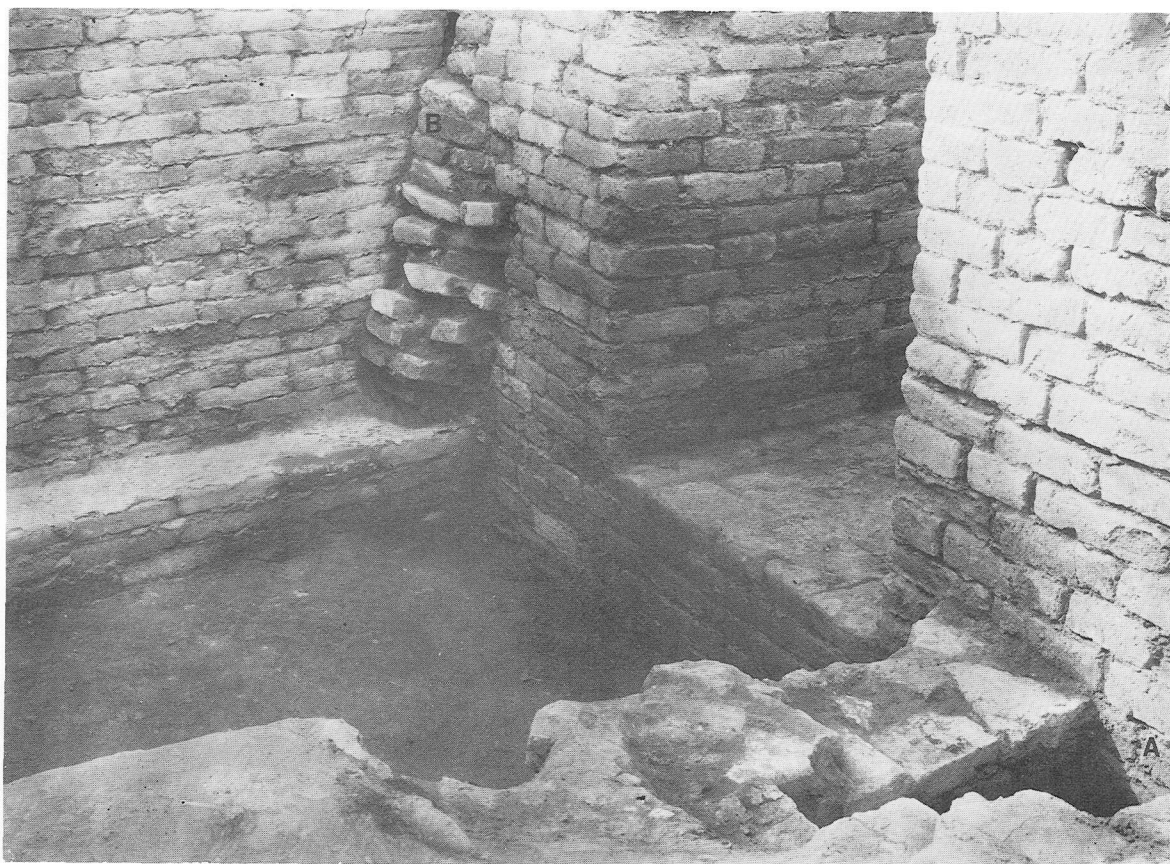
(a) The Courtyard, with the doors of Rooms 3 and 4. (p. 24)



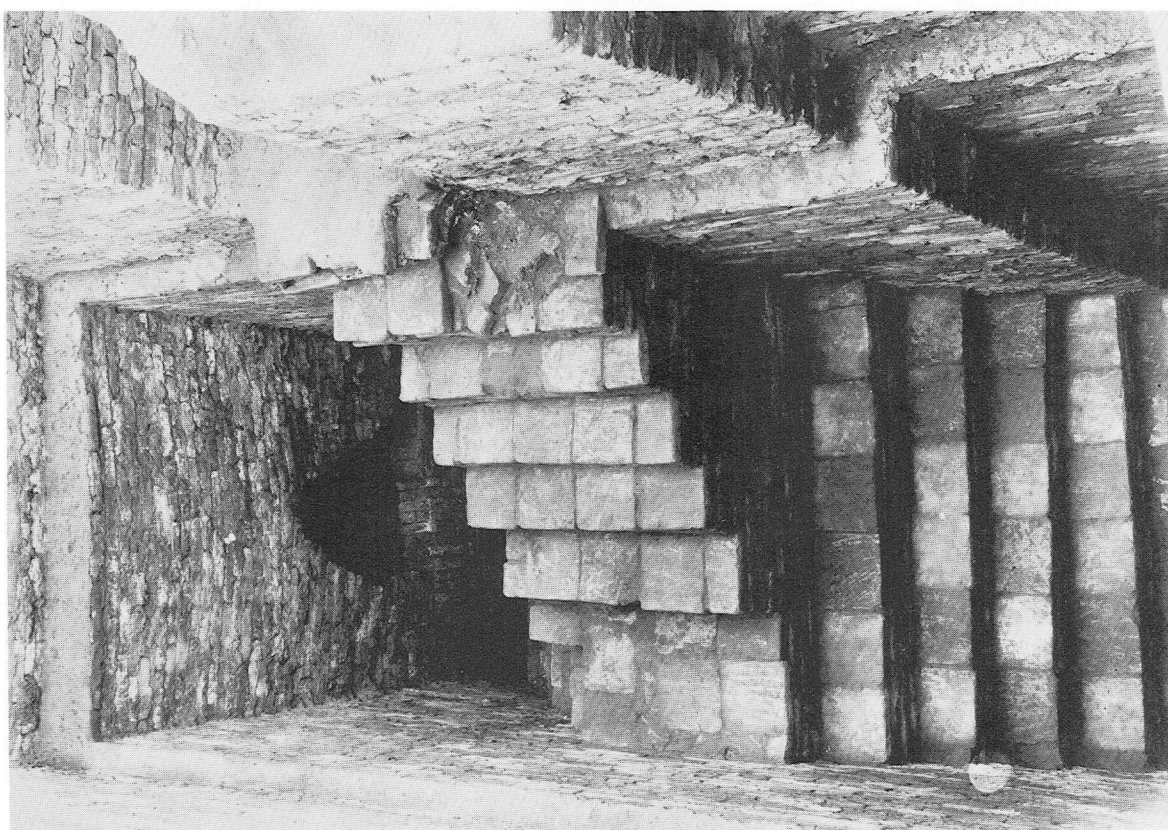
(b) The Courtyard: the altar and the door of Room 5. (p. 24)



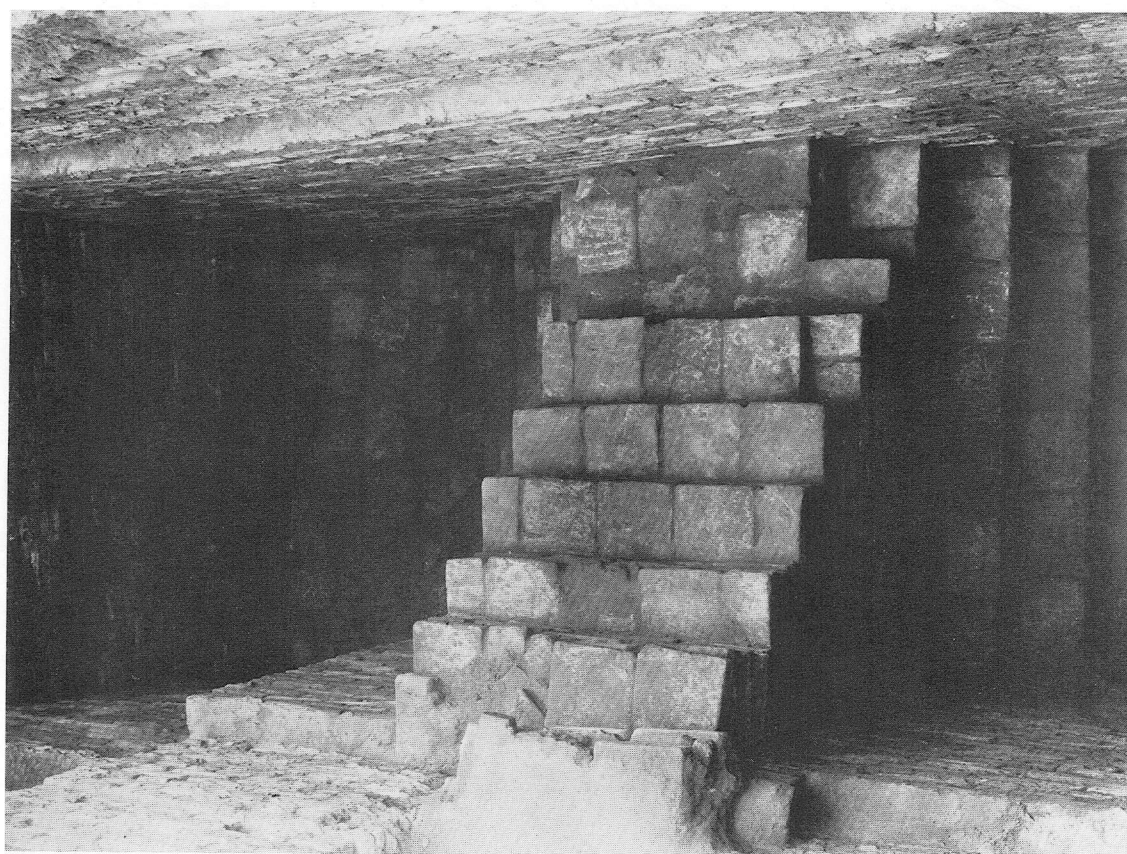
(a) Room 5: the altar against the SW wall. (p. 25)



(b) Room 8: the entrance from Dungi's Mausoleum (pp. 27, 28):
A, the hollow door jamb;
B, the blocking of the breach from the foundation-deposit chamber.



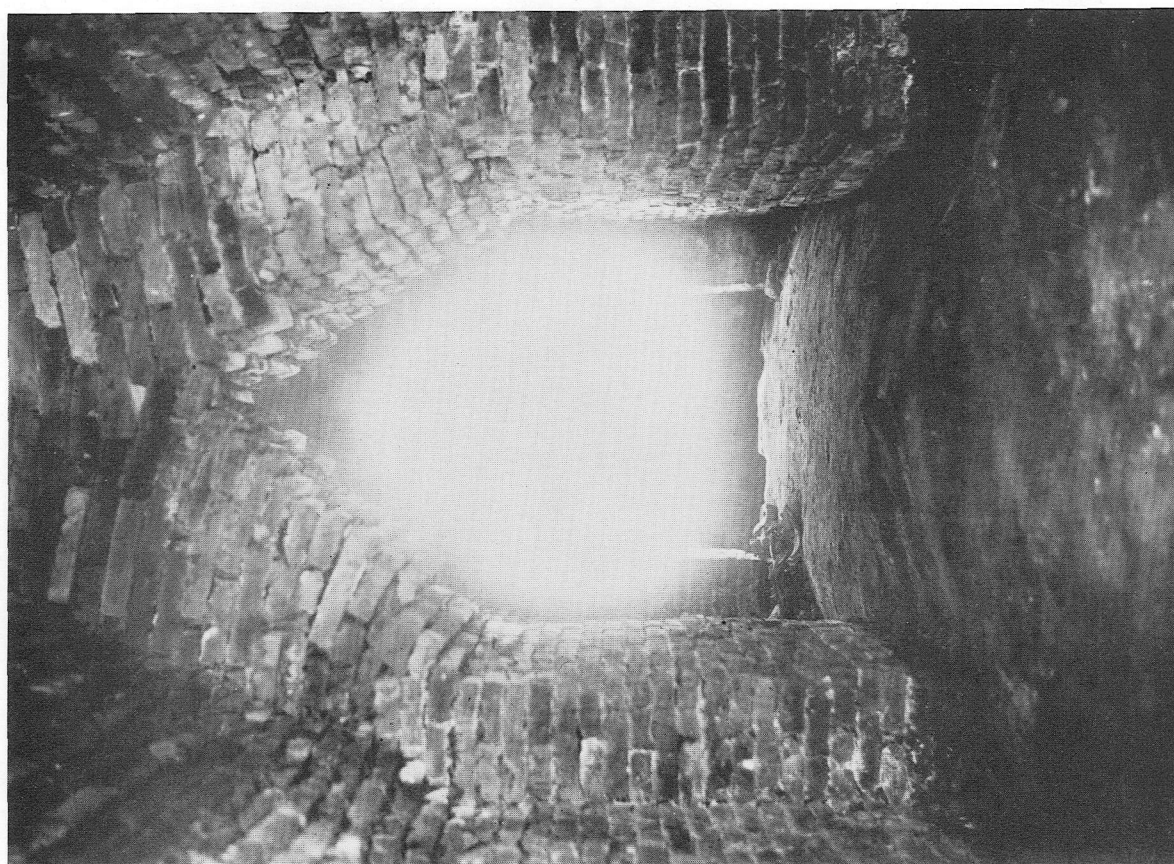
(a) The Staircase, shewing the door of the NW tomb chamber with its broken blocking. (pp. 28, 29)



(b) The Staircase, with approach to the SE tomb chamber. (pp. 28, 29)

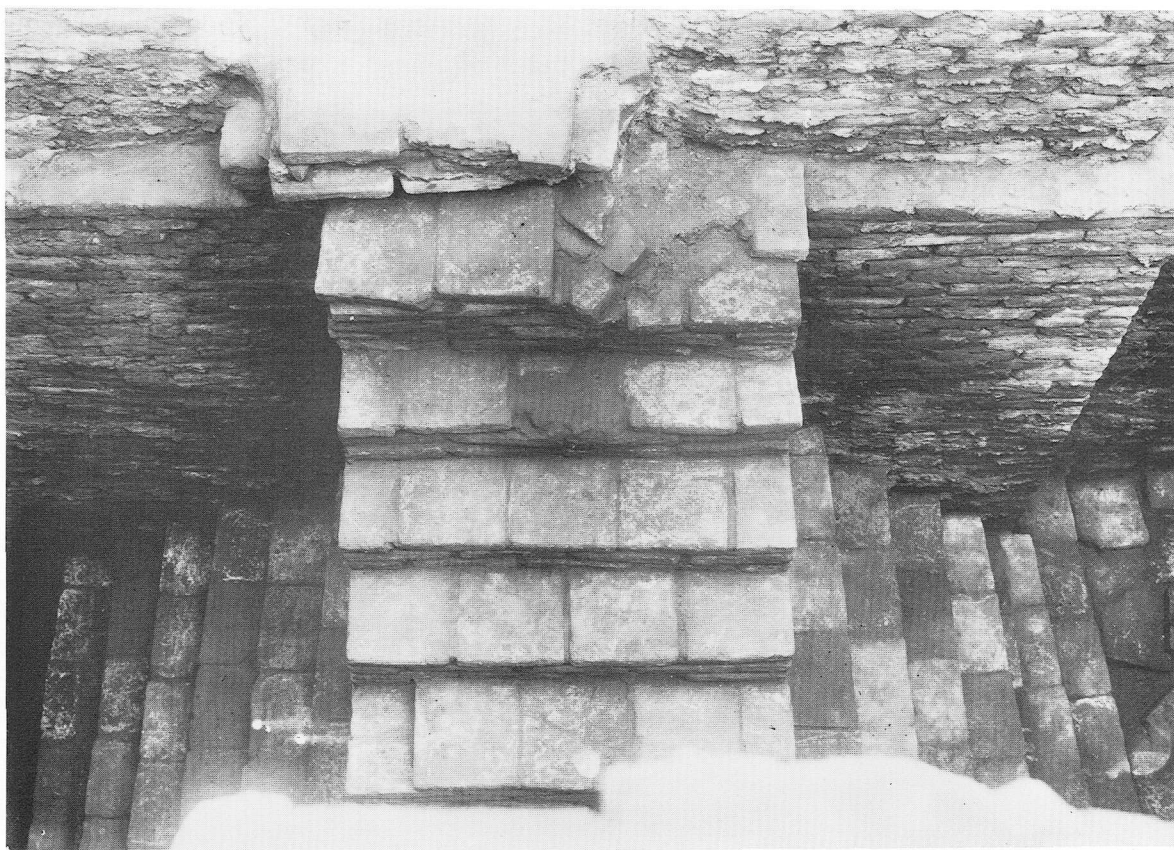


(a) The blocked entrance to the SE tomb chamber. (p. 28)

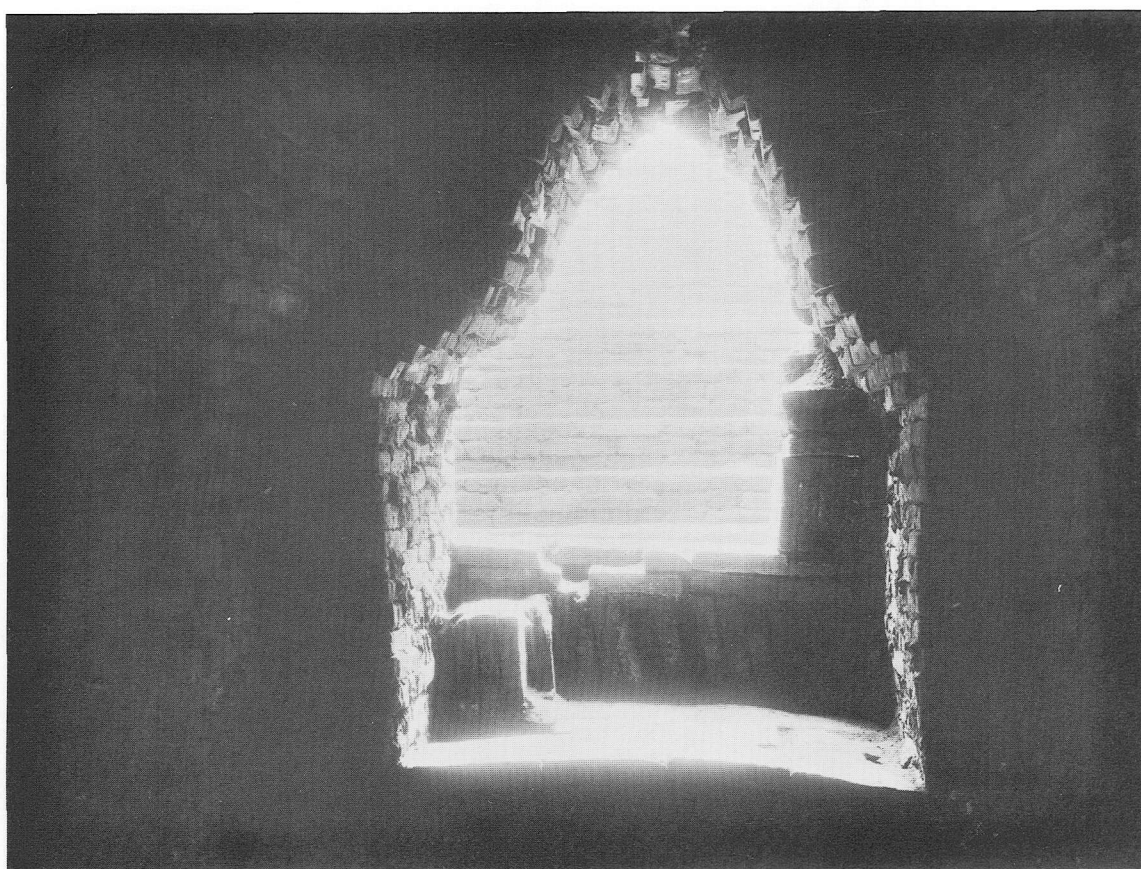


(b) The SE tomb chamber from inside, looking towards the door. (p. 28)

THE SE MAUSOLEUM OF BUR-SIN



(a) The Staircase, shewing the added steps at the top. (pp. 28, 29)



(b) The NW tomb chamber door, from the inside. (pp. 28, 29)



(a) The excavation of the Mausoleum:
 A-A, the Temenos wall of Nebuchadnezzar running across the site;
 B,B, house walls of the Larsa period;
 C, ladder let down through the hole in the roof of the courtyard tomb chamber.

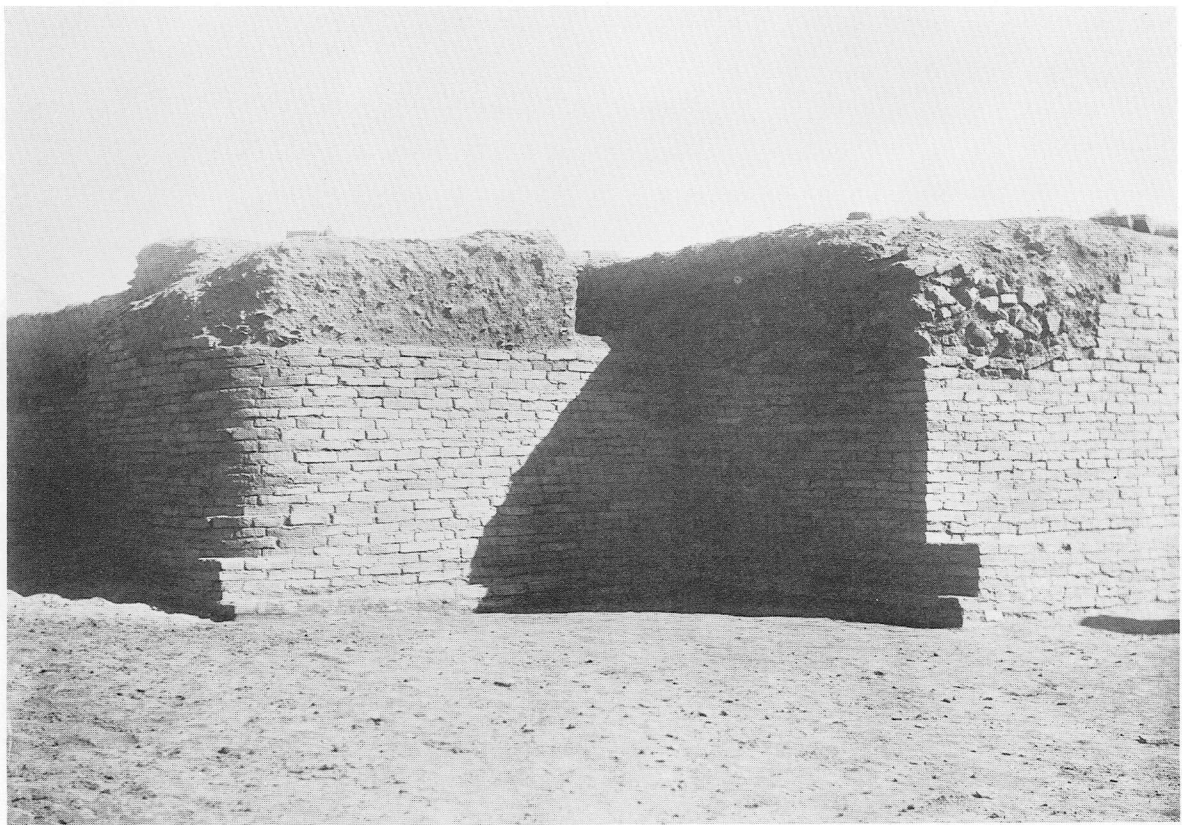


(b) The Mausoleum excavated: the Courtyard, looking north (p. 30):
 A-A, the Temenos wall of Nebuchadnezzar;
 B, Larsa burial vault;
 C,C, intrusive Larsa larnax burials.

THE NW MAUSOLEUM OF BUR-SIN



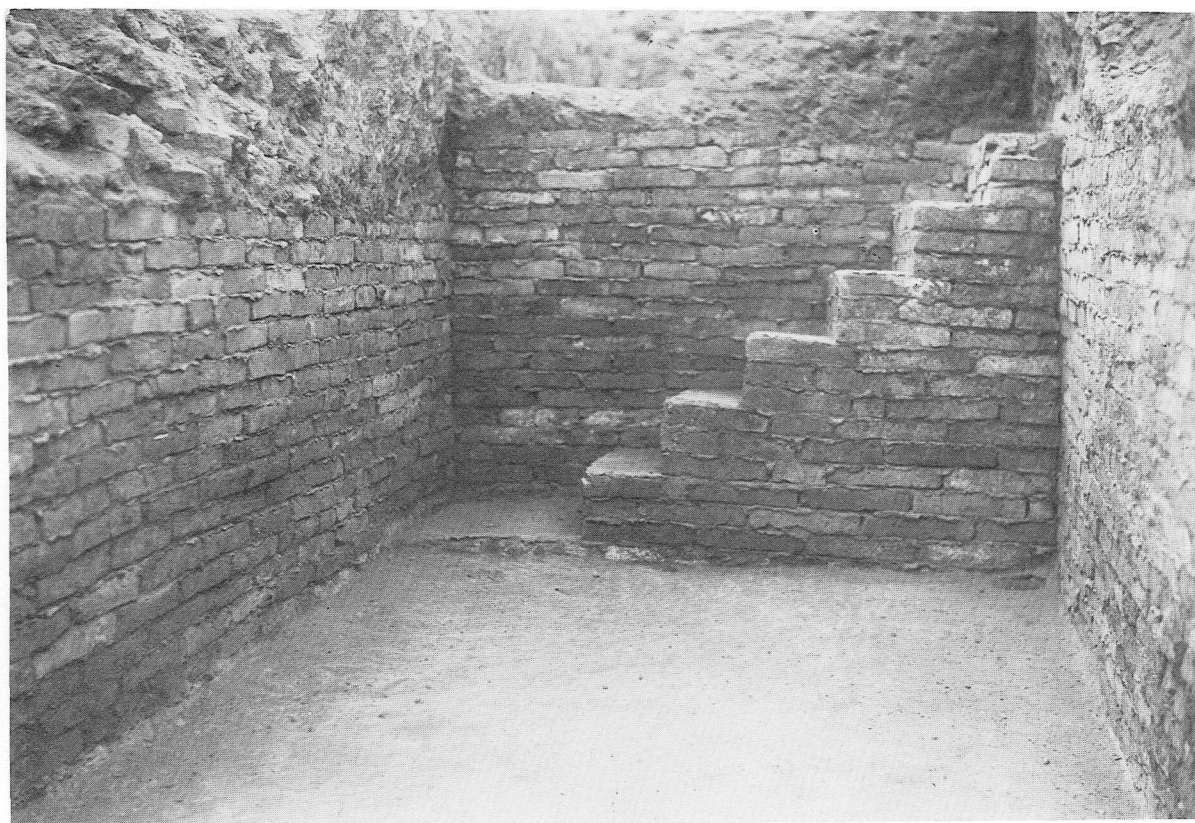
(a) The NE front, shewing the SE jamb of the main entrance, the drain intake by the wall and the rounded corner of Room 6. Above the ruins are the remains (B,B) of the Temenos wall of Nebuchadnezzar. (p. 30)



(b) The outer face at the west corner, shewing rounded brickwork. (p. 30)



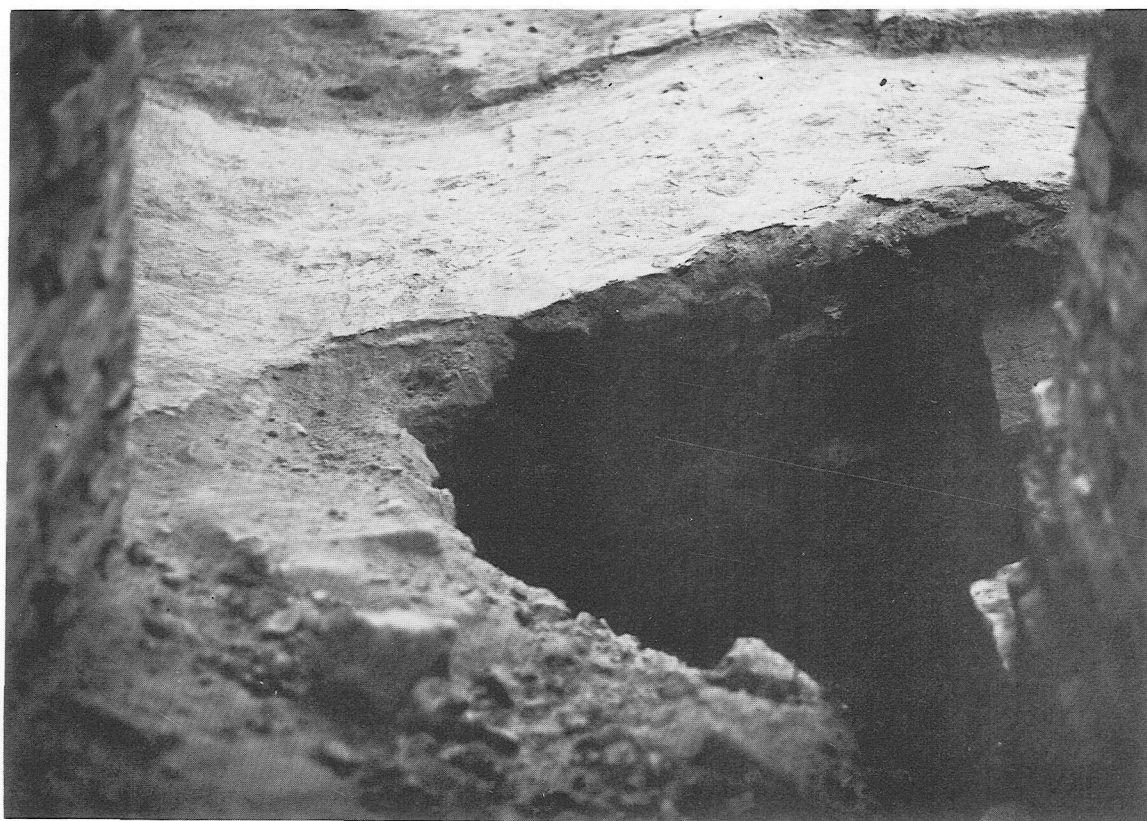
(a) General view of the building from the SE. (p. 30)



(b) The stepped base in Room 3. (p. 32)



(a) Rooms 4 and 5, shewing the sunken floor. (p. 32)



(b) Room 4, from the doorway of Room 5, shewing the breach in the floor and, behind, the remains of an altar. (p. 32)



(a) Room 6, looking towards the courtyard. (p. 32)



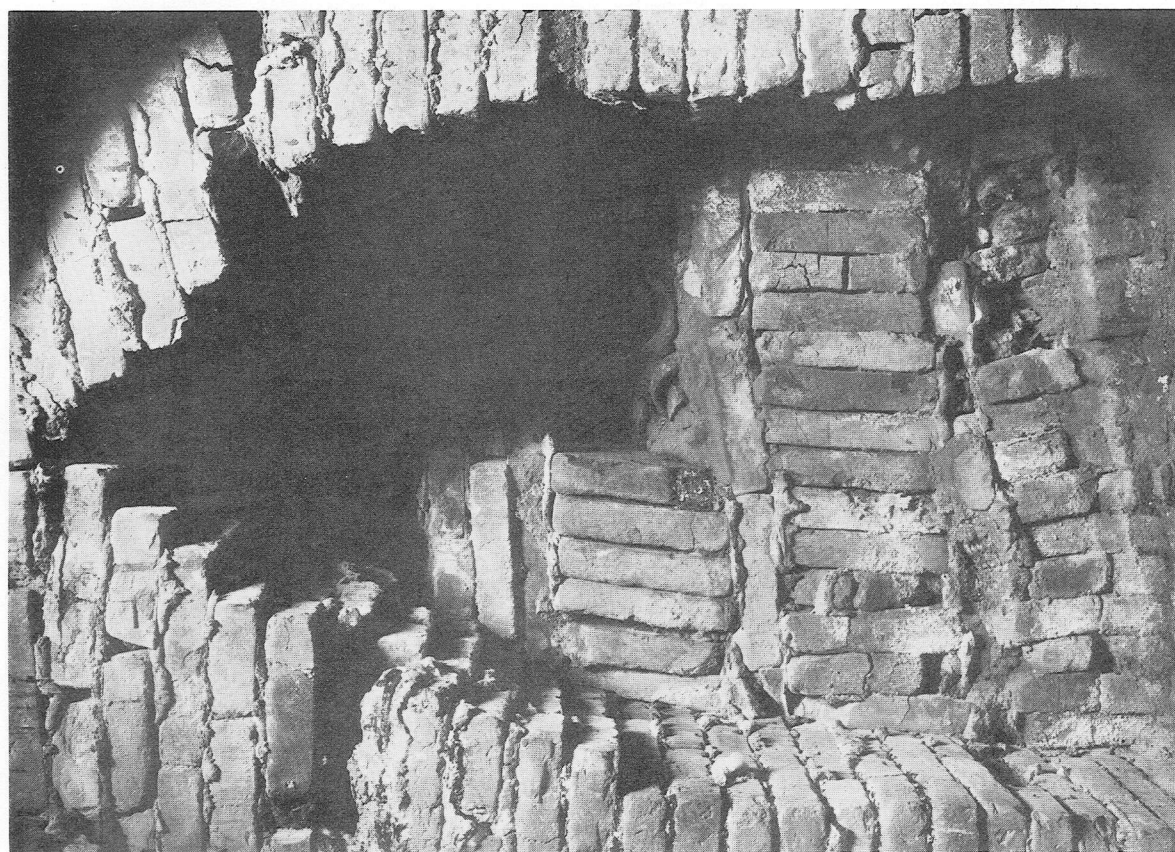
(b) Room 6, the altar. (p. 33)



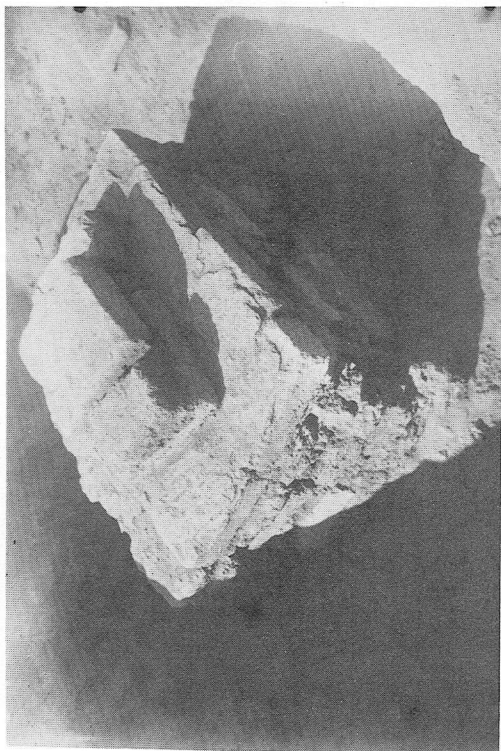
(a) Tomb-chamber 1: the interior, looking NW. (p. 34)



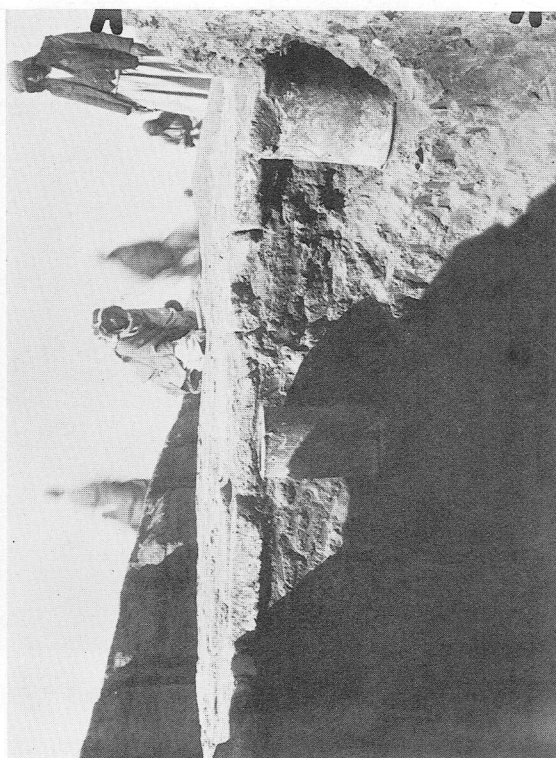
(b) Tomb-chamber 3: detail of the corbelled roof shewing on the brickwork the bitumen coating of the centering-beams (the grain of the wood is visible). (pp. 18, 35)



(a) The NW Mausoleum of Bur-Sin: the door of Tomb chamber 1, opened by robbers. (p. 34)



(b) Foundation-box of Dungi beneath the Dim-tab-ba temple. (p. 40)



(c) Inscribed clay cylinders of Dungi *in situ* beneath the pavement of the Dim-tab-ba temple. (p. 40)



(a) E.H. Site: square F 7. Bench of Bur-Sin.



(b) E-nun-mah: General view looking west. (p. 45)



(a) General view of the ruins, looking NE:
A, A, Nebuchadnezzar pavement. (p. 45)



(b) The outer NE wall. (p. 45)



(a) Mud-brick construction below the NE wall, with plano-convex brick pavement associated with it. (pp. 45, 48)



(b) Ur-Nammu's drain in the NE wall: the lower part of the vertical shaft and the outlet. (pp. 46, 48)



(a) Buttress of the NE wall shewing (pp. 46, 48)

A, brickwork of Bur-Sin;
B, brickwork of Kudur-Mabug;
C, brickwork of Kuri-Galzu.



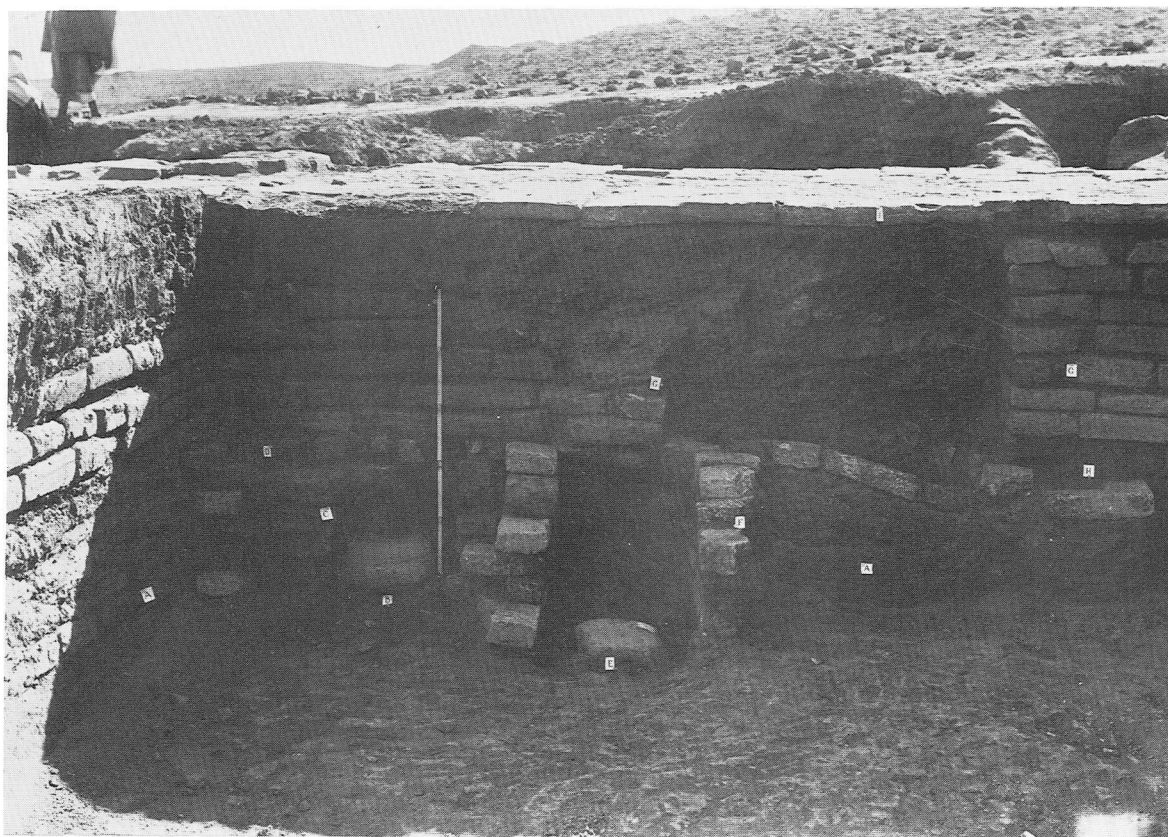
(b) The outer SW wall of the Third Dynasty building overlaid by an interior wall of Kudur-Mabug's E-mu-ri-a-na. (pp. 47, 49).



(a) Room 13: the NW end, with the hinge-stone of Gimil-Ilishu. (p. 51)



(b) Room 14 (p. 52) shewing
 A, the mud-brick wall of Ur-Nammu; E, F, support and base of door frame;
 B, Larsa period burnt-brick wall; G, threshold;
 C, remains of hinge-box; H, Neo-Babylonian mud-brick step;
 D, socket-stone; I, pavement of Nebuchadnezzar.



(a) E-Nun-Mah: Room 17, SE end, details (p. 52):

A, Third Dynasty mud-brick construction;

B, early doorsocket, uninscribed;

C, brick hinge-box;

D, remains of early pavement;

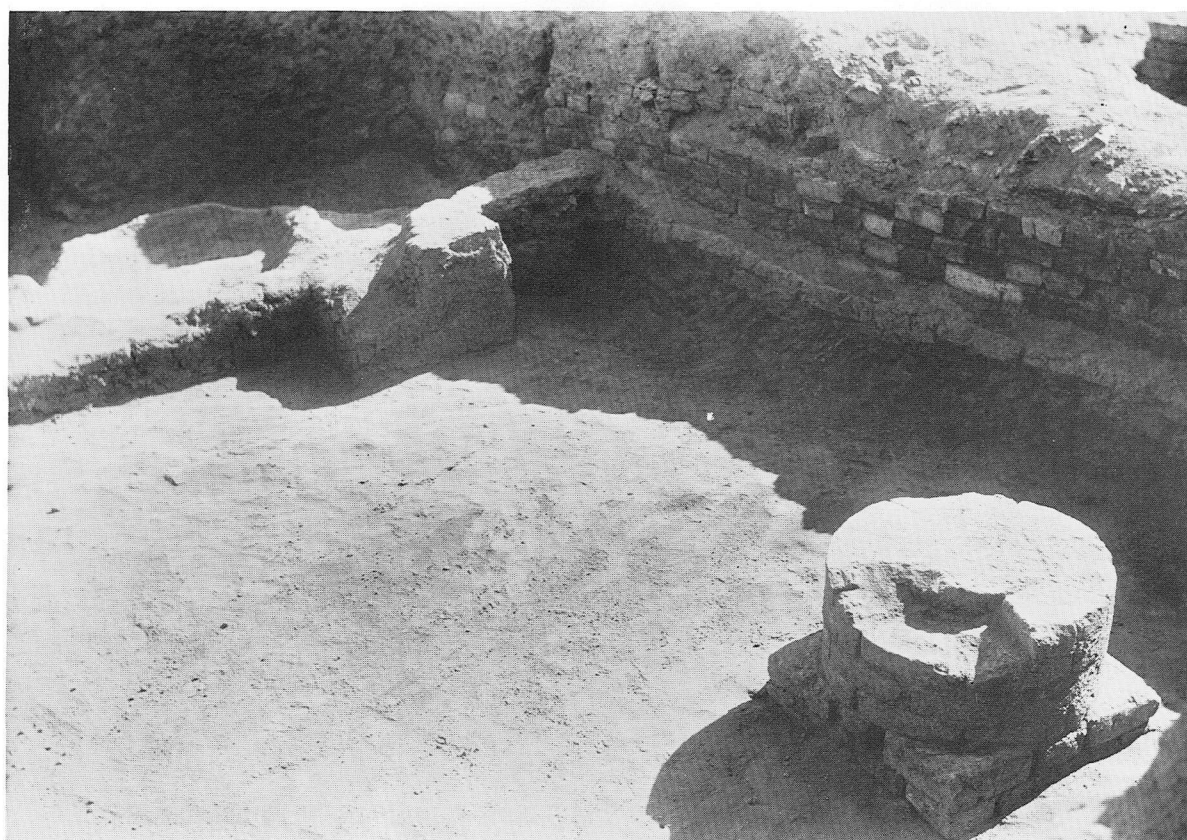
E, doorsocket of Ur-Nammu;

F, brick hinge-box;

G, G, door jambs;

H, impost-brick against the door jamb;

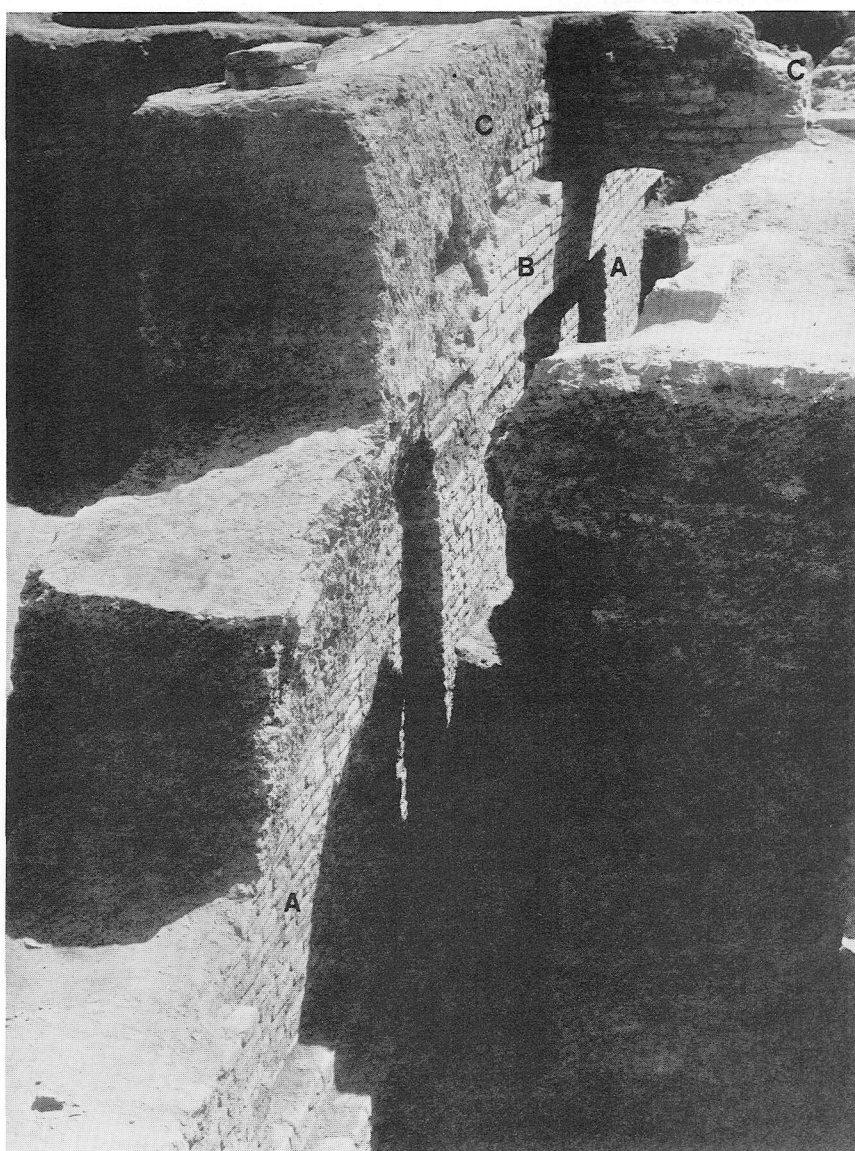
I, Nebuchadnezzar's pavement.



(b) The Third Dynasty temple of Nin-gish-zida: mud-brick column and wall pier. (p. 42)



(a) The Gig-Par-Ku: the stelae of Bur-Sin in position. (p. 43)



(b) The Temenos Wall:
the outer face of the SW wall of
the tower in Section B (p. 57):
A, Third Dynasty brickwork;
B, Kuri-Galzu's brickwork;
C, later Kassite brickwork.

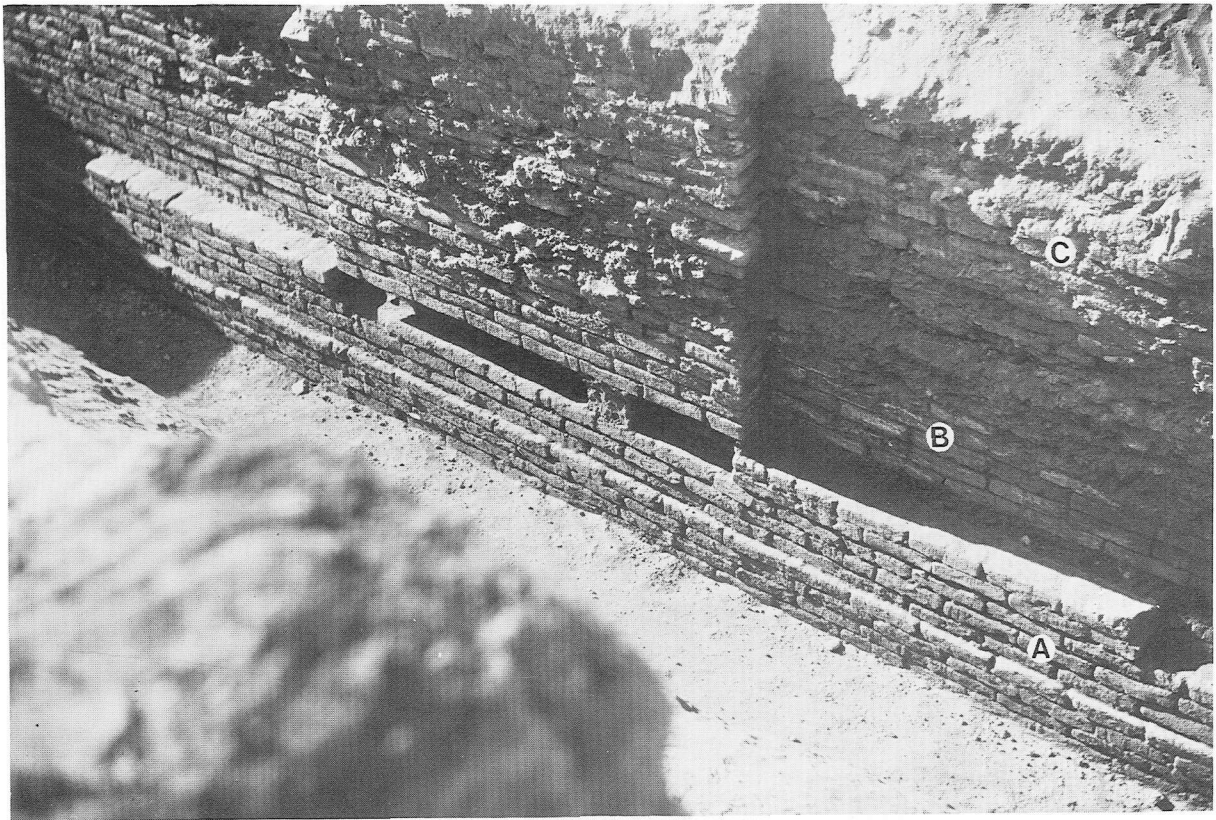


(a) Room D 3, looking SW: in the middle of the room is seen the top of Ur-Nammu's mud-brick Temenos Wall; in the background, the buttressed NE wall of Warad-Sin's tower.

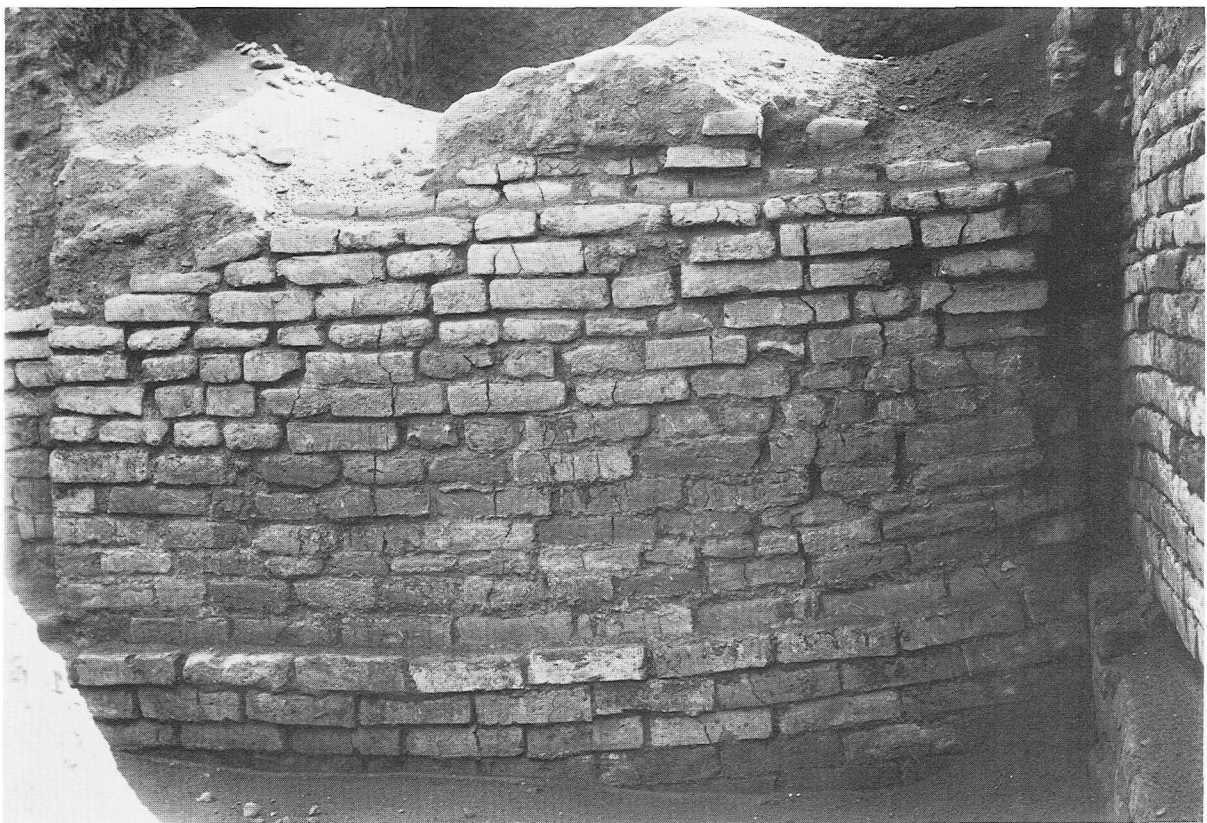


(b) Room D 3, looking NE: Ur-Nammu's mud-brick Temenos Wall is seen running the length of the room; the burnt-brick walls are by Kuri-Galzu.

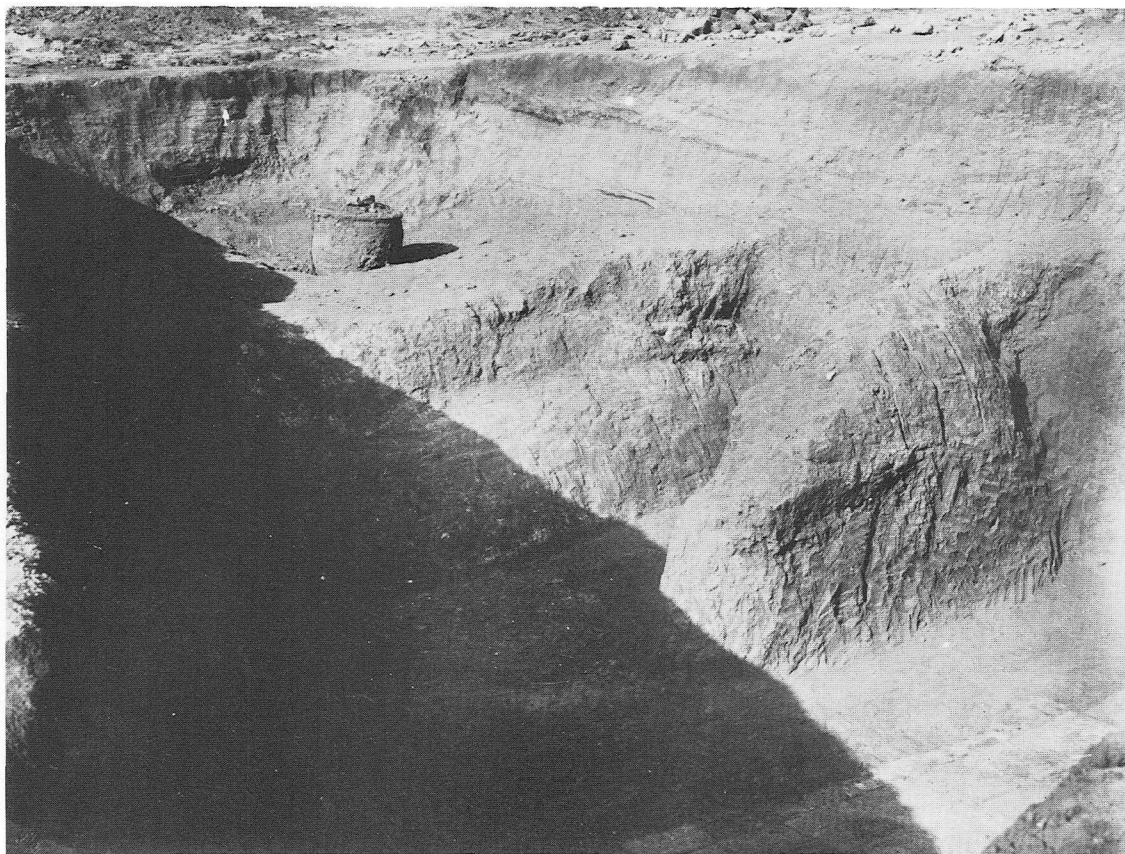
THE TEMENOS WALL: THE TOWER AT THE NW END



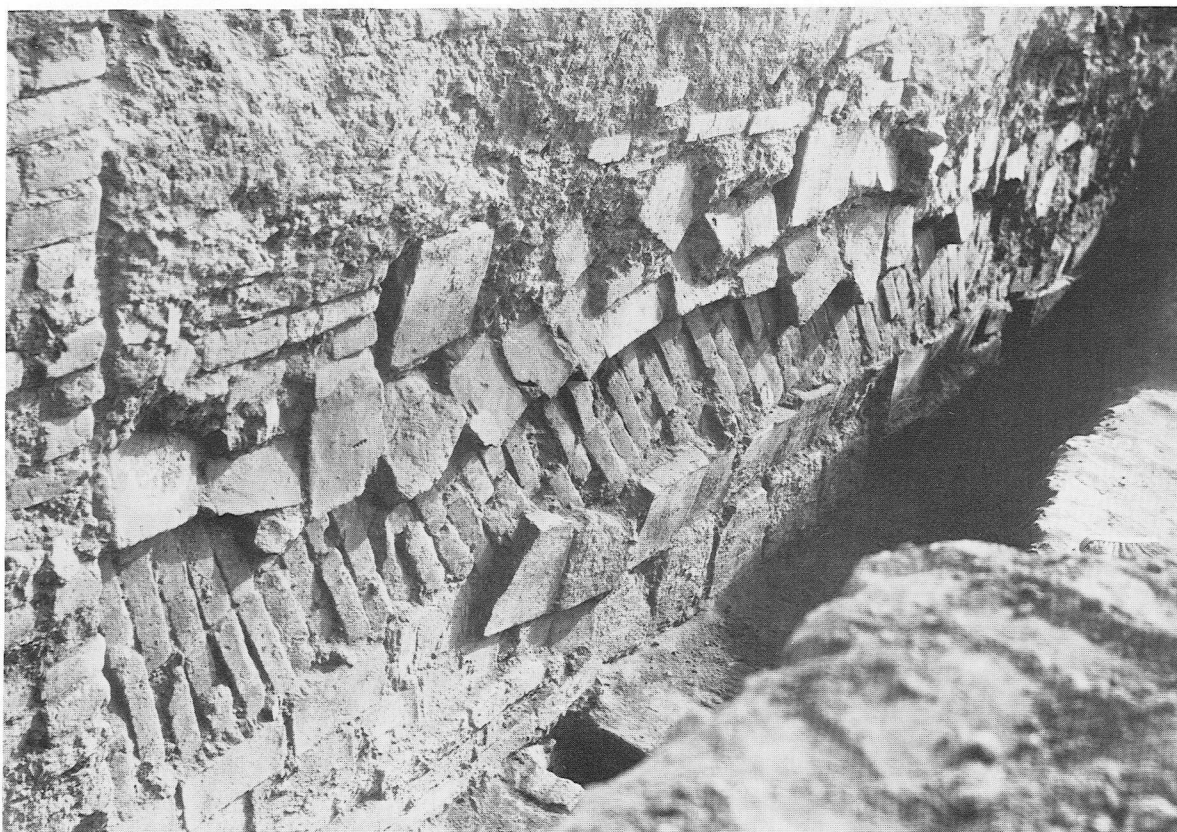
(a) The outer face of the NE wall of the salient, shewing:
A, brickwork of Ur-Nammu;
B, of Kuri-Galzu;
C, later Kassite. (p. 58)



(b) The wall face beyond the salient: Kuri-Galzu's brickwork abutting on the side wall of the Third Dynasty (Section D). (p. 58)



(a) The back face of the Temenos wall

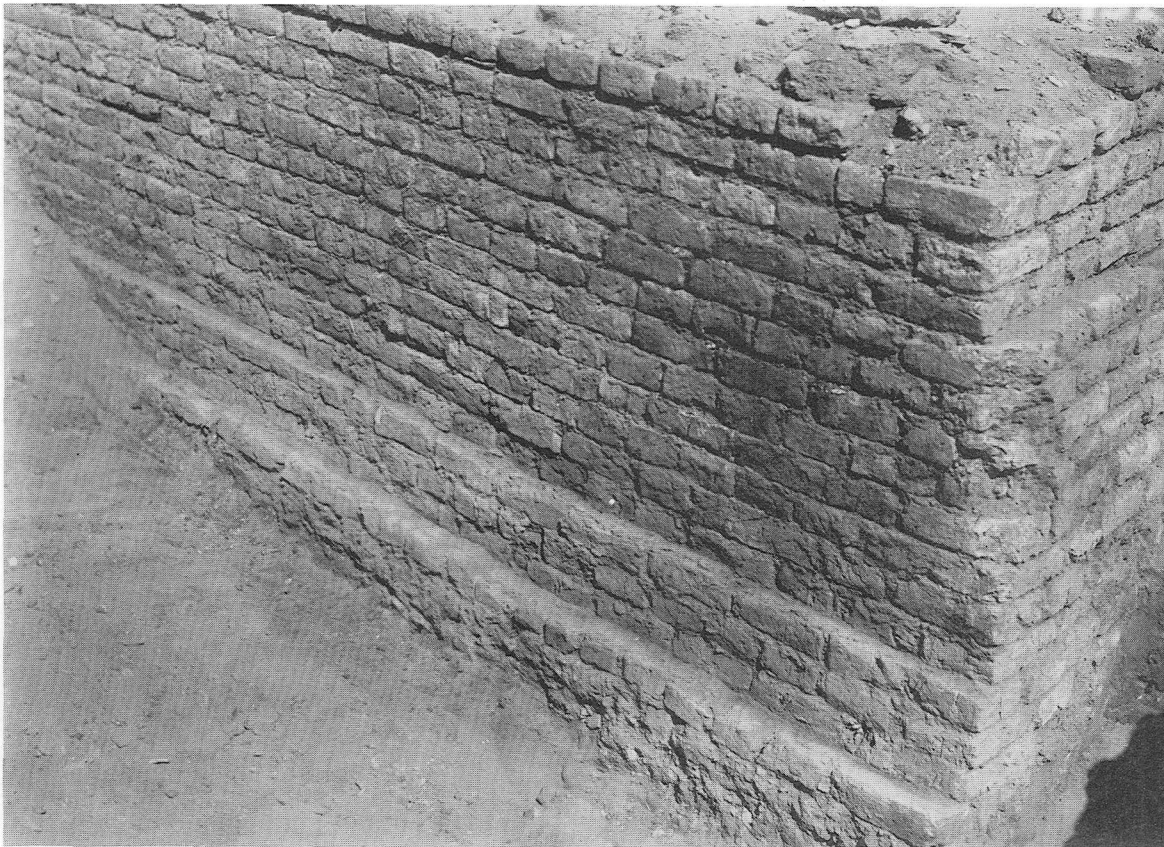


(b) The F.H. Site: brick face of the dam across the wadi which supported the Third Dynasty building. (p. 59)

THE TEMENOS WALL



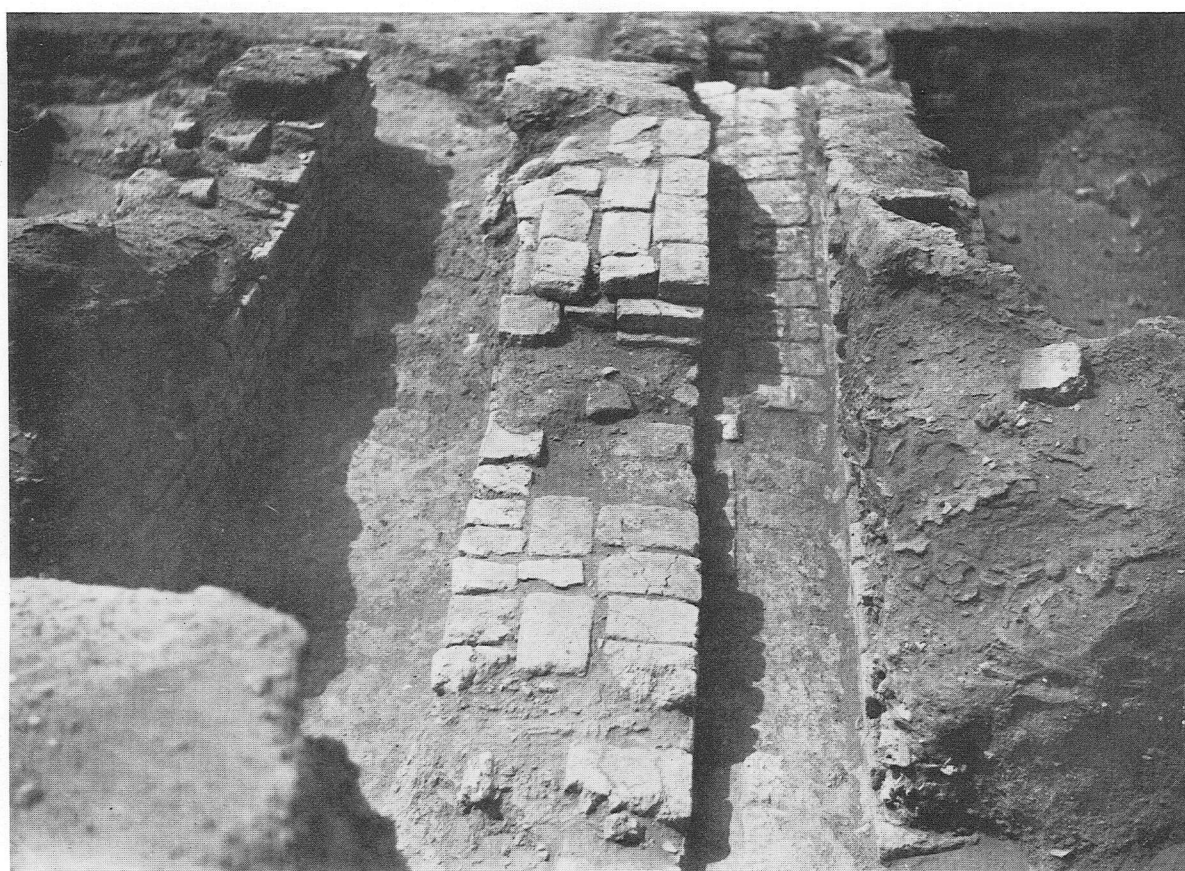
(a) The outer face of the Third Dynasty Temenos Wall SE of the Gig-Par-Ku. (p. 56)



(b) The Town Wall, Square JJ 33. The Third Dynasty mud brick masked by burnt brick of the Larsa period. (p. 65)

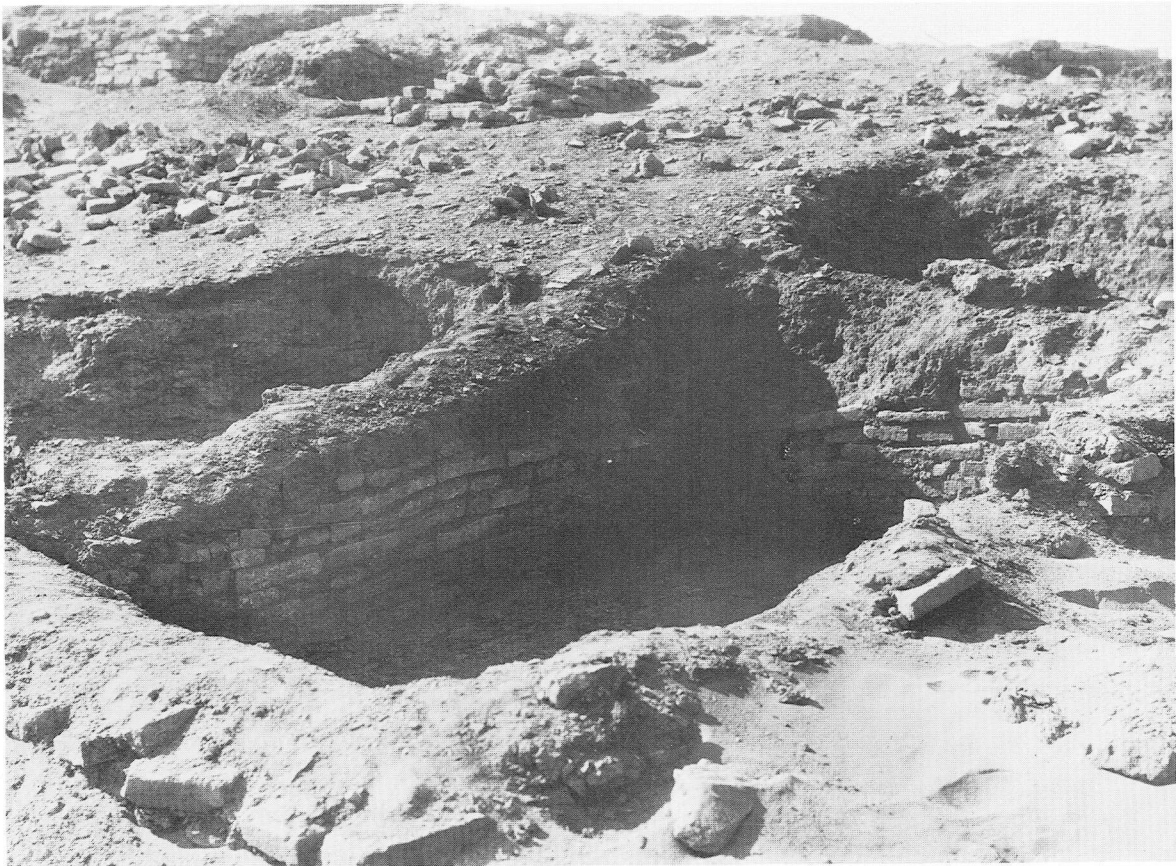


(a) Squares MM 36-37. The back of the mud-brick Town Wall; against it a later (?) pavement, a Neo-Babylonian well and, in the background, a Neo-Babylonian kiln. (pp. 62,65)



(b) Square NN 39. Late drain-channel and wall built on the mud-brick mass of the Third Dynasty rampart. (p. 67)

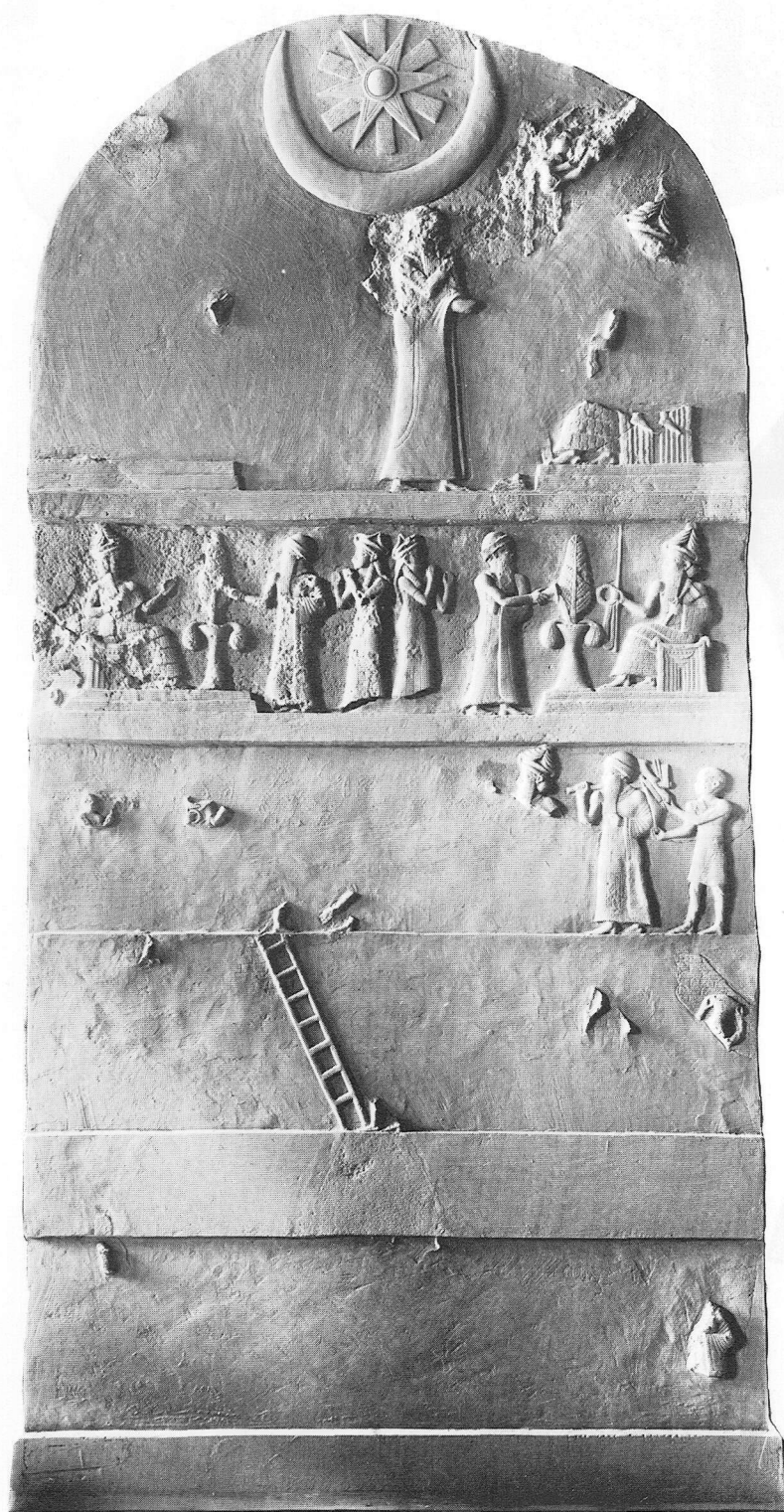
THE TOWN WALL



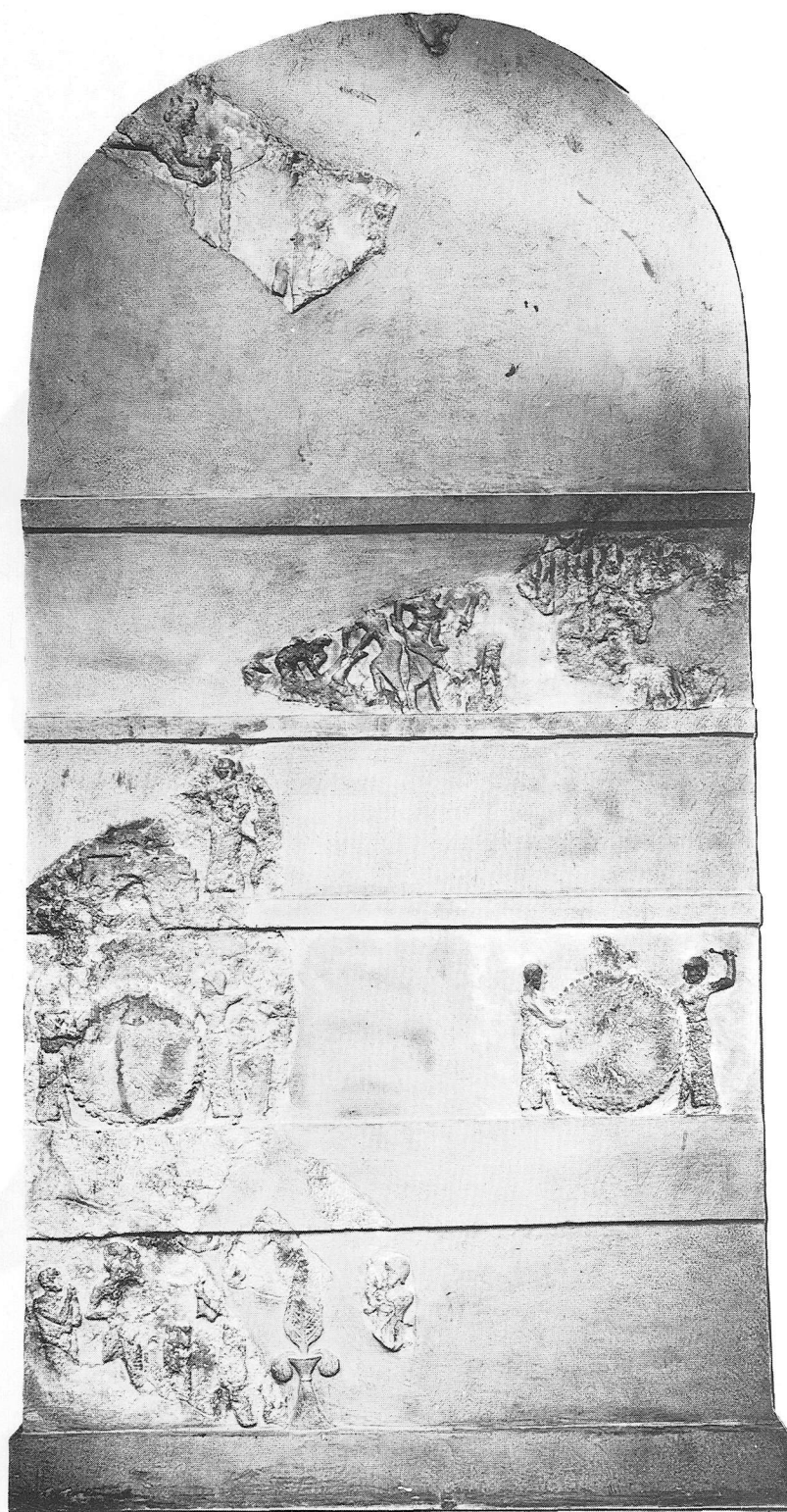
(a) Squares OO 46-47. Chambers built against the outer face of the rampart. (p. 67)



(b) Squares JJ-MM 60-63. The Neo-Babylonian revetment of the original rampart: the back view, after cutting away the mud brick, to shew the brickwork keys bonding the revetment to the core. (pp. 63,68)

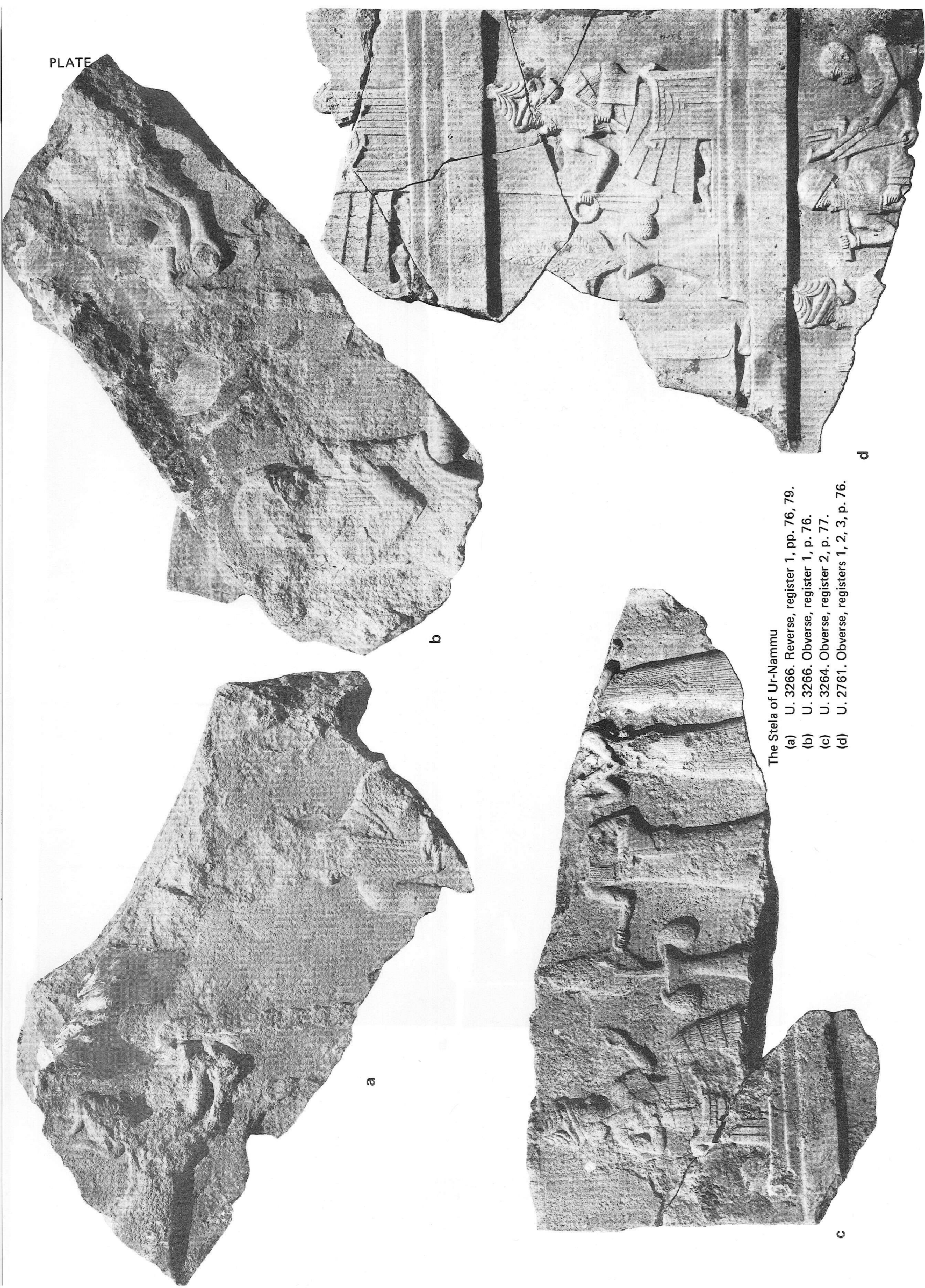


a



b

The Stela of Ur-Nammu: the original restoration by Legrain in the University Museum. (a) Obverse. (b) Reverse. (pp. 76-77 and Footnotes 106a, b)

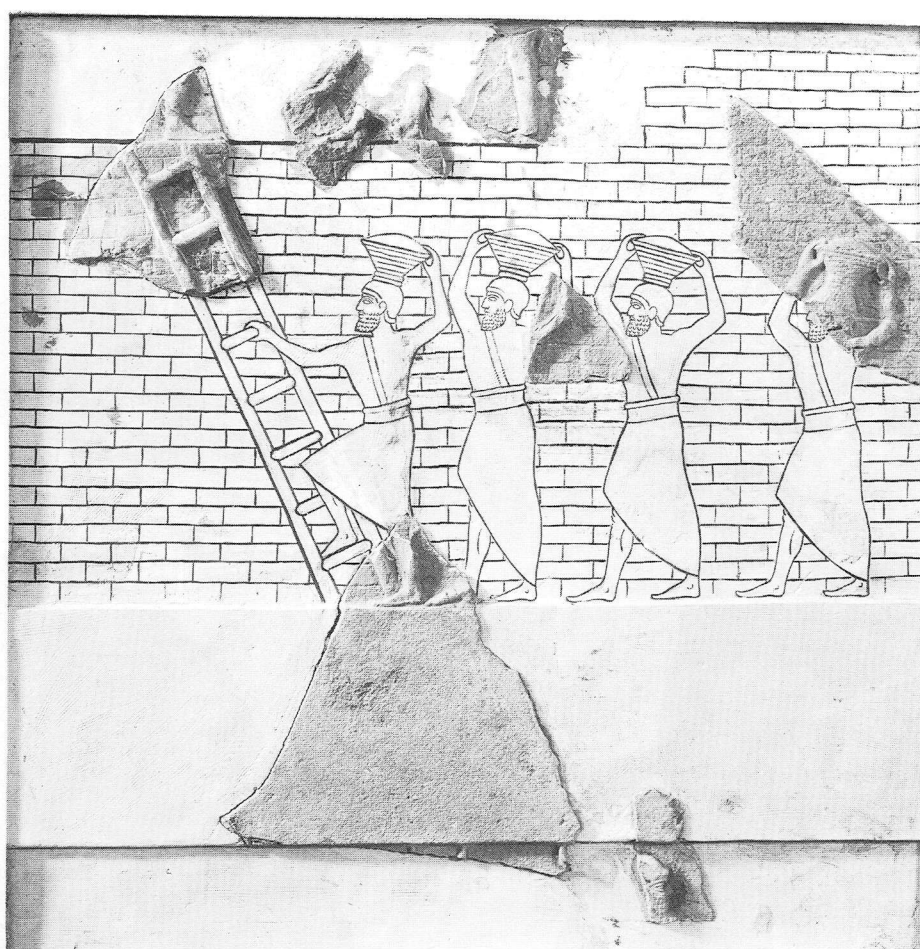


The Stela of Ur-Nammu

- (a) U. 3266. Reverse, register 1, pp. 76, 79.
- (b) U. 3266. Obverse, register 1, p. 76.
- (c) U. 3264. Obverse, register 2, p. 77.
- (d) U. 2761. Obverse, registers 1, 2, 3, p. 76.



a

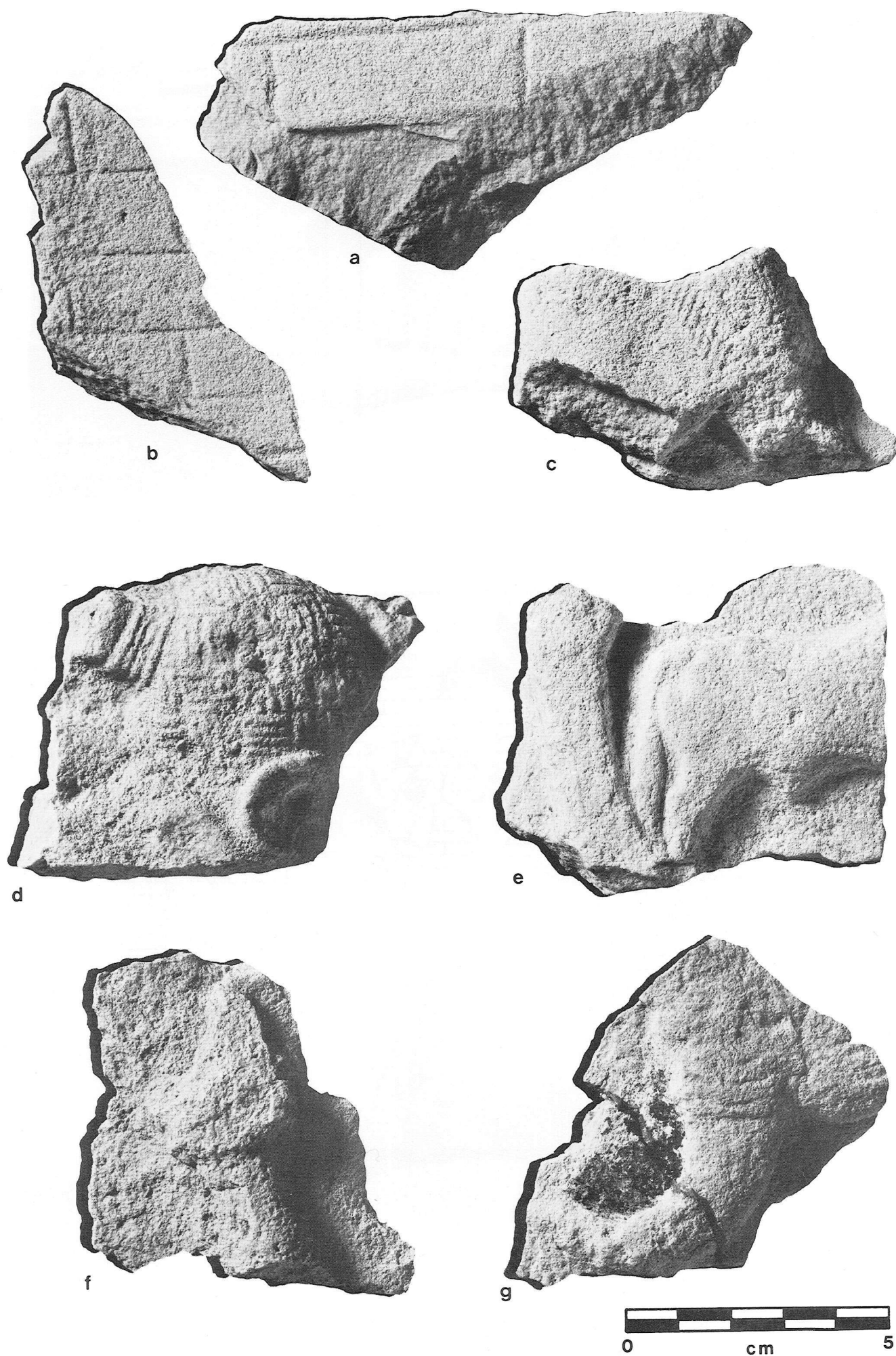


b

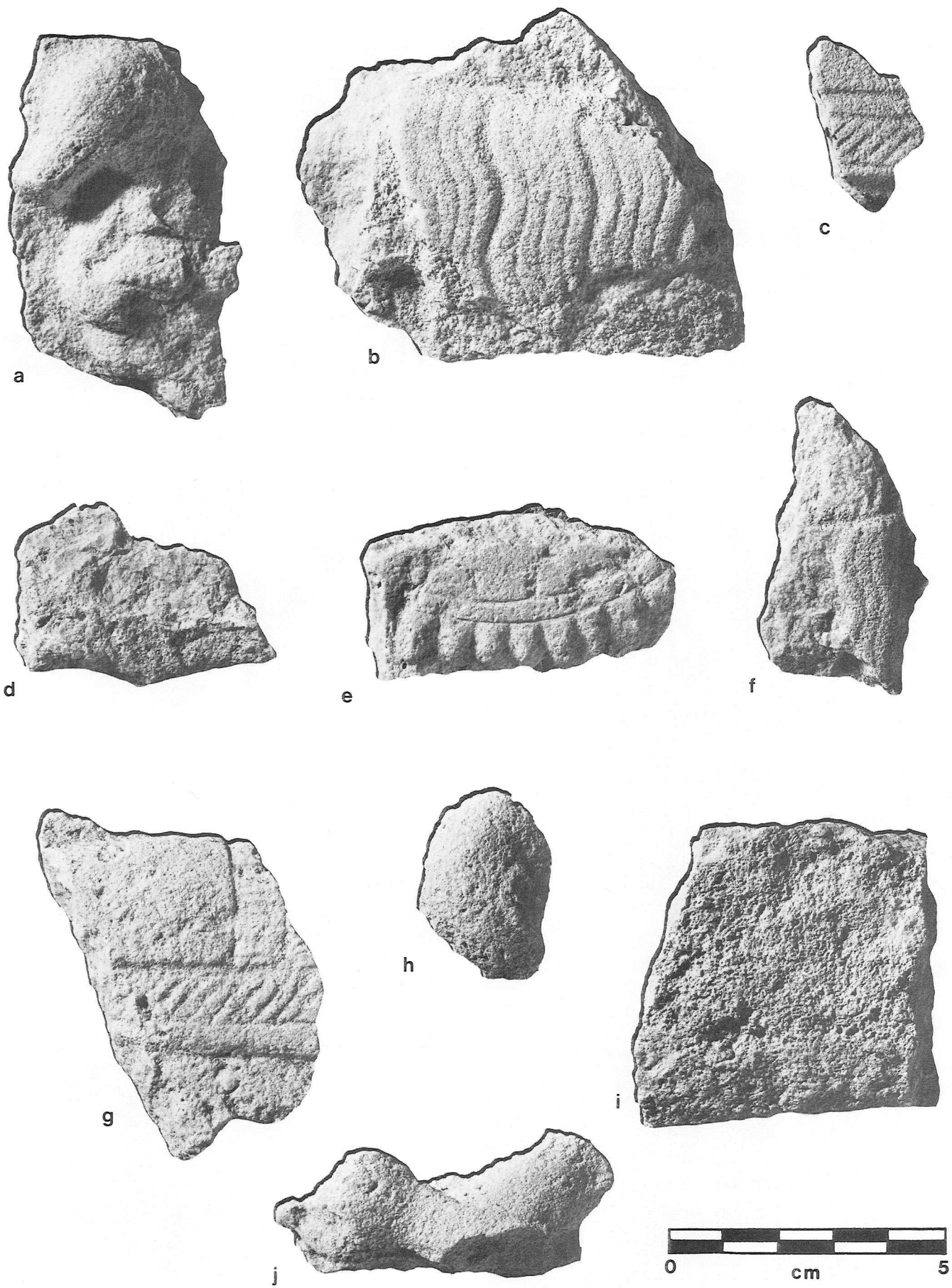
The Stela of Ur-Nammu

(a) U.2761, 3215, 3264. Obverse, registers 1, 2, 3, p. 77.

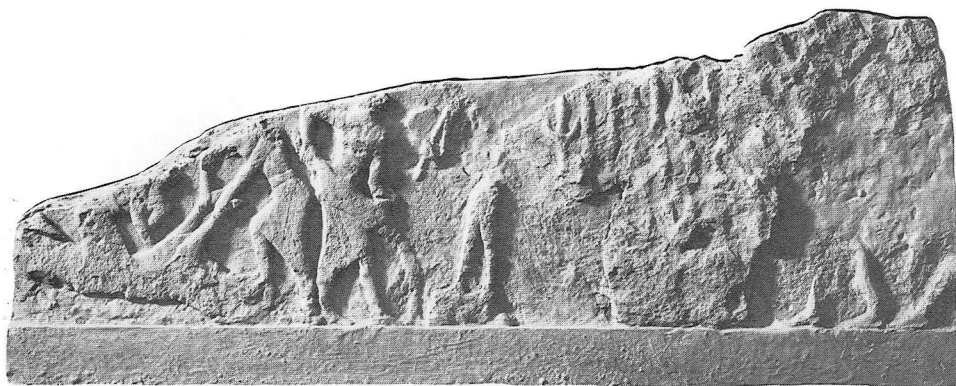
(b) Reconstruction of obverse, register 4, including U.305 and other small fragments. See pp. 76, 77, 78.



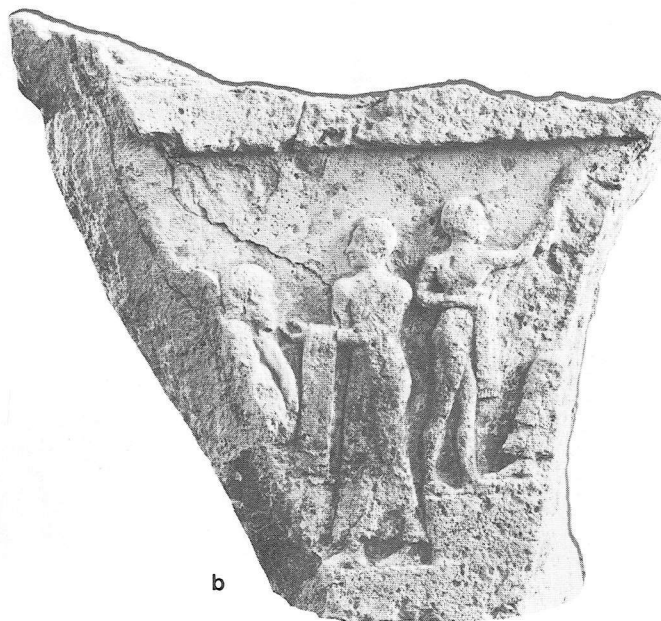
The Stela of Ur-Nammu: unnumbered fragments.



The Stela of Ur-Nammu: unnumbered fragments.



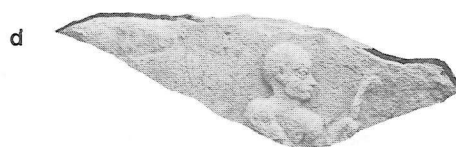
a



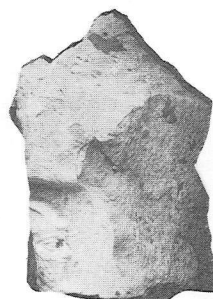
b



c



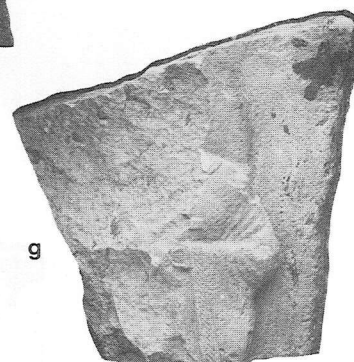
d



e



f



g

The Stela of Ur-Nammu

(a) U. 3264; (b) U. 18526; (c) U. 3265, 3328; (d, e) U ; (f) U. 3209;
(g) U. 6409.



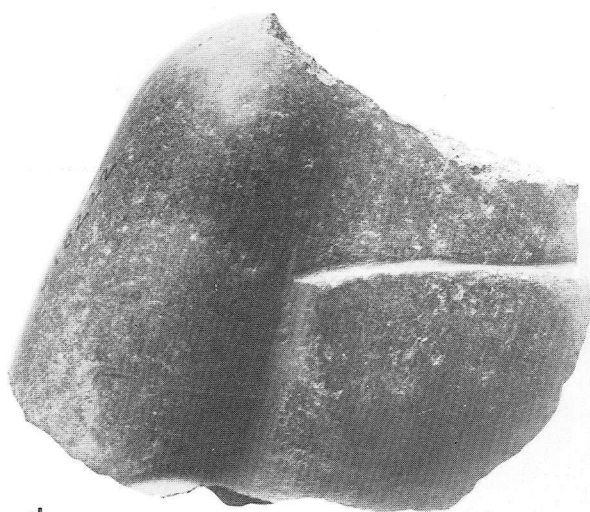
a



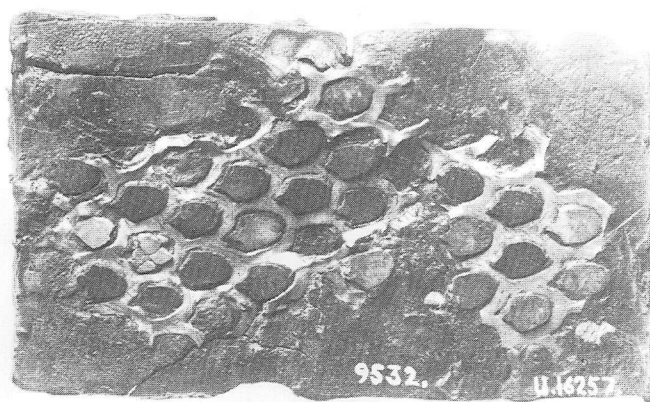
b



c



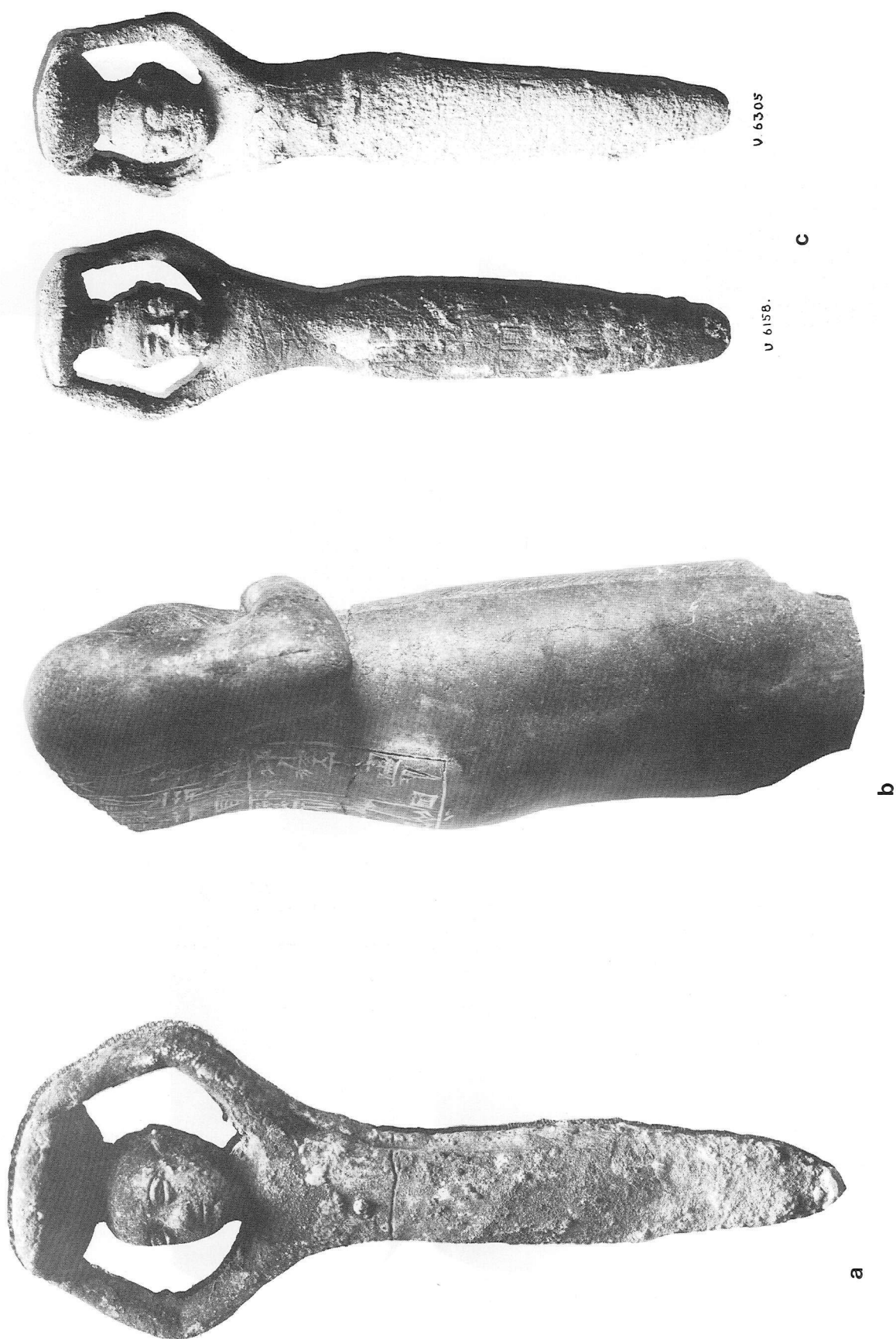
d



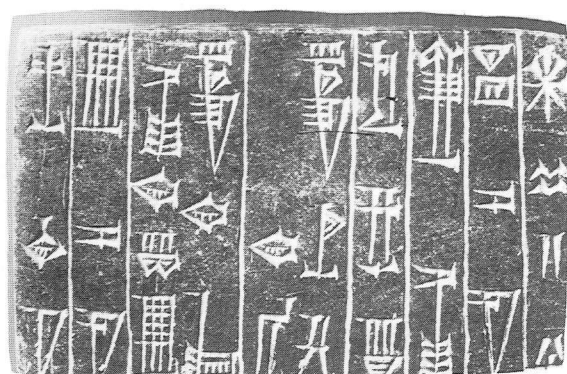
e

Fragments of stone sculpture and inlay

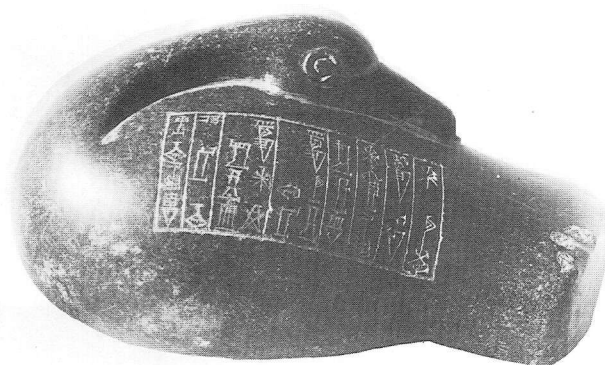
- (a) U. 137. Fragment of limestone statue.
- (b) (c) U. 16292A, B. Fragments of diorite statue.
- (d) U. 18222. Fragment of diorite statue.
- (e) U. 16257. Inlay fragment.



- (a) U. 1000. Copper figure of Ur-Nammu from E-hursag.
- (b) U. 6306. Diorite statue of Dungi from the Dim-tab-ba temple (cf U. 6276).
- (c) U. 6158, U. 6305. Copper figures of Dungi from the Dim-tab-ba temple.



a

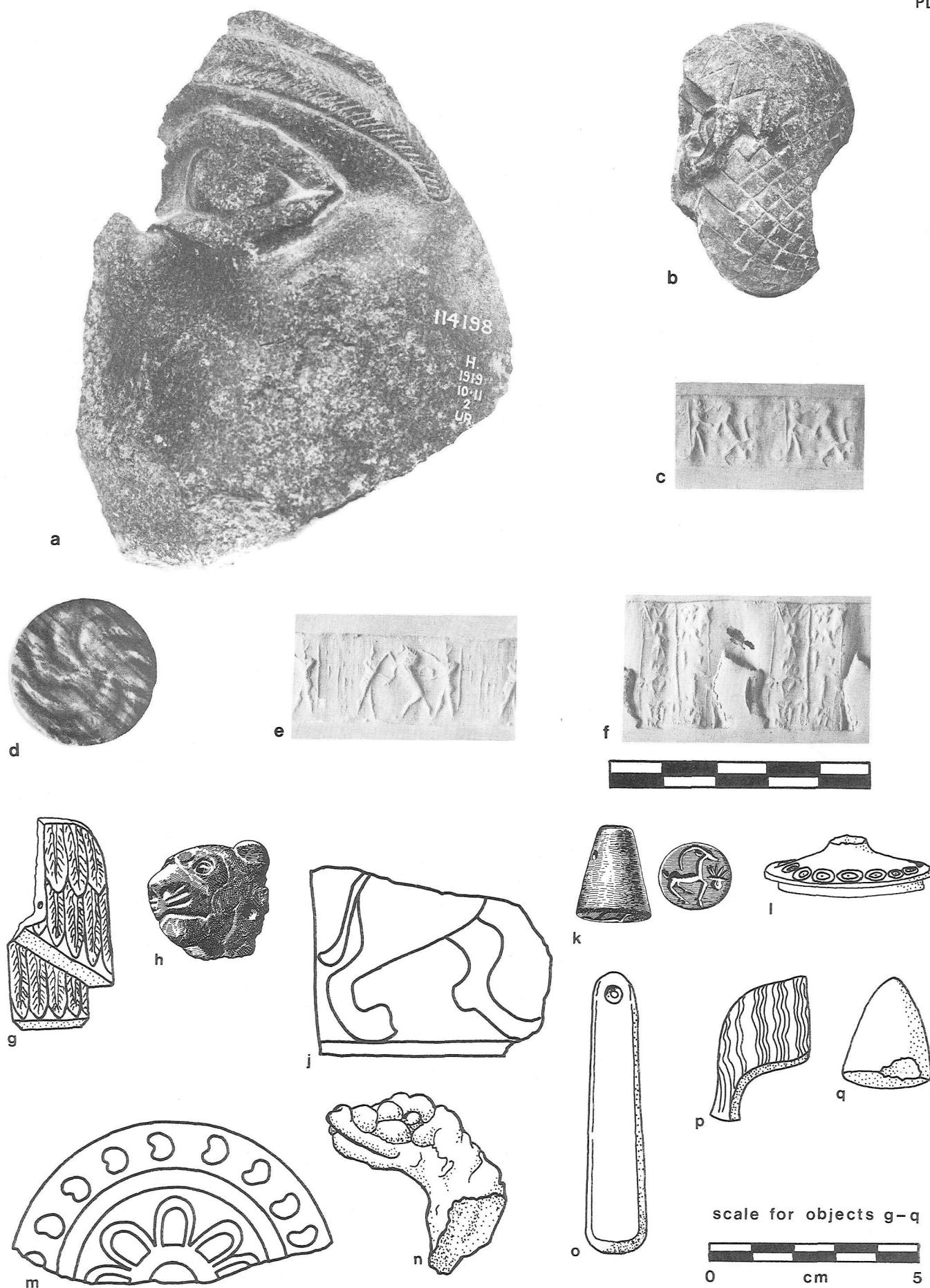


b



c

- (a) U. 6157. Steatite foundation tablet of Dungi from the Dim-tab-ba temple.
- (b) U. 7825. Diorite duck-weight with inscription of Dungi.
- (c) U. 6337 a, b, c. Clay cylinders with inscription of Dungi.



(a) Diorite fragment from E-hursag, found by Dr. Hall. (L.B.M. 114198)

(b) Fragment of head from E-hursag, found by Dr. Hall.

(c) U. 790. Impression of cylinder seal.

(d) U. 7915. Stamp seal.

(e) U. 7020. Impression of cylinder seal.

(f) U. 16556. Impression of cylinder seal.

(g) U. 307. Marble relief fragment.

(h) Animal head found by Dr. Hall.

(j) U. 366. Clay plaque fragment.

(k) Stamp seal found by Dr. Hall

(l) U. 405. Steatite lid.

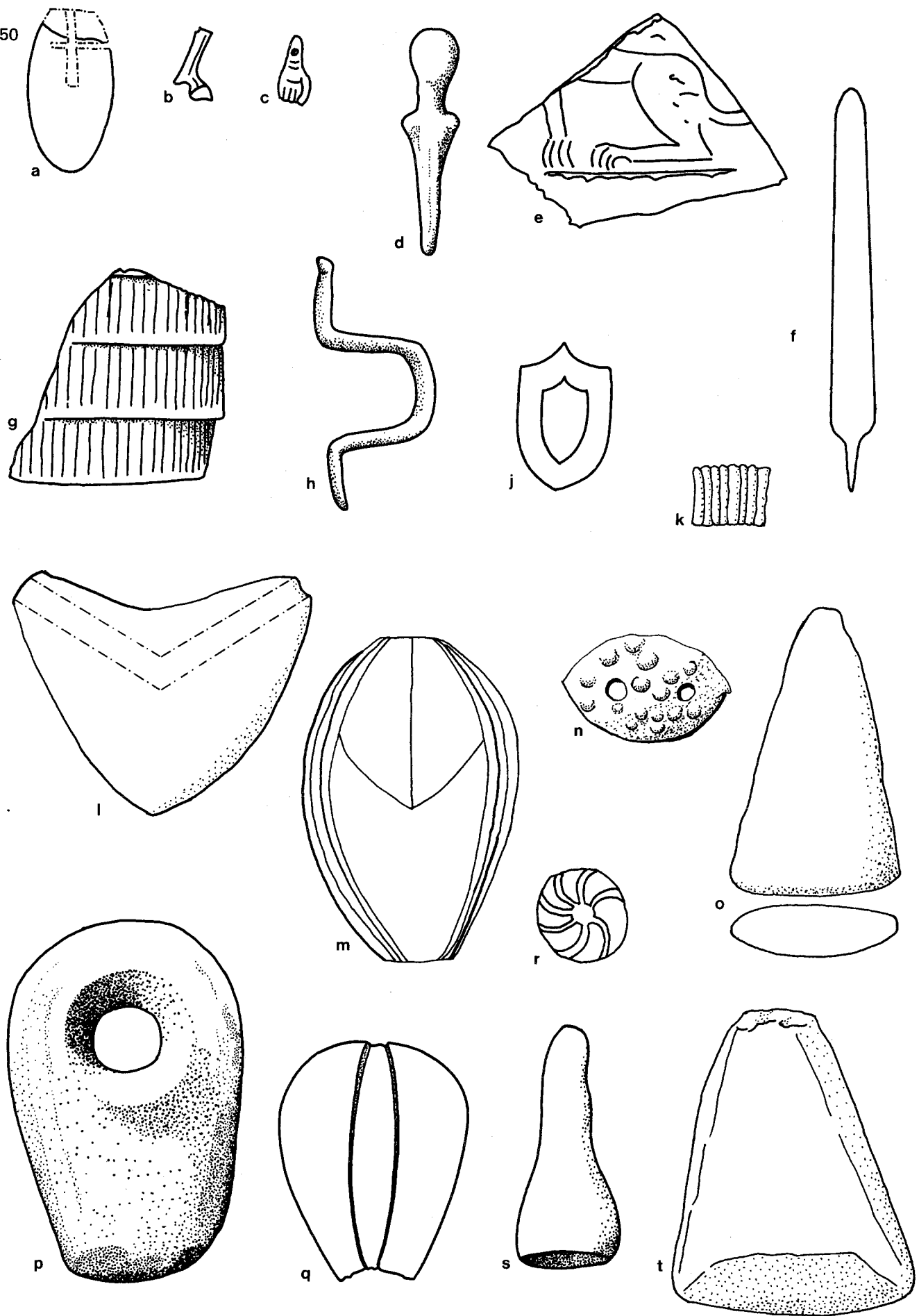
(m) U. 406. Calcite lid fragment.

(n) U. 6784. Copper head of dragon.

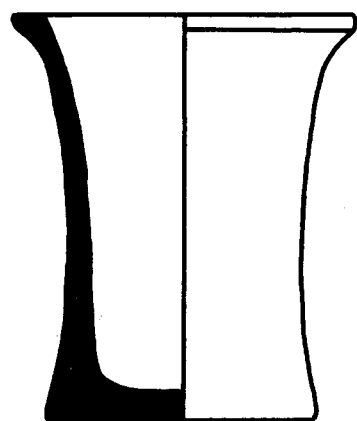
(o) U. 513. Whetstone.

(p) U. 512. Steatite wig for inlay.

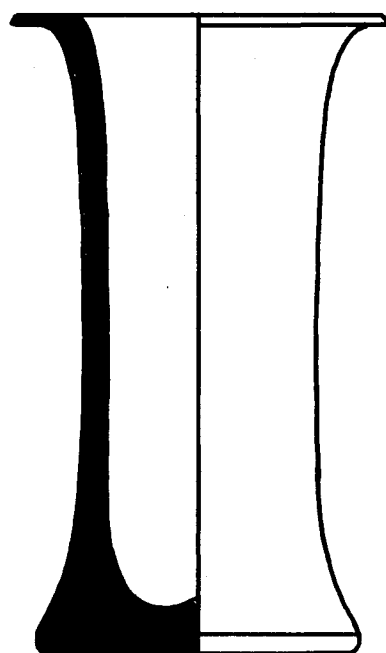
(q) U. 604. Marble gaming piece.



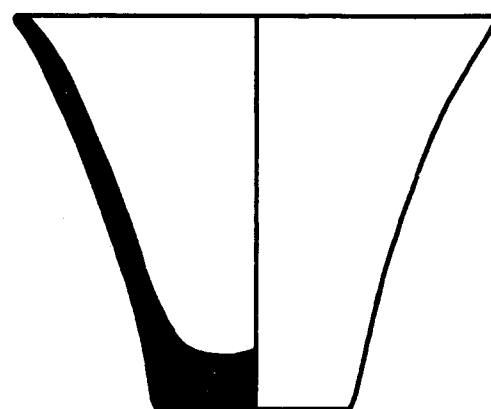
- | | | | |
|-----|-------------------------------------|-----|--|
| (a) | U. 835. Stone plumb-bob. | (l) | U. 8334. Stone amulet. |
| (b) | U. 1353. Gold overlay. | (m) | U. 16231. Limestone macehead. |
| (c) | U. 1359. Shell amulet. | (n) | U. 16258b. Gold overlay. |
| (d) | U. 1361. Copper drill. | (o) | U. 16267. Stone grinder. |
| (e) | U. 2605. Incised pottery fragment. | (p) | U. 16265. Stone hammer. |
| (f) | U. 2592. Copper sword. | (q) | U. 16334. Steatite macehead. |
| (g) | U. 6029. Limestone statue fragment. | (r) | U. 17429. Gold roundel inlaid with silver. |
| (h) | U. 16243. Copper staple. | (s) | U. 16268b. Stone pounder. |
| (i) | U. 6995. Shell inlay. | (t) | U. 16266. Diorite adze. |
| (j) | U. 6995. Shell inlay. | | |
| (k) | U. 16258a. Gold overlay. | | |



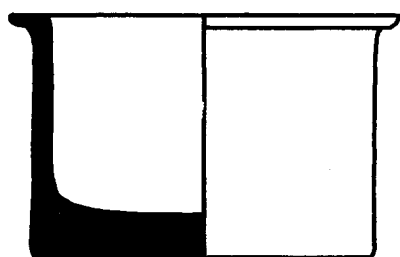
II. U 881



I. U 16432



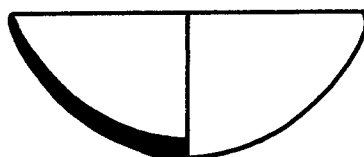
V. U 884



III. U 882



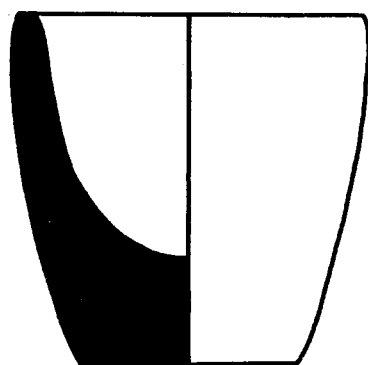
VI. U 892



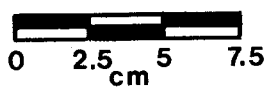
IX. U 416



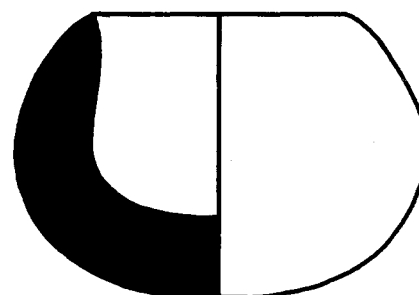
VII. U 16431



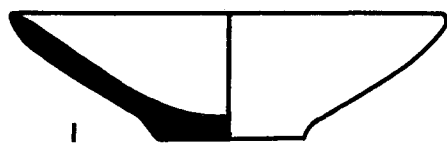
IV. U 16299



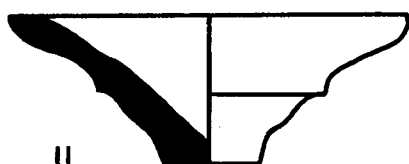
STONE VASE TYPES



VIII. U 16274



I



II



III



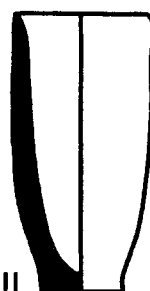
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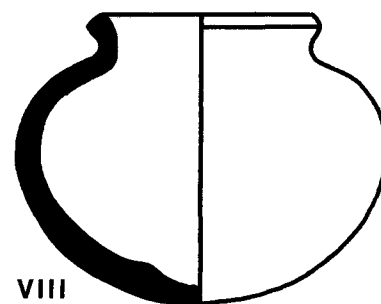
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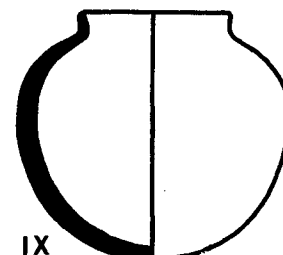
VI



VII

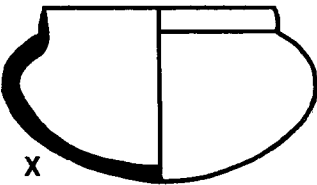


VIII



IX

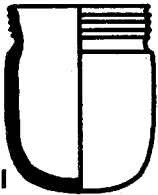
TYPES OF POTTERY VESSELS I-IX



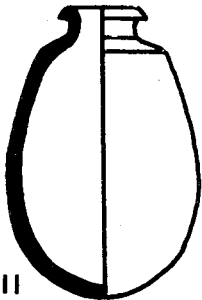
X



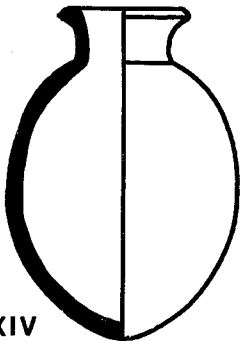
XI



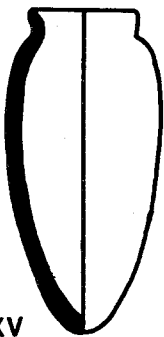
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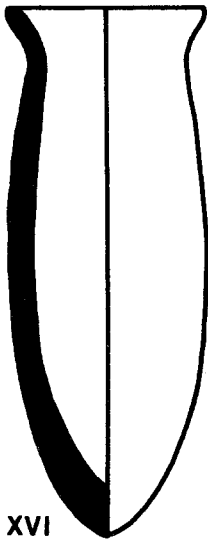
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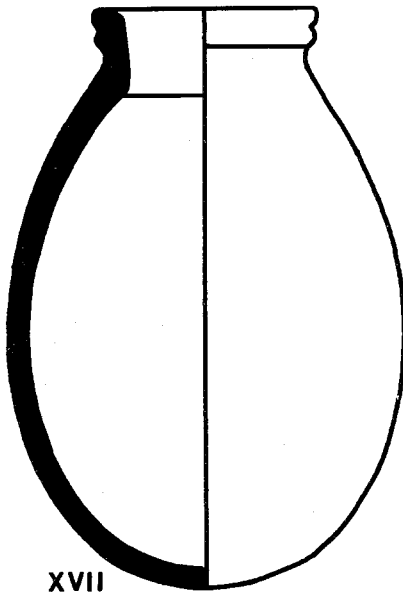
XIV



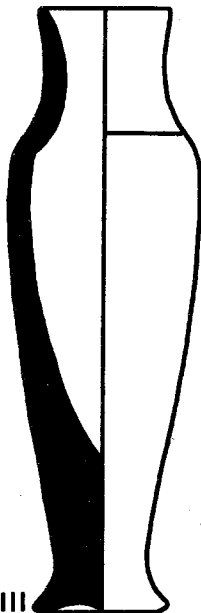
XV



XVI



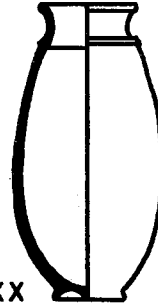
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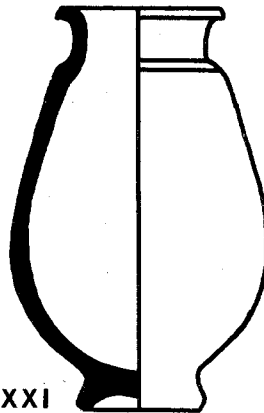
XVIII



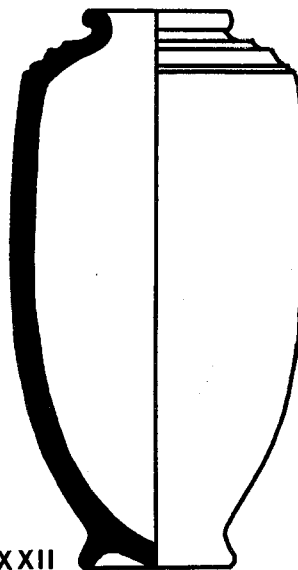
XIX



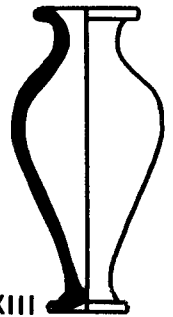
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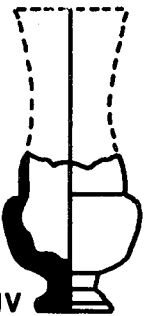
XXI



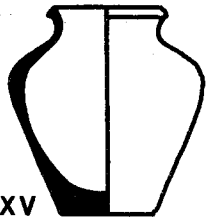
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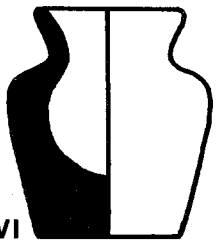
XXIII



XXIV



XXV



XXVI

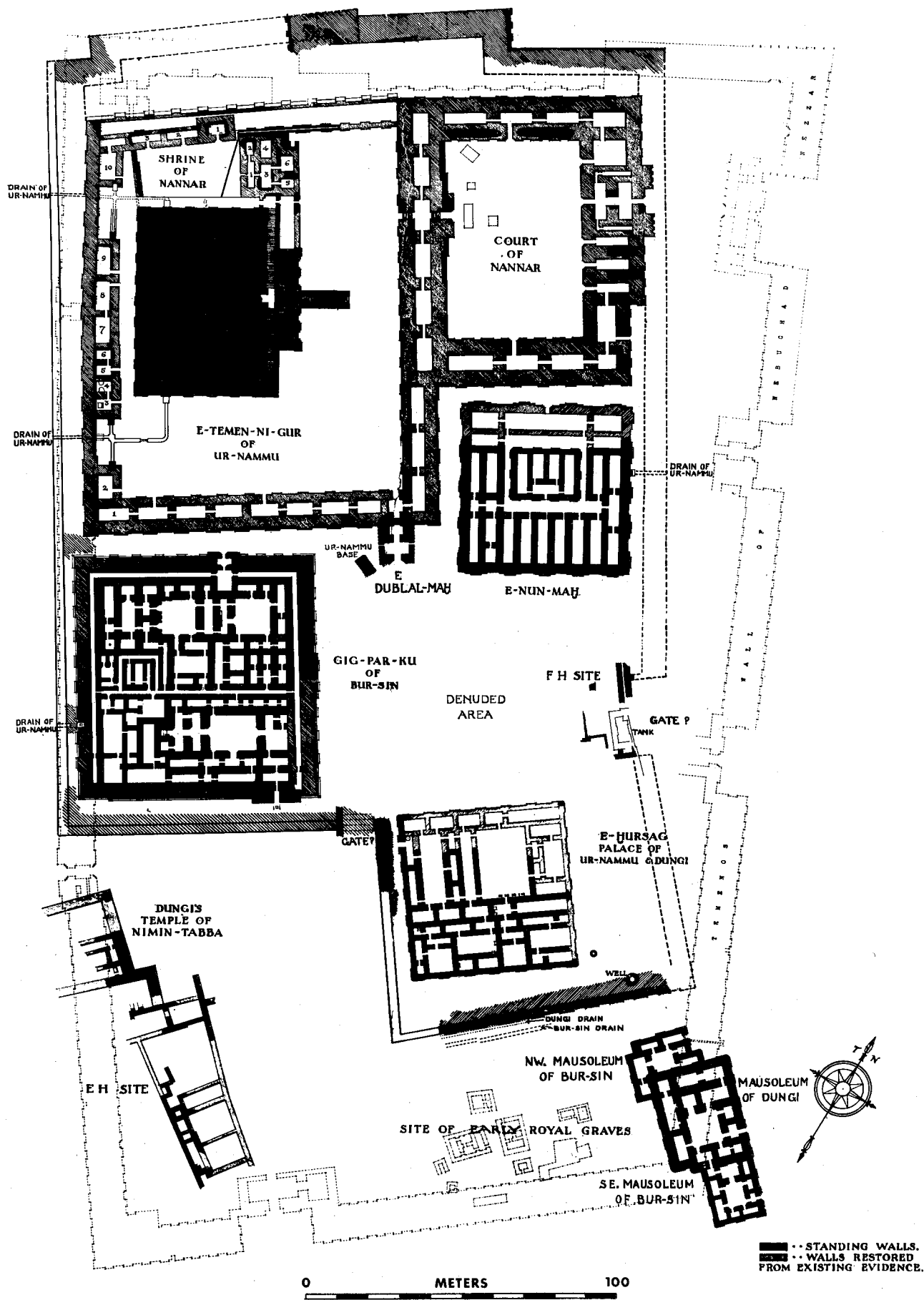


XXVII



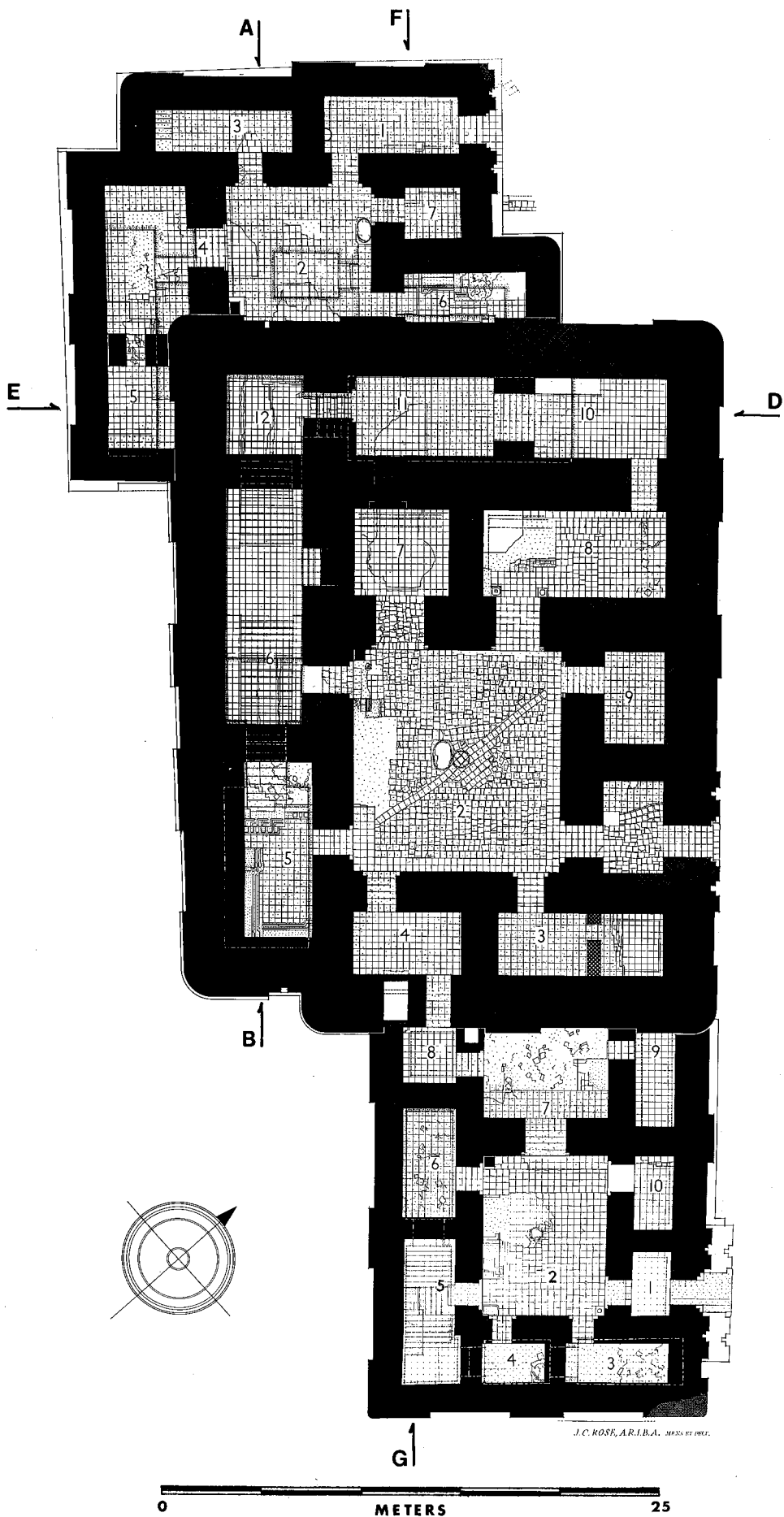
XXVIII

TYPES OF POTTERY VESSELS



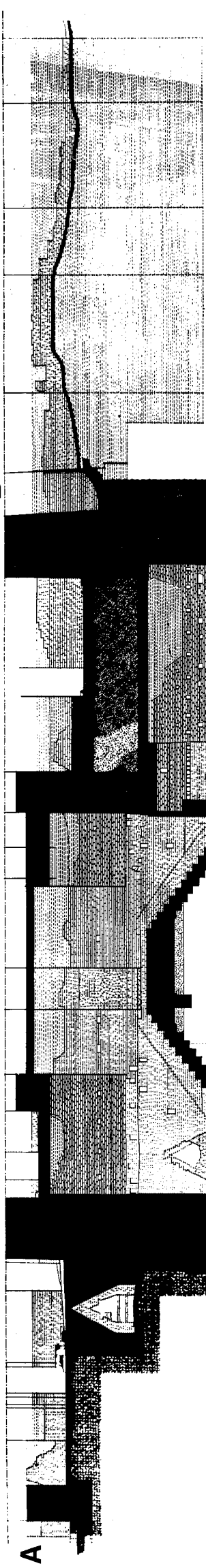
F.G. NEWTON.
 A.S. WHITBURN, *ARIBA*.
 C.L. WOOLLEY, *Non. ARIBA*.
MENS ET DELT - 1922-1930.
 A.S. WHITBURN, *ARIBA*.
DELT - JAN. 1930.

Plan of E-gish-shir-gal, the Temenos of Ur, in the time of the Third Dynasty

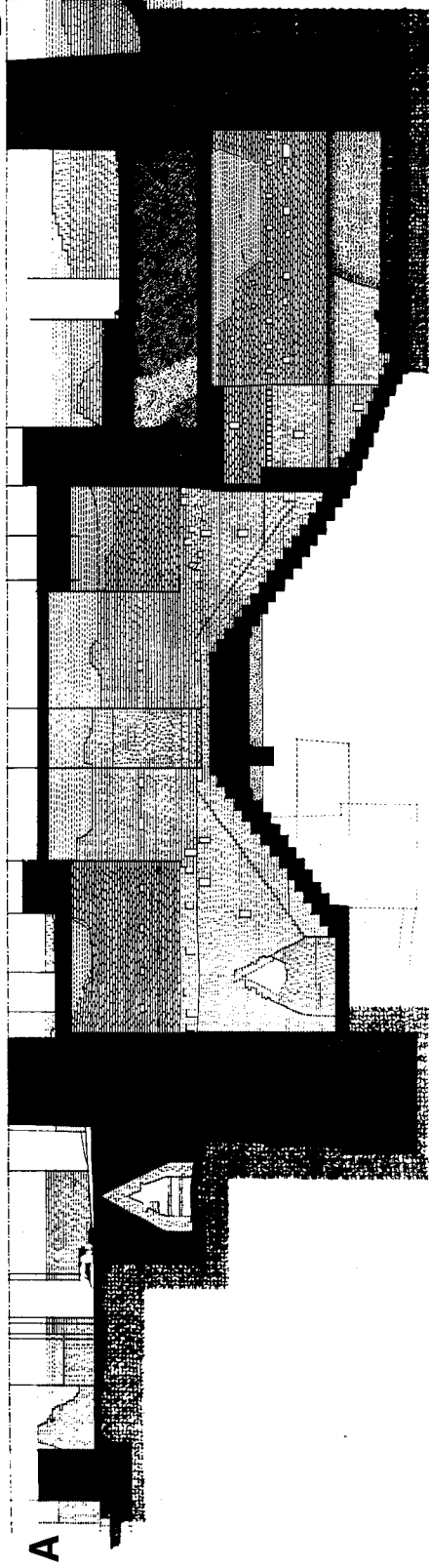


Plan of the Mausolæa of Dungi and Bur-Sin

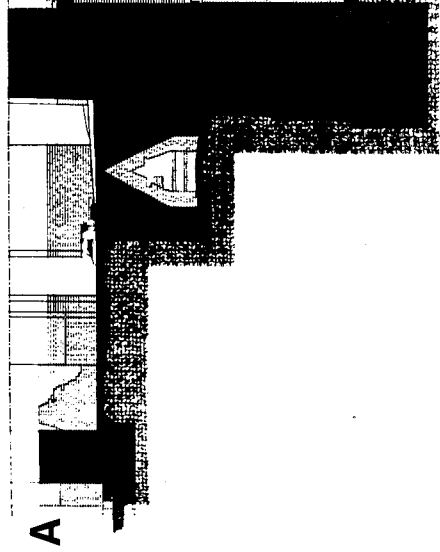
C



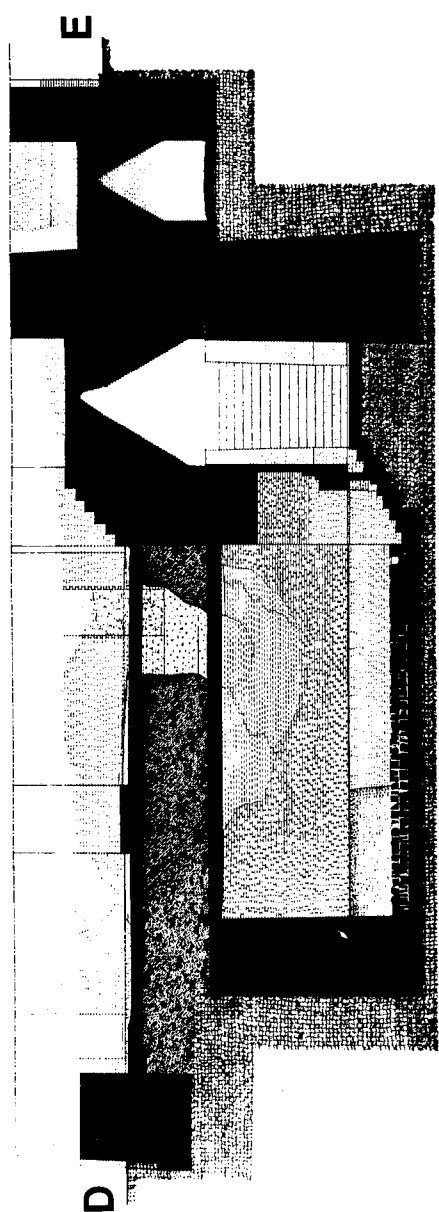
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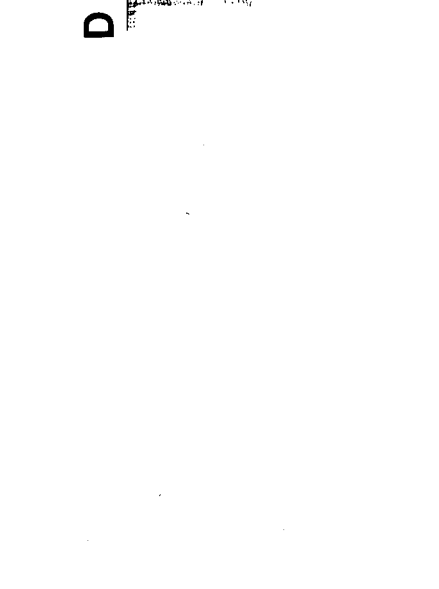
A



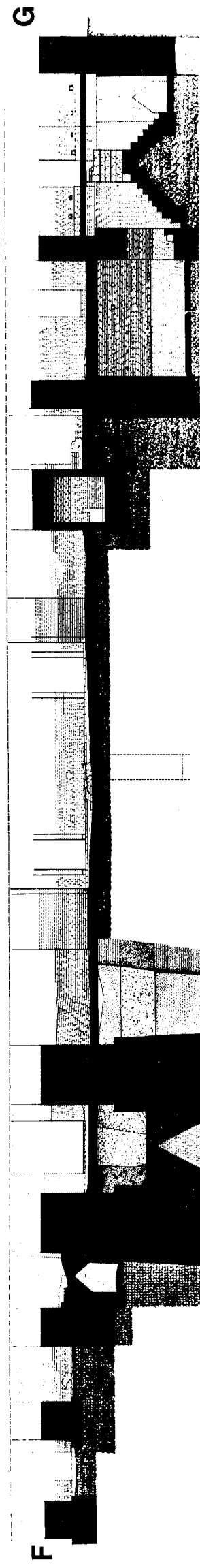
E



D



G



F

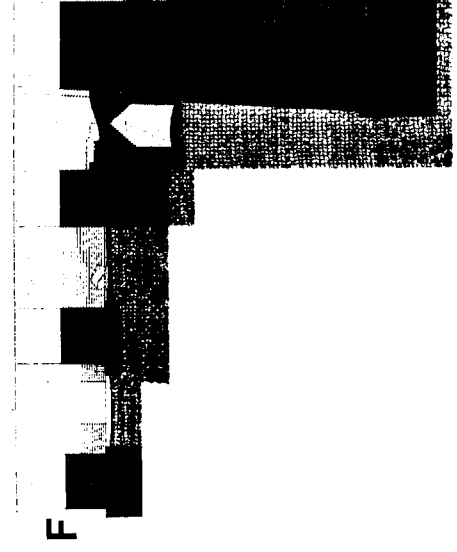
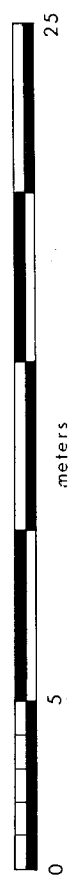
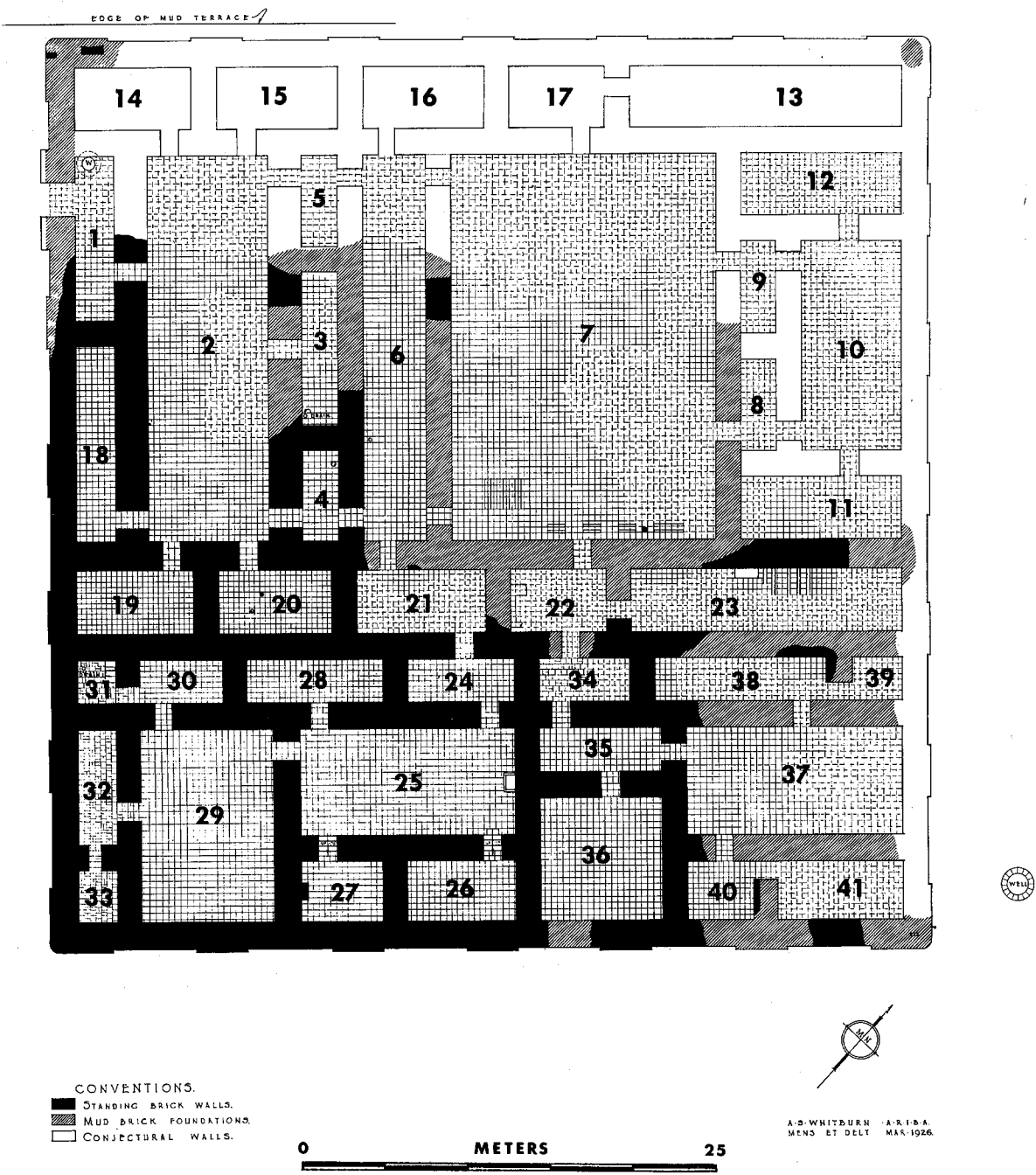


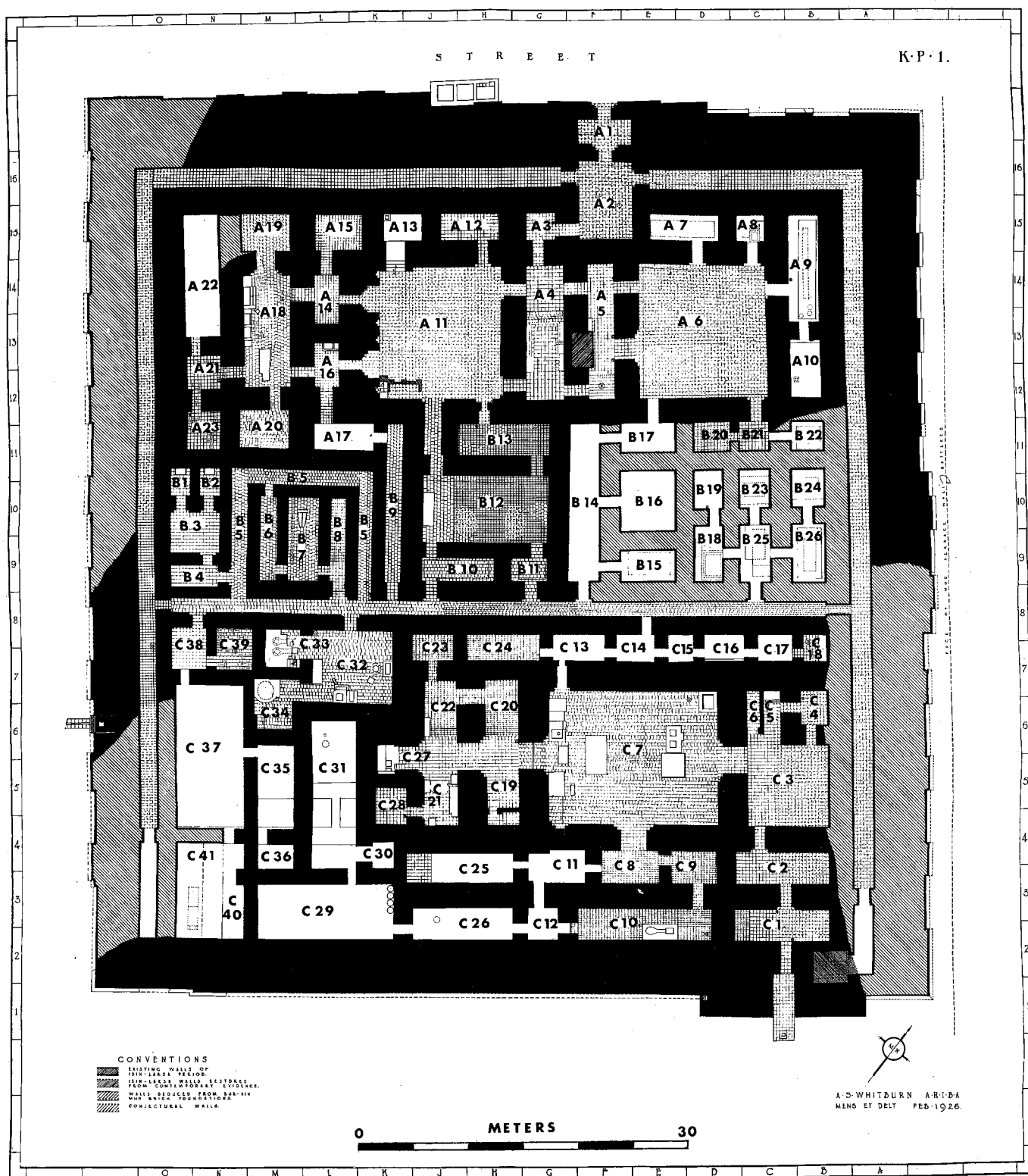
PLATE 55



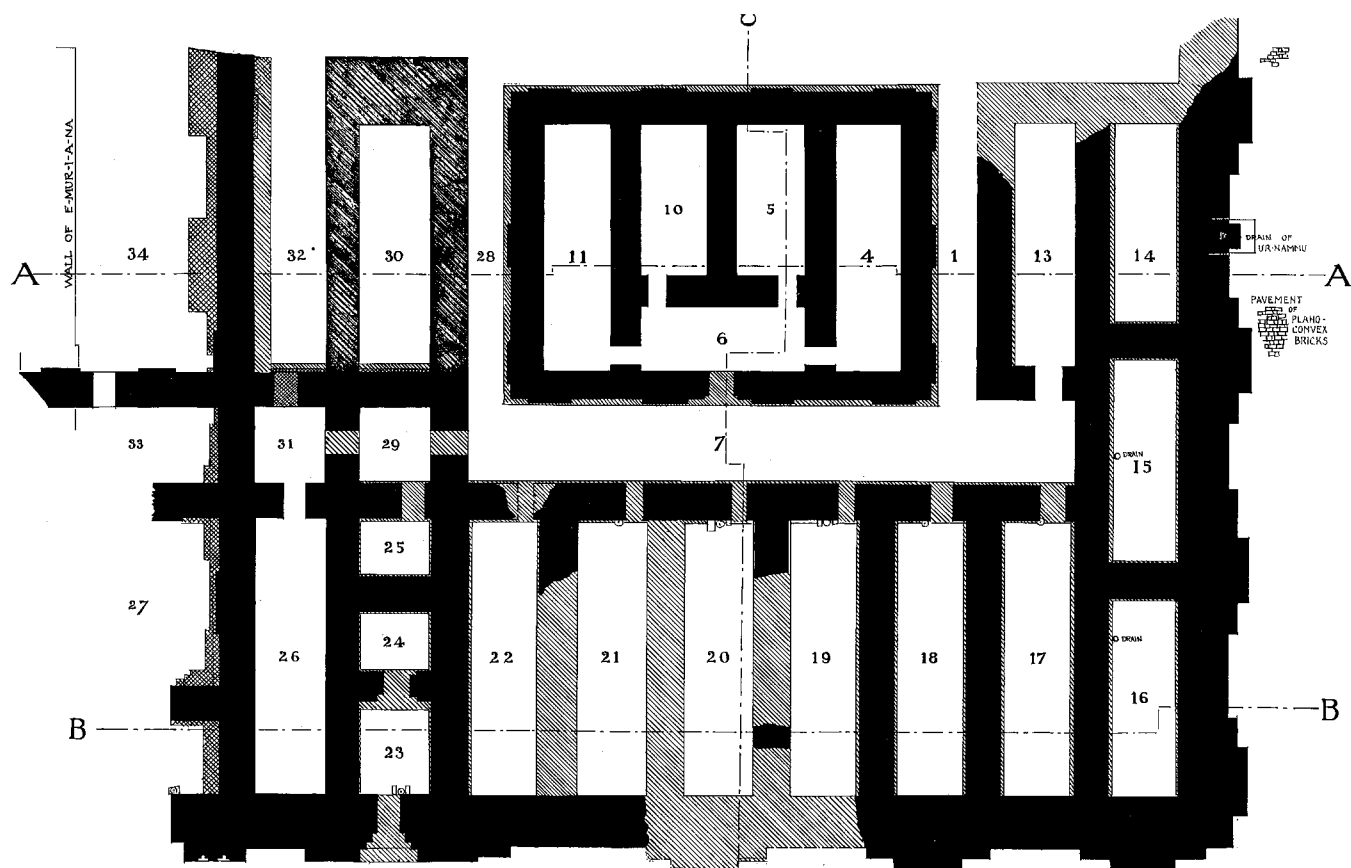
The Mausolea of Dungi and Bursin: Sections



E-hursag, the Palace (?) of Ur-Nammu and Dungi



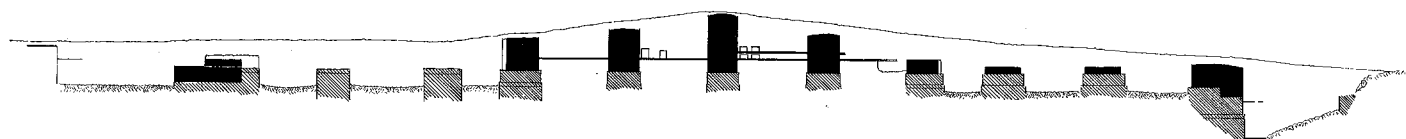
Plan of Gig-Par-Ku. Third Dynasty and Isin-Larsa periods



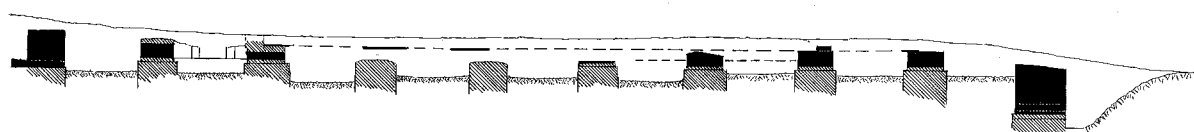
F. G. NEWTON MENS. ET DELT. 1923

NOTE. WALLS OF ALL PERIODS FOLLOW VIRTUALLY THE SAME LINES.
 ■ EXISTING BURNT BRICK WALLS OF KURI-GALZU PERIOD.
 ▨ EARLY BURNT BRICK WALLS NOT BUILT OVER BY KURI-GALZU.
 ▩ MUD BRICK WALLS EXPOSED BY DESTRUCTION OF LATER WORK.

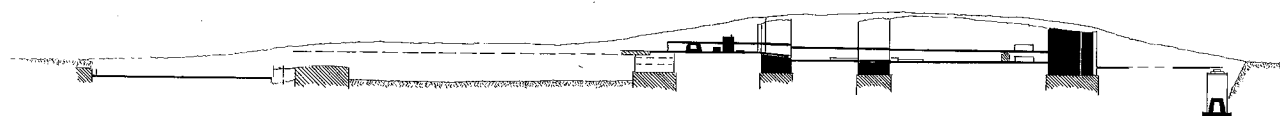
SCALE 0 5 10 15 20 METRES



SECTION ON LINE AA



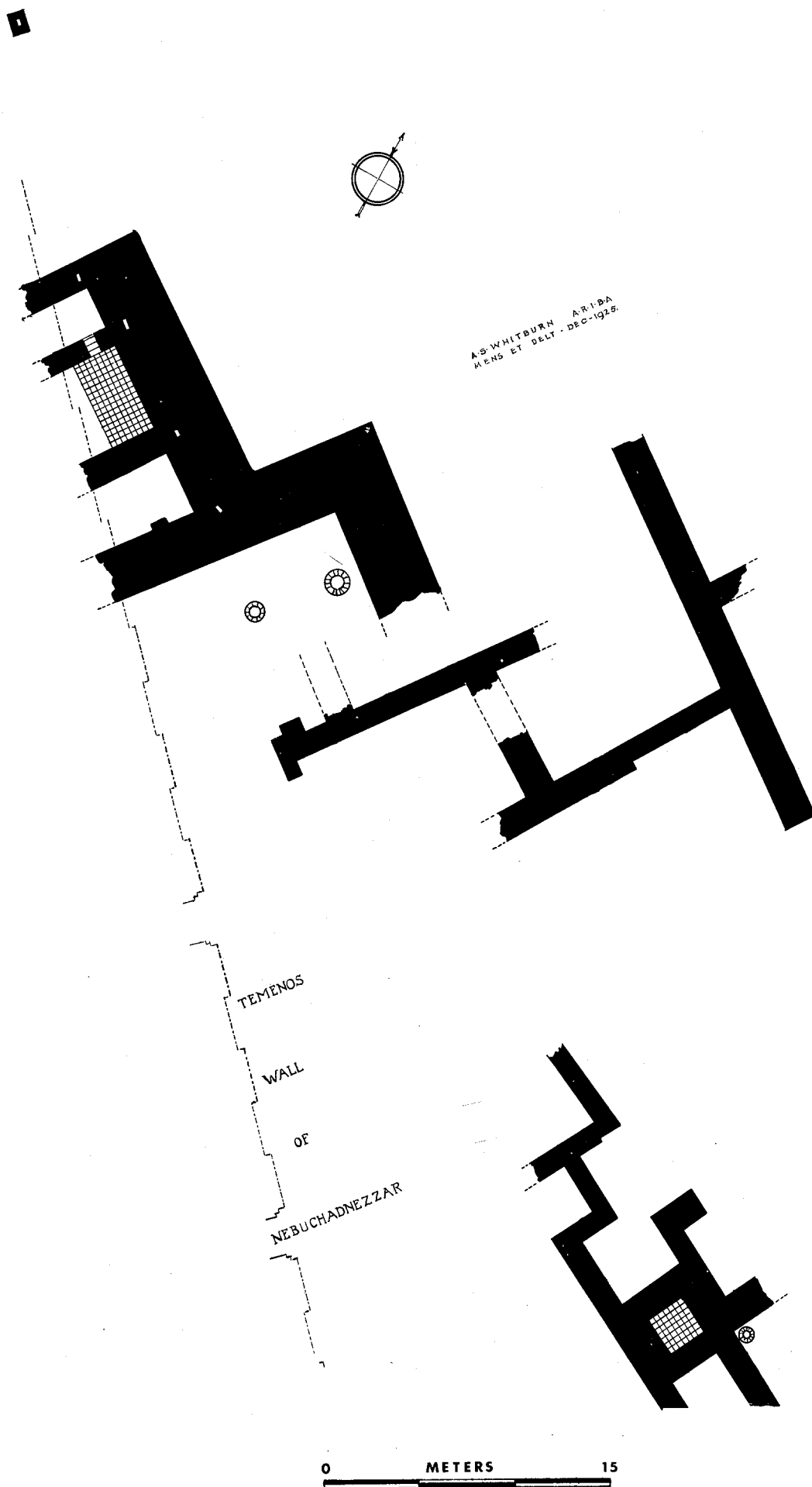
SECTION ON LINE BB



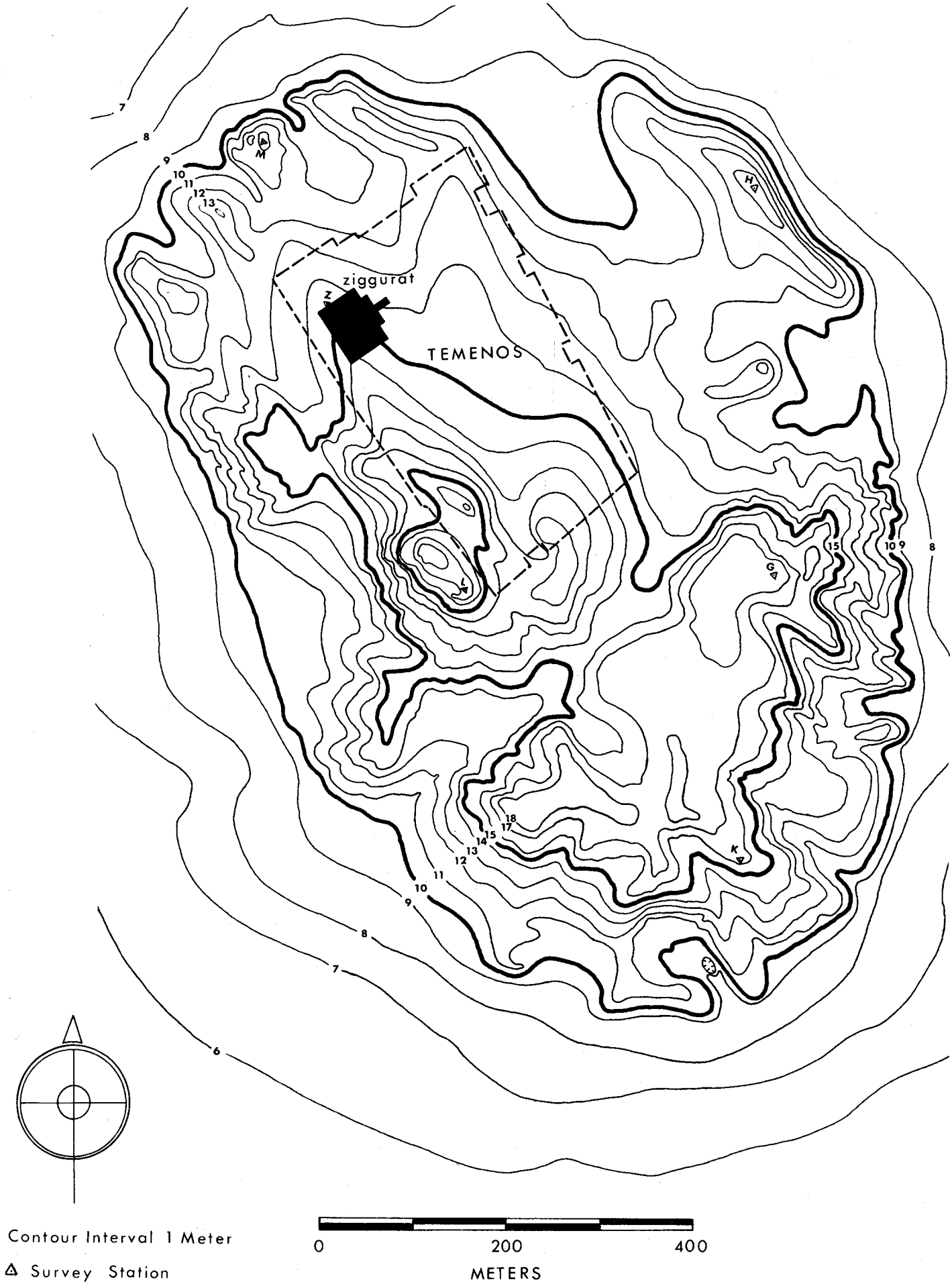
SECTION ON LINE CC

■ BURN'T BRICK WALLS ▨ MUD BRICK WALLS

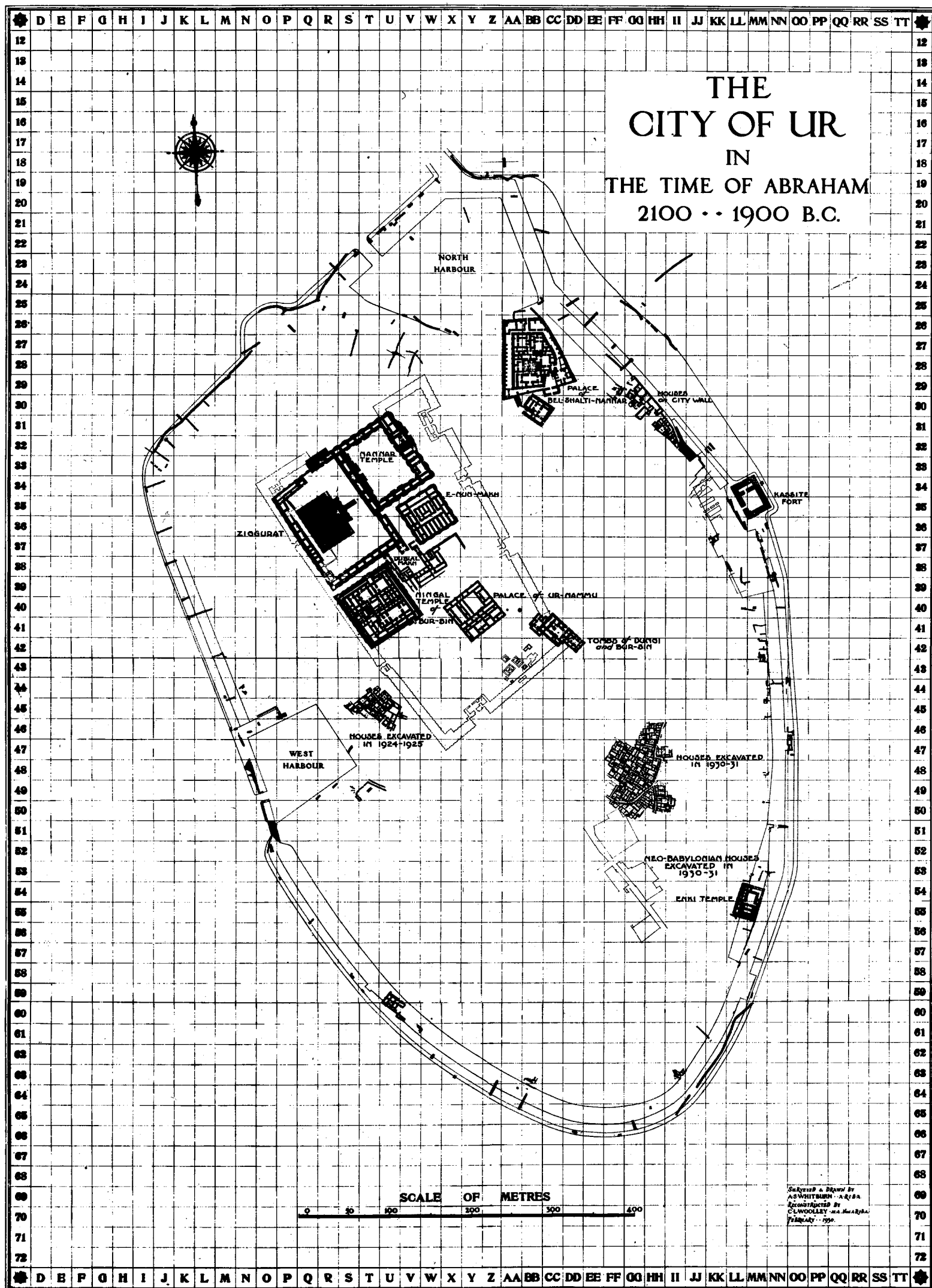
Plan and Sections of E-nun-mah in the Third Dynasty period



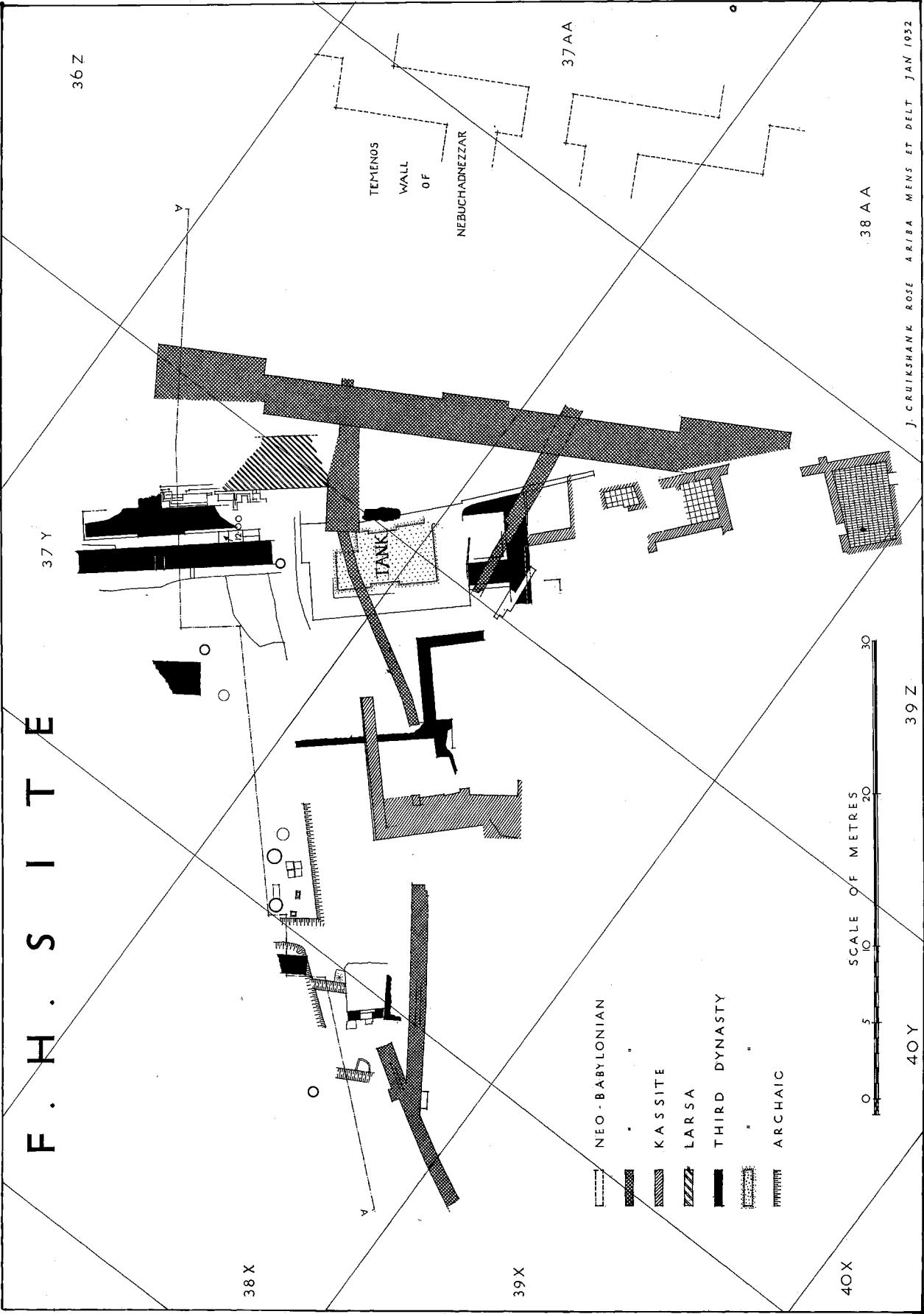
Plan of the remains of the Dim-tab-ba temple



Contour map of Ur



The City of Ur shewing the principal buildings excavated



Plan of the mixed remains in Squares X-AA, 37-38